Transportation

AECOM

December 2014



Transportation Management Plan (TMP) Golden Gate Bridge Moveable Median Barrier Project

Prepared for the Golden Gate Bridge Highway and Transportation District Federal Project Number STPL-6003(037)



Transportation Management Plan (TMP)

Golden Gate Bridge Moveable Median Barrier Project Prepared for the Golden Gate Bridge Highway and Transportation District Federal Project Number STPL-6003(037) December 2014

Table of Contents

Exe	cutive Summary	1
1.0	Introduction	2
2.0	Project Information	3
2.1 2.2	Project Background Project Description Historical Average Daily Traffic Volumes	3
	Construction Activities and Related Transportation Impacts	
3.1	Construction Activities	7
3.2 3.3 3.4 3.5 3.6	Construction Staging and Traffic Handling— Short-Term Project Construction Staging and Traffic Handling— Long-Term Project Transportation Impacts— Short-Term Project Transportation Impacts— Long-Term Project Lane Closures	. 17 . 18 . 20
3.7 3.8	Ramp Closures Lane and Ramp Closure Late Pick-up Delay Costs	. 21
3.9 3.10	Lane Closure Detours and Detour Delay Cost Analysis	. 22 . 24
	Ongoing/Planned Projects in the Project Vicinity Transportation Management Plan Strategies	
4.1 4.2 4.3		. 45
4.4 4.5 4.6	Public Information Outreach/Public Awareness Campaign Traveler and Motorist Information Strategies Incident Prevention and Management Strategies	. 49
4.7 4.8	Work Zone Safety Training Contingency Planning Demand Management	. 52 . 53

List of Tables

Table 1: Stage Construction—Short-Term Project	9
Table 2: Traffic Handling Stage Description—Short-Term Project	12
Table 3: Traffic Handling – Golden Gate Bridge Weekend Closure	
Table 4: Stage Construction— Long-Term Project	
Table 5: Traffic Handling Stage Description— Long-Term Project	
Table 6: Golden Gate Bridge Weekend Closure Late Pick-Up Delay Costs	22
Table 7: Average Queue – San Francisco—Oakland Bay Bridge	
Table 8: Detour Traffic Volumes - San Francisco-Oakland (Westbound Interstate 80)	
Table 9: Detour Traffic Volumes – Richmond— San Francisco—Oakland (Eastbound Interstate 80)	
Table 10: Average Queue Duration – Richmond—San Rafael Bridge	35
Table 11: Detour Traffic Volumes – Richmond—San Rafael Bridge (Eastbound Interstate 580)	
Table 12: Detour Traffic Volumes – Richmond—San Rafael Bridge (Westbound Interstate 580)	
Table 13: GGB Closure Queue Summary	
Table 14: Recommended TMP Strategies	45
Table 15: Golden Gate Bridge District Moveable Median Barrier Outreach Plan	
Table 16: Local Portable Changeable Message Signs Schedule	
Table 17: Scenarios and Actions Matrix	
Table 18: Contact Personnel Matrix (To Be Updated Regularly)	57
Table 19: Golden Gate Transit Ferry Service – Weekend Closure of the Golden Gate Bridge	

List of Figures

Figure 1: Existing Conditions (2012) Freeway Traffic Volumes	5
Figure 2: Historical Average Daily Traffic Volumes	6
Figure 3: Lane Diagrams	7
Figure 4: Proposed Detour Routes for the Golden Gate Bridge Weekend Closure	23
Figure 5: Historical Daily Traffic Volumes – San Francisco—Oakland Bay Bridge	27
Figure 6: Detour Traffic Volumes – San Francisco—Oakland Bay Bridge (30 Percent GGB Traffic Reduction)	31
Figure 7: Detour Traffic Volumes – San Francisco—Oakland Bay Bridge (20 Percent GGB Traffic Reduction)	32
Figure 8: Detour Traffic Volumes – San Francisco—Oakland Bay Bridge (10 Percent GGB Traffic Reduction)	33
Figure 9: Detour Traffic Volumes – San Francisco—Oakland Bay Bridge (Zero Percent GGB Traffic Reduction)	34
Figure 10: Historical Daily Traffic Volumes – Richmond-San Rafael Bridge	38
Figure 11: Detour Traffic Volumes – Richmond-San Rafael Bridge (30 Percent GGB Traffic Reduction)	39
Figure 12: Detour Traffic Volumes – Richmond-San Rafael Bridge (20 Percent GGB Traffic Reduction)	40
Figure 13: Detour Traffic Volumes – Richmond-San Rafael Bridge (10 Percent GGB Traffic Reduction)	41
Figure 14: Detour Traffic Volumes – Richmond-San Rafael Bridge (Zero Percent GGB Traffic Reduction)	42
Figure 15: Changeable Message Sign Locations	50

Attachments

Attachment A: Project Vicinity Map and Existing GGB Roadway Configurations

Attachment B: Long-Term and Short-Term Stage Construction, Traffic Handling and Traffic Control Plans and Short-Term Construction Area Signs

Attachment C: Lane and Ramp Closure and Damage Summary and Calculations

Attachment D: Typical District Daily Lane Arrangement Schedule

Attachment E: Caltrans District 4 TMP Data Cost Sheet

Attachment F: TMP Contact List

Attachment G: Traffic Special Provisions

List of Abbreviations

```
2N/4S - Two Northbound lanes/Four Southbound lanes
 3N/3S - Three Northbound lanes/Three Southbound lanes
 4N/2S - Four Northbound lanes/Two Southbound lanes
 AC - Asphalt Concrete
 AC Transit – Alameda-Contra Costa County Transit
 ADT – Average Daily Traffic
 AET – All Electronic Tolling
 BART - Bay Area Rapid Transit
 BATA – Bay Area Toll Authority
 BTM - Barrier Transfer Machine
 CAD – Computer Aided Dispatching
 CHIN - Caltrans Highway Information Network
 CHP - California Highway Patrol
 CMS – Changeable Message Signs
 COZEEP - Construction Zone Enhanced Enforcement Program
 DD - Deputy Directive
 District - Golden Gate Bridge Highway and Transportation District
 DTM - District Traffic Manager
 EMS - Emergency Medical Services
 FHWA – Federal Highway Administration
 FSP - Freeway Service Patrol
 ft – feet
 GGB – Golden Gate Bridge
 HAR - Highway Advisory Radio
 HMA – Hot Mix Asphalt
 in – inch
 MBGR – Metal Beam Guard Rail
 MGS - Midwest Guard Rail System
 MMB - Moveable Median Barrier
 MRN-Marin
 MTC - Metropolitan Transportation Commission
 MUNI – San Francisco Municipal Railway
 NB - northbound
 PCMS – Portable Changeable Message Signs
 PIO - Public Information Office
 PM - Post Mile
 RE – Resident Engineer
 ROW - right-of-way
 SB - southbound
 SF - San Francisco
 SFMTA – San Francisco Municipal Transportation Agency
 SHS - State Highway System
 TAM – Transportation Authority of Marin
 TASAS – Traffic Accident Surveillance and Analysis System
 TDM – Transportation Demand Management
 TMC – Traffic Management Center
 TMT – Traffic Management Team
 TSP – Tow Service Patrols
 TV - Television
 UC – undercrossing
 USCG - United States Coast Guard
 vph – vehicles per hour
 VTA – Santa Clara Valley Transportation Authority
iii
```

Executive Summary

This Transportation Management Plan (TMP) was prepared by AECOM with input from the California Department of Transportation (Caltrans) and The Golden Gate Bridge Highway and Transportation District (District) to assess work zones and summarize the process of minimizing traffic impacts and delays associated with the construction of the Golden Gate Bridge (GGB) Moveable Median Barrier (MMB) Project (herein referred to as the Project) on Route 101. This plan provides a framework for the implementation of traffic control mitigation strategies and distribution of traffic related information to local motorists, emergency services, and businesses.

Most of the proposed work for the Project is within the Route 101 and Golden Gate Bridge corridor, which is a six-lane facility that serves traffic between the City and County of San Francisco (SF) and Marin (MRN) County. Roadway lane and ramp closures will be required to accommodate Project construction activities. The proposed roadway lane and ramp closures are scheduled to prevent significant impacts to traffic operations across the Golden Gate Bridge. The following TMP strategies and components are utilized in this plan and will be implemented to mitigate any potential impacts during construction:

- Construction management focuses on the use of appropriate work windows, that ensure proposed detours and lane and ramp closures occur during periods of time with low traffic volumes, thereby reducing motorist delays and protecting worker and public safety.
- Public information outreach strategies are used to inform the public about construction activities and to provide an opportunity for the public to voice any concerns.
- Traveler information outreach, similar to public information outreach, consists of communication with the public regarding construction activities and allows motorists to adjust travel plans to allow for possible delays and/or detours around the construction work zone.
- Incident management focuses on quickly addressing incidents that occur as a result of the construction activities. Incident management strategies rely on real-time communication from the construction work zone to various stakeholders within the region.
- Traffic monitoring allows for adjustments to the construction schedule and work windows in order to offset any unforeseen results of construction activities that may cause significant traffic delays.
- Contingency planning also allows adjustments when congestion or delays exceed the original estimates. The contingency planning strategies establish a chain of command and list important contacts that are to be notified of incidents as they occur.
- Demand management strategies are intended to alleviate demand along the corridor by encouraging motorists to use other routes and/or other forms of transportation during the construction period in order to reduce the delays that they may encounter as a result of the ongoing construction activities.

1.0 Introduction

This Transportation Management Plan has been prepared in compliance with the Caltrans Deputy Directive (DD)-60 that requires TMPs to be prepared for all projects on the State Highway System (SHS). The purpose of this TMP is to provide a comprehensive strategy for minimizing traffic disruption, reducing motorist delays, and increasing the safe movement of vehicles through and around the construction area of the proposed Golden Gate Bridge Moveable Median Barrier without compromising public safety, worker safety, or the quality of work. This goal will be achieved through the effective application of traffic mitigation strategies, including:

- Construction Management This strategy will focus on construction phasing and staging, detour routes, lane closure restrictions, off-peak work hours, and effective coordination among related projects within the vicinity that are expected to have overlapping schedules.
- Public Information Outreach This strategy will focus on informing local agencies and the traveling public about construction activities and will encourage motorists to travel during off-peak periods, modify travel plans by using alternate routes, or allow for more time when passing through the work zones. Project information will be disseminated to local public officials, California Highway Patrol (CHP), sheriff, fire department, transit agencies, schools, and the general public using various media and resources as identified in Chapter 4.
- Traveler Information Outreach This strategy will focus on providing construction and traffic condition information while drivers are en-route to their destination, with the goal of shifting traffic away from the work zone. Traveler information outreach will be disseminated through the use of Changeable Message Signs (CMS), static ground mounted signs, and Highway Advisory Radio (HAR).
- Incident Management This strategy will focus on methods to quickly clear work zone collisions, stalls, excessive congestion, or other incidents through the use of tow services, field monitoring, and Construction Zone Enhanced Enforcement Program (COZEEP), a tool used to improve Project safety through the use of supplemental CHP Units to assist in the management of traffic passing through the work zone.
- Traffic Monitoring The monitoring of traffic condition plays two roles. First and foremost, traffic conditions approaching and traveling through the work zone are monitored during periods of lane closures to detect excessive queuing and delay, crashes, and other problems which would trigger an early pick-up. Secondly, traffic monitoring is conducted periodically throughout Project construction to determine the effect of longer-term/extended closures and whether detour routes or management strategies should be modified.
- Contingency Planning The contingency plan outlines specific actions that should be implemented to restore or minimize effects on traffic when congestion or delays exceed original estimates, or when other unanticipated problems arise. A contingency plan would be triggered due to work zone accidents, higher than estimated traffic demand, delayed work closures, or other unforeseen events that cause excess congestion or delay. The contingency plan provides a chain of command and list of important contacts to be notified in the event an early pick-up is triggered.
- Demand Management Demand management strategies are aimed at alleviating traffic congestion through the management of travel characteristics. Demand management focuses on increasing transportation choices, encouraging the use of alternative forms of transportation or travel during off-peak times, trip reduction and carpooling programs.

In addition to outlining specific actions and traffic management strategies for use during construction, this TMP identifies when actions should be completed, agencies responsible for the completion of the actions and an evaluation of the appropriate construction work windows as well as a discussion of recommended mitigation measures to reduce potential traffic impacts.

2.0 Project Information

2.1 Project Background

Route 101 and the Golden Gate Bridge are the main transportation link between Marin County and the City and County of San Francisco. The GGB is a six-lane undivided highway administered by the District. The GGB spans 9,000 feet (ft) from the northern San Francisco peninsula to the south-facing Marin County headlands, near the town of Sausalito. The GGB is under the jurisdiction of the District and Route 101 is under the jurisdiction of Caltrans, District 4. Average Daily Traffic (ADT) volumes along this segment of the highway are currently in excess of 110, 000 vehicles. As of March 27, 2013 the GGB is operating under an all-electronic tolling (AET) system that allows for continuous movement of traffic through the tollbooths.

The District currently reverses lanes with plastic-tubular pylons to increase the capacity of the GGB in the direction of peak traffic volumes. A MMB would enhance safety and reduce the potential for cross-over collisions on the GGB and its approaches by installing a physical barrier to replace the plastic-tubular pylons, which are currently used to delineate opposing directions of traffic on the GGB, and to transition traffic from the approach traffic lanes to the six GGB traffic lanes. The MMB system consists of a continuous chain of one meter long, steel-encased concrete barrier units that can be moved laterally across one lane of traffic at a time by a Barrier Transfer Machine (BTM). This system would provide a semi-rigid barrier between opposing traffic on the GGB while, at the same time, allowing the District the flexibility to reconfigure the lanes on the GGB to optimize traffic operations in each direction. A map of the Project vicinity is presented in **Attachment A1**.

2.2 Project Description

The District proposes to install a MMB on the 1.7 mile-long GGB and on the approach portion of Route 101, north of the GGB, for a total length of 11,500 feet. Construction activities will take place along the District and Caltrans right-of-way (ROW). The Project will modify the existing GGB Toll Plaza and replace the existing 19 inch high plastic-tubular pylon dividers (spaced every 25 ft) with a MMB system. A BTM will transition the MMB system between lanes to accommodate the variable traffic demands across the GGB.

To implement the MMB system, improvements at each end of the GGB are required to safely terminate the MMB and transition to the existing freeway geometry. In this installation, as typically occurs with these systems, the BTMs would be parked in the median of the freeway when not in use. The only periods when the BTMs would leave the freeway ROW would be for maintenance or fueling. At the northern approach segment on Route 101, the Project proposes to remove approximately 770 ft of existing concrete median barrier and construct a pavement section where the barrier is removed.

Due to the construction of the Presidio Parkway Project (Caltrans EA #1637U1), the MMB Project would be implemented in two contracts – a Short-Term Project and a Long-Term Project. The first contract (Short-Term Project) includes the majority of the work required for installation of the MMB. The Short-Term Project will terminate at a temporary MMB location north of the GGB Toll Plaza (within District right-of-way) and the final MMB location just south of the Sausalito Road undercrossing (UC) at the northern approach segment of Route 101. This contract is anticipated to be constructed prior to the completion of the Presidio Parkway Project. Construction activities for the first contract will require temporary lane closures on the GGB and on Route 101 within Caltrans ROW.

The MMB and BTM installation on the GGB and its approaches will involve the placement of the MMB on the roadway with the use of heavy construction equipment; in addition, the contractor will test the performance on the system along the GGB. To ensure the safety of both the public and construction workers a full closure of the GGB will be required. This closure will begin at midnight on January 9, 2015 and, is scheduled to end at 4:00 AM on January 12, 2015.

The second contract will take place after the Presidio Parkway Project is complete and will involve work within the District ROW. With the exception of pavement markings and installation of roadside signs, no work will be conducted within Caltrans ROW during the Long-Term Project construction. Under the Long-Term Project, the MMB will be extended south to terminate approximately 750 ft south of the tollbooths within the District ROW. Although no work will be conducted with the Caltrans ROW, construction activities for the second contract will require temporary lane closures within both the District and Caltrans ROW.

2.3 Historical Average Daily Traffic Volumes

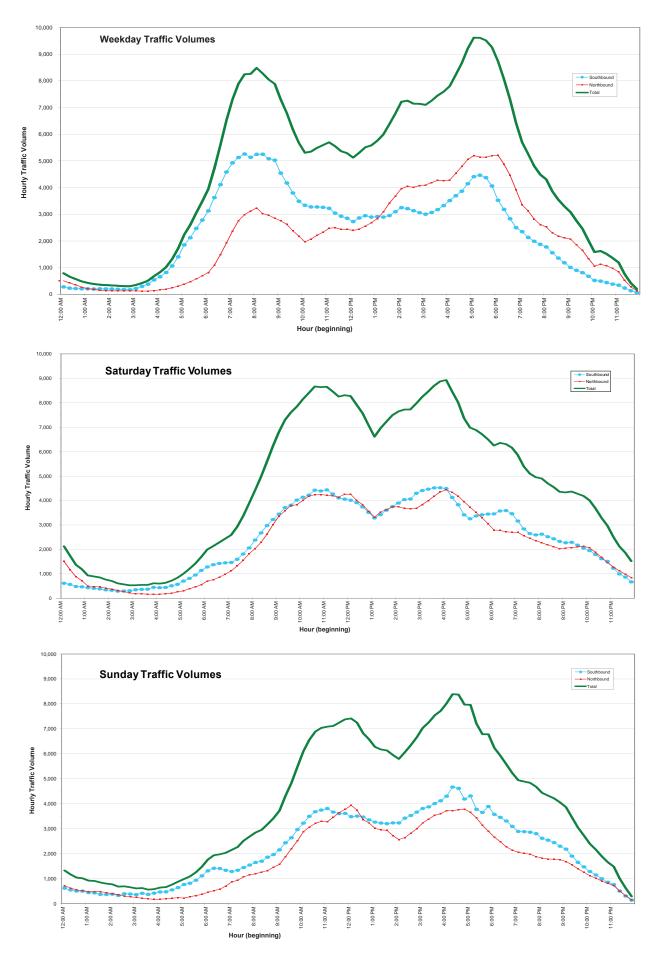
A detailed analysis of annual average daily traffic volumes on the GGB obtained from the District was included as part of the *Traffic Report* (AECOM, 2014). Existing Conditions in the year 2012 were collected on the GGB and ramps within the evaluated area. The data included peak hour traffic volumes, heavy vehicle volumes, hourly volumes, and historical average daily traffic volumes.

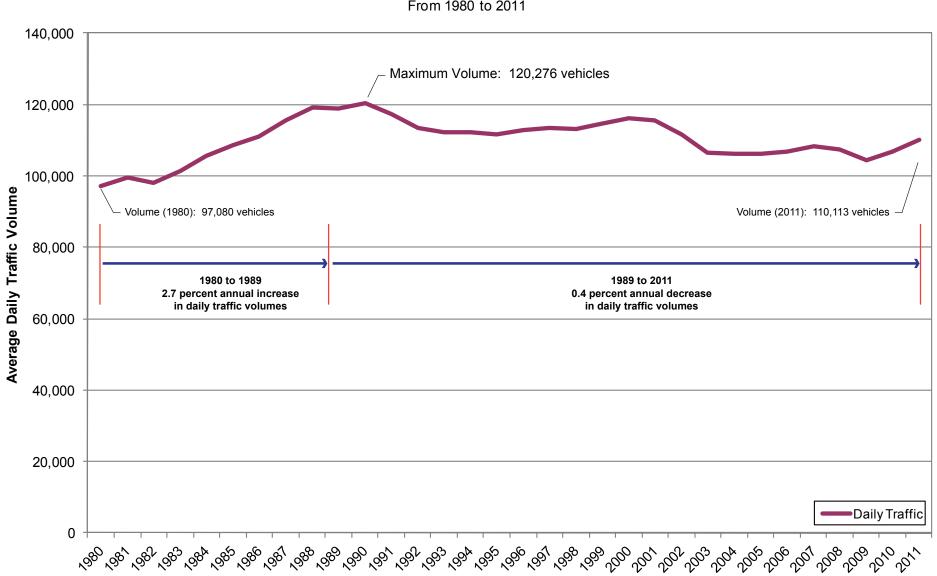
Hourly weekday, Saturday, and Sunday traffic volumes and are summarized in **Figure 1.** During the weekday AM peak hour (8:00 AM to 9:00 AM), the southbound traffic volume is approximately 5,200 vehicles per hour (vph) and northbound traffic volume is approximately 3,000 vph. The total traffic volume in both directions was approximately 8,400 vph. During the weekday PM peak hour (5:00 PM to 6:00 PM), the southbound traffic volume is approximately, 4,500 vph and northbound traffic volume is approximately 5,150 vph. The total traffic volume in both directions was approximately 9,650 vph.

During the Saturday peak hour (4:00 PM to 5:00 PM), the southbound traffic volume is approximately 4,500 vph and northbound traffic volume is approximately 4,500 vph. The total traffic volume is approximately 9,000 vph and represents the maximum hourly traffic volume on the Golden Gate Bridge on a Saturday.

During the Sunday peak hour (4:00 PM to 5:00 PM), the southbound traffic volume is approximately 4,300 vph and northbound traffic volume is approximately 3,700 vph. The total traffic volume is approximately 8,000 vph and represents the maximum hourly traffic volume on the Golden Gate Bridge on a Sunday.

Annual daily traffic volumes were also obtained from the District. The average annual daily traffic volumes on the GGB from fiscal year 1980 to 2011 are shown in **Figure 2**. The highest average daily traffic volume on the Golden Gate Bridge was 120,276 daily vehicles, which occurred in the year between July 1 1989 and June 30 1990. Between 1980 and 1989 the average daily traffic volume on the GGB increased from 97,080 daily vehicles to 120,276 daily vehicles – an annual increase of 2.7 percent. Since 1989, the average daily traffic on the GGB has decreased from 120,276 daily vehicles to 110,113 daily vehicles – an annual decrease of 0.4 percent.





Average Daily Traffic Volumes From 1980 to 2011

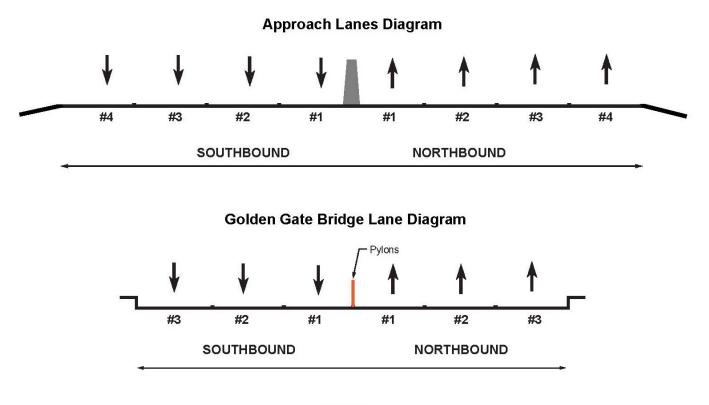
Fiscal Year

3.0 Construction Activities and Related Transportation Impacts

This section of the TMP addresses the construction activities and potential traffic impacts that may result from these activities. Work zone and traffic impacts vary for each of the four stages of construction. An assessment of the proposed stage construction and traffic handling plans is made in this TMP to determine the work zone and traffic impacts for each stage. Most lane closures are expected to take place during off-peak hours, with the exception of one 52-hour full freeway closure that will occur over the duration of one weekend. The closure is expected to begin on a Friday night at 12:00 PM (midnight) and end no later than the following Monday morning at 4:00 AM.

For the purposes of this TMP, a numbering scheme was developed to identify the eight lanes within the Project study area (on the GGB and on both the northern and southern approach). This lane numbering scheme is illustrated in **Figure 3.** The lane closest to the median (in both the northbound [NB] and southbound [SB] direction) is designated as Lane #1, the lane immediately adjacent (to the right of Lane #1) is designated as Lane #2, and so on.

Figure 3: Lane Diagrams



NO SCALE

The following sub-sections describe the Project stage construction and traffic handling sequence requiring temporary closures and detours in each area that will be impacted. **Attachment B1** contains the detailed Construction Staging Plans, and **Attachment B2** and **B3** contain the Traffic Handling and Traffic Control Plans, respectively, for the Short-Term Project.

3.1 Construction Activities

The Project requires two construction contracts: the first contract or Short-Term Project is anticipated to begin in June 2014 and end in late August 2014, the second contract or Long-Term Project, is anticipated to begin in early 2017. The first contract is anticipated to take 60 days to construct and the second contract is anticipated to take 30 days to construct.

Construction of the Project would occur in several stages with required improvements at each end of the GGB. At the northern approach of the GGB, during the Short-Term Project, a portion of the existing concrete median barrier on Route

101 will be removed to provide enough space for the MMB to terminate safely and store the BTM when not in use. Once completed, lane striping will be applied to the roadway.

Lane closure and ramp closure charts, identifying the number of lanes and/or ramps that must be open to accommodate existing traffic for each hour of the day to minimize delay when work activities are being conducted are included as **Attachment C1**. These charts restrict work hours so that traffic is not significantly impacted during periods of peak travel demand and congestion (i.e., peak traffic periods, which typically occur between 6:00 AM and 9:00 AM and 4:00 PM and 7:00 PM). Construction activities are required to be performed during off-peak periods, such as at night and on weekends, to minimize impacts to motorists.

Construction Conditions

The lane requirements and lane closures prepared for the Project are consistent with the lane closure charts prepared for the Golden Gate Bridge Seismic Retrofit Project (Contract No. 2006-B-1) included in Special Provisions Section 10-1.10 "Maintaining Traffic", of the Seismic Golden Gate Bridge Seismic Retrofit Phase IIIA North Anchorage Housing/North Pylon in The City and County of San Francisco and Marin County California (February 19, 2008).⁽ⁱ⁾ These Lane closure charts identify work windows (i.e., time of day and day of week when construction activities could occur, when lanes may be closed, the number of lanes that may be closed). Lane closure charts are included as **Attachment C1**.

The lane closure charts/calculations determined that lane closures along the Project site could occur during the following hours:

Northbound:

- Weekdays from 10:00 AM to 2:00 PM.
- Monday to Thursday from 8:00 PM to 5:00 AM the following day.
- Friday from 9:00 PM to Saturday at 7:00 AM.

Southbound:

- Weekdays from 10:00 AM to 3:00 PM.
- Monday to Thursday from 8:00 PM to 5:00 AM the following day.
- Friday from 9:00 PM to Saturday at 7:00 AM.

Construction of the Toll Plaza consists of the demolition and replacement of the tollbooths and the re-striping of the roadway. Work will occur continuously for a minimum of one week. All work in the southern approach would occur within District ROW. The Toll Plaza will be reduced to five tollbooths during short periods of time (less than eight hours per occurrence). Construction would require that the GGB be reduced to six or seven lanes at the Toll Plaza for more than a one week period and to five lanes for short periods of time (less than eight hours per occurrence).

Stage Construction, Traffic Handling and Traffic Control plans are included as **Attachment B1** through **B3** for the Short-Term Project. The Construction Area Signs for the Short-Term Project are included as **Attachment B4** and serve as the detour plans. Stage Construction, Traffic Handling and Traffic Control plans are included as **Attachment B5** through **B7** for the Long-Term Project.

3.2 Construction Staging and Traffic Handling— Short-Term Project

Brief descriptions of each stage of construction and traffic handling for the short-term project are provided in **Table 1** and **Table 2**.

Southern Approach	GGB	Northern Approach		
Stage 1S	Stage 1B	Stage 1N		
Remove existing striping and markers.	Remove pavement markers.	Install temporary railing (Type K) and crash cushions.		
Install temporary pylon mounting holes and temporary striping (paint) north of the toll plaza.	Install permanent lane striping from STA "G" 1000+00 to STA "G" 1076+40.79.	Remove portion of existing Metal Beam Guard Rail (MBGR) and Asphalt Concrete (AC) dike. Install Drainage System #1. Reconstruct removed MBGR and reconstruct removed AC dike.		
Remove Toll Plaza canopy from Lanes #8 to #11.	Install BTM guide striping from STA "G" 1000+00 to STA "G" 1076+40.79.	Install Midwest Guard Rail System (MGS) and Hot Mix Asphalt (HMA) dike.		
a. Remove Tollbooth #11. Remove concrete island and crash cushion at Tollbooth #11 and place temporary delineators in lieu of concrete island at Tollbooth #11 prior to opening lanes to traffic.		Remove temporary railing (Type K) and crash cushions.		
b. Remove Tollbooth #10. Remove concrete island and crash cushion at Tollbooth #10 and place temporary delineators in lieu of concrete island at Tollbooth #10 prior to opening lanes to traffic.				
c. Remove Tollbooth #9. Remove concrete island and crash cushion at Tollbooth #9 and place temporary delineators in lieu of concrete island at Tollbooth #9 prior to opening lanes to traffic.				
 Remove Tollbooth #8. Remove concrete island and crash cushion at Tollbooth #8 and place temporary (Type K) railing in Lane #9 and Lane #7 with temporary crash cushions prior to opening lanes to traffic. 				
Place temporary railing (Type K) in Lane #7 and Lane #9 with temporary crash cushions.				
Install temporary traffic stripe (paint) and remove temporary delineators or pylons placed in a. or b. above and remove existing channelizers south of toll booth #10 and #11 prior to opening lanes to traffic.				

Southern Approach	GGB	Northern Approach
Remove toll booth, concrete island, and crash cushion at Tollbooth #8.		
Stage 2S	Stage 2B	Stage 2N
Retrofit Tollbooth #7. Modify concrete island and replace crash cushions at Tollbooth #7.	Install Moveable Median Barrier (by others). This work will be coordinated with Stages 4S and 5N.	Remove median concrete barrier and crash cushion and replace with temporary railing (Type K) and temporary crash cushion.
Construct foundation, island, columns, crash cushion and booth for new Lane #8.		
Construct canopy over new Lane #8.		
Install AET equipment on canopy over new lane #8 (by others). Install treadle across new lane #8 (by others).		
Replace crash cushions at Lanes #1 to #7.		
Replace existing concrete expansion joint and sealant.		
Repair concrete cracks at the Toll Plaza.		
Stage 3S	Stage 3B	Stage 3N
Install BTM Guide striping.	Remove obsolete pylon holders and fill holes.	Shift temporary railing (Type K) and temporary crash cushions to provide workspace during night time construction of drainage systems #3 and #4.
Install pylon mounting holes.		Remove and modify drainage systems #3 and #4.
		Shift temporary railing (Type K) and temporary crash cushions at end of shift.
Stage 4S		Stage 4N
Install Moveable Median Barrier (by others). This work will be coordinated with Stages 2B and 5N.		Remove median pavement. Construct roadway pavement. Shift temporary railing (Type K) and temporary crash cushions to provide workspace during pavement excavation and weekend construction work.
Remove existing striping and markers from STA "G" 980+24 to STA "G" 1000+00		Shift temporary railing (Type K) and temporary crash cushions at end of weekend construction to clear travel lanes.
Install permanent lane striping from STA "G" 984+24 to STA "G" 1000+00.		Install BTM guide striping from STA "G" 1076+41 to STA "G" 1083+44.
Replace crash cushions at Tollbooth #1 to Tollbooth #6.		Install temporary BTM guide striping from STA "G" 1083+44 to STA "G" 1096+55.
Install Concrete Barrier (Type K).		
Remove temporary railing (Type K), temporary crash cushions and channelizers south of Tollbooth #8 and Tollbooth #9.		

Southern Approach	GGB Northern Approach	
Stage 5S	Stage 5N	
Complete toll booth and canopy retrofit.	Install Moveable Median Barrier (by This work will be coordinated with S and 2B.	
Retrofit a section of the administrative building.	Remove temporary railing (Type K) a cushions.	and crash
Remove obsolete pylon holders and fill holes.	Remove existing striping and pavem markers.	ıent
	Install temporary striping (paint) fro 1083+44 to STA "G" 1098+46.65.	om STA "G"
	Install permanent striping from STA 1076+40.79 to STA "G" 1083+44	、"G"
	Stage 6N	
	Remove obsolete pylon holders and	fill holes.
	Cold plane AC pavement and place I overlay along mainline from STA "G" to STA "G" 1098+47 and at NB Saus Lateral off-ramp and bus pull-off ar	" 1083+44 alito
	Install temporary stripe (paint) from 1083+44 to STA "G" 1098+47.	ו STA "G"
	Install temporary BTM guide stripe STA "G" 1083+44 to STA "G" 1096+5	
	Stage 7N	
	Remove temporary stripe (paint) an temporary BTM guide strip (paint).	d
	Install permanent stripe along main ramps from STA "G" 1083+44 to STA 1098+47 and NB Sausalito Lateral o bus pull off area.	A "G"
	Install permanent BTM guide stripe "G" 1083+44 to STA "G" 1096+55.	from STA

Source: AECOM, 2014

Southern Approach	GGB	Northern Approach
Stage 1S	Stage 1B	Stage 1N
Close SB toll Lanes #7, #8, #9 and #10 during both construction and non- construction hours.	All NB and SB lanes to remain open during non-construction hours.	Close NB outer shoulder between the Vista point on-ramp and the Sausalito Lateral off- ramp during both construction and non- construction hours.
NB toll Lanes #11 to remain open during non-construction hours.		Close SB outer Shoulder between STA 1086 +00 and STA 1084 +41.56 during both construction and non-construction hours.
		NB auxiliary lane and SB Lane #4 to remain open during both construction and non- construction hours, except during the installation of temporary railing (Type K) and crash cushions.
		Close NB Vista Point on-ramp and off-ramp, NB Sausalito Lateral off-ramp during the cold plane AC Pavement and HMA overlay.
Stage 2S	Stage 2B	Stage 2N
Close SB toll Lanes #7, #8 #9 and #10 during both construction and non- construction hours.	This stage will occur simultaneously with the weekend closure of the GGB.	Close NB inner shoulder between Vista Point on-ramp and Sausalito Road Undercrossing during both construction and non- construction hours.
NB toll Lanes #11 to remain open during non-construction hours.	All lanes on the GGB will be closed to traffic.	Close SB inner shoulder between Vista Point on-ramp and Sausalito Road Undercrossing during both construction and non- construction hours.
All NB and SB lanes to remain open during non-construction hours.		
	Stage 3B	Stage 3N
	All NB and SB lanes to remain open during non-construction hours.	Close NB inner shoulder between Vista Point on-ramp and Sausalito Road Undercrossing during both construction and non- construction hours.
		Close SB inner shoulder between Vista Point on-ramp and Sausalito Road Undercrossing during both construction and non- construction hours.
Stage 4S		Stage 4N
This stage will occur simultaneously with the weekend closure of the GGB.		Close NB inner shoulder between NB Vista Point on-ramp and Sausalito Road Undercrossing during both construction and non-construction hours.
		Close SB inner shoulder between Vista Point on-ramp and Sausalito Road Undercrossing during both construction and non- construction hours.

Table 2: Traffic Handling Stage Description—Short-Term Project

Southern Approach	GGB	Northern Approach	
		Stage 5N	
		This stage will occur simultaneously with the weekend closure of the GGB.	
		Stage 6N	
		All NB and SB lanes to remain open during non-construction hours.	
		Stage 7N	
		All NB and SB lanes to remain open during non-construction hours.	

Source: AECOM, 2014.

3.2.1 Short-Term Project – Southern Approach

Stage 1S

Stage 1S construction activities at the southern approach include the removal of existing striping and markers, the installation of temporary pylon mounting holes, and temporary striping (paint) north of the Toll Plaza. As well as the removal of the Toll Plaza canopy from Lanes #8 through #11. In addition the islands, crash cushions and booths in Lanes #8, #10 and #11 will be demolished. Prior to opening the lanes to traffic temporary delineators will be placed in lieu of the concrete island at the tollbooths and (Type K) temporary railing and crash cushions will be installed in Lane #9 and Lane #7.

Additionally, Stage 1S construction activities will include the placement of temporary (Type K) railing on Lane #7 and Lane #9. The installation of temporary traffic striping (paint) and the removal of temporary delineators or pylons placed during removal of either Tollbooth #11 and or Tollbooth #10, and removal of existing channelizers south of Tollbooth #10 and Tollbooth #11 prior to opening these lanes to traffic.

During Stage 1S construction on the southern approach, the NB toll Lane #11 will remain open during non-construction hours, and the SB toll Lanes #7, #8, #9and #10 will be closed during both construction and non-construction hours.

Stage 2S

Construction activities at the southern approach during Stage 2S consist of retrofitting Tollbooth #7, and the modification of a concrete island and crash cushions at Tollbooth #7. Additionally, construction activities will include the construction of the foundation, island, columns, crash cushions and a booth for a new lane, Lane #8. A new canopy will be constructed over the new Lane #8 and AET equipment will be installed over the new canopy. Additionally, treadle will be installed (by others) across Lane #8. There will be replacement of the crash cushions at Lanes #1 to #7. In addition, there will be replacement of existing concrete expansion joint and sealant, and repair of concrete cracks at the Toll Plaza.

During Stage 2S construction on the southern approach, the NB toll Lanes #10 and #11 will remain open during nonconstruction hours, and the SB toll Lanes #7, #8 and #9 will be closed during both construction and non-construction hours. All NB and SB lanes on the southern approach and on the GGB will remain open during non-construction hours.

Stage 3S

At the southern approach construction activities include the installation of the BTM striping guide. Construction activities will also include the installation of pylon mounting.

All NB and SB lanes on the southern approach, GGB and northern approach will remain open during non-construction hours.

Stage 4S

The MMB will be installed at the southern approach during this stage, and the work will be coordinated with Stage 2B and Stage 5N.

During Stage 4Sconstruction activities at the southern approach include, the removal of existing striping and markers from STA "G" 980+00 to STA "G" 1000+00, and installation of permanent lane striping from STA "G" 984+24 to STA "G" 1000+00. Activities will also include the replacement of crash cushions at Tollbooth #1 through Tollbooth #6, and removal of temporary (Type K) railing, temporary crash cushions and temporary delineators in Lane #7 and Lane #9. Additionally, this will be followed by the installation of a Concrete Barrier (Type K).

Construction activities during this stage will occur during the weekend closure of the Golden Gate Bridge. See Section 3.2.1 for discussion of traffic handling elements during the weekend closure of the Golden Gate Bridge.

3.2.2 Short-Term Project – Golden Gate Bridge Stage 1B

Stage 1B construction activities at the Golden Gate Bridge include removal of the pavement markers and the installation of permanent lane striping and BTM guide striping from STA "G" 1000+00 to STA "G" 1076+40.79. All NB and SB lanes on the GGB will remain open during non-construction hours. During this stage, pedestrian access on the East Sidewalk will be maintained; similarly, bicycle access on both the east and west sidewalks will be maintained.

Stage 2B

During Stage 2B construction activities along the GGB will consist of the installation of the moveable median barrier, this stage will be coordinated with Stag e 4S and Stage 5N.

Construction activities during this stage will occur during the weekend closure of the Golden Gate Bridge. See Section 3.2.1 for discussion of traffic handling elements during Golden Gate Bridge Weekend Closure.

Stage 3B

At the GGB construction activities will consist of the removal of obsolete pylon holders and filling of the pylon holes. All NB and SB lanes on the GGB, southern and northern approaches will remain open during non-construction hours. During this stage, pedestrian access on the East Sidewalk will be maintained; similarly, bicycle access on both the east and west sidewalks will be maintained.

3.2.3 Short-Term Project – Northern Approach

Stage 1N

Stage 1N construction activities at the northern approach include the installation of temporary (Type K) railing and crash cushions and the removal of the existing metal beam guard rail and asphalt concrete dike barrier. This will be followed by construction of Drainage System #1 and replacement of the removed MBGR and reconstruction of the removed AC dike. Additionally, during this stage the temporary (Type K) railing and crash cushions will be removed.

During Stage 1N construction activities, the NB outer shoulder between the Vista Point on-ramp and the Sausalito Lateral off-ramp will be closed during both construction and non-construction hours. The SB outer shoulder between STA 1086 +00 and STA 1084 +41.56 will be closed during construction and non-construction hours. The NB auxiliary lane will remain open during both construction and non-construction hours. All NB and SB lanes on the GGB will remain open during non-construction hours. Additionally, the Vista Point/NB Sausalito Lateral off-ramp bicycle path and bus pull-out bus area will remain open. NB Vista Point on- and off-ramps, NB Sausalito Lateral off-ramp and SB Sausalito Lateral on-ramp will be closed during installation of temporary railing (Type K) and crash cushions.

Stage 2N

Stage 2N construction activities at the northern approach consist of the removal of the median concrete barrier and crash cushion with temporary (Type K) railing and temporary crash cushions.

During Stage 2N construction activities, the NB and SB inner shoulders between the NB Vista Point on-ramp and Sausalito Road Undercrossing will be closed during both construction and non-construction hours. All NB and SB lanes on the GGB will remain open during non-construction hours. Additionally, the Vista Point/NB Sausalito Lateral off-ramp bicycle path and bus pull-out bus area will remain open.

Stage 3N

Stage 3N construction activities at the northern approach will involve shifting the temporary (Type K) railing and crash cushions in order to provide workspace for Drainage Systems #3 and #4 night-time work, as well as the removal and modification of drainage systems #3 and #4.

During Stage 3N construction activities, the NB and SB inner shoulders between the Vista Point on-ramp and Sausalito Road Undercrossing will be closed during both construction and non-construction hours. All NB and SB lanes on the GGB will remain open during non-construction hours. Additionally, the Vista Point/NB Sausalito Lateral off-ramp bicycle path and bus pull-out bus area will remain open.

Stage 4N

During Stage 4N construction activities at the northern approach will include the removal of the median pavement, construction of roadway pavement, and shifting the temporary (Type K) railing and temporary crash cushions to provide workspace during the pavement excavation and weekend construction work. At the end of the weekend construction work, there will be shifting of the temporary (Type K) railing and crash cushions in order to remove temporary (Type K) railing and crash cushions from travel lanes. During this stage construction work will also include the installation of BTM guide striping from STA "G" 1076+41 to STA "G" 1083+44 and temporary BTM guide striping from STA "G" 1083+44 to STA "G" 1096+55

During Stage 4N construction activities, the NB and SB inner shoulders between the Vista Point on-ramp and Sausalito Road Undercrossing will be closed during both construction and non-construction hours. All NB and SB lanes on the GGB will remain open during non-construction hours. Additionally, the Vista Point/NB Sausalito Lateral off-ramp bicycle path and bus pull-out bus area will remain open.

Stage 5N

The MMB will be installed at the northern approach during this stage, and the work will be coordinated with Stage 4S and Stage 2B.

Stage 5N construction activities at the northern approach, will include the removal of temporary (Type K) railing and existing striping and pavement markers, and the installation of temporary striping from STA "G" 1083+44 to STA "G" 1098+46.65, the installation of permanent striping from STA G 1076+40.79 to STA "G" 1083+44.

Construction activities during this stage will occur during the weekend closure of the Golden Gate Bridge. See Section 3.2.1 for discussion of traffic handling elements during Golden Gate Bridge Weekend Closure. Additionally the NB Sausalito Lateral off-ramp bike path and bus pull-out area will be closed during this stage. Bicycles and pedestrians may travel to Conzelman Road through Fort Baker to East Road.

Stage 6N

Construction activities at the northern approach during this stage will involve the removal of obsolete pylon holders and filling of the pylon holes. There will be a cold plan AC pavement and placement of HMA overlay along the mainline from STA "G" 1083+44 to STA "G" 1098+47 and at the NB Sausalito Lateral off-ramp and bus pull-off area. Additionally this stage will involve the installation of temporary striping from STA "G" 1083+44 to STA "G" 1098+47, and the installation of temporary BTM guide Striping from STA "G" 1083+44 to STA "G" 1096+55.

During Stage 6N construction activities, all NB and SB lanes on the GGB and the northern and southern approaches will remain open during non-construction hours. Additionally, the Vista Point/NB Sausalito Lateral off-ramp bicycle path and bus pull-out bus area will remain open. The Vista Point on- and off-ramps, NB Sausalito Lateral off-ramp, and SB Sausalito Lateral on-ramp will be closed as needed during construction hours. Vehicles will be detoured to the Spencer Avenue Interchange.

Stage 7N

Construction activities during this stage will involve the removal of temporary striping and the installation of permanent striping along mainline ramps from STA "G" 1083+44 to STA "G" 1098+47 and the NB Sausalito Lateral off-ramp bus pull off area. Additionally this stage will involve the installation of permanent BTM guide striping from STA "G" 1083+44 to STA "G" 1096+55.

During Stage 7N construction activities, all NB and SB lanes on the GGB and the northern and southern approaches will remain open during non-construction hours. Additionally, the Vista Point/NB Sausalito Lateral off-ramp bicycle path and bus pull-out bus area will remain open. The Vista Point on- and off-ramps, NB Sausalito Lateral off-ramp, and SB Sausalito Lateral on-ramp will be closed as needed during construction hours. Vehicles will be detoured to the Spencer Avenue Interchange.

3.2.4 Traffic Handling— Golden Gate Bridge Weekend Closure

Construction activities along the GGB will require a complete closure of the Golden Gate Bridge to all traffic in both the northbound and southbound directions to facilitate the safe installation and testing of the MMB. The closure will occur during a weekend and will last for a period of no longer than 52 hours, beginning on Friday at midnight and ending no later than Monday at 4:00 AM. Detailed traffic handling plans for the weekend closure of the Golden Gate Bridge are included as part of **Attachment B2**. The weekend closure of the Golden Gate Bridge will occur during Stages 3S, 2B and 5N of the short-term project. Brief descriptions of the traffic handling for the weekend closure of the GGB are provided in **Table 3**.

Southern Approach- Stage 4S	GGB – Stage 2B	Northern Approach- Stage 5N
Close all lanes on NB Route 101 from Marina Blvd to the GGB. Provide flaggers to allow buses and authorized vehicles to enter closure.	Close All NB and SB lanes.	Close all lanes on SB Route 101 to traffic from the GGB to Donahue Street (Marin City / Sausalito Exit).
All lanes on SB Route 101 south of Merchant Rd to remain open.	Provide flaggers to allow buses and authorized vehicles to enter closure.	Close all lanes on NB Route 101 to traffic from the GGB to the NB Sausalito Lateral on-ramp.
Close SB Route 101 left-turn lanes at Route 101/Marina Blvd intersection. Provide flaggers to allow buses and authorized vehicles to enter closure.		Close NB Vista Point on and off-ramps to traffic.
Close EB Marina Blvd left-turn lane at Route 101/Marina Blvd intersection. Provide flaggers to allow buses and authorized vehicles to enter closure.		Close NB Sausalito Lateral on and off-ramps to traffic.
Close all lanes on NB Route 1(Park Presidio Blvd) from Lake Street to Route 101. Provide flaggers to allow buses and authorized vehicles to enter closure.		Close SB Sausalito Lateral on and off-ramps to traffic.
All lanes on SB Route 1 south of Route 101 open to traffic.		NB Sausalito Lateral on-ramp open to traffic.
Close NB GGB Merchant Rd on and off- ramps to traffic. Provide flaggers to allow buses and authorized vehicles to enter closure.		Close SB Spencer Avenue on-ramp to traffic.
Close SB GGB Merchant Rd off-ramp to traffic.		Close SB Rodeo Avenue on-ramp to traffic.
SB GGB Merchant Rd on-ramp open to traffic.		Close SB Donahue Street (Marin City Exit) on- ramp to traffic.
		Close EB Donahue Street left-turn lane onto Route 101SB on-ramp to traffic.
		NB Sausalito Lateral off-ramp bike path will be open to bicycle traffic.

Table 3: Traffic Handling- Golden Gate Bridge Weekend Closure

Source: AECOM, 2014.

Southern Approach

At the southern approach, all lanes on NB Route 101 will be closed to traffic from Marina Blvd to the GGB. All lanes on SB Route 101, south of Merchant road, will remain open to traffic. SB Route 101 left-turn lanes to Marina Blvd will be closed. The EB Marina Blvd left-turn lane to SB Route 101 (Richardson Ave) will be closed to traffic. All lanes on NB Route 1 (Park Presidio Blvd) from Lake Street to Route 101 will be closed to traffic. All lanes on SB route 101 will be open to traffic. NB GGB Merchant Road on and off-ramps will be closed to traffic. SB Merchant Road off-ramp will be open to traffic. SB GGB Merchant Road on-ramp will be open to traffic. Flaggers will be provided during this stage to allow buses and authorized vehicles to enter closed roadways.

Golden Gate Bridge

At the GGB, all NB and SB lanes will be closed to traffic. Pedestrian access on the East Sidewalk will be maintained; similarly, bicycle access on both the East and West Sidewalks will be maintained. Flaggers will be provided during this stage to allow buses and authorized vehicles to enter closed lanes on the GGB.

Northern Approach

At the northern approach, all lanes on SB Route 101 will be closed to traffic between the GGB and Donahue Street (Marin City / Sausalito Exit). All lanes on NB Route 101 will be closed between the GGB and the NB Sausalito Lateral on-ramp. NB Vista Point on and off-ramps will be closed to traffic. SB Sausalito Lateral on and off-ramps will be closed to traffic. NB Sausalito Lateral on and off-ramps will be closed to traffic. SB Spencer Avenue on-ramp, SB Rodeo Avenue on-ramp and SB Donahue Street (Marin City Exit) will be closed to traffic.

Pedestrian access on the East Sidewalk will be maintained; similarly, bicycle access on both the East and West Sidewalks will be maintained. The eastern bicycle path between the Vista Point and Alexander Avenue will remain open to bicycle traffic.

3.3 Construction Staging and Traffic Handling— Long-Term Project

Brief descriptions of each stage of construction and traffic handling for the Long-Term Project are provided in **Table 4** and **Table 5**.

Table 4: Stage Construction— Long-Term Project

Table 4: Stage Construction— Long-Term Project		
Southern approach		
Stage 1		
Install concrete barrier		
Stage 2		
Remove existing striping and markers		
Remove pylon mounting holes		
Install pylon mounting holes		
Install traffic striping		
Install BTM guide striping		
Stage 3		
Realign existing MMB		
Install MMB and connect to existing		

Source: AECOM, 2014.

Table 5: Traffic Handling Stage Description— Long-Term Project

Southern approach

Stage 1

All NB and SB lanes to remain open during both construction and non-construction hours

Stage 2

All NB and SB lanes to remain open during non-construction hours

Stage 3

All NB and SB lanes to remain open during non-construction hours

Source: AECOM, 2014.

Stage 1

During Stage 1 construction activities, a concrete barrier will be installed on the southern approach. In the NB direction on the mainline Lane#1 will be merged with Lane #2.

There will be no construction activities on the GGB and all NB and SB lanes on both the GGB and on the northern approach will remain open during both construction and non-construction hours.

Stage 2

Stage 2 construction activities at the southern approach include the removal of existing striping and pavement markers and pylon mounting holes within the District ROW. Additionally, it includes the installation of pylon mounting holes, traffic striping and BTM guide striping.

During Stage 2, there will be no construction activity on the GGB all NB and SB lanes on the GGB, southern and northern approach will remain open during non-construction hours.

Stage 3

At the southern approach, Stage 3 construction activities include the realignment of the existing MMB and the installation of the new MMB. During Stage 3 construction activities all NB and SB lanes on the GGB and southern will remain open during non-construction hours.

3.4 Transportation Impacts— Short-Term Project

With the exception of the weekend closure of the GGB, all NB and SB lanes at the southern and northern approach as well as at the GGB, will be open to traffic during all stages of construction. The lane closure and damage calculations presented in **Attachment C2** determined that this closure would only have a significant impact during the following time periods: Northbound direction:

- Monday Thursday from 5:00 PM to 7:00 PM
- Friday from 2:00 PM to 3:00 PM, and from 5:00 PM to 6:00 PM

Southbound direction:

• Monday – Thursday from 7:00 AM to 9:00 AM

However, there will be no lane closures during these time periods. All construction work will be conducted during the identified work windows, as presented in Section 3.1, (i.e., late at night, during the early morning hours and on weekends when traffic demands on the GGB are at a minimum). Lane closures will be temporary. Detailed lane closure charts are provided as **Attachment C1**.

The following are the traffic control plans for various stages of construction on the GGB, northern and southern approach. Detailed Traffic Control plans and Construction Area Sign plans that include detour plans are provided as **Attachment B3** and **B4** respectively.

3.4.1 Southern Approach Stage 1S

During Stage 1S construction activities, on the southern approach the SB toll Lanes #7, #8 and #9 will be closed during both construction and non-construction hours. These toll lane closures are not expected to cause significant traffic delays.

All NB and SB lanes on the GGB will remain open during this stage of construction during non-construction hours, and as such, no significant traffic impacts are expected to occur.

Stage 2S

During Stage 2S construction activities, all lanes on the southern approach and on the GGB will remain open to traffic during non-construction hours and as such, no significant traffic impacts are expected to occur. Additionally, the SB toll Lanes #7, #8 and #9 will be closed during both construction and non-construction hours. These toll lane closures are not expected to cause significant traffic delays.

Stage 3S

See Section 3.4.1 for discussion of transportation impacts during this stage.

Stage 4S

During Stage 4S construction activities, all lanes on the southern approach and on the GGB will remain open to traffic during non-construction hours and as such, no significant traffic impacts are expected to occur.

3.4.2 Golden Gate Bridge

Stage 1B

All NB and SB lanes on the GGB will remain open during this stage of construction during non-construction hours, and as such, no significant traffic impacts are expected to occur.

Stage 2B

See Section 3.4.1 for discussion of transportation impacts during this stage.

Stage 3B

All NB and SB lanes on the GGB will remain open during this stage of construction during non-construction hours, and as such, no significant traffic impacts are expected to occur.

3.4.3 Northern Approach

Stage 1N

During Stage 1N construction activities, at the northern approach, the NB auxiliary lane shoulder and SB outer shoulder between the Marin Abutment and SB Sausalito Lateral off-ramp will be closed during construction and non-construction hours. This closure will not affect any of the traffic lanes and will not reduce roadway capacity in either direction; as a result no significant traffic impacts are expected to occur.

The NB Vista Point on- and off-ramps, NB Sausalito Lateral off-ramp and the SB Sausalito Lateral on-ramp will be closed during the installation of temporary railing (Type K). These closures will occur late at night and are not expected to have significant impacts due to the low traffic volumes during these hours.

All NB and SB lanes on the GGB will remain open during this stage of construction during non-construction hours, and as such, no significant traffic impacts are expected to occur.

Stage 2N to 4N

During Stages 2N to 4N, at the northern approach, the NB and SB inner shoulders between the NB Vista Point off-ramp and Sausalito Road Undercrossing will be closed. These closures will not affect any of the traffic lanes and will not reduce roadway capacity in either direction; as a result no significant traffic impacts are expected to occur.

All NB and SB lanes on the GGB will remain open during these stages of construction during non-construction hours, and as such, no significant traffic impacts are expected to occur.

Stage 5N

See Section 3.4.1 for discussion of transportation impacts during this stage.

Stage 6N

All NB and SB lanes on the southern approach, GGB and northern approach will remain open during this stage of construction during non-construction hours, and as such, no significant traffic impacts are expected to occur.

Stage 7N

All NB and SB lanes on the southern approach, GGB and northern approach will remain open during this stage of construction during non-construction hours, and as such, no significant traffic impacts are expected to occur.

3.4.4 Transportation Impacts – Golden Gate Weekend Bridge Closure

As discussed earlier, during construction of the short-term project, a full closure of the GGB that will not last more than 52 hours and will occur over one weekend. This closure is expected to cause significant delays to motorists travelling between Marin County and the City of San Francisco; however it is necessary in order to ensure the safe installation of the MMB and to allow for free movement of works and equipment during these operations. A detailed description of the detour routes to be used during this closure as well as an analysis of the travel time delay and associated costs for vehicles is included as part of Section 3.9.

It is recommended that the public is informed to use alternate freeways, Ferry Services and/or avoid the use of Route 101 during this weekend. Further recommendations on TMP strategies that can be employed to mitigate lane closure impacts can be found in Section 4.4 and 4.5.

3.5 Transportation Impacts— Long-Term Project

During construction of the Long-Term Project, all lanes on the GGB and on the northern approach will remain open. On the southern approach, at least two lanes in each direction and five toll lanes at the Toll Plaza will remain open to traffic both during all stages of construction. Work will be conducted during the identified work windows, (as presented in Section 3.1, i.e., late at night and during the early morning hours) when traffic demands on the GGB are at a minimum. Lane closures will be temporary. Detailed lane closure charts for the Long-Term Project are provided as **Attachment C1**. While the temporary lane closures will reduce the capacity of the GGB minor traffic delays are expected during construction staging and lane closures, and no significant traffic impacts are expected to occur.

The following are the traffic control plans for various scenarios expected during construction on the southern approach. Detailed traffic control plans for the Long-Term Project are provided as **Attachment B7.**

Two NB and SB lanes Closed

On the southern approach, the inner NB lanes will be closed and the outer two NB lanes will be open in this scenario. In the SB direction, the two outer lanes will remain open and the two inner SB lanes will remain closed to traffic. At the Toll Plaza, toll Lane #1 to Lane #5 will remain open during construction. On the GGB all lanes will remain open and the MMB will be in the at 4N/2S configuration.

During construction, the toll lane closures will result in a decrease in capacity at the Toll Plaza in both directions; however, traffic volumes are not expected to exceed available capacity and as such significant traffic delays are not expected to occur.

Three NB Lanes closed

At the southern approach, the NB Lane #2 and #3 will be closed to traffic in this scenario. The Route 1 on-ramp lanes will be merged with the NB Lane #1. All SB lanes will remain open to traffic in the SB direction. At the Toll Plaza toll Lanes #1 through Lane #8 will remain open. All the GGB lanes will remain open and the MMB will be in the 4N/2S configuration.

Limiting traffic to the use of one lane in the NB direction at the southern approach reduces the roadway capacity. However, the lane closures occur late at night and in the early morning traffic volumes are not expected to exceed available capacity during construction conditions and significant traffic delays are not expected to occur.

Two SB Lanes Closed

On the southern approach, the two SB inner lanes will remain closed to traffic during construction. Toll Lanes #4, #5 and #6 will remain closed to traffic. During this scenario, all the NB lanes will remain open to traffic in the NB direction. All the GGB lanes will remain open and the MMB will be set in the 2N/4S configuration.

Limiting traffic to the use of only five of the eight toll lanes and two SB lanes south of the Toll Plaza reduces the capacity at the Toll Plaza. However, the lane closures occur late at night and in the early morning traffic volumes are not expected to exceed available capacity during construction conditions and significant traffic delays are not expected to occur.

Two SB Lanes Closed

At the southern approach, two outer SB lanes and toll Lane #1 through #3 will remain closed to traffic. Toll Lanes #4 through #8, will remain open to SB traffic. During this scenario, all the NB lanes will remain open to traffic. All the GGB lanes will remain open and the MMB will be in the 3N/3S configuration.

Limiting traffic to the use five of the eight toll lanes, and two SB lanes south of the plaza reduces the capacity at the Toll Plaza. However, the lane closures occur late at night and in the early morning traffic volumes are not expected to exceed available capacity during construction conditions and significant traffic delays are not expected to occur.

3.6 Lane Closures

Short-Term Project

All lanes in each direction will remain open throughout all stages and phases of construction during the Short-Term Project, with the exception of the weekend closure of the Golden Gate Bridge. Lane closures will take place during late evening and early morning hours when traffic demands on the GGB (and its approaches) are at a minimum.

Minor traffic delays are expected during construction staging and lane closures, and no significant traffic impacts are expected to occur. The defined work windows defined ensure that vehicle demand does not exceed the lane capacity. Traffic conditions during construction activities will be monitored and the work windows may be adjusted if need be.

Long-Term Project

During the Long-Term Project all lanes on the GGB and the northern approach will remain open. On the southern approach at least two lanes and five toll lanes will remain open to the public during and after construction. Traffic delays are expected to be minor, as construction will occur late at night when traffic volumes are at a minimum.

Golden Gate Bridge Weekend Closure

A full closure of the Golden Gate Bridge will be necessary during the short-term construction activities. This closure will begin at midnight on January 9, 2015 and will end at 4:00 AM on January 12, 2015. The closure is not expected to exceed 52 hours. While this will cause significant delays to motorists travelling between the City of San Francisco and Marin County, the weekend closure is unavoidable to ensure both public and worker safety during construction. It is recommended that the public is informed to use alternate freeways, ferry services and/or avoid the use of Route 101 during this weekend. Further recommendations on TMP strategies that can be employed to mitigate lane closure impacts can be found in Section 4.4 and 4.5.

3.7 Ramp Closures

As discussed in Section 3.2, there will be ramp closures that will occur during the weekend closure of the GGB. Detailed ramp closure charts are provided as **Attachment C1.** Ramp closures will occur at the following locations:

- Northbound Golden Gate Bridge Merchant Road on-ramp;
- Northbound Golden Gate Bridge Merchant Road off-ramp;
- Southbound Golden Gate Bridge Merchant Road off-ramp;
- Northbound Route 101 Vista Point on-ramp;
- Northbound Route 101 Vista Point off-ramp;
- Northbound Route 101 Sausalito Lateral on-ramp;
- Northbound Route 101 Sausalito Lateral off-ramp;
- Southbound Route 101 Sausalito Lateral on-ramp;
- Southbound Route 101 Sausalito Lateral off-ramp;
- Southbound Route 101 Spencer Avenue on-ramp;
- Southbound Route 101 Rodeo Avenue on-ramp; and,

• Southbound Route 101 Donahue Street on-ramp.

In addition to ramp closures that will occur during the weekend closure of the GGB, nighttime ramp closures will occur as needed during construction stages 6N and 7N at the northbound Vista Point on- and off-ramps, northbound Route 101 Sausalito Lateral off-ramp, and southbound Route 101 Sausalito on-ramp.

3.8 Lane and Ramp Closure Late Pick-up Delay Costs

In the event that construction activities exceed the allotted time and result in late lane closure pick-ups, delay costs and damage calculations have been assessed as part of this TMP.

3.8.1 Lane and Ramp Closure

The District determined that except for the 52-hour weekend bridge closure, liquidated damages for failing to open the required bridge or mainline traffic lanes to public traffic at the times specified shall be \$5,000 for each full ten minute period or part thereof after the first ten minute period. The total liquidated damages for each 12 hours of such delay shall not exceed \$150,000.

3.8.2 Golden Gate Bridge Weekend Closure

Failure to complete all the work for stages 4S and 5N in all parts and requirements and to reopen the GGB at the specified time is expected to have a significant impact on regional activities; a detailed description of the liquidated damages determined by the District is presented in **Attachment C2** and is summarized in **Table 6**, which shows the delay costs of the first hour after the planned 4:00 AM reopening on the GGB.

Table 6: Golden Gate Bridge Weekend Closure Late Pick-Up Delay Costs

Time Period	Charge
After first 10 minutes and up to 20 minutes (4:10:01 AM to 4:19:59 AM)	\$10,000
20 to 30 minutes (4:20:00 AM to 4:29:59 AM)	\$20,000
30 to 40 minutes (4:30:00 AM to 4:39:59 AM)	\$30,000
40 to 50 minutes (4:40:00 AM to 4:49:59 AM)	\$40,000
50 to 60 minutes (4:50:00 AM to 4:59:59 AM)	\$50,000
Liquidated damages each additional 10 minutes after initial first hour	+ \$25,000

Source: Golden Gate Bridge Highway and Transportation District, 2014.

- The total liquidated damages for failing to open the bridge or mainline traffic lanes to public traffic at the times specified for the 52-hour weekend closure shall not exceed three hundred thousand (\$300,000) dollars.

Late lane closure pickup delay costs were also determined for the detour routes on the Richmond—San Rafael Bridge (Interstate 580) and the San Francisco—Oakland Bay Bridge (Interstate 80), and are included in **Attachment C2**. Late lane closure pickup delay costs were determined by comparing the minimum delay damage costs presented in Section 2.5.3 of the *Caltrans Transportation Management Plan Guidelines* (Caltrans, 2009) ⁽ⁱⁱ⁾, with the costs determined using a volume-based approach and selecting the higher delay cost. Due to the low traffic volumes during the hours immediately succeeding the construction hours, damage calculations were performed using a worst-case scenario of a five-hour late lane closure pick-up. Detailed damage calculations for the late reopening of the GGB, with respect to the Richmond—San Rafael Bridge and the San Francisco—Oakland Bay Bridge are presented in **Attachment C2**. The methodology used calculated the delay costs based on the expected volumes on each bridge with the addition of the GGB detour traffic. Both bridges operated over capacity in both directions within the first five hours after the anticipated GGB reopening with an estimated average delay cost of between \$410 and \$1,760 for each 10 minute period. As determined by the District, the minimum damages of \$5,000 for the first ten minutes, regardless of traffic volumes, may be applied to each bridge.

3.9 Lane Closure Detours and Detour Delay Cost Analysis

Motorists travelling between Marin County and San Francisco during the weekend closure of the GGB will be required to use alternate routes. A description of the proposed detour routes is included below and a summary of the detour routes can be found in **Figure 4**, detailed plans of the detour can be found in **Attachment B4**.

Notes:





The delay costs for these detours was determined by using the benefit valuation for in-vehicle travel for both auto, transit and freight vehicles included in the *Plan Bay Area Project Performance Assessment* (Association of Bay Area Governments, 2012)⁽ⁱⁱⁱ⁾. The benefit valuation represents both the discomfort experienced by travelers enduring transportation-related delays and the loss in regional productivity of on-the-clock travelers and commuter. The benefit valuation used is \$16.03 per person hour of travel for in-vehicle travel time for auto and transit vehicles and is set equal to one-half of the mean regional wage rate (\$32.06). The benefit valuation used for freight and trucks is \$26.24 per person hour of travel for invehicle travel time. It should be noted that the mileage used, to determine these costs is an approximation and actual mileage and travel time will vary for motorists based on their personal origin, destinations and detour route preferences.

Southern Approach

Motorists travelling on NB Route 1 will be directed to turn right and drive east along local roadways, toward Geary Boulevard and Fell Street and follow detour signs that will direct them to the San Francisco—Oakland Bay Bridge (EB Interstate 80) and the Richmond—San Rafael Bridge (WB Interstate 580), from there motorists can merge onto SB Route 101 and continue on to their final destination. This detour results in an increased travel distance of approximately 33 miles and an additional 0.81 hours (49 minutes) of travel time, the cost of this detour is approximately \$17.98 for auto/transit vehicles and \$26.25 for freight trucks. This cost includes a \$5.00 per-axle toll that travelers will have to pay at the Richmond-San Rafael Bridge. Motorists travelling northbound on Marina Boulevard and on Richardson Avenue (Route 101) will be directed to merge onto SB Route 101 and follow detour signs that will direct them to the San Francisco—Oakland Bay Bridge (EB Interstate 80), and the Richmond-San Rafael Bridge (WB Interstate 580), from there motorists can merge onto SB Route 101 and continue on to their final destination. This detour results in an increased travel distance of 30 miles and an additional 0.67 hours (40 minutes) of travel time, the cost of this detour is approximately \$15.69 for auto/transit vehicles and \$22.49 for freight trucks. This cost includes a \$5.00 per-axle toll that travelers will have to pay at the Richmond-San Rafael Bridge.

Northern Approach

Motorists travelling Southbound on Route 101 will be directed to take the Spencer Avenue exit and merge onto NB Route 101. Detour signs will direct them to the Richmond—San Rafael Bridge (EB Interstate 580) and later merge onto WB Interstate 80 which will lead them to the San Francisco—Oakland Bay Bridge; from there motorists can merge onto NB Route 101 and continue on to their final destinations. This detour results in an increased travel distance of 33 miles and an additional 0.78 hours (47 minutes) of travel time, the cost of this detour was determined as approximately \$12.56 for auto/transit vehicles and \$20.55 for freight trucks.

3.10 Local and Regional Impacts

Construction activities at the GGB and its northern and southern approaches are expected to have both local and regional impacts within the San Francisco Bay Area. The most significant impacts are expected to occur during the full closure of the GGB, which will occur during the weekend closure of the GGB beginning on January 9, 2015 at midnight (12:00 AM) and ending on January 12, 2015 at 4:00 AM. The closure is not expected to exceed these 52 hours. Assumptions regarding traffic volumes during the weekend closure of the GGB are based on experience with the five-day weekend full closure of the San Francisco—Oakland Bay Bridge. During the closure an estimated 30 percent of San Francisco—Oakland Bay Bridge traffic chose to forego driving in favor of alternate modes of transportation (bus, ferry etc.) or avoided travelling altogether. It is anticipated that approximately 30 percent of GGB traffic will opt to use transit to travel between Marin County and the City and County of San Francisco, while the remaining 70 percent of GGB traffic will use detour routes. These detour routes will consist of both local roadways such as Sir Francis Drake Boulevard in Marin County, and Presidio Parkway, and Fell Street, and Geary Boulevard in the City and County of San Francisco, as well as regional highways, Interstate 580 and Interstate 80 which will include the use of the Richmond—San Rafael Bridge, and the San Francisco—Oakland Bay Bridge respectively.

The impacts discussed in this section are a direct result from the unavoidable weekend closure of the GGB, and while they will inconvenience travelers, the closure, subsequent detours and alternative transportation options are necessary to ensure both public and worker safety during the installation of the MMB on the GGB.

3.10.1 Northern Approach

Sir Francis Drake Boulevard

Sir Francis Drake Boulevard is a major east-west roadway in Marin County, which stretches from Point Reyes on the west to the San Quentin Peninsula on the east. As it passes through the Golden Gate Transit Ferry Terminal and the Larkspur Landing retail center, Sir Francis Drake Boulevard operates as a two-way arterial, with two through-lanes in each direction separated by a median. At the Greenbrae interchange, at the intersection of Sir Francis Drake Boulevard and Route 101, Sir Francis Drake Boulevard has three lanes of traffic in both the eastbound and westbound direction.

Vehicles travelling southbound on Route 101 will be diverted to Interstate 580 during the weekend closure of the GGB, Sir Francis Drake Boulevard will serve as an important connection between Route 101 and Interstate 580. Additionally, the Golden Gate Larkspur Ferry terminal is located on Sir Francis Drake Boulevard. It is anticipated that the proposed detour routes as well as the proximity of the Golden Gate Larkspur Ferry Terminal to Sir Francis Drake Boulevard will cause an increase in traffic volumes on Sir Francis Drake Boulevard during the weekend closure of the GGB.

Golden Gate Larkspur Ferry Terminal

The District provides a ferry service between the City of Larkspur and the City of San Francisco. The ferry terminal in Larkspur is located on Sir Francis Drake Boulevard just east of Route 101. The ferry terminal has 1,800 parking spaces available to the public, including 30 carpool spaces. In addition, the lot has 28 spaces for persons with disabilities and two spaces for electric vehicles. Parking at the ferry terminal is free for the first 24 hours.

Golden Gate Sausalito Ferry Landing

The District also operates a ferry service between the City of Sausalito and the City of San Francisco. The Ferry Landing in Sausalito is located in downtown Sausalito at Humboldt Street and Anchor Street. There are for-pay public parking lots adjacent to the Ferry Landing and metered parking within the vicinity of the ferry landing.

3.10.2 Southern Approach

Presidio Parkway

The Presidio Parkway (formerly Doyle Drive), is a segment of Route 101 that extends from the south end of the Golden Gate Bridge Toll Plaza to Broderick Street on the east, including Richardson Avenue. Currently access to Presidio Parkway is also provided via Marina Boulevard on the southern approach, and on the northern approach, corridor access is also provided at Veteran's Boulevard and at Lincoln Boulevard via Merchant Road near the Toll Plaza. During the weekend closure of the GGB, it is anticipated that the Presidio Parkway may experience a decrease in traffic volumes, as a result of motorists utilizing the detour routes that are not within the vicinity of this roadway totravel between Marin County and the City and County of San Francisco.

3.10.3 Alternate Routes

During the weekend closure of the GGB the affected traffic will be detoured to alternate routes, primarily the San Francisco—Oakland Bay Bridge and the Richmond—San Rafael Bridge, which will connect traffic from Marin County to the City and County of San Francisco. As part of the Transportation Management Plan, an analysis was conducted to determine the effect of increased traffic on these alternate routes as a result of the weekend closure of the GGB.

While a base capacity was determined for both the San Francisco—Oakland Bay Bridge and the Richmond—San Rafael Bridge, the weekend closure of the GGB is anticipated to result in atypical traffic volumes on the detour routes. As a result it was necessary to determine a more conservative peak capacity based on the adjustment factors presented in the *Highway Capacity Manual* (Caltrans, 2010). The peak capacity formula and adjustment factors are summarized below:

Peak Capacity

= Base Capacity × Peak Hour Factor (PHF) × Number of Lanes (N) × Adjustment for Heavy Vehicles (f_{hv}) × Adjustment for Driver Population (f_{p})

Where:

- Peak Hour Factor (PHF) is used to account for variations in flow within the peak hour, and is based on the existing volume-to-capacity ratio of the roadway.
- Adjustment for heavy vehicles (*f*_{hv}) is based on calculating passenger-car equivalents for trucks and buses, and the proportion of trucks and buses in the traffic stream, as provided in the *Annual Average Daily Truck Traffic on the California State Highway System* (Caltrans, 2010) report.

• Adjustment for driver population (*f_p*) reflects the effect of weekend recreational vehicle-trips and driver unfamiliarity with roadways.

Detailed delay calculations are included in **Attachment C2**. As discussed in Section 2.2 and Section 3.11, a reconstruction of the Presidio Parkway will occur simultaneously with the GGB Moveable Median Project.

San Francisco—Oakland Bay Bridge

The San Francisco—Oakland Bay Bridge is a major link between the City and County of San Francisco and the San Francisco Bay Area. The bridge has five lanes in each direction. Hourly weekend (Friday through Monday morning) traffic volumes for the San Francisco—Oakland Bay Bridge are summarized in **Figure 5**.

The base capacity for each direction on the San Francisco—Oakland Bay Bridge was determined to be 9,250 passenger cars. The PHF was determined to be 0.95, and the f_{hv} was determined to be 0.98 in both directions of the San Francisco—Oakland Bay Bridge. To reflect potential driver unfamiliarity with this detour route the standard rural f_{ρ} of 0.975 was assumed in both directions of the San Francisco—Oakland Bay Bridge. After the application of these adjustment factors to the base capacity, the peak capacity was determined to be 8,352 vph in both directions of the San Francisco—Oakland Bay Bridge.

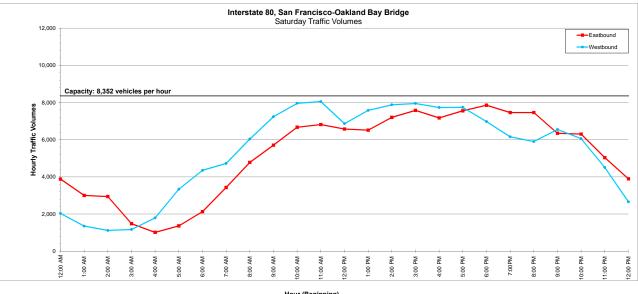
Further assumptions regarding traffic volumes during the weekend closure of the GGB are based on experience with the five-day weekend full closure of the San Francisco—Oakland Bay Bridge. During the closure an estimated 30 percent of San Francisco—Oakland Bay Bridge traffic chose to forego driving in favor of alternate modes of transportation (bus, ferry etc.) or the avoided travelling altogether. As such, the detour delay analysis for the weekend closure of the GGB, assumes a 30 percent no-show rate for existing GGB traffic volumes. The remaining 70 percent of GGB traffic were assigned to alternate routes to travel between Marin County and the City and County of San Francisco.

Detour delay calculations were also performed assuming a higher share of GGB traffic will drive. In addition to the 30 percent "no-show" rate, this analysis was conducted assuming a zero (0) percent, 10 percent, and 20 percent "no-show" rate, with the remaining share of traffic (100 percent, 90 percent, and 80 percent respectively), assigned to the detour routes. This analysis added this remainder share of existing weekend NB GGB traffic onto the EB San Francisco—Oakland Bay bridge, and the remainder share of existing weekend SB GGB traffic onto the WB San Francisco—Oakland Bay Bridge.

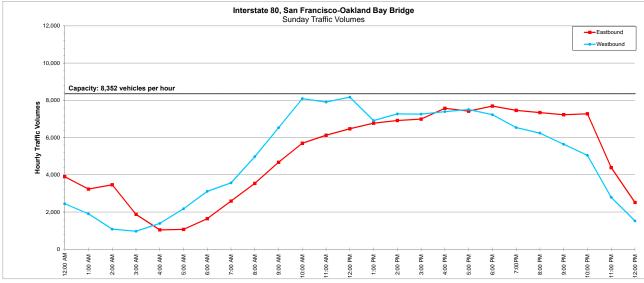
A queue is anticipated to occur whenever the cumulative output exceeds the cumulative demand. The time intervals when this will occur on the San Francisco—Oakland Bay Bridge during the weekend closure of the GGB ending on Monday at 4:00 AM are summarized in **Table 7**.

A summary of the anticipated traffic volumes and queue lengths during the closure of the GGB is presented in **Attachment C2** and is summarized in **Table 8** and **Table 9**, and in **Figure 6** through **Figure 9**.

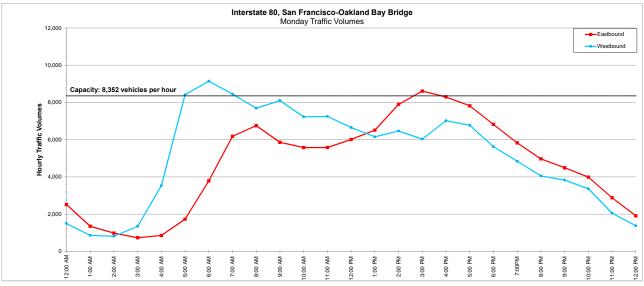
As shown in **Attachment C2**, the demand is anticipated to exceed capacity during the full weekend closure of the GGB demand under all reduction scenarios, with the exception of the westbound direction on Monday morning under the 20 percent and 30 percent reduction scenarios. The bridge would operate over capacity for periods of up to 15 hours (discontinuously). While associated delays will be an inconvenience to travelers they are unavoidable to ensure both public and worker safety during the installation of the MMB. The District has developed a public information outreach plan, summarized in Section 4.4 that is focused on reducing the travel demand during the weekend closure of the GGB, and in turn minimizing the anticipated delay on the San Francisco—Oakland Bay Bridge.











Hour (Beginning)

	San Francisco—Oakland Bay Bridge Average Queue			
Reduction Scenario	Eastbound		Westbound	
	Duration	Time Period	Duration	Time Period
Saturday				
Zero Percent	15 Hours	9:00 AM to Midnight	12 Hours	9:00 AM to 9:00 PM
10 Percent	15 Hours	9:00 AM to Midnight	11 Hours	9:00 AM to 8:00 PM
20 Percent	12 Hours	10:00 AM to 10:00 PM	11 Hours	9:00 AM to 8:00 PM
30 Percent	12 Hours	10:00 AM to 10:00 PM	11 Hours	9:00 AM to 8:00 PM
Sunday				
Zero Percent	14 hours	10:00 AM to Midnight	12 Hours	8:00 AM to 8:00 PM
10 Percent	14 hours	10:00 AM to Midnight	12 Hours	9:00 AM to 9:00 PM
20 Percent	14 hours	10:00 AM to Midnight	11 Hours	9:00 AM to 8:00 PM
30 Percent	13 hours	11:00 AM to Midnight	10 Hours	10:00 AM to 8:00 PM
Monday				
Zero Percent	2 Hours	3:00 PM to 5:00 PM	4 Hours	5:00 AM to 9:00 AM
10 Percent	2 Hours	3:00 PM to 5:00 PM	4 Hours	5:00 AM to 9:00 AM
20 Percent	2 Hours	3:00 PM to 5:00 PM	4 Hours	5:00 AM to 9:00 AM
30 Percent	2 Hours	3:00 PM to 5:00 PM	4 Hours	5:00 AM to 9:00 AM

Table 7: Average Queue – San Francisco—Oakland Bay Bridge

Source: AECOM, 2014.

	Golden Gate Bridge Weekend Closure Detour Traffic Volume — San Francisco—Oakland Bay Bridge (Westbound) $^{(1)}$											
Hours	0 Percent Reduction			10 Percent Reduction			20 Percent Reduction			30 Percent Reduction		
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0:00 - 1:00	2,390	2,933	1,736	2,354	2,884	1,712	2,318	2,836	1,687	2,283	2,787	1,663
1:00 - 2:00	1,551	2,115	998	1,531	2,094	984	1,511	2,073	970	1,491	2,051	956
2:00 - 3:00	1,237	1,219	919	1,225	1,205	908	1,213	1,191	898	1,201	1,178	887
3:00 - 4:00	1,292	1,096	1,499	1,280	1,083	1,483	1,267	1,070	1,468	1,255	1,057	1,452
4:00 - 5:00	1,965	1,561	4,041	1,948	1,544	3,990	1,930	1,527	3,939	1,913	1,510	3,888
5:00 - 6:00	3,739	2,511	9,724	3,698	2,478	9,593	3,658	2,444	9,462	3,617	2,411	9,330
6:00 - 7:00	5,189	3,804	12,019	5,105	3,735	11,732	5,021	3,666	11,444	4,937	3,597	11,157
7:00 - 8:00	6,212	4,531	12,830	6,063	4,435	12,392	5,914	4,338	11,955	5,765	4,242	11,517
8:00 - 9:00	8,231	6,539	12,532	8,011	6,383	12,048	7,792	6,226	11,563	7,572	6,070	11,079
9:00 - 10:00	10,095	8,971	11,764	9,809	8,727	11,398	9,523	8,483	11,031	9,237	8,238	10,665
10:00 – 11:00	11,008	11,507	10,268	10,703	11,165	9,964	10,397	10,824	9,660	10,092	10,482	9,356
11:00 – 12:00	11,536	11,705	10,174	11,188	11,325	9,882	10,839	10,946	9,589	10,491	10,566	9,297
12:00 – 13:00	10,588	12,574	9,412	10,215	12,134	9,136	9,843	11,693	8,860	9,470	11,253	8,585
13:00 – 14:00	11,350	11,050	8,816	10,973	10,636	8,550	10,595	10,222	8,283	10,218	9,808	8,017
14:00 – 15:00	11,502	10,610	9,345	11,139	10,276	9,057	10,777	9,943	8,769	10,414	9,609	8,482
15:00 – 16:00	11,045	10,248	9,036	10,735	9,949	8,736	10,425	9,650	8,435	10,116	9,352	8,135
16:00 – 17:00	10,658	10,941	10,339	10,365	10,586	10,007	10,073	10,231	9,675	9,780	9,876	9,342
17:00 – 18:00	11,124	10,740	10,250	10,786	10,416	9,903	10,447	10,092	9,555	10,109	9,769	9,208
18:00 – 19:00	9,760	9,847	8,439	9,481	9,585	8,158	9,202	9,323	7,877	8,924	9,061	7,595
19:00 – 20:00	8,448	8,795	6,706	8,219	8,569	6,520	7,989	8,344	6,333	7,760	8,118	6,147
20:00 - 21:00	7,987	8,251	5,495	7,778	8,050	5,351	7,570	7,848	5,207	7,361	7,647	5,063
21:00 - 22:00	8,269	7,289	4,946	8,097	7,124	4,834	7,925	6,959	4,722	7,753	6,794	4,611
22:00 - 23:00	7,575	6,128	4,027	7,423	6,020	3,961	7,272	5,911	3,894	7,120	5,803	3,828
23:00 - 24:00	5,512	3,311	2,396	5,411	3,259	2,362	5,310	3,207	2,327	5,209	3,155	2,293

Table 8: Detour Traffic Volumes – San Francisco—Oakland (Westbound Interstate 80)

Source: AECOM, 2014.

Notes:

Shading indicates detour traffic volume is above peak capacity.
 Bold indicates the scheduled end of the GGB weekend closure and all lanes on GGB are anticipated to be open to traffic.

⁽¹⁾ Peak capacity on Interstate 80 Westbound = 8,358 vph

	Golden Gate Bridge Weekend Closure Detour Traffic Volume — San Francisco—Oakland Bay Bridge (Eastbound) ⁽¹⁾											
Hours	0 Percent Reduction			10 Percent Reduction			20 Percent Reduction			30 Percent Reduction		
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0:00 - 1:00	4,951	4,896	3,135	4,844	4,796	3,073	4,737	4,696	3,011	4,630	4,596	2,949
1:00 – 2:00	3,585	3,843	1,694	3,527	3,782	1,659	3,468	3,721	1,625	3,410	3,659	1,590
2:00 - 3:00	3,377	3,933	1,155	3,333	3,886	1,138	3,290	3,839	1,120	3,246	3,792	1,103
3:00 - 4:00	1,725	2,134	860	1,701	2,108	847	1,676	2,082	834	1,652	2,056	821
4:00 - 5:00	1,191	1,215	1,016	1,173	1,198	1,000	1,155	1,181	983	1,137	1,163	967
5:00 - 6:00	1,734	1,282	2,116	1,697	1,260	2,077	1,659	1,239	2,039	1,622	1,217	2,000
6:00 - 7:00	2,730	2,070	4,844	2,670	2,027	4,738	2,609	1,985	4,632	2,549	1,942	4,526
7:00 - 8:00	4,652	3,401	8,528	4,530	3,320	8,293	4,407	3,238	8,058	4,285	3,157	7,824
8:00 - 9:00	6,877	5,099	9,848	6,667	4,943	9,539	6,457	4,787	9,229	6,247	4,630	8,920
9:00 - 10:00	8,753	7,238	8,674	8,449	6,982	8,393	8,144	6,725	8,111	7,840	6,469	7,830
10:00 - 11:00	10,498	9,134	8,546	10,115	8,790	8,249	9,732	8,446	7,952	9,349	8,102	7,655
11:00 – 12:00	10,541	9,758	8,760	10,168	9,395	8,442	9,796	9,031	8,123	9,423	8,668	7,805
12:00 - 13:00	10,059	9,501	9,285	9,710	9,198	8,958	9,362	8,896	8,630	9,013	8,593	8,303
13:00 - 14:00	9,779	9,728	9,769	9,452	9,433	9,443	9,126	9,137	9,117	8,799	8,842	8,791
14:00 – 15:00	10,202	9,541	11,705	9,902	9,279	11,324	9,602	9,016	10,943	9,302	8,754	10,561
15:00 – 16:00	10,457	9,361	13,031	10,169	9,124	12,589	9,880	8,887	12,146	9,592	8,651	11,704
16:00 – 17:00	10,242	10,031	12,913	9,935	9,785	12,451	9,628	9,539	11,989	9,321	9,293	11,527
17:00 – 18:00	11,777	11,280	12,771	11,355	10,894	12,276	10,932	10,507	11,780	10,510	10,121	11,285
18:00 – 19:00	13,475	13,335	11,014	12,913	12,771	10,595	12,351	12,206	10,175	11,788	11,642	9,756
19:00 – 20:00	10,595	10,569	8,568	10,281	10,258	8,294	9,968	9,947	8,021	9,654	9,636	7,747
20:00 - 21:00	9,490	9,651	6,929	9,287	9,420	6,733	9,084	9,189	6,537	8,881	8,958	6,341
21:00 - 22:00	8,226	9,659	6,128	8,038	9,416	5,965	7,850	9,172	5,801	7,661	8,929	5,638
22:00 - 23:00	8,609	9,208	5,221	8,378	9,015	5,098	8,148	8,822	4,974	7,917	8,628	4,851
23:00 - 24:00	6,574	5,454	3,676	6,420	5,347	3,597	6,266	5,241	3,517	6,112	5,134	3,438

Table 9: Detour Traffic Volumes – Richmond— San Francisco—Oakland (Eastbound Interstate 80)

Source: AECOM, 2014.

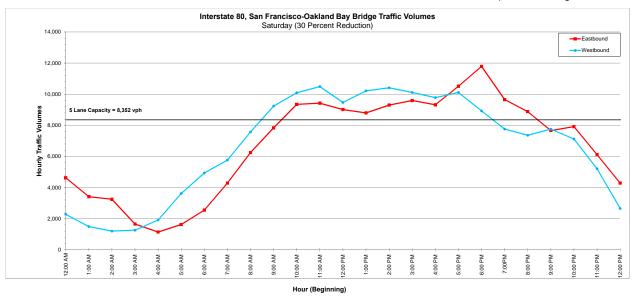
Notes:

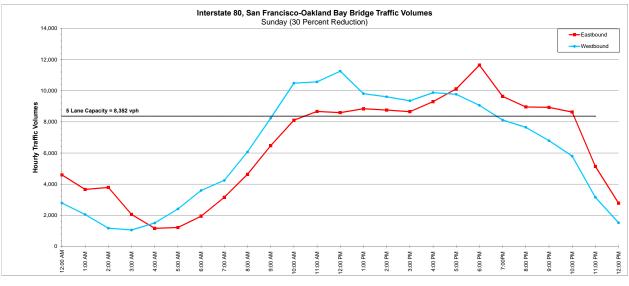
- Shading indicates detour traffic volume is above peak capacity.

- Bold indicates the scheduled end of the GGB weekend closure and all lanes on GGB are anticipated to be open to traffic.

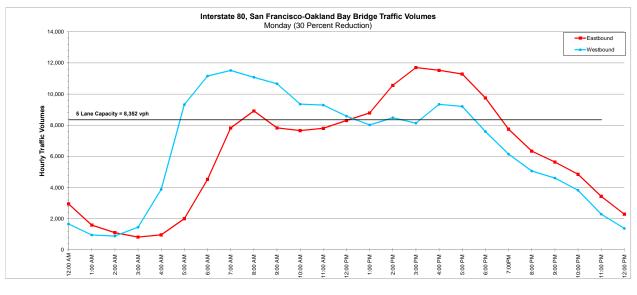
⁽¹ Peak capacity on Interstate 80 Eastbound = 8,358 vph



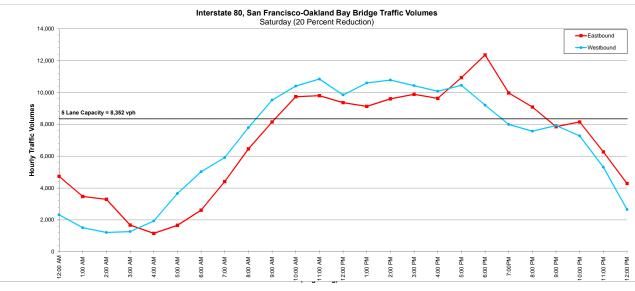




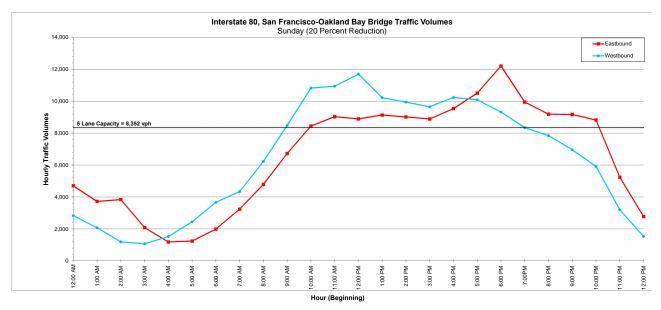
Hour (Beginning)

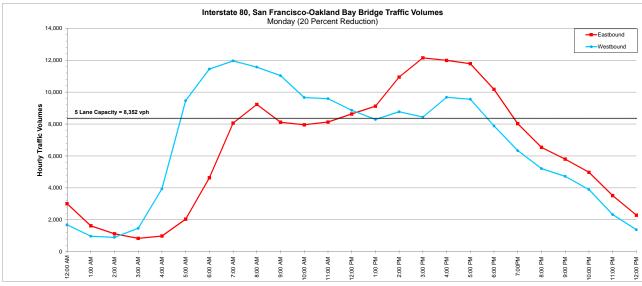




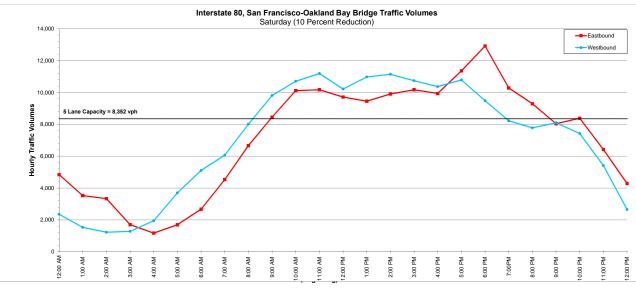


Hour (Beginning)

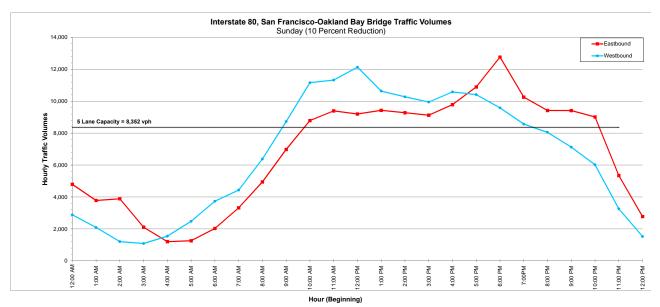




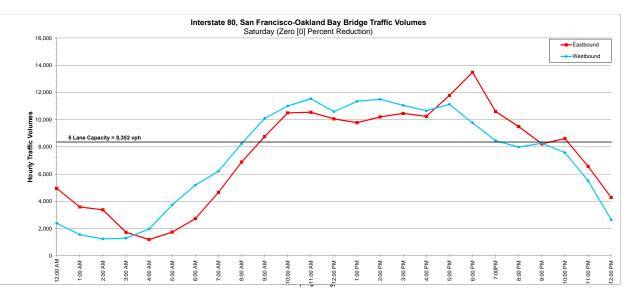




Hour (Beginning)



Interstate 80, San Francisco-Oakland Bay Bridge Traffic Volumes Monday (10 Percent Reduction) 14,000 Eastbound Westbound 12,000 10.000 Hourly Traffic Volumes 5 Lane Capacity = 8,352 vph 8,000 6,000 4,000 2,000 0 12:00 AM 1:00 AM 2:00 AM 3:00 AM 4:00 AM 5:00 AM 6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 8:00 PM 9:00 PM 10:00 PM 11:00 PM 12:00 PM 7:00PM



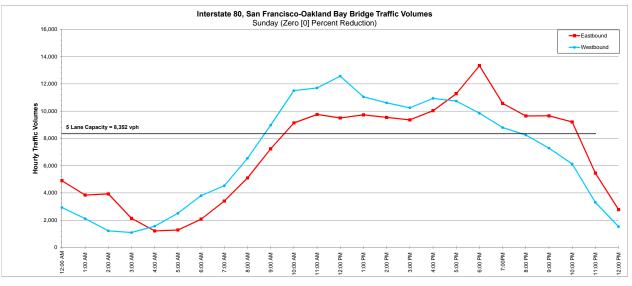
Golden Gate Bridge Moveable Median Barrier

Transportation Management Plan

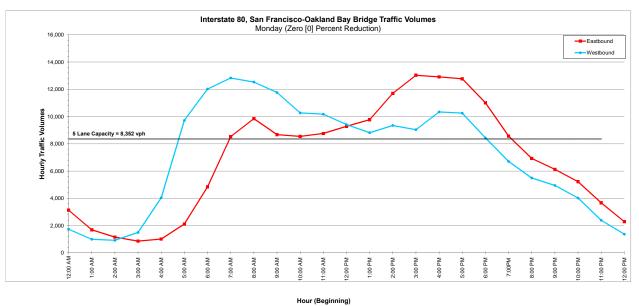
Figure 9: Weekend Closure of the GGB Detour Traffic Volumes - San Francisco-Oakland Bay Bridge

(Zero [0] Percent Reduction)









noar (beginning)

Richmond—San Rafael Bridge

The Richmond—San Rafael Bridge is a major link between Marin County and the East San Francisco Bay Area. The bridge has two lanes in each direction with a base capacity of 3,700 passenger cars. Hourly weekend (Friday through Monday morning) traffic volumes for the Richmond-San Rafael Bridge are summarized in **Figure 10**.

However, as previously discussed, it was necessary to determine a more conservative peak capacity that better reflects the atypical traffic volumes anticipated during the weekend closure of the GGB. The PHF was determined to be 0.95 in the eastbound direction and 0.90 in the westbound direction of the Richmond—San Rafael bridge. The f_{hv} was determined to be 0.97 in both directions of the Richmond—San Rafael Bridge. To reflect potential driver unfamiliarity with this detour route the standard rural f_{ρ} of 0.975 was assumed in both directions of the Richmond—San Rafael Bridge. After all adjustment factors were applied to the base capacity the peak capacity was determined to be 3,314 vph in the eastbound direction, and 3,146 vph in the westbound direction of the Richmond—San Rafael Bridge. However, for consistency and a more conservative approach to the delay calculations, the lower peak capacity of 3,146 vph in the westbound direction was applied to both directions of the Richmond—San Rafael Bridge.

Similar to the San Francisco—Oakland Bay Bridge detour analysis, it was assumed that during the weekend closure of the GGB, 30 percent of GGB traffic will forgo driving between Marin County and the City and County of San Francisco. The remaining 70 percent of GGB traffic will use alternate routes to travel between Marin County and the City and County of San Francisco. Additional analysis assuming a 20 percent, 10 percent and zero percent "no-show" rate was also conducted to develop a more comprehensive understanding of the potential effect of the weekend closure of the GGB on the Richmond—San Rafael Bridge.

As shown in **Attachment C2**, during the weekend closure of the GGB, the demand is anticipated to exceed capacity during the full weekend closure of the GGB. A queue is anticipated to occur whenever the cumulative output of the Richmond— San Rafael Bridge exceeds the cumulative demand. The time intervals when this will occur during the weekend closure of the GGB ending on Monday at 4:00 AM are summarized in **Table 10**.

	Richmond—San Rafael Bridge Average Queue Duration							
Reduction Scenario	Ea	stbound	Westbound					
	Duration	Duration Time Period		Time Period				
Saturday								
Zero Percent	15 Hours	8:00 AM to 11:00 PM	16 Hours	8:00 AM to Midnight				
10 Percent	14 Hours	8:00 AM to 10:00 PM	15 Hours	8:00 AM to 9:00 PM ;				
IUFEICEIIL	14 110015	8.00 AM to 10.00 PM	(13 Hours, 2 Hours)	10:00 PM to Midnight				
20 Percent	14 Hours	8:00 AM to 10:00 PM	15 Hours	8:00 AM to 9:00 PM ;				
zoreicent	14 10015	8.00 AM to 10.00 PM	(13 Hours, 2 Hours)	10:00 PM to Midnight				
30 Percent	12 Hours	9:00 AM to 10:00 PM	13 Hours	8:00 AM to 9:00 PM				
Sunday								
Zero Percent	13 hours	12:00 AM to Midnight	14 Hours	9:00 AM to 11:00 PM				
10 Percent	13 Hours	9:00 AM to 10:00 PM	14 Hours	9:00 AM to 11:00 PM				
20 Percent	13 Hours	9:00 AM to 10:00 PM	14 Hours	9:00 AM to 11:00 PM				
30 Percent	12 Hours	9:00 AM to 9:00 PM	12 Hours	9:00 AM to 9:00 PM				
Monday								
Zero Percent	3 Hours	4:00 PM to 7:00 PM	3 Hours	7:00 AM to 10:00 AM				
10 Percent	3 Hours	4:00 PM to 7:00 PM	3 Hours	7:00 AM to 10:00 AM				
20 Percent	3 Hours	4:00 PM to 7:00 PM	3 Hours	7:00 AM to 10:00 AM				
30 Percent	3 Hours	4:00 PM to 7:00 PM	3 Hours	7:00 AM to 10:00 AM				

Table 10: Average Queue Duration – Richmond—San Rafael Bridge

Source: AECOM, 2014.

This analysis added the relevant reduction in existing weekend NB GGB traffic onto WB Richmond—San Rafael bridge, and the relevant reduction in existing weekend SB GGB traffic onto the EB Richmond—San Rafael bridge. A summary of the anticipated traffic volumes and queue lengths during the closure of the GGB is presented in **Attachment C2** and is summarized in **Table 11**, and **Table 12** as well as in **Figure 11** through **Figure 14**.

		Golden Gate Bridge Weekend Closure Detour Traffic Volume — Richmond—San Rafael Bridge(Eastbound) ⁽¹⁾										
Hours	0 Pe	rcent Reduc	tion	10 Pe	ercent Reduc	tion	20 Pe	ercent Reduc	tion	30 P	ercent Reduc	tion
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0:00 - 1:00	719	975	480	683	926	456	647	878	431	612	829	407
1:00 – 2:00	384	479	289	364	458	275	344	437	261	324	415	247
2:00 - 3:00	244	291	240	232	277	229	220	263	219	208	250	208
3:00 - 4:00	240	223	269	228	210	253	215	197	238	203	184	222
4:00 - 5:00	345	294	865	328	277	814	310	260	763	293	243	712
5:00 - 6:00	734	549	2,216	693	516	2,085	653	482	1,954	612	449	1,822
6:00 - 7:00	1,430	1,145	4,419	1,346	1,076	4,132	1,262	1,007	3,844	1,178	938	3,557
7:00 - 8:00	2,555	1,681	6,420	2,406	1,585	5,982	2,257	1,488	5,545	2,108	1,392	5,107
8:00 - 9:00	3,600	2,630	6,972	3,380	2,474	6,488	3,161	2,317	6,003	2,941	2,161	5,519
9:00 - 10:00	4,733	4,022	5,505	4,447	3,778	5,139	4,161	3,534	4,772	3,875	3,289	4,406
10:00 – 11:00	5,336	5,548	4,882	5,031	5,206	4,578	4,725	4,865	4,274	4,420	4,523	3,970
11:00 – 12:00	5,796	6,067	4,838	5,448	5,687	4,546	5,099	5,308	4,253	4,751	4,928	3,961
12:00 – 13:00	5,763	6,603	4,651	5,390	6,163	4,375	5,018	5,722	4,099	4,645	5,282	3,824
13:00 – 14:00	5,830	6,298	4,615	5,453	5,884	4,349	5,075	5,470	4,082	4,698	5,056	3,816
14:00 – 15:00	5,942	5,796	5,266	5,579	5,462	4,978	5,217	5,129	4,690	4,854	4,795	4,403
15:00 – 16:00	5,354	5,461	5,701	5,044	5,162	5,401	4,734	4,863	5,100	4,425	4,565	4,800
16:00 – 17:00	5,653	6,288	6,535	5,360	5,933	6,203	5,068	5,578	5,871	4,775	5,223	5,538
17:00 – 18:00	6,114	6,232	6,954	5,776	5,908	6,607	5,437	5,584	6,259	5,099	5,261	5,912
18:00 – 19:00	5,396	5,417	5,183	5,117	5,155	4,902	4,838	4,893	4,621	4,560	4,631	4,339
19:00 – 20:00	4,402	4,517	3,545	4,173	4,291	3,359	3,943	4,066	3,172	3,714	3,840	2,986
20:00 - 21:00	3,691	3,659	2,670	3,482	3,458	2,526	3,274	3,256	2,382	3,065	3,055	2,238
21:00 - 22:00	3,202	3,125	2,157	3,030	2,960	2,045	2,858	2,795	1,933	2,686	2,630	1,822
22:00 - 23:00	2,874	2,084	1,362	2,722	1,976	1,296	2,571	1,867	1,229	2,419	1,759	1,163
23:00 - 24:00	1,858	1,050	743	1,757	998	709	1,656	946	674	1,555	894	640

Table 11: Detour Traffic Volumes - Richmond—San Rafael Bridge (Eastbound Interstate 580)

Source: AECOM, 2014.

Notes:

- Shading indicates detour traffic volume is above peak capacity.

- Bold indicates the scheduled end of the GGB weekend closure and all lanes on GGB are anticipated to be open to traffic.

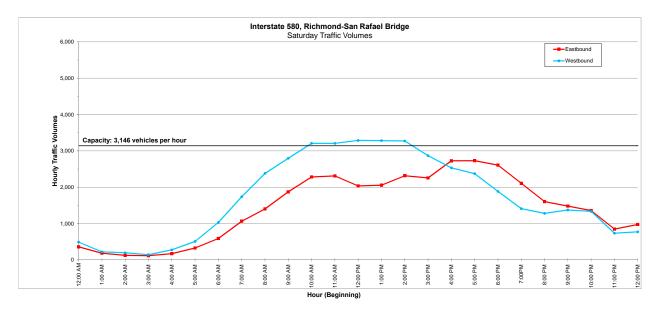
⁽¹⁾ Peak capacity on Interstate 580 Eastbound = 3,146 vph

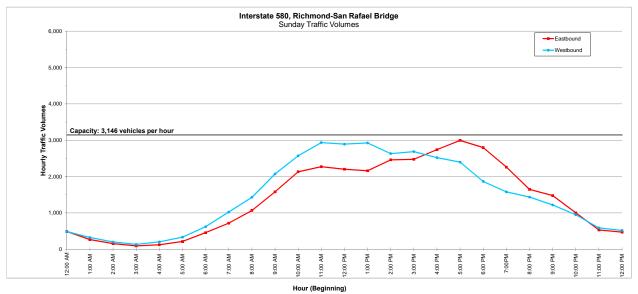
		Go	olden Gate Br	idge Weekend	l Closure Det	our Traffic V	olume — Rich	mond—San	Rafael Bridge	e (Westbound) ⁽¹⁾	
Hours	0 Pe	ercent Reduc	uction 10 Percent Reduction 20 Percent Reduction 30 Percent Re		ercent Reduc	eduction						
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0:00 - 1:00	1,560	1,486	924	1,453	1,386	862	1,346	1,286	800	1,239	1,186	738
1:00 - 2:00	805	935	541	747	874	506	688	813	472	630	751	437
2:00 - 3:00	632	671	292	588	624	275	545	577	257	501	530	240
3:00 - 4:00	387	394	308	363	368	295	338	342	282	314	316	269
4:00 - 5:00	456	375	556	438	358	540	420	341	523	402	323	507
5:00 - 6:00	881	549	1,471	844	527	1,432	806	506	1,394	769	484	1,355
6:00 - 7:00	1,635	1,047	3,992	1,575	1,004	3,886	1,514	962	3,780	1,454	919	3,674
7:00 - 8:00	2,960	1,838	6,001	2,838	1,757	5,766	2,715	1,675	5,531	2,593	1,594	5,297
8:00 - 9:00	4,480	2,990	6,512	4,270	2,834	6,203	4,060	2,678	5,893	3,850	2,521	5,584
9:00 - 10:00	5,840	4,637	5,633	5,536	4,381	5,352	5,231	4,124	5,070	4,927	3,868	4,789
10:00 - 11:00	7,036	6,011	5,133	6,653	5,667	4,836	6,270	5,323	4,539	5,887	4,979	4,242
11:00 - 12:00	6,933	6,567	5,280	6,560	6,204	4,962	6,188	5,840	4,643	5,815	5,477	4,325
12:00 - 13:00	6,774	5,919	5,267	6,425	5,616	4,940	6,077	5,314	4,612	5,728	5,011	4,285
13:00 - 14:00	6,548	5,880	5,339	6,221	5,585	5,013	5,895	5,289	4,687	5,568	4,994	4,361
14:00 - 15:00	6,272	5,255	5,622	5,972	4,993	5,241	5,672	4,730	4,860	5,372	4,468	4,478
15:00 - 16:00	5,750	5,054	6,361	5,462	4,817	5,919	5,173	4,580	5,476	4,885	4,344	5,034
16:00 - 17:00	5,604	4,979	6,731	5,297	4,733	6,269	4,990	4,487	5,807	4,683	4,241	5,345
17:00 – 18:00	6,596	6,259	7,205	6,174	5,873	6,710	5,751	5,486	6,214	5,329	5,100	5,719
18:00 – 19:00	7,506	7,508	6,285	6,944	6,944	5,866	6,382	6,379	5,446	5,819	5,815	5,027
19:00 - 20:00	4,547	4,687	4,162	4,233	4,376	3,888	3,920	4,065	3,615	3,606	3,754	3,341
20:00 - 21:00	3,310	3,744	2,962	3,107	3,513	2,766	2,904	3,282	2,570	2,701	3,051	2,374
21:00 - 22:00	3,256	3,652	2,564	3,068	3,409	2,401	2,880	3,165	2,237	2,691	2,922	2,074
22:00 - 23:00	3,641	2,881	1,949	3,410	2,688	1,826	3,180	2,495	1,702	2,949	2,301	1,579
23:00 - 24:00	2,274	1,655	1,271	2,120	1,548	1,192	1,966	1,442	1,112	1,812	1,335	1,033

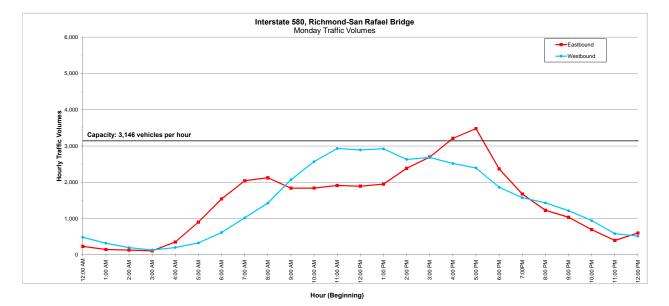
Source: AECOM, 2014.

Notes:

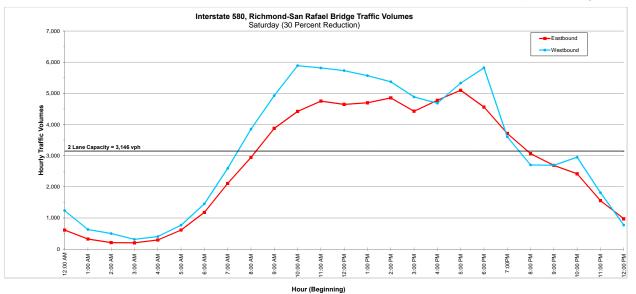
Shading indicates detour traffic volume is above peak capacity.
 Bold indicates the scheduled end of the GGB weekend closure and all lanes on GGB are anticipated to be open to traffic.
 ⁽¹⁾ Peak capacity on Interstate 580 Westbound = 3,146 vph

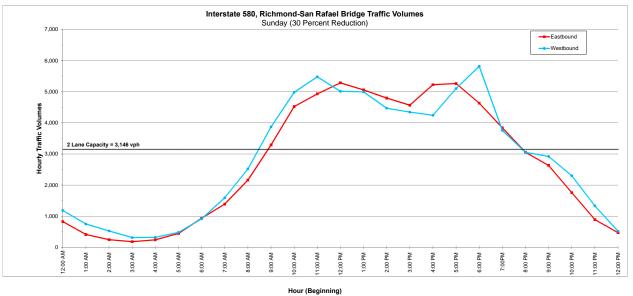


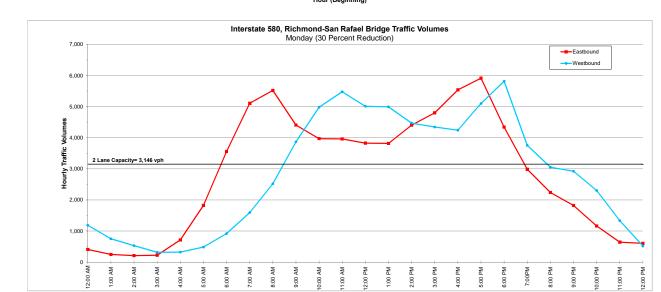




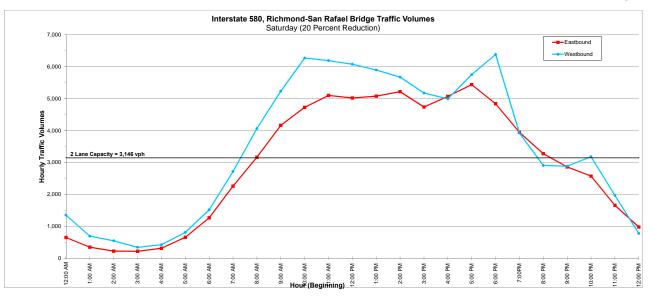


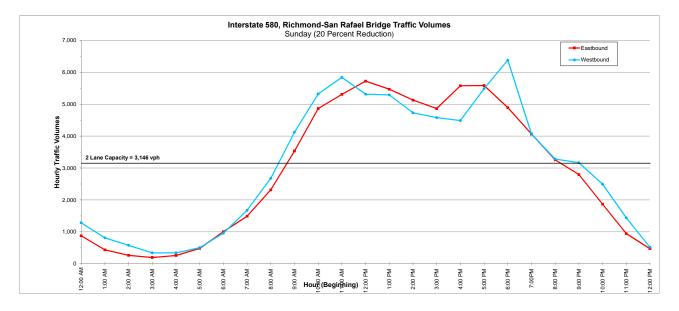


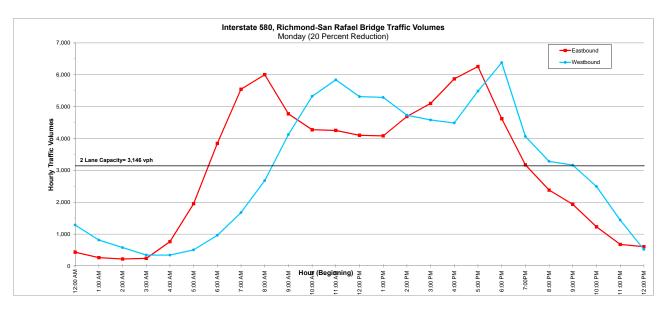




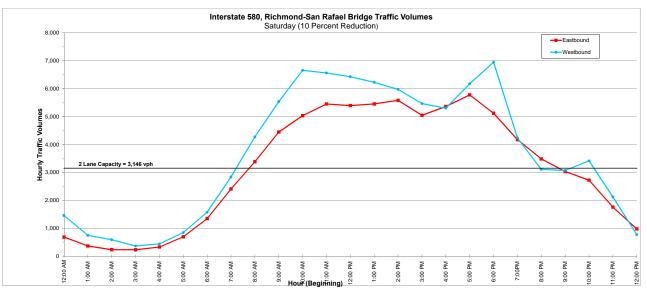


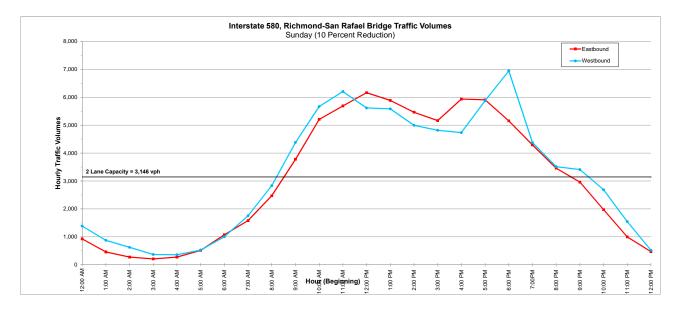


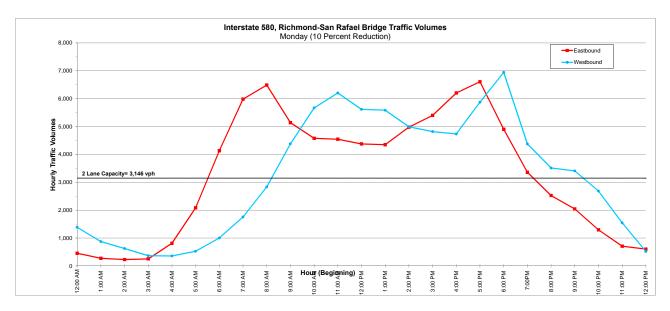




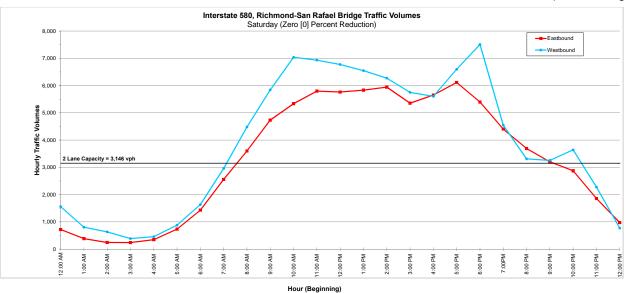


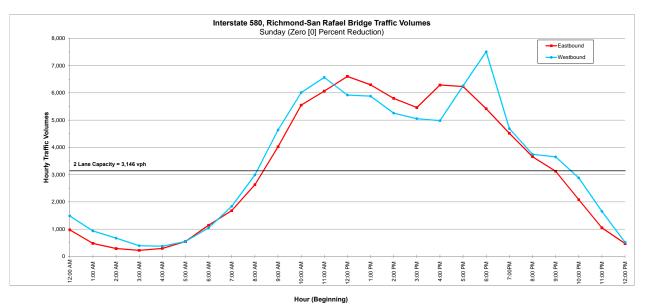


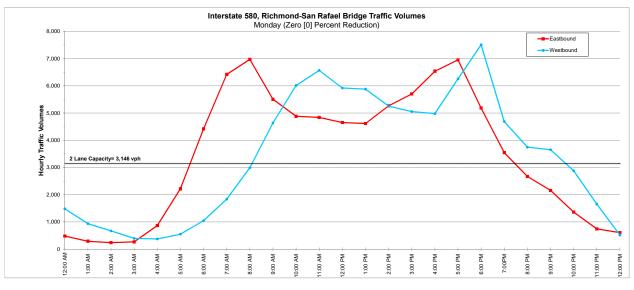












As shown in **Attachment C2**, the demand on the Richmond—San Rafael Bridge is anticipated to exceed capacity during the full weekend closure of the GGB demand under all reduction scenarios. The bridge would operate over capacity for periods of up to 16 hours (discontinuously). While associated delays will be an inconvenience to travelers they are unavoidable to ensure both public and worker safety during the installation of the MMB.

 Table 13 summarizes the queue distance, total duration and maximum queue delay along both the Richmond—San Rafael

 Bridge, and the San Francisco—Oakland Bay Bridge during the full weekend closure of the GGB.

	RSRE	8 1-580	SFOBB I-80 Queue Distance, miles		
	Queue Dist	ance, miles			
Volume Reduction Scenario	(Queue Dura	ation, hours)	(Queue Dura	ation, hours)	
	[Queue De	elay, hours]	[Queue De	lay, hours]	
	Eastbound	Westbound	Eastbound	Westbound	
	0 to 16.5	0 to 19.5	0 to 8.5	0 to 7.6	
Zero Percent	(31)	(33)	(31)	(28)	
	[2.1]	[2.5]	[1.0]	[0.9]	
	0 to 14.4	0 to 17.3	0 to 7.6	0 to 6.8	
10 Percent	(30)	(32)	(31)	(27)	
	[1.8]	[2.2]	[0.9]	[0.8]	
	0 to 12.3	0 to 15.4	0 to 6.6	0 to 5.9	
20 Percent	(30)	(32)	(28)	(26)	
	[1.6]	[2.0]	[0.8]	[0.7]	
	0 to 10.5	0 to 13.5	0 to 5.6	0 to 5.1	
30 Percent	(27)	(28)	(27)	(25)	
	[1.3]	[1.7]	[0.7]	[0.6]	

Table 13: GGB Closure Queue Summary

Source: AECOM, 2014.

The District has developed a public information outreach plan, summarized in Section 4.4 that is focused on reducing the travel demand during the weekend closure of the GGB, and in turn minimizing the anticipated delay on the Richmond—San Rafael Bridge.

San Francisco International Airport

The San Francisco International Airport is a major international airport serving the San Francisco Bay Area. During the weekend closure of the GGB, travelers going to and from the airport from the County of Marin and other parts of the North Bay Area will need to access the airport using alternate routes described in this TMP. Travelers will need to account for anticipated delays associated with detour routes to be used during the weekend closure of the GGB. In addition to other public information measures detailed in Section 4.4, notification of the full weekend closure of the GGB should be sent to the San Francisco International Airport, two weeks in advance to alert all employees, airlines, air passengers and greeters of the closure, all applicable detour routes and transit options available to travelers.

3.11 Ongoing/Planned Projects in the Project Vicinity

The Phase II construction of the Presidio Parkway Project is located at the southern approach to the GGB where the MMB will terminate. Phase II construction will be taking place concurrently within the corridor and construction activities may coincide with construction of the MMB. Effective coordination between these projects is needed to minimize overall delays along the US 101 corridor. Coordination typically involves scheduling multiple projects within the corridor to ensure that adequate capacity remains available to accommodate the anticipated travel demand. Coordination ensures that construction activities with overlapping work zones do not occur simultaneously. Coordination requires communicating the timing of lane closures, and detour routes.

Construction of the Phase III of the Golden Gate Bridge Seismic Retrofit Project is planned for completion in 2013/2014. Phase IIIA involves the retrofit of the North Anchorage Housing and Pylon N1, and the construction is planned for completion in 2013/2014. Phase IIIB involves the retrofit of the main suspension span, main towers, south tower pier and fender. Phase IIIB will be sent out for bid in 2013/2014 and will take up to four years to complete. Construction activities of the Project will need to be coordinated with the Golden Gate Bridge Seismic Retrofit Project once more information about the construction schedule becomes available.

4.0 Transportation Management Plan Strategies

The success of the TMP depends on consensus building, teamwork, compliance, and cooperation among all Project stakeholders. The TMP team for the Golden Gate Bridge Moveable Median Barrier Project includes (but is not limited to) Caltrans, the District, local government agencies, law enforcement agencies, transit operators, and transportation planning agencies.

The following sub-sections will describe the TMP measures that are recommended to address the potential transportation impacts during each phase of construction activities for the Golden Gate Bridge Moveable Median Barrier Project. This chapter also describes recommended TMP strategies to mitigate construction-related traffic delays. The TMP strategies are of a general nature intended to mitigate the overall level of congestion, and address incidents, monitoring, and contingencies.

The goal of this TMP includes:

- Minimize the impacts of reduced mobility and access through the work zone.
- Provide a safe environment for construction personnel and motoring public.
- Inform the general public about construction activities, potential impacts, and alternatives, before and during their travel.
- Address public concern about construction-related traffic impacts through public outreach programs.
- Manage and maintain traffic flow through work zones during both short-term and extended closures.
- Reduce traffic demand through the work zone.

TMP recommendations are grouped into the following broad transportation management strategies:

- Construction and coordination strategies;
- Public awareness strategies;
- Traveler and motorist Information strategies;
- Incident prevention, management, and contingency planning strategies; and,
- Demand management strategies.

These strategies may be modified, changed or eliminated as necessary, with consultation from the District and Caltrans District 4 Office of Traffic Operations, to maximize safety and/or to minimize traffic congestion at the construction site.

4.1 TMP Strategies Summary

The principle focus of the TMP is to implement extensive public outreach to encourage motorists to alter their travel plans such that they drive during off-peak or non-construction periods, use alternate routes or telecommute to work if applicable. These recommendations aim to reduce the likelihood of extensive congestion in the vicinity of the Project and on alternate routes during ramp and full GGB closures. Information will be made available to the public for use during pre-trip planning through press releases, telephone hotline, television (TV) news, 511 and internet, targeted outreach efforts and stakeholder meetings. Other information will assist motorists while en-route to their destinations through the use of radio broadcasts, static signs, changeable message signs, and highway advisory radio. Additional strategies focus on management of the remaining traffic through monitoring of congestion, using CHP to assist in traffic control, and provide service patrol assistance to quickly clear work zone incidents and restore traffic flows. **Table 14** presents the individual measures and actions within each recommended strategy.

Construction	Public	Traveler	Incident	Traffic Monitoring	Contingency
Strategies	Information	Information	Management		Planning
 Construction phasing and staging Lane Closures: coordinate lane closures with related construction projects Off- peak/night/wee kend Work Reduced Speed zones Coordinate with adjacent construction Traffic control improvements 	 Press releases Telephone hot line and 511 Local cable TV and news Internet and 511.org 	 Changeable Message Signs Static ground mounted signs Highway Advisory Radio 	 Construction zone enhanced enforcement program Transportation Management Center (TMC) Traffic Control Officers Traffic Management Team Freeway Service Patrol 	 Visual Observation during closure Traffic counts Delay measurement and travel time surveys Reinforcement of detour routes Traffic management team Evaluate TMP strategies 	 Flagman Control Local Police Traffic Control Modify Construction Timing or Early Pick-up Media Alert/SigAlert 511 Alert Relocation of CMS (Truck Mounted CMS) Emergency/Contingency/Contacts Standby equipment list Contractors contingency plan Alternate routes

Table 14: Recommended TMP Strategies

Source: AECOM, 2014.

4.2 Construction Strategies

Construction strategies are measures that are included in the plans and specifications, and are performed by the Contractor during construction. The objectives of construction strategies are to reduce construction time, minimize traffic disruptions, and avoid potential safety problems during construction. One of the primary construction considerations is to schedule work, and temporary closures around off-peak times such as weekends, late night or early morning hours to minimize impacts to traffic. Lane closure charts were developed to restrict the work to off-peak times and are included as **Attachment C1** for the Short-Term Project and for the full GGB closure. These charts shall be used to schedule lane closures for construction. In addition, to encourage the contractor to complete the work in a timely manner, the Project will follow Caltrans' liquidated damage concept to execute the delay penalties that will be added to the Golden Gate Bridge MMB contract.

The Contractor will be required to monitor activities and make decisions regarding implementation of a contingency plan. The contingency plan shall identify key activities and personnel. A communication plan shall also be included with names and phone numbers.

4.2.1 Construction Staging/Phasing

The Short-Term Project is comprised of four stages of construction as shown in **Attachment B1**. The Long-Term Project is comprised of three stages of construction, shown in **Attachment B5**. Each stage of construction is devised to minimize traffic impacts by completing a new or temporary facility before beginning a subsequent stage or closing a facility.

4.2.2 Lane Requirement Charts

A lane requirement chart is a standard requirement in the Caltrans' Standard Special Provision (SSP) that provides allowable time periods for construction activities. The charts shall be enforced to minimize traffic impacts. Lane requirement charts for the Project are provided as **Attachment C1** for the Short-Term Project and the full GGB closure.

4.2.3 Construction Detours

A complete set of construction detour routes to be utilized for the Short-Term Project are provided as **Attachment B4** for the full GGB closure during the Short-Term Project. A discussion of the delay and associated delay cost is included in Section 3.9.

4.2.4 Off-Peak/Night/Weekend Closure

The lane closure charts require that closures occur during off-peak, nighttime, and weekend periods. The planned full closure of the GGB will occur during a weekend and will last no longer than 52 hours, beginning at midnight on Friday and ending no later than the following Monday at 4:00 AM.

4.2.5 Reduced Speed Zones

Construction zones will require reduced speed zones supported by the presence of CHP (COZEEP). Ground mounted signs and/or portable CMS (PCMS) will be used to identify work zone speed restrictions and enforcement consequences.

4.2.6 Construction Vehicles Entering/Exiting the Work Zone

Construction vehicles getting in and out of the work zone should be regulated by the following protocols:

- The Contractor shall prepare and submit a Contractor's vehicular traffic plan one week in advance of the start of work to the Engineer for review and approval.
- The Contractor shall make available acceleration and deceleration areas parallel with Route 101 traffic where construction vehicles are exiting and entering the work areas. These locations shall be a minimum of 11 ft wide, paved area with a minimum distance of 1,500 ft, including taper, and must have a clear line of sight for traffic.
- The Contractor shall install all warning signs and traffic control devices as necessary and as ordered by the Engineer to inform the motorists of the movement of construction-related vehicles.
- The Contractor shall be responsible for having all equipment and vehicle operators understand and follow an approved traffic plan.
- Construction vehicles entering or exiting the center median without a lane closure in place shall not be allowed.
- The Contractor shall install all "Slow for the Cone Zone" warning signs as necessary and as ordered by the Engineer to inform the motorists of the construction zone. "Slow for the Cone Zone" is a social marketing, public awareness campaign that warns California motorists of the hazards associated with driving recklessly through California's highway work zones.

4.3 Coordination Strategies

Simultaneous construction activities on the GGB and freeways serving as alternate routes should be avoided whenever possible. It is critical for all Project implementation teams within Route 101 corridor to interface and coordinate with each other. Effective coordination will minimize the number of overall delays on Route 101 corridor.

4.3.1 Establish Hierarchy of Conflict Resolution

Clear responsibilities and hierarchy of decision making/conflict resolution should be established and communicated to the contractor during pre-construction meetings.

4.3.2 Coordinate Closures with Adjacent Construction Projects and Local Agencies

Coordination typically involves scheduling multiple projects within the corridor to ensure that adequate capacity remains available to accommodate the anticipated travel demand. Coordination ensures that construction activities with overlapping impacts do not occur simultaneously. Coordination requires communicating the timing of lane closures, identifying incidents, and coordinating detour routes between adjacent projects.

The contractor and Resident Engineer (RE) will need to coordinate Project closures with closures and construction activities at the other construction projects within Route 101 corridor, specifically the Phase II construction of the 101 Doyle Drive/Presidio Parkway Project, to minimize the effect of simultaneous closures. In addition, the contractor and/or RE should notify local agencies and other key stakeholders prior to any closures and ensure that the closures will not coincide with any other agency's construction or event activities. Agency and stakeholder notification should occur at least 30 days prior to closures, and again several days prior to the planned closures.

4.3.3 Coordination with Emergency Services for Alternate Routes

In the event that an incident occurs on a detour route it is possible that the route may become blocked to emergency vehicles. Therefore, in coordination with emergency service providers, secondary routes should be identified as an alternative to main detour routes so that emergency service mobility is maintained.

4.3.4 Portable Changeable Message Signs

The fixed CMS locations should be supplemented with PCMS. The Contract Plans will identify and show locations of these PCMS signs to assists motorists with the detour routes, incidents, and advanced closure notification. PCMS are truck or trailer mounted and may be controlled locally or remotely. PCMS will be part of this TMP for traffic control purposes.

The Project construction RE is responsible for monitoring message content and CMS deployment. At least one PCMS should be utilized at the beginning of each traffic control zone for speed reduction. PCMS shall be installed 72 hours in advance of any given traffic control operation. Detailed plans for proposed PCMS locations are included as **Attachment B4.**

4.4 Public Information Outreach/Public Awareness Campaign

Public information is a vital part of this TMP. The objective of the public information campaign is to disseminate timely information related to construction activities. The scope of this campaign includes informing the public about the construction Project and its impacts on the traveling public, and to provide information on various measures commuters may use to avoid anticipated delays due to construction. Additionally, the public awareness campaign will inform motorists regarding the full weekend closure of the GGB with specific dates and times, as well as available transportation services that must be considered as an optional measure. Elements of the public information campaign are described in this section.

4.4.1 Paid Advertising and Press Releases

Project and construction information will be released to the press through Golden Gate Bridge Public Affairs Office. The District will develop press releases and distribute to local media with Project and construction information. The District will also send updates to the media as needed. Any press release will be posted on the District's website. The District has developed an outreach plan to facilitate the public awareness campaign. This plan is summarized in **Table 15**.

4.4.2 Notification to Business and Government Agencies

Timely notification of planned closures will allow local businesses, government agencies and transit operators to adjust to the upcoming closure, adjust transportation schedules, and to notify patrons of upcoming events and potential delays. To ensure that adequate time is provided to prepare and send notifications.

The RE should notify the Transportation Management Plan Office and the Caltrans Public Information Office on an ongoing basis and a minimum of three weeks in advance of the start of any bridge closures. The notifications should contain materials suitable for photocopying by employers for final distribution to employees and stakeholders.

4.4.3 Notification to Local Officials

Local law enforcement and other public safety officials should be notified of the full weekend closure of the GGB. The Caltrans Public Information Office will prepare announcements for distribution to the city clerks in the counties of Marin, San Francisco, Sonoma, Napa, Alameda, Contra Costa, Solano, Santa Clara, and San Mateo.

4.4.4 Notification to Transit Agencies

Information regarding bridge, roadway, and ramp closures should be provided to transit providers in addition to bus and ferry services provided by the District, including but not limited to San Francisco Municipal Railway (MUNI), Bay Area Rapid Transit (BART), Alameda-Contra Costa County Transit (AC Transit). Notification of these closures should be provided as early as possible so that transit agencies can adjust their transit services and inform riders as needed. Transit agencies should be reminded of the actual planned full closure two weeks in advance. Coordination should be conducted with transit agencies in advance of the bridge closures to determine any transit services that require modifications and agreements.

Notification of bridge closures should be sent to all Bay Area trucking companies so they can plan their goods delivery schedules approximately two weeks in advance. Companies that should be notified include but are not limited to the following:

- Supermarkets (Trader Joe's, Safeway, etc.);
- Newspaper companies (San Francisco Chronicle, Marin Independent Journal, Oakland Tribune, etc.);
- Courier companies (Federal Express, United States Postal Service, etc.); and,
- Taxi providers and airport shuttle.

Activity	Source	Size	Active or Run Date(s)
Television	Comcast		Mid-Nov- Jan
Online Advertising	Targeting both tourism sites and Bay Area residents		Nov-Jan
Radio Traffic Announcements	English, Chinese, and Spanish	15 and 30 second spots	12/29-1/11
	Marin Independent Journal (8)	3 col x 6 inches	Dec-Jan
	San Francisco Chronicle (12) – Full Run	3 col x 6 inches	Dec-Jan
Diambas, Ada	Commuter Times (1)	1⁄4 page	Dec-Jan
Display Ads	La Voz (Spanish newspaper) (2)	1⁄4 page	January
	World Journal and Sing Tao (Chinese newspapers) (6)	¼ page	January
	Press Democrat (8)	3 col x 6 inches	Dec-Jan
Passenger Advisory Committees	Cynthia (ACA) Ron (BPAC) Harvey (FPAC)		
Bus/Vessel Posters	English and Spanish	11inches x 17	
	(also at D-3 boarding area)	inches	
Ferry Terminal Signage			
Gazette Article			
FogHorn Employee Newsletter			
SFTV	Hotel and Pier 39 TV spots		January
E-Mail	E-blasts to customer lists		Oct-Jan
Web Site Content	News section and MMB section		Ongoing
Courtesy Mailing/ Notification	Letter sent to contacts database		October and Decembe
Gas Station Radio	Audio PSA at Bay Area gas stations		12/29-1/11
Press Coverage/Press Releases			Ongoing

Table 15: Golden Gate Bridge District Moveable Median Barrier Outreach Plan

Source: Golden Gate Bridge Highway and Transportation District, 2014

4.4.5 Airport Traffic Alerts

Notification of the weekend closure of the GGB should be sent to the Oakland International Airport, the San Francisco International Airport, and the Mineta International Airport (San Jose International Airport) two weeks in advance to alert employees, airlines, air passengers and greeters of all proposed closures.

4.4.6 Travel Agents/Organizations

Public outreach will include travel agents, the Chamber of Commerce, the American Automobile Association offices throughout the state, travel organizations in neighboring states and travel magazines in the form of press releases.

4.5 Traveler and Motorist Information Strategies

Just as critical to the success of this TMP is the motorist information system that will be implemented during construction. Traveler information strategies listed below focus on providing construction and traffic conditions information while drivers are en-route to their destination, with the goal of shifting traffic away from the work zone(s).

4.5.1 Changeable Message Signs

CMS are one of the most effective mechanisms in providing real time traffic information to motorists approaching the construction zones, with possibility to readily modify the messages to reflect the changing traffic conditions. This information will guide and assist in directing motorists toward detour routes that avoid the impacted areas. A signing scheme will be developed for the Project to encourage voluntary diversion away from the impacted areas to guide motorists through the various route detours, as alternate routes are not feasible for the Project. The District should use its fixed CMS within the Golden Gate Bridge corridor to identify the short-term and long-term closures of Route 101 mainline, and identify alternate routes.

Suggested usage of existing CMS locations are illustrated in Figure 15, detailed plans specifying the locations of the changeable message signs are included in Attachment B4. These locations were selected because many of the motorists on Route 101 access the route from these interstate and state route highways, and are listed below, the Caltrans naming convention for each sign is included in parenthesis:

- Route 101 Southbound, South of San Pedro (CM 002);
- Route 101 Northbound, South of Sir Francis Drake Boulevard (CM 001);
- Interstate 80 Eastbound, East of University Avenue (CM 078);
- Interstate 80 Westbound, West of Route 13 (CM 070); •
- Interstate 80 Eastbound, East of 8th Street (CM 062):
- Route 101 Northbound, North of 23rd Street (CM 042);
- Route 101 Northbound, North of Candlestick Exit (CM 079); and,
- Route 92 Westbound, East. Foster City Boulevard (CM 084).

In addition to the existing CMS signs, PCMS will be deployed along major local and regional roadways to inform drivers of the full weekend closure of the GGB, as well as of available detour routes during the closure. Table 16 presents the messages to be displayed on the PCMS both two weeks prior to the closure and during the full weekend closure of the GGB. The full schedule and locations of all PCMS are included in Attachment B4.

Display Period	First Flash	Second Flash	Third Flash
Two Weeks Prior to Closure	GOLDEN GATE BR CLOSURE	FRI MIDNIGHT THRU	
	JANUARY 09 – 12	MON 4:00 AM	EXPECT DELAYS
During Closure	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS
Courses AFCONA 201/			

Table 16: Local Portable Changeable Message Signs Schedule

Source: AECOM, 2014.

Figure 15: Regional CMS - PCMS Locations Map

Golden Gate Bridge Moveable Median Barrier Transportation Management Plan



4.5.2 Ground Mounted Signs

In addition to local detour and work zone signage placed and maintained by the contractor, a regional signing plan is recommended. Ground mounted information guide signs should be placed ahead of the major entry access locations to the corridor and vicinity to provide drivers with information setting the expectation for their travel or to reroute their travel away from the proposed construction areas. The contractor is responsible for placing the ground mounted signs in the identified locations to assists motorists with the detour routes.

4.5.3 Caltrans Highway Information Network

Real-time highway condition information should be provided through Caltrans Highway Information Network (CHIN) accessible via telephone (1-800-427-ROAD).

4.5.4 Highway Advisory Radio

Highway Advisory Radio is recommended in concert with the static ground mounted signs recommended within the Golden Gate Bridge corridor. The existing HAR antennae along the GGB could be used within the Project vicinity. HAR will allow 24-hour availability for motorists, without the need for additional equipment (other than an amplitude modulation [AM] radio) to receive highway advisory broadcasts. In addition, it can include more specific information than a commercial traffic report, CMS, or static ground sign.

The HAR broadcast message should be succinct yet comprehensive in content. Because HAR broadcasts have a range of three to five miles, the message should typically be contained in 60 to 90 second duration but no more than 90 seconds in length. The message should contain the following information:

- A short description of overall construction information (i.e. construction duration, type of work performed, closures, etc.) and specific information on short-term closures.
- Basic contact details for further construction information (i.e. phone number or web page).

Any of the approved broadcast bands may be used; however, it is recommended that AM 520 or 1610 be utilized if possible due to the large quantity of historical use of these AM bands and driver familiarity.

4.6 Incident Prevention and Management Strategies

Incident prevention, management, and contingency strategies focus on methods to clear work zone collisions, stalls, excessive congestion, or other incidents and also help reduce and prevent traffic collisions. Establishing a mechanism for immediate incident response can be accomplished with enhanced Caltrans' GGB Tow Service Patrols (TSP), and COZEEP.

4.6.1 Construction Zone Enhanced Enforcement Program

National data shows the two leading causes of work zone crashes are excessive speed and driver inattention. There is universal agreement that a staffed police car with flashing lights at the beginning of the work zone is the most effective way to reduce speed in the work zone and get the driver's attention. The program involves continuous presence of the CHP in the construction zone, provides enforcement of speed restriction, and faster incident response.

It is recommended that a COZEEP program be established for the entire construction period. During lane closures, CHP officers would be used to initiate the traffic break and provide traffic control. Enhanced enforcement would most likely be used during lane closures but could be invoked at other times at the discretion of the Construction Manager (CM). The CM would prepare a contract change order for each event requiring COZEEP. The total COZEEP cost, for the lane closures is estimated to be \$300,000. The total COZEEP cost for the weekend closure of the GGB is estimated to be \$1,373,000. Detailed COZEEP costs are included in **Attachment E**.

4.6.2 Freeway Service Patrol

The District typically employs tow trucks on the GGB to mitigate stalls and incidents, and minimize any related traffic congestion in an effort to restore normal operating conditions. At the GGB approaches, the Freeway Service Patrol (FSP) is used to patrol the construction zone and perform minor repairs and/or remove stalled vehicles from the freeway at no charge to the motorist.

FSP service will be needed particularly during the weekend closure of the GGB, and may be used during contingency situations. At least six months prior to the deployment of FSP service, Caltrans FSP Supervision (510-286-5917) and the

MTC Program Manager (510-817-3209) will be contacted to determine final logistics, and exact costs associated with the use of the FSP service during the weekend closure of the GGB.

4.6.3 Flagman and Traffic Control Officers

The contractors' special provisions identify when flagmen are required to control detours for the short-term closures. Should a crash, breakdown, or other incident occur on the mainline or surface streets approaching or within the work zone, the RE may require the contractor to use flagmen at additional locations to clear traffic congestion or may request that the CHP and/or local police establish traffic control officers at key detour intersections to clear any traffic congestion.

4.7 Work Zone Safety Training

The Contractor should offer work zone safety training to their workers.

4.7.1 Reduced Speed Zones

California has enacted legislation to double fines for speeding in work zones, and this strategy should be utilized during closures. While signs indicating doubled fines are a deterrent, Caltrans and contractors need to ensure that the signs are only posted when the work zone is active and are covered when there is no activity in the work zone. According to the Federal Highway Administration (FHWA), motorist credibility is a major issue in controlling speed in the work zone. The presence of cones and reduced speed limits coupled with no visible work taking place within a work zone raises public questions about the enforceability of reduced speed zones. Other considerations:

- Lack of adequate space for vehicles to pull off of the road often results in inefficient traffic law enforcement through the work zone. Ensure adequate enforcement space by designing space for enforcement activities into a work zone. Ensure the contractor maintains adequate shoulder/enforcement areas to keep them available for making traffic stops.
- To help enforce this strategy consider the use of speed warning systems that communicate average downstream speeds to drivers on variable message signs. This technology warns drivers that they may soon need to slow down or stop.

4.7.2 Improved Visibility of Traffic Control Devices

Ensure visibility of traffic control devices. Methods for improving visibility of signs, pavement markings, and channelizing devices include:

- Use of highly reflective or fluorescent sign sheeting can provide improved visibility for work zone signs.
- Provide larger signs and provide redundancy for critical signs.
- Increase sign spacing.
- Provide artificial lighting on work zone signs.
- Provide flags and/or warning lights on work zone signs.
- Increase the size of, and decrease the spacing of, channelizing devices.
- Install highly reflective temporary pavement markings to delineate intended travel paths.
- Ensure adequate visibility of signs and markings on detour routes.
- Improve the display of sign messages through changes in colors, contrast, pictorial or text messages, font style, letter height, and stroke width.

4.7.3 Traffic Monitoring

The monitoring of traffic conditions plays two roles:

- 1. Incident traffic monitoring: Monitoring of traffic conditions approaching and traveling through the work zone during periods of lane closures to detect excessive queuing and delay, crashes, and other problems which would trigger an early pick-up; and,
- 2. Effectiveness traffic monitoring: Traffic monitoring conducted periodically over the duration of the construction Project to determine the effect of the closures and whether detour routes or management strategies should be modified.

Each of these monitoring purposes use various strategies and measures as described below.

4.7.4 Visual Observation during Closures

The contractor and RE will share the responsibility of observing traffic conditions during the extended and short-term closures to determine if conditions warrant early pick-up of the closures. The RE should remain in contact with the TMC to obtain periodic updates on traffic conditions on mainline Route 101 approaching the work zone.

4.8 Contingency Planning

To address potential problems that may occur during construction, a traffic contingency plan and a contractor contingency plan will be developed for all work occurring during freeway lane and ramp closure periods. The contingency plan outlines specific actions that should be implemented to restore or minimize effects on traffic when congestion or delays exceed original estimates or due to unforeseen events such as work-zone accidents, higher than predicted traffic demand, or delayed lane closures. This can significantly reduce the delay that might otherwise occur while trying to determine what to do on the spot. There are many scenarios possible should a problem occur. The contingency plans should be reviewed by Caltrans designers and other stakeholders.

4.8.1 Purpose of Contingency Plans

The purpose of the contingency plan would be to identify when the construction operation must be abandoned to facilitate opening of the roadway within the designated time. A contingency plan should include, but is not limited to the following:

- Identify key operational decision points with specific times associated with each activity. This timeline should identify the expected completion time of each critical path activity.
- Clearly defined trigger points must be identified with each critical path activity to establish when the contingency plan will be activated.
- Decision tree with clearly defined lines of communication and authority.
- Contact information such as names, phone numbers, and pager numbers for the RE, the Permit Inspector, the onsite traffic advisor, the CHP Division or Area Commander, relevant local police departments, appropriate local agency representatives, and other applicable personnel such as transit agencies and emergency services.
- Coordination strategy (and special agreements if applicable) between the RE, on-site traffic advisor, CHP and local agencies.
- Contractor's contingency plan.
- Standby equipment.
- Development of contingencies based on maintaining minimum service level.

The primary responsibility for initiating a contingency plan falls upon the RE. Alternatives should be reviewed and considered in preparation for any planned closures. The traffic management center and the local agency should be notified of any changes made to the detours out in the field.

4.8.2 Scenarios and Actions

A number of contingency plans should be developed in the event that something unexpected occurs with respect to construction activities or traffic operations. The various scenarios that have been considered, along with the planned actions or responses, are summarized in **Table 17**.

A contractor or Caltrans' forces (such as maintenance) can be ordered to pick up a lane closure early if traffic impacts become significant either due to a project incident or activities outside the project area. Early pickup should only be ordered when traveler and worker safety will not be compromised.

4.8.3 Traffic Contingency Plan

This plan addresses specific actions that will be taken to restore or minimize effects on traffic when congestion or delay exceeds original demand estimates. Trigger points that require the termination of lane or ramp closures are defined as, but not limited to, the following: inclement weather, higher than expected traffic demand, work zone equipment failure or delayed reopening of facility closures.

Specific actions that will be undertaken to restore traffic will be determined based on the item of construction work that is being undertaken during the closure period. Trigger points for terminating lane or ramp closures will be defined using specific thresholds to be established in consultation with the selected contractor(s). Usually the solution involves directing traffic via PCMS to exit early, to avoid the problem area, or to direct traffic to the next exit, taking advantage of message signs and some combination of route detours. These alternatives should be reviewed and considered in preparation for any planned closures. The Traffic Management Center and the local agency should be notified of any changes made to the detours out in the field.

Table 17: Scenarios and Actions Matrix

Scenario	Actions to be Taken
The Golden Gate Bridge is not reopened at or prior to the Monday at 4:00 AM deadline	 Open as many lanes as safely possible and open the remainder as soon as possible. Modify public awareness campaign. Modify CMS and additional PCMS as needed to divert traffic.
Construction activities are completed early allowing the Golden Gate Bridge to be reopened earlier than scheduled.	 Modify public awareness campaign. Modify CMS and additional PCMS as needed to inform motorists.
Lanes are not opened by the time on the lane closure chart	 Open as many lanes as safely possible and open the remainder as soon as possible. Develop a work plan so it is not repeated.
Equipment breaks down/construction is delayed	 Cease construction activities and reopen all lanes. Fix or replace equipment in order to complete planned activities as scheduled. Reschedule planned construction activities.
Bad weather delays	 Reschedule planned construction activities. Modify public awareness campaign.
Traffic is heavier than expected	 Modify CMS and add additional PCMS as needed to divert more traffic. Send information to media so public can be informed by radio and television Divert traffic to alternate routes using signs and
Variation in work limits than scheduled	• Coordinate with RE for modifications to traffic handling, traffic control, and all appropriate activities.
Traffic impacts become significant either due to a project incident or activities outside the project area	 Cease construction activities and reopen all lanes. Reschedule planned construction activities. Early pickup should only be ordered when traveler and worker safety will not be compromised.

Source: AECOM, 2014.

4.8.4 Contractor's Contingency Plan

The Contractor's contingency plan addresses activities under the contractor's control in the work zone. The contractor will be required to submit a traffic control plan at least one week prior to any lane closures, or critical operation identified by the RE. The traffic control plan shall contain a detailed contingency plan to ensure opening of the closures by the designated time. This can significantly reduce the delay that might otherwise occur while trying to determine what to do on the spot. The contractor will need to prepare a contingency plan that would be implemented in the event that the construction operation requiring the freeway lane or ramp closures do not proceed as planned.

The contractor will have the primary responsibility for monitoring operation before, during, and after such closures along the detour routes and at the construction site. During construction activity, contractors will need to provide appropriate personnel to monitor activities and make decisions regarding activation of contingency plans. As soon as it becomes evident during any construction activity that it will not be possible to complete that activity and remove the closure at the designated time, that activity shall be halted and postponed until a later date.

The purpose of contingency plans is to identify when the construction operation must be abandoned to facilitate opening of a facility within the designated time. The relevant local agencies (i.e. City and County of San Francisco and Marin County), the District, Caltrans, construction management staff, CHP and other stakeholders will review the contingency plans. This plan should provide the following information:

- Identify key operational decision points with specific times associated with each activity. This timeline should identify the expected completion time of each critical path activity.
- Clearly defined trigger points must be identified with each critical path activity to establish when the contingency plan will be activated.
- Decision tree with clearly defined lines of communication and authority.

- Appropriate communication equipment to be provided and procedures established to communicate between each other during the entire construction period, especially whenever emergency events happen.
- Contact information such as names, phone numbers and pager numbers of the RE, Contractor's Project Manager, Project Manager, Caltrans Permit and/or Construction Inspector, District 4 TMC, CHP Area Commander, San Francisco and Marin County Sheriff, relevant local police departments, Emergency Services, appropriate local agency representatives, and other applicable personnel such as transit agencies.
- A description of the standby equipment that would be available to complete the operation in the event of equipment failure. The plan will list and describe any and all standby equipment and secondary material suppliers, to be available to complete the operations in the event of equipment failure, unexpected loss of material or unexpected uselessness of material.
- If simultaneous construction projects are planned, then the contractors should coordinate the contingency plans to verify that no overlap of the proposed detour routes exists between the projects.

Anticipated construction activities to be monitored include, but are not limited to, the following construction tasks:

- Demolition and removal of existing roadway pavement and earthwork.
- Construction and finishing of retaining and sound walls.
- GGB widening including false work installation.
- Grading and paving of the permanent facilities including work in open trenches and excavation.
- Removal of existing traffic control facilities including pavement delineation, roadway and overhead signs, and traffic signals.
- Installation of pavement, delineation, roadway ad overhead signs, traffic signal installations, and lighting.
- Installations of roadway medians, and curb and gutters.

As soon as it is apparent that a contractor will be unable to restore traffic flow before the end of GGB, lane or ramp closures, the contractor or RE should immediately implement the following procedures:

- If the RE and contractor determine that additional staff will expedite the restoration of traffic flow, cooperative agreements with Caltrans maintenance staff or other local agency resources should be activated.
- Any supplemental equipment that is not in use should be utilized to expedite the opening of the highway facility.
- Notify the Caltrans Transportation Management Center, city staff, county staff, and local law enforcement departments for the Cities of San Francisco, Sausalito, Marin County, San Francisco County, the CHP Area Commander, and other appropriate local agency representatives to inform them of the situation.

Possible solutions to reduce traffic impacts involve directing traffic via PCMS to exit early, to avoid the problem area, or to direct traffic to the next exit, taking advantage of message signs and some combination of route detours. These alternatives should be reviewed and considered in preparation for any planned closures. The Traffic Management Center and local government agencies should be notified of any changes made to the detours out in the field.

Alternate Detour Routes

As part of the contingency plan, alternate detour routes should be prepared for the proposed short-term closures.

Roles and Responsibilities

Reporting structure and roles/responsibilities are key towards a successful implementation of contingency plans or for emergency communication efforts.

Emergency/Contingency Plan Contacts

An emergency /contingency plan contact list should be prepared for each project. The contact list should provide details (name, phone number, and department) of the key personnel that may require notification or communication. The contact list for the project is shown in **Table 18** and should be modified on a regular basis during the bidding and construction phases of the project:

Standby Equipment List

The contractor should provide a list of standby equipment available to be used at times of equipment failure.

Decision Tree and Chain of Command

The list below identifies the chain of command/authority and the lines of communications to be followed as a part of any contingency plan for the construction projects along the US 101 freeway Corridor.

• •	Field Inspector Resident Engineer Construction Senior	Name: TBD Name: TBD Name: TBD	Phone No: TBD Phone No: TBD Phone No: TBD
•	Area Construction Manager	Name: TBD	Phone No: TBD
•	District Traffic Safety – TMC	Name: TBD	Phone No: TBD

TMC Response Protocol

The Project Traffic Contingency Plan basically follows the TMC major incident response protocol. When a major laneblocking incident occurs on any of the bridges and severe congestion is about to develop at the approaches, TMC should receive a report from CHP, Caltrans or the Contractor field personnel. TMC staff shall take the following actions:

Beginning of the Report

- 1. Notify Communication Center
- 2. Verify details with CCTV or CHP unit
- 3. Activate CMS, Dispatch Bridge Tow
- 4. Notify Traffic Management Team (TMT)
- 5. Notify media, 511.org and management via SigAlert and/or pager notification
- 6. Notify/coordinate with adjacent districts' TMCs, if applicable
- 7. Notify/coordinate with local TMCs, if applicable
- 8. Activate HAR and Emergency Medical Services (EMS)
- 9. Make an entry on the CHP Computer Aided Dispatching (CAD) bulletin board and route to the media, if applicable
- 10. Coordinate with DTM to have lane closures picked up on alternate routes, if applicable
- 11. Notify locally affected transit, city police, and traffic engineers for city street congestion, if applicable

During Incident

- 1. Update incident status notifications, if applicable.
- 2. Update communication center and TMT when incident is over.

End of Incident

- 1. Notify communication center and TMT when incident is over.
- 2. Deactivate CMS, HAR, and EMS
- 3. Send final Sig Alert and/or pager notification.
- 4. Delete CHP CAD bulletin board entry and route to the media, if applicable.
- 5. Notify adjacent districts' TMCs, local TMCs, Signal Operations, local transit, city police, and city traffic engineers when incident is over, if applicable
- 6. Update shift briefing binder, if applicable

All costs of implementing the Transportation Management Plan, including its preparation will be borne by the project and are summarized in **Attachment E**.

4.8.5 Communication Plan

A communication plan shall include a decision tree with clearly defined lines of communication. The names, telephone numbers and email addresses of the Contractor's Project Manager, Caltrans TMC, Resident Engineer, Caltrans Permit and/or Construction Inspector, CHP Commander, and other applicable personnel are provided in **Table 18**, and **Attachment F** includes a complete listing of contact information of agencies, organizations, and interests groups that may potentially be affected by construction activities. This list should be updated regularly and/or changed through the life of the Project. During the weekend closure of the GGB, the command post for all stakeholders will be located in the Board Room of the District Toll Plaza Administration Building.

4.8.6 Traffic Contingency Plan

This plan addresses specific actions that will be taken to restore or minimize effects on traffic when congestion or delay exceeds original demand estimates. Trigger points that require the termination of lane or ramp closures are defined as, but not limited to, the following: inclement weather, higher than expected traffic demand, work zone equipment failure or delayed reopening of facility closures.

Specific actions that will be undertaken to restore traffic will be determined based on the item of construction work that is being undertaken during the closure period. Trigger points for terminating lane or ramp closures will be defined using specific thresholds to be established in consultation with the selected contractor(s).

Table 18: Contact Personnel Matrix (To Be Updated Regularly)

•	Median Barrier (SF-101 PM 9.7 to MRI Contact	Phone	E-mail
Agency Caldon Coto Bridge Highways		Phone	E-man
Golden Gate Bridge Highway a		((15) 022 2010	
	Chuck Voong, Project Manager	(415) 923-2019	cvoong@goldengate.org
Golden Gate Bridge Highway	Lisa Locati, Bridge Captain	(415) 923-2205	llocati@goldengate.org
and Transportation District	Robert Smith, Resident Engineer	(415) 923-2021	rsmith@goldengate.org
	, 6	(415) 716-8154	-0 0 0
Engineering Consult		(540) 000 00 (0	
AECOM	Bill Burton, Project Manager	(510) 622-6642	Bill.Burton@aecom.com
	Joy Villafranca, Project Engineer	(510) 622-6693	Joy.Villafranca@aecom.com
Contractor	Γ		
	Kjell Davila, Project Engineer	(415) 760-0226	KjellD@ghilottibros.com
Ghilotti Bros., Inc	, , , ,	(415) 256-2292	, -0
· · · · · · · · · · · · · · · · · · ·	Troy Simning, Project Manager	(415) 760-9505	TroyS@ghilottibros.com
		(415) 256-2292	
alifornia Department of Tran			
	Dale McCrossen, District Traffic		
Project Staff	Manager (DTM)- Senior (Lane	(510) 286-6911	dale.mccrossen@dot.ca.gov
	Closure Manager)		
	General, District 4 Radio Room	(510) 286-6359	
Command Post ⁽¹⁾			
	СНР	(415) 923-2010	
	CITE	(415) 923-2070	
	Coldon Coto Bridgo	(415) 923-2076	
	Golden Gate Bridge	(415) 923-2077	
	Golden Gate Bridge – OPS	(415) 923-2068	
	US Park Police	(415) 923-2071	
	US Park Ranger	(415) 923-2072	
	San Francisco Police Department	(415) 923-2073	
Golden Gate Bridge Joint	San Francisco Fire	(415) 923-2074	
nter-Agency Command	San Francisco Department of		
Post	Emergency Management	(415) 923-2299	
	Sausalito Police Department	(415) 923-2075	
	Marin SO	(415) 923-2272	
	Intel / NCRIC	(415) 923-2078	
	US Coast Guard	(415) 923-2079	
	Southern Marin Fire	(415) 923-2069	
	Fax – Send	(415) 923-2009	
	Fax – Send Fax – Receive	(415) 923-2066	
Metropolitan Transportation ((410) 923-2004	
		(510) 817-5862	irondwin@mta an raw
	John Goodwin		jgoodwin@mtc.ca.gov
511	Lindsey Baker	(239) 564-1818	lbaker@mtc.ca.gov
	Alysha Nachtigall	(510) 817-5989	anachtigall@mtc.ca.gov
	Radiah Victor	(510) 817-5719	rvictor@mtc.ca.gov
Bay Area Toll Authority	Jason Weinstein	(510) 384-7742	jweinstein@mtc.ca.gov
BATA)	Jeff Gerbracht	(510) 207-2865	jgerbacth@mtc.ca.gov
aw Enforcement			
	Dispatch	(707) 551-4100	
California Highway Patrol	B.J. Whitten, San Francisco	(415) 557-1094	bwhitten@chp.ca.gov
alloring ingitway ratiot	TBD, Marin		
	TBD, CHP Commander		
Marin County Sherriff	Pohort T. Doulo Charriff	(415) 400 7250	rdovle@co.morin.co.vo
Department	Robert T. Doyle, Sherriff	(415) 499-7250	rdoyle@co.marin.ca.us
Alameda County Sheriff	Gregory J. Ahern, Sheriff	(510) 725-5085	
Sausalito Police			
Department	Susan Barnes, Chief's Assistant	(415) 289-4170	sbarnes@ci.sausalito.ca.us

Golden Gate Bridge Moveable	Median Barrier (SF-101 PM 9.7 to MRI	N-101 PM 0.3, STPL-6	003(037), EA-04-3G5800)
Agency	Contact	Phone	E-mail
City of San Rafael, Police Department	Diana Bishop, Chief		cops@srpd.org
Novato Police Department	Renee Woolard, Administrative Assistant	(415) 897-1122	rwoolard@novato.org
Mill Valley Police Department	Deborah Ross, Administrative Assistant	(415) 389-4100	dross@cityofmillvalley.org
San Anselmo Police Department/ Twin Cities Police Department	Dana Unruh, Authority Clerk	(415) 927-5150	dunruh@centeralmarinpolice.org
Tiburon Police Department	Cindy Rodriguez, Administrative Assistant	(415) 789-2801	crodriquez@ci.tiburon.ca.us
Ross Police Department	Eric Masterson, Chief	(415) 453-2727	
Belvedere Police	Lulana Dhilling, Dalias Cognetary	((15) (05, 0011	In hilling Quity of holys days and
Department	Lylene Phillips, Police Secretary	(415) 435-2611	lphillips@cityofbelvedere.org
Fairfax Police Department	Cynthia Powell, Community Service Officer	(415) 453-5330	cpowell@fairfaxpd.org
City of Oakland Police Department	Dispatch	(510) 777-3211	
Fire Departments	·]		
San Francisco Fire	Michie Mong Lieuterent	(415) 550 0001	michic
Department	Michie Wong, Lieutenant	(415) 558-3361	michie.wong@sfgov.org
Marin County Fire			
Department, Southern	Jason Weber, Fire Chief	(415) 499-6717	jweber@marincounty.org
Marin			
Marin County Fire	Chris Martinelli, Senior Fire	(/15) /00 6717	
Department, Western Marin	Captain	(415) 499-6717	cmartinelli@marincounty.org
Larkpsur Fire Department	Robert Sinnott, Fire Chief	(415) 927-5014	rsinnott@larkspurfire.net
Greenbrae Fire Station 16	Robert Sinnott, Fire Chief	(415) 927-5014	rsinnott@larkspurfire.net
Mill Valley Fire Department	Greg Moore, Fire Chief	(415) 389-4130	fire@cityof millvalley.org
Ross Valley Paramedic Authority	Robert Sinnott, Executive Director	(415) 927-5014	rsinnott@larkspurfire.net
Novato Fire Protection District	Ken Massucco, Fire Chief	(415) 878-2690	firechief@novatofire.org
City of Oakland	Dispatch	(510) 444-1616	
City of San Rafael, Fire Department	Christopher Gray, Fire Chief	(415) 485-3304	chrisgray@cityofsanrafael.org
CAL Fire Unit Four	Eric Hoffman, Unit Chief	(707) 576-2586	eric.hoffmann@fire.ca.gov
Transit			
San Francisco Municipal	Cynthia Hui	(415) 701-4577	cynthia.hui@sfmta.com
Transportation Agency	Candace Wilcher	(415) 269-6458	candace.wilcher@sfmta.com
(SFMTA)	Matthew Lee	(415) 701-4378	Matthew.c.lee@sfmta.com
Marin Transit	TBD	(415) 226-0855	
Transportation Authority of Marin (TAM)	Diane Steinhauser, Executive Director	(415) 226-0820	
Santa Rosa City Bus	Anita Winkler, Deputy Director	(707) 543-3333	awinkler@srcity.org
	Clarence Johnson, Public Affairs	(510) 891-4745	
AC Transit	James Pachan, Chief Operating Officer		
Santa Clara Valley Transportation Authority (VTA)	Brandi Childress, Media Relations	(408) 952-4297	
SamTrans Public Affairs	Jayme Ackerman, Media Relations	(650) 508-7934	
	Andrew Feldon	(408) 592-0617	feldena@amtrak.com
	Rick Peterson	(916) 654-7190	rpeterson@amtrak.com
Amtrak and Capitol Corridor	Hubert Hanrahan	(510) 464-6991	HubertH@capitolcorridor.org
Joint Powers Authority	Linsey Ettlin	(510) 874-7494	lettlin@bart.gov
	Barbara Ruditis	(510) 714-5175	RuditiB@amtrak.com

Golden Gate Bridge Moveable	Median Barrier (SF-101 PM 9.7 to MRI	01 PM 9.7 to MRN-101 PM 0.3, STPL-6003(037), EA-04-3G5800)		
Agency	Contact	Phone	E-mail	
Solano Express		(707) 424-6075	commuterinfo@sta-snci.com	
Sonoma County Transit	Bryan Albee, Transit Manager	(707) 585-7516	bkalbee@sctransit.com	
BART Public Affairs	Alicia Trost, Public Affairs			
Airports				
San Francisco International Airport	Zeke Zamara, Traffic Management	(650) 821-6532	zeke.zamara@flysfo.com	
Dakland Airport and Port of Dakland	Robert Bernardo, Manager of Media and Public Relations	(510) 627-1401	rbernardo@portoakland.com	
Napa County Airport	Martin Pehl	(707) 253-4300	martin.pehl@countyofnapa.org	
Sonoma County Airport	Jon Stout, Airport Facilities Manager	(707) 565-7243	airport@sonoma-county.org	
Other Agencies				
United States Coast Guard	Greg Ressio	(415) 399-3536	operations@511.org	
Shiled States Coast Guard	Jim Macrae	(510) 207-0125	operations@511.org	
Foll Bridges Counts	Russell Sweeden	(510) 286-0794	russell_sweeden@dot.ca.gov	
Civil Air Patrol, Redwood Empire Composite Squadron 157- U.S. Air Force Auxiliary	David Reber, Captain	(707) 545-7488	djreber@aol.com	
Federal Aviation Administration	Robert Walker, Northbay Systems Support Manager	(707) 525-9356	robert.a.walker@faa.gov	
Federal Aviation Administration	Robin K. Hunt, Airports District Manager	(650) 876-2778 ext. 600	robin.k.hunt@faa.gov	
Napa Valley Transportation and Planning Agency	TBD	(707) 259-8631	contact@nctpa.net	
Transportation Alternatives of Marin	Patrick Seidler	(415) 389-5040 ext. 24	pseidler@wtb.com	
Sausalito Ferry Information Kiosk	Dick Seashore	(415) 332-2698	dicksea@pacbell.net	
Whistlestop Wheels	Terry Scussel, General Manager	(415) 456-9062 ext. 151	tscussel@thewhistlestop.org	
Nator Emorganov	Nina Rannells, Executive Director	(415) 291-3377 ext. 186	rannells@watertransit.org	
Nater Emergency Fransportation Authority Oakland/Alameda Harbor	Keith Stanke, Manager, Operations	(415) 291-3377 ext. 192	stahnke@watertransit.org	
(Vakland/Alameda Harbor Bay, San Francisco Bay and Vallejo)	Ernest Sanchez, Manager, Public Information	(415) 291-3377 ext. 190	sanchez@watertransit.org	
	Chad Mason, Senior Planner	(415) 291-3377 ext. 745	mason@watertransit.org	

Source: AECOM, 2014.

Notes:

- Shading indicates data not available, to be determined, or intentionally left blank.

⁽¹⁾ The Command Post Center will be located in the District board room.

Usually the solution involves directing traffic via PCMS to exit early, to avoid the problem area, or to direct traffic to the next exit, taking advantage of message signs and some combination of route detours. These alternatives should be reviewed and considered in preparation for any planned closures. The Traffic Management Center and the local agency should be notified of any changes made to the detours out in the field.

4.8.7 Contractor's Contingency Plan

The Contractor's contingency plan addresses activities under the contractor's control in the work zone. The contractor will be required to submit a traffic control plan at least one week prior to any lane closures, or any critical operation identified by the RE. The traffic control plan shall contain a detailed contingency plan to ensure opening of the closures by the designated time. This can significantly reduce the delay that might otherwise occur while trying to determine what to do on

the spot. The contractor will need to prepare a contingency plan that would be implemented in the event that the construction operation requiring the freeway lane or ramp closures do not proceed as planned.

The contractor will have the primary responsibility for monitoring operation before, during, and after such closures along the detour routes and at the construction site. During construction activity, contractors will need to provide appropriate personnel to monitor activities and make decisions regarding activation of contingency plans. As soon as it becomes evident during any construction activity that it will not be possible to complete that activity and remove the closure at the designated time, that activity shall be halted and postponed until a later date.

The purpose of contingency plans is to identify when the construction operation must be abandoned to facilitate opening of a facility within the designated time. The relevant local agencies, the District, Caltrans, construction management staff, CHP and other stakeholders will review the contingency plans. This plan should provide the following information:

- Identify key operational decision points with specific times associated with each activity. This timeline should identify the expected completion time of each critical path activity.
- Clearly defined trigger points must be identified with each critical path activity to establish when the contingency plan will be activated.
- Decision tree with clearly defined lines of communication and authority.
- Appropriate communication equipment to be provided and procedures established to communicate between each other during the entire construction period, especially whenever emergency events happen.
- Contact information such as names, phone numbers and pager numbers of the RE, Contractor's Project Manager, Project Manager, Caltrans Permit and/or Construction Inspector, Caltrans' District 4 TMC, CHP Area Commander, San Francisco and Marin County Sheriff, relevant local police departments, Emergency Services, appropriate local agency representatives, and other applicable personnel such as transit agencies.
- A description of the standby equipment that would be available to complete the operation in the event of equipment failure. The plan will list and describe any and all standby equipment and secondary material suppliers, to be available to complete the operations in the event of equipment failure, unexpected loss of material or unexpected uselessness of material.
- If simultaneous construction projects are planned, then the contractors should coordinate the contingency plans to verify that no overlap of the proposed detour routes exists between the projects.

Anticipated construction activities to be monitored include, but are not limited to, the following construction tasks:

- Demolition and removal of existing roadway pavement and earthwork.
- Construction and finishing of retaining and sound walls.
- Bridge widening including false work installation.
- Grading and paving of the permanent facilities including work in open trenches and excavation.
- Removal of existing traffic control facilities including pavement delineation, roadway and overhead signs, and traffic signals.
- Installation of pavement, delineation, roadway ad overhead signs, traffic signal installations, and lighting.
- Installations of roadway medians, and curb and gutters.

As soon as it is apparent that a contractor will be unable to restore traffic flow before the end of a lane or ramp closure period, the contractor or RE should immediately implement the following procedures:

- If the RE and contractor determine that additional staff will expedite the restoration of traffic flow, additional sources from the Contractor should be activated.
- Any supplemental equipment that is not in use should be utilized to expedite the opening of the highway facility.
- Notify the Caltrans Transportation Management Center, city staff, county staff, and local law enforcement departments for the City and County of San Francisco, Sausalito, Marin County, the CHP Area Commander, and other appropriate local agency representatives to inform them of the situation.

Possible solutions to reduce traffic impacts involve directing traffic via PCMS to exit early, to avoid the problem area, or to direct traffic to the next exit, taking advantage of message signs and some combination of route detours. These alternatives should be reviewed and considered in preparation for any planned closures. The Traffic Management Center and local government agencies should be notified of any changes made to the detours out in the field.

4.9 Demand Management

Demand management strategies include a wide range of techniques intended to reduce the volume of traffic traveling through the work zone by diverting travelers to alternate modes, shifting trips to off-peak periods, or shifting vehicles to alternate routes. Caltrans has limited influence on the travel characteristics of the general public. The state's greatest influence is in providing the public information on transportation alternatives, coordinating with other agencies that provide transportation services, regulating the use of state facilities, and providing state facilities that contribute to reduced travel demand (i.e. park and ride lots).

Demand management strategies should be identified in the public outreach material discussed in earlier sections, and should be discussed with key stakeholders and major employers during stakeholder coordination meetings. Caltrans should encourage stakeholders and employers to implement demand management programs and services, or to form partnerships with Transportation Management Associations who provide these services.

4.9.1 Impact Mitigation for Local and Regional Areas

The Golden Gate Bridge/Route 101 is a direct link between Marin County and San Francisco. Thousands of motorists utilize this section of highway daily to commute between San Francisco and Marin. Tourists also travel across the GGB to access the vista point and parks near the GGB. Most construction activities will take place during late evenings or early mornings to prevent significant impacts. Truck/Heavy Vehicle Restrictions, Increased Shuttle Services, and Parking Supply Management will be used to lessen impacts when construction takes place during high volume travel times. Additional strategies include:

- Ridesharing/carpooling incentives This strategy involves the use of ridesharing and carpooling incentives to reduce the number of vehicles traveling through the work zone. Incentives include preferential parking for carpools, provision or subsidy of vanpool vehicles (e.g., some employers provide vehicles while others subsidize fuel and insurance). Additionally, employers can encourage employees to use existing rideshare and carpool matching services (such as 511.org Rideshare or local TMA's). Agencies such as the Metropolitan Transportation Commission offer start-up incentives such as free gas cards, vanpool subsidies up to \$300, free bridge tolls, and free public parking permits. Caltrans should promote the use of their park-and-ride lots for rideshare/carpool meeting locations.
- Guaranteed Ride Home Guaranteed Ride Home is a benefit offered by many counties and employers that alleviate concerns about being "stranded without a car" for those who carpool or use transit to commute. The program provides commuters who regularly carpool, vanpool, bike, walk or take transit to work with a reliable and free ride home usually in a taxi or rental car when unexpected emergencies arise.
- Park-and-ride lots This strategy involves the creation, expansion, and/or promotion of park-and-ride lots to encourage ridesharing and transit use, thus reducing the number of vehicles traveling through the work zone.
- Peak-hour traffic restrictions Route 101 carries a notable amount of truck traffic that can increase delays during closures as well as increase the probability of crashes, particularly if non-standard geometrics are required during construction. Caltrans may consider restricting trucks during critical closures, but would need to provide feasible and acceptable alternatives. Detouring truck traffic to alternative routes, even for short-term closures, will impact local communities and may be vigorously opposed by local agencies and the public.
- Transit incentives Transit incentives include employer transit subsidies and guaranteed ride home programs. These strategies work best when there are adequate transit routes and frequencies that serve major origin and destinations of motorists through the work zone. This strategy could be recommended for the major employers within the Project area.
- Shuttle services Shuttle and charter buses may be considered if a large number of users along the corridor are anticipated to use this service. This strategy could be recommended for the major employers within the Project area.

- Variable work hours This strategy involves encouraging motorists who typically travel though the work zone during periods of high demand or construction to work variable hours (off-peak) to reduce the demand for travel during peak hours.
- Telecommuting Telecommuting in the work place reduces the dependence to travel to work. Telecommuting helps reduce the number of commute trips, there by significantly reducing traffic congestion through the work zone.

4.9.2 Public Transit Mitigation

The weekend closure of the Golden Gate Bridge will impact the District Bus Transit Division and MUNI routes that service the GGB. To mitigate the effects of the GGB closure and to encourage commuters to use public transit to travel between Marin County and the City and County of San Francisco certain District bus services will continue to run along the GGB during the closure with limited service. Additionally, the closure will require an increase in District Ferry Transit Division Services. The District plans to maintain transit and ferry services as well as operational hours in order to accommodate travelers during the weekend closure.

The following transit operator's service lines operate along the GGB and are expected to be directly affected by the weekend closure of the GGB.

Golden Gate Transit

Golden Gate Transit operates several bus routes between the North Bay and San Francisco by use of Route 101. Stops located along the Project area are important transfer points to MUNI Buses, Golden Gate Transit and the Presidio Shuttle.

- Route 2 San Francisco Marin Headlands
- Route 4 San Francisco Mill Valley
- Route 8 San Francisco Tiburon
- Route 18 San Francisco College of Marin
- Route 24 San Francisco San Anselmo, Fairfax
- Route 27 San Francisco San Anselmo
- Route 38 San Francisco Terra Linda
- Route 44 San Francisco Lucas Valley
- Route 54 San Francisco Novato/San Marin
- Route 56 San Francisco San Marin/Novato
- Route 58 San Francisco Hamilton/Novato
- Route 72 San Francisco Santa Rosa
- Route 74 San Francisco Petaluma, Santa Rosa
- Route 76 San Francisco East Petaluma
- Route 97 San Francisco
- Route 10 San Francisco Strawberry
- Route 70 San Francisco Santa Rosa
- Route 80 San Francisco Santa Rosa
- Route 101 San Francisco Santa Rosa

MUNI

Route 76 – Marin Headlands

These bus services will be permitted use of Route 101 during the weekend closure. Flaggers will be provided on closed roadways to guide busses through lane closures.

Golden Gate Transit Ferry Services

In addition to the service lines listed above, it is expected that other lines servicing the Bay Area should expect to see an increase in ridership during the weekend closure as a result of the diverted traffic from the GGB. To accommodate diverted traffic from the GGB, the District ferry services will operate on the modified schedule included in **Table 19**.

Depart Larkspur	Arrive San Francisco	Depart San Francisco	Arrive Larkspur
5:45*	6:15*	6:20*	6:50*
7:00*	7:30*	7:35*	8:05*
8:20*	8:50*	9:10*	9:45*
9:40	10:30	10:40 ⁽¹⁾	
10:10*	10:45*	10:55*	11:30*
11:40	12:30	12:40	1:30
12:40*	1:10*	1:20*	1:50*
2:40	2:30	3:45	4:35
4:15*	4:45*	5:00*	5:30*
5:00	5:50	6:00 ⁽¹⁾	
		6:25	7:15
6:00*	6:30*	7:25*	7:55*
8:05*	8:35*	8:45*	9:15*
10:00*	10:30*	10:40*	10:50*
11:00*	11:30*	11:40*	12:10*
12:20*	12:50*	1:00*	1:30*

Table 19: Golden Gate Transit Ferry Service – Weekend Closure of the Golden Gate Bridge

Source: Golden Gate Bridge Highway and Transportation District, 2014.

Notes:

-"*" Denotes high speed service

-Bold indicates PM service

⁽¹⁾ Ferry service to Sausalito

4.9.3 Airport Traffic Alerts

Notification of the GGB closure should be sent to the San Francisco International Airport, in advance to alert all employees, airlines, air passengers and greeters of the closure and available detour routes that will connect the City and County of San Francisco with the North Bay area.

Conclusion

This TMP presents a comprehensive strategy that allows construction activities for the Project to occur during appropriate work windows that will minimize delays to motorists while ensuring that public and worker safety remain a top priority. In addition this TMP encourages collaboration between the District, Caltrans, contractors, and local and regional public agencies to maintain public awareness about the scope and timeline of the Project which will allow the public to make adjustments to their daily commute as necessary to minimize delays.

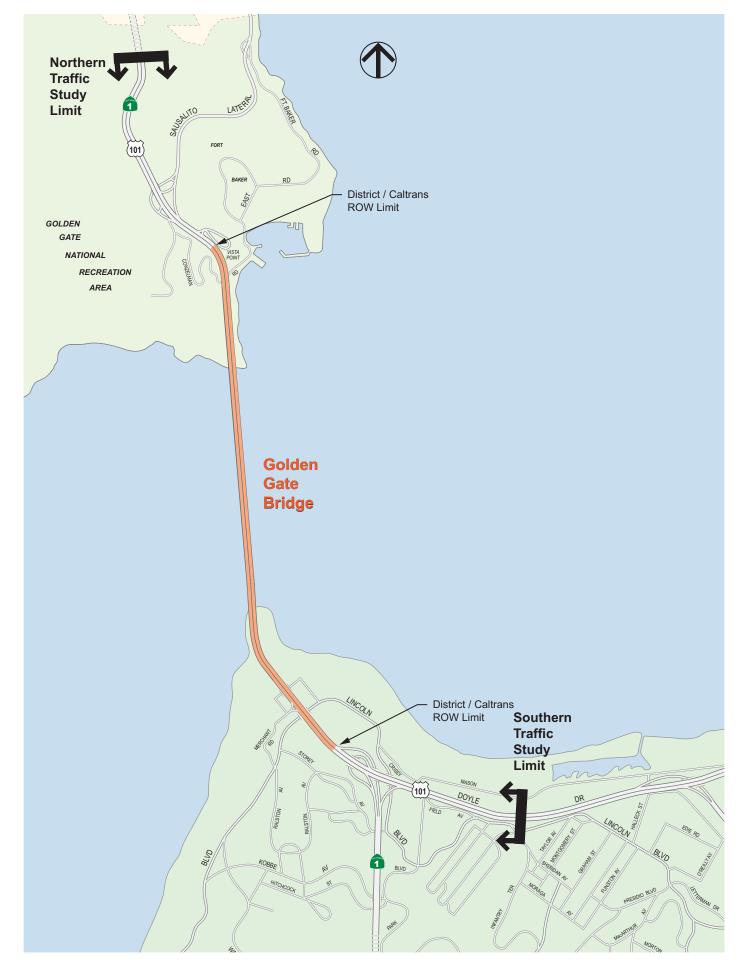
The scope of the Project will require a full closure of the Golden Gate Bridge from midnight on January 9, 2015 to 4:00 AM on January 12, 2015. The closure is not expected to last more than 52 hours. The weekend closure of the bridge will occur when traffic volumes are significantly lower than during the week. While this will cause significant delays to motorists travelling between the City of San Francisco and Marin County, the weekend closure of the Golden Gate Bridge is unavoidable to ensure both public and worker safety during construction. It is recommended that the public is informed to use alternate freeways, transit services and/or avoid the use of Route 101 during this weekend.

This TMP also encourages the constant monitoring of traffic conditions during the duration of construction activities in order to ensure that the construction schedule does not cause excessive delay or threats to public and worker safety. The TMP establishes a chain of command during construction activities that allows for a quick response to incidents that may occur. This TMP is a dynamic (i.e. living) document that was prepared based on information available at the time of preparation and should be considered a guide to construction activities that allows for periodic updates and modifications in order to better serve the current ongoing needs of the Project.

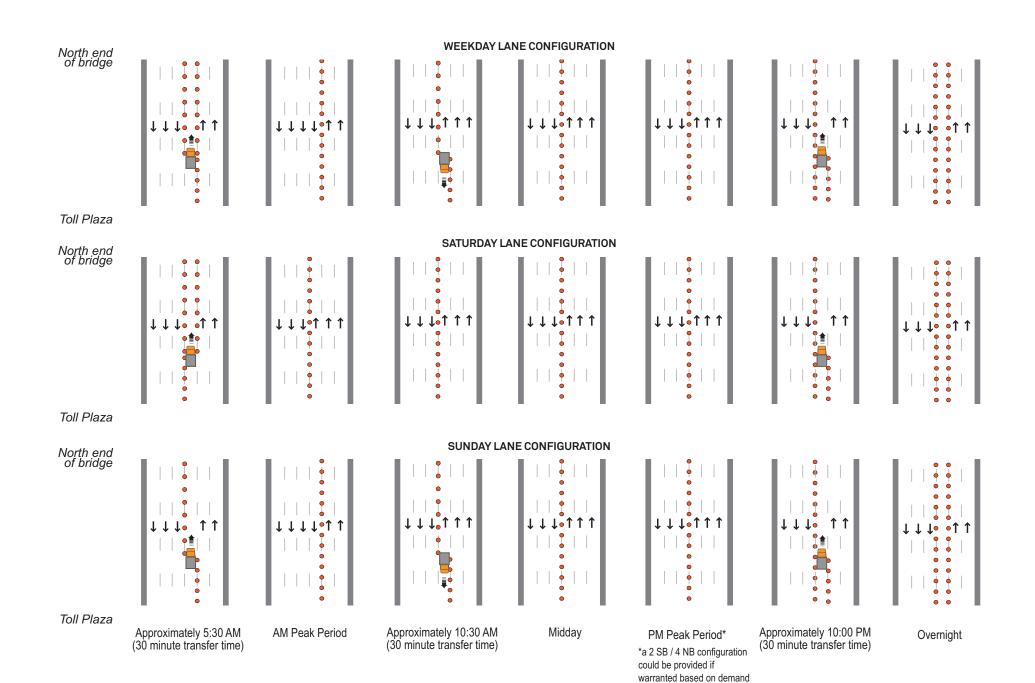
Attachments

Attachment A1: Project Vicinity Map

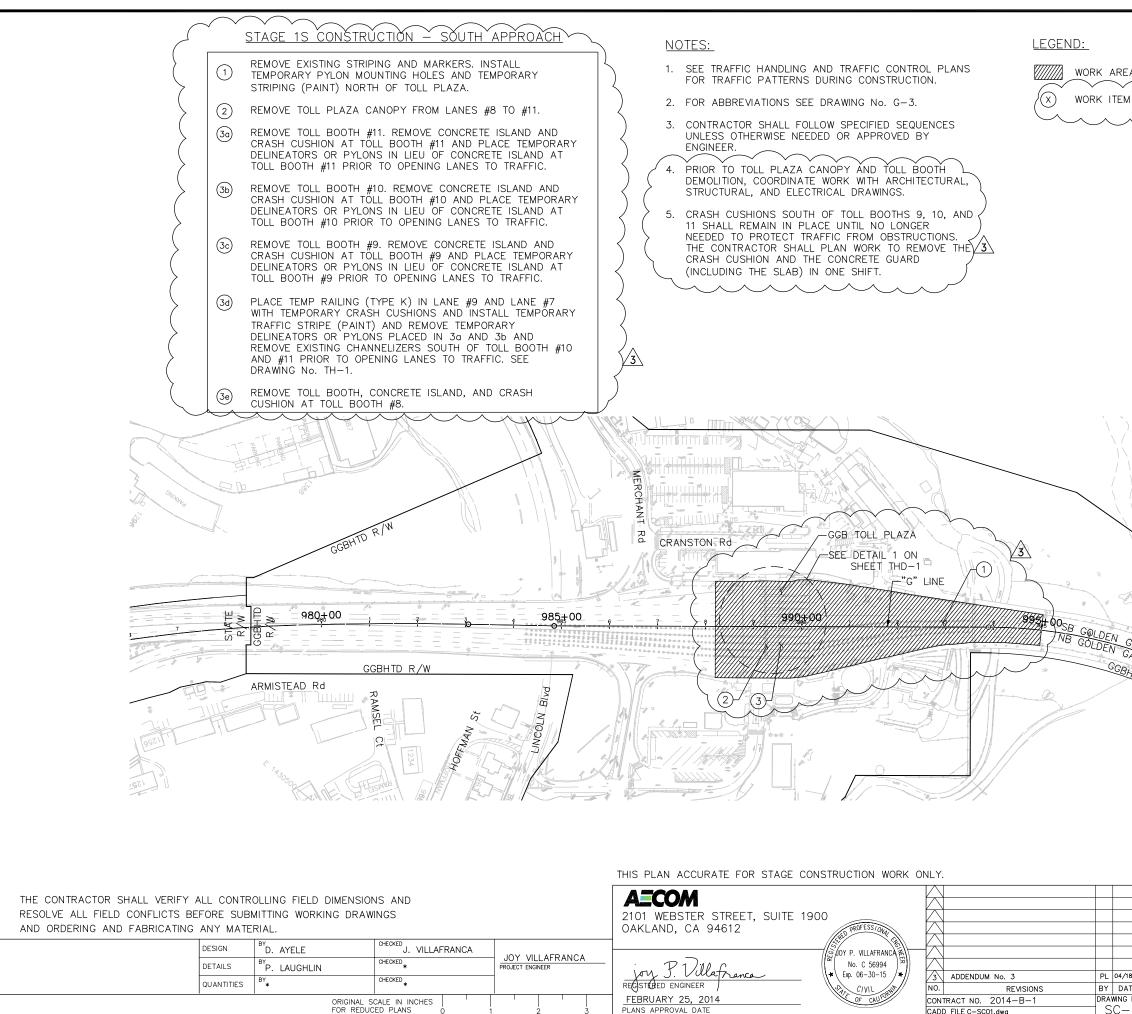
Attachment A1: Project Vicinity Map



Attachment A2: Existing Conditions GGB Roadway Configuration Schedule

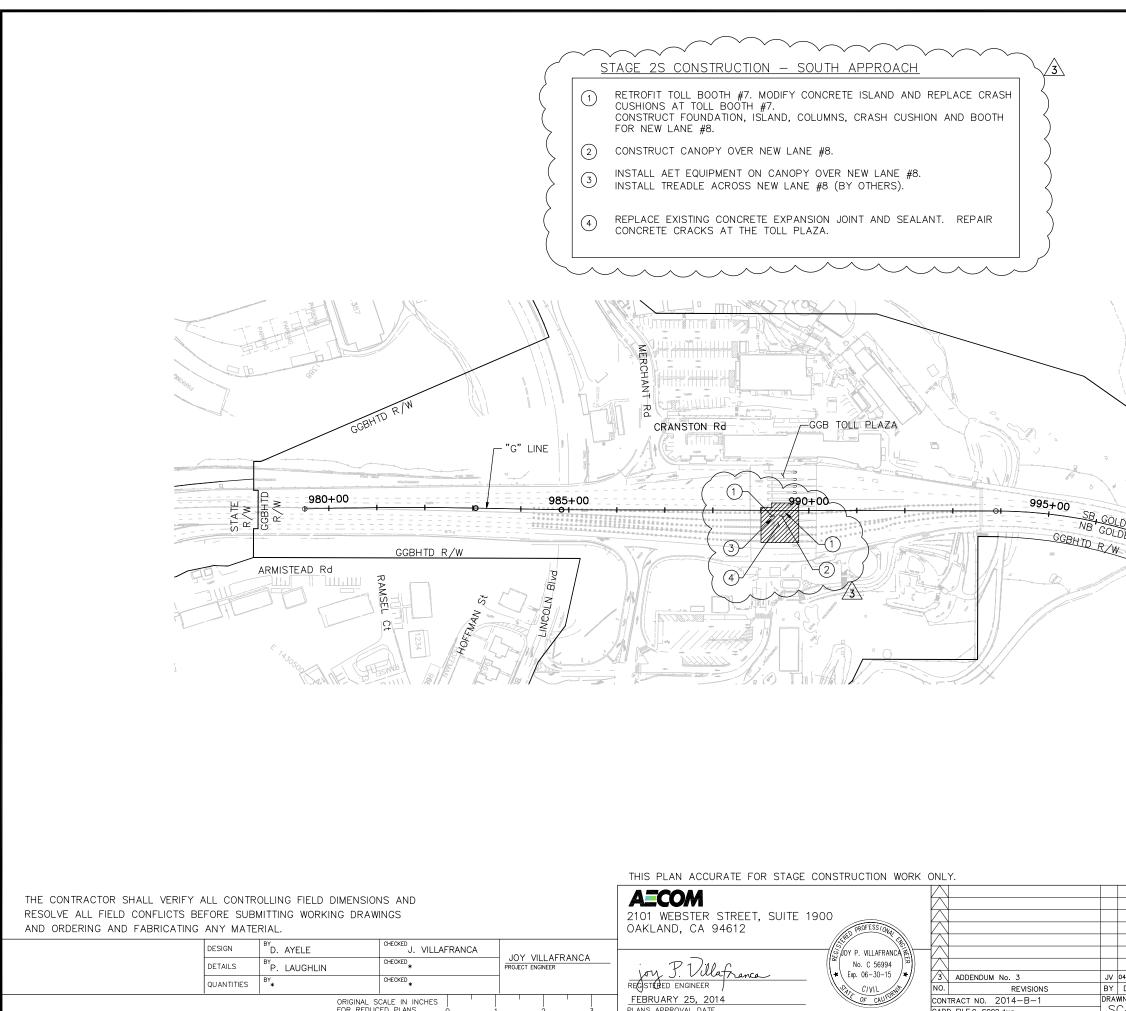


Attachment B1: Stage Construction Plans— Short-Term Project



CADD FILE C-SC01.dwg

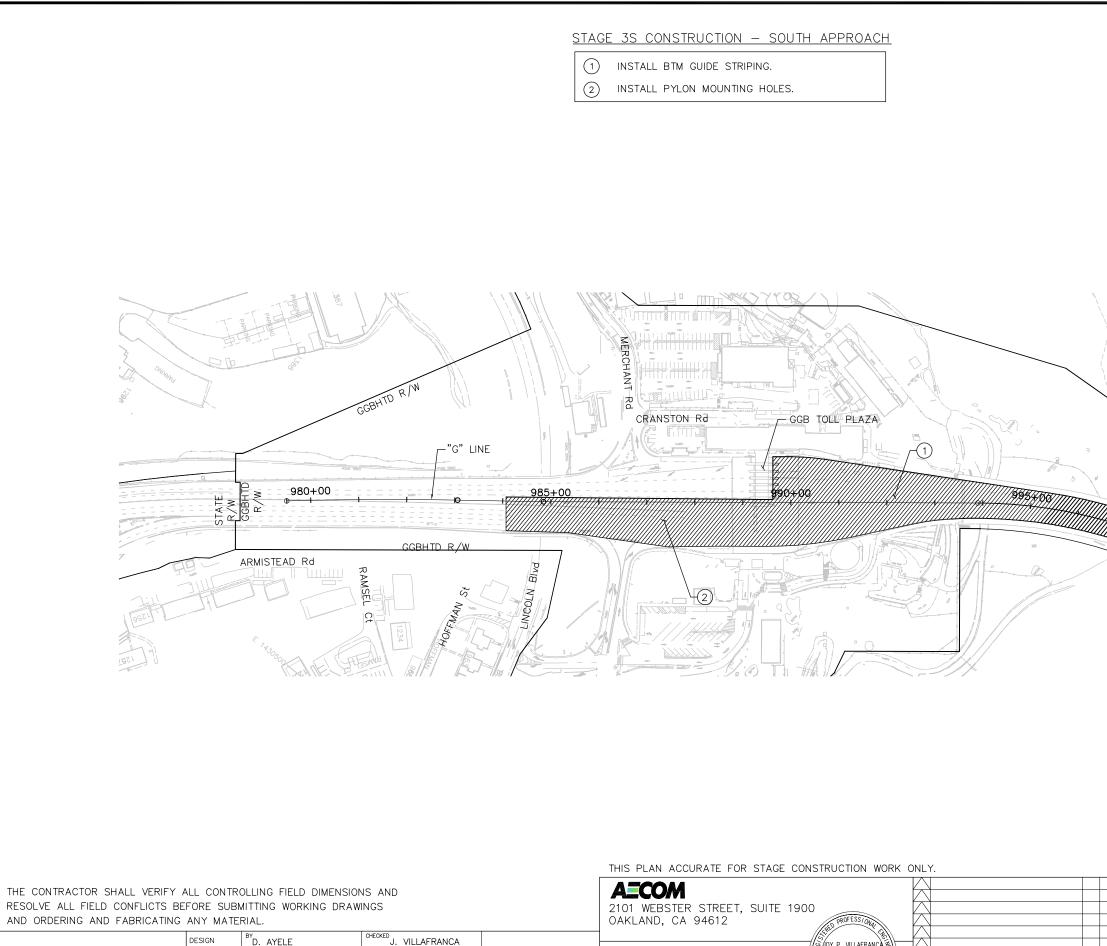
		REV. SHEET TOTAL NO. NO. SHEETS
		0 74 192
REA		
\sim		
EM NU	JMBER 3	
$\overline{}$	\sim	
(
		$\mathbf{A}_{\mathbf{X}}$
		$\boldsymbol{\mathscr{I}}$
d.		[×]
R		
		ATTO R. M.
GATE		// **
SBHTD	BRIDGE	
	× W ···································	1000
		1000-100
	7 ~	
l.		
N	>	
		SCALE:1" = 100'
	APPROVED BY	
	PROFESSION ENA Z. BAUER	CODENCATERING AND TRANSPORTATION DISTRICT
	(GOLDEN GATE BRIDGE MOVEABLE MEDIAN BARRIER
	A CIVIL IN	
14/18/14	OF CAUFOR	STAGE CONSTRUCTION – SOUTH APPROACH STAGE 1S
DATE NG NO.	DISTRICT ENGINEER 02-25-2014	STAGE TS SHEET 1 OF 15
2-1	DATE	



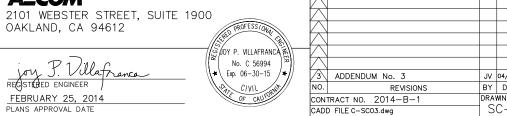
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

JV 04/ BY D DRAWIN CONTRACT NO. 2014-B-1 SC-CADD FILE C-SC02.dwg

		REV. SHEET TOTAL NO. NO. SHEETS
		0 75 192
	N	OTES:
	1.	
	2.	SC-1. FOR ABBREVIATIONS, SEE DRAWING No. G-3.
	۷.	ABREMATORS, SEE DRAMING NO. 0 5.
$\frac{1}{2}$		
$\langle \cdot \rangle$		
H		
Dr.	CCBHT	× ×
	GEBHID R.M	
58		
DENT		
EN G	ATE BRIDG	
\rightarrow	SATE BRIDGE ATE BRIDGE	
		1000,00
```		e e e
ĥ	1)	
		SCALE:1" = 100'
	APPROVED BY	GOLDEN GATE BRIDGE, HIGHWAY
	EWA Z. BAUER	GOLDEN GATE BRIDGE MOVEABLE
	Exp. 03-31-15	MEDIAN BARRIER
4/18/14	No. C 43632 ★ Exp. 03-31-15 C/VIL OF CALLOONT	MEDIAN BARRIER STAGE CONSTRUCTION – SOUTH APPROACH
4/18/14 DATE NG NO. — 2		MEDIAN BARRIER



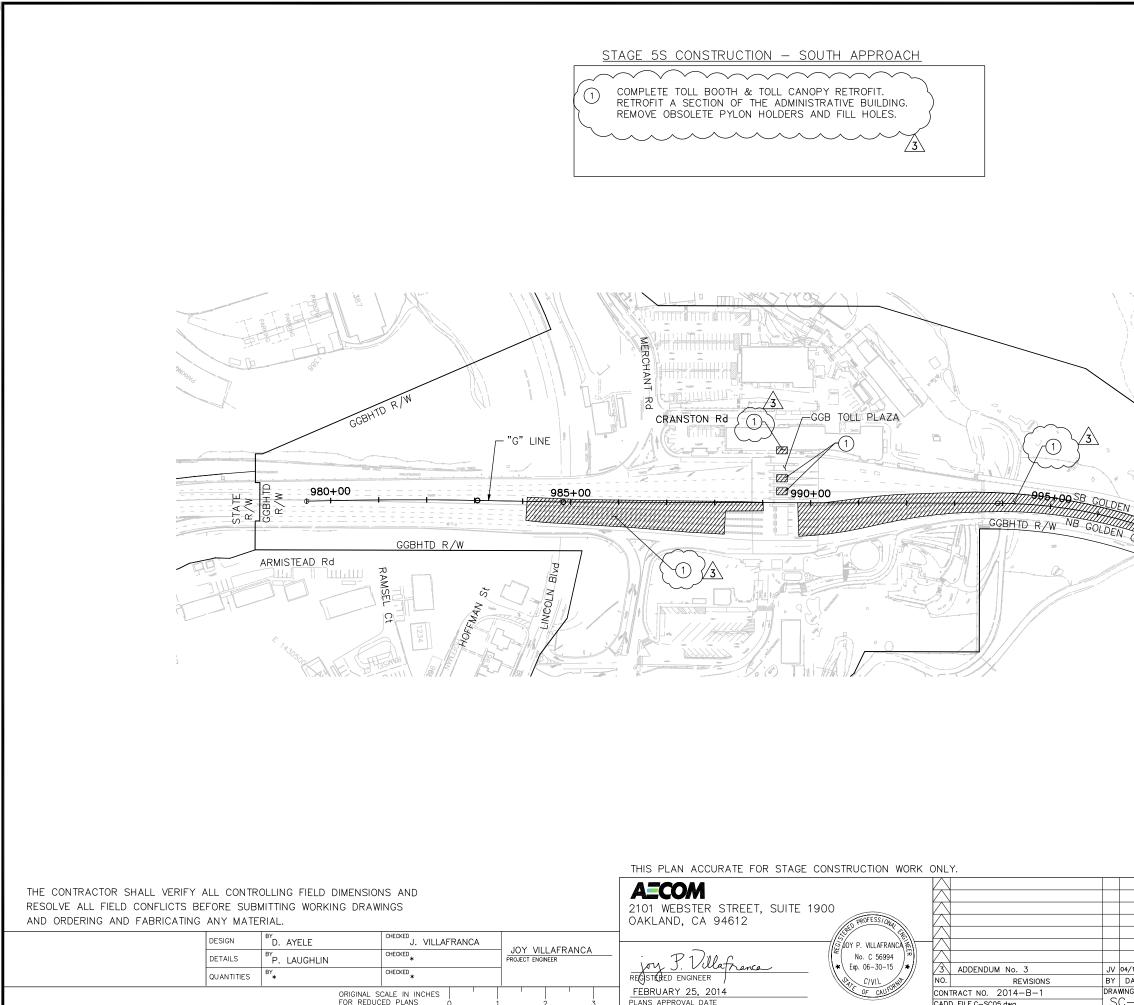
RICATING	ANT MATE	RIAL.				
	DESIGN	D. AYELE				
	DETAILS	P. LAUGHLIN	CHECKED *	JOY VILLAFRANCA PROJECT ENGINEER		
	QUANTITIES	BY *	CHECKED *			
		ORIGINAL S	CALE IN INCHES			



		-	REV. SHEET NO. NO. 0 76	TOTAL SHEETS 192
SEE DRAWING N	BREVIATIONS AND/C o. SC-1. IONS, SEE DRAWING	) )	i	
		~		
APPROVED BY		EN GATE BRIDG		
Eva Z. BAUER No. C 43632 Eva 03-31-15 C/VIL DATE DISTRICT ENGINEER 02-25-2014 DATE	GOLDEN C M STAGE CONSTRU	ate Bridge M Edian Barrief	OVEABLE	

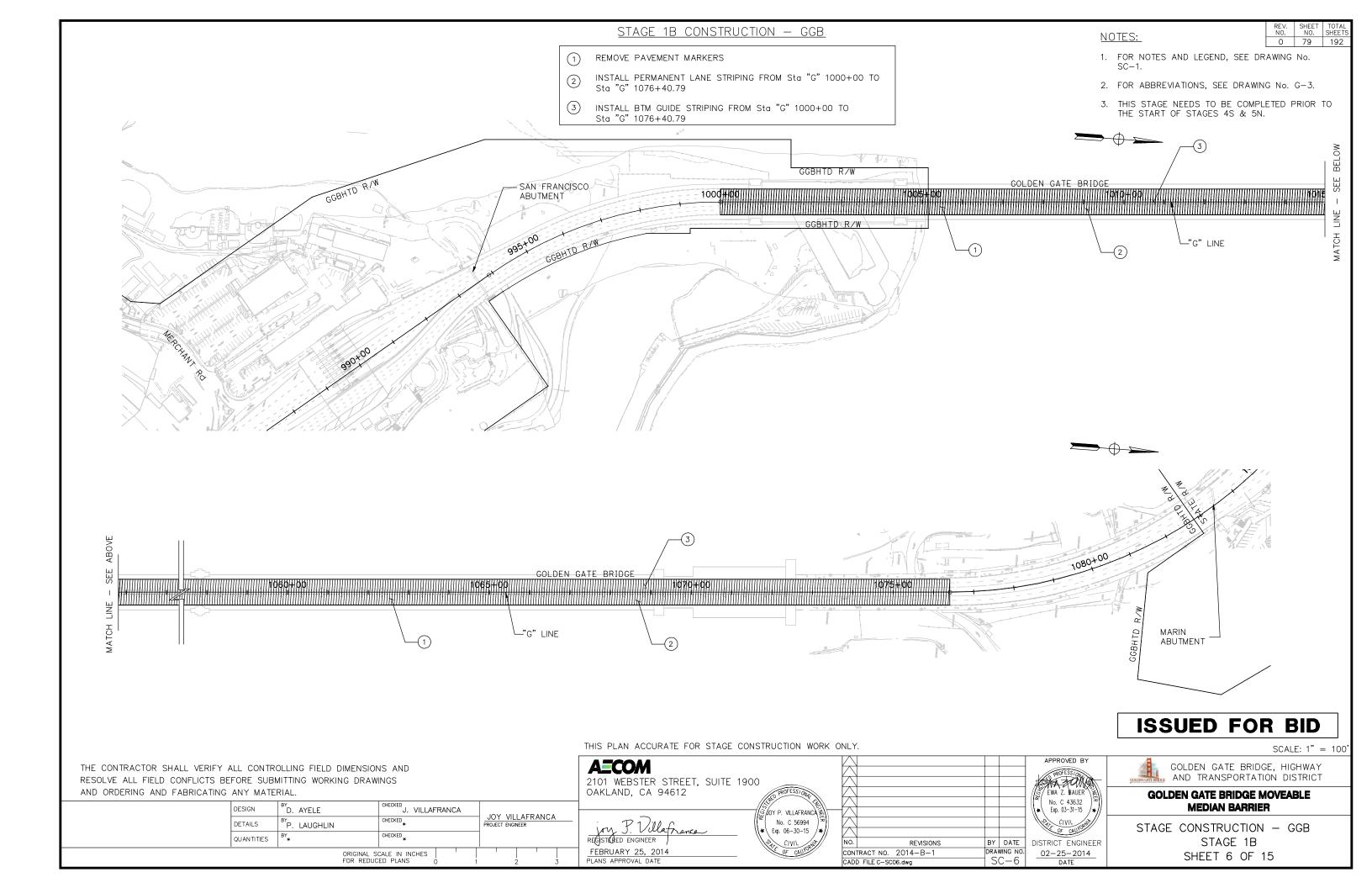
		STAC (1) (2) (3) (4) (5) (6)	E 4S CONSTRUCTION – SOL INSTALL MOVEABLE MEDIAN BARR OTHERS). REMOVE EXISTING STRIPING AND FROM Sta "G" 984+24 TO Sta "G" INSTALL PERMANENT LANE STRIPI "G" 984+24 TO Sta "G" 1000+00 REPLACE CRASH CUSHIONS AT TG #1 TO #6. INSTALL CONCRETE BARRIER (TYPE REMOVE TEMP RAILING (TYPE K), CRASH CUSHIONS AND CHANNELI OF TOLL BOOTHS #8 AND #9.	IER (BY MARKERS G" 1000+00. NG FROM Sta D. DLL BOOTHS PE K). TEMPORARY		
	CCBHTD R/W	985+00	MERCHANT Rd CRANSTON Rd	GGB TOLL PLAZA	3	
ARMISTEAD Rd	GGBHTD R/W	TINCOLN BING				
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENS RESOLVE ALL FIELD CONFLICTS BEFORE SUBMITTING WORKING DR AND ORDERING AND FABRICATING ANY MATERIAL.			THIS PLAN ACCURATE FOR STAGE <b>AECOM</b> 2101 WEBSTER STREET, SUITE 1 0AKLAND, CA 94612	900	DNLY.	
DETAILS BY AUGHLIN QUANTITIES BY	CHECKED J. VILLAFRANCA	DY VILLAFRANCA JECT ENGINEER	FEBRUARY 25, 2014 PLANS APPROVAL DATE	Sory P. VILLAFRANCA           No. C 56994           ★           Exp. 06-30-15           Strict           OF           CIVIL	ADDENDUM No. 1 NO. REVISIONS CONTRACT NO. 2014-B-1 CADD FILE C-SCO4.dwg	PL 04/ BY DA DRAWNG SC-

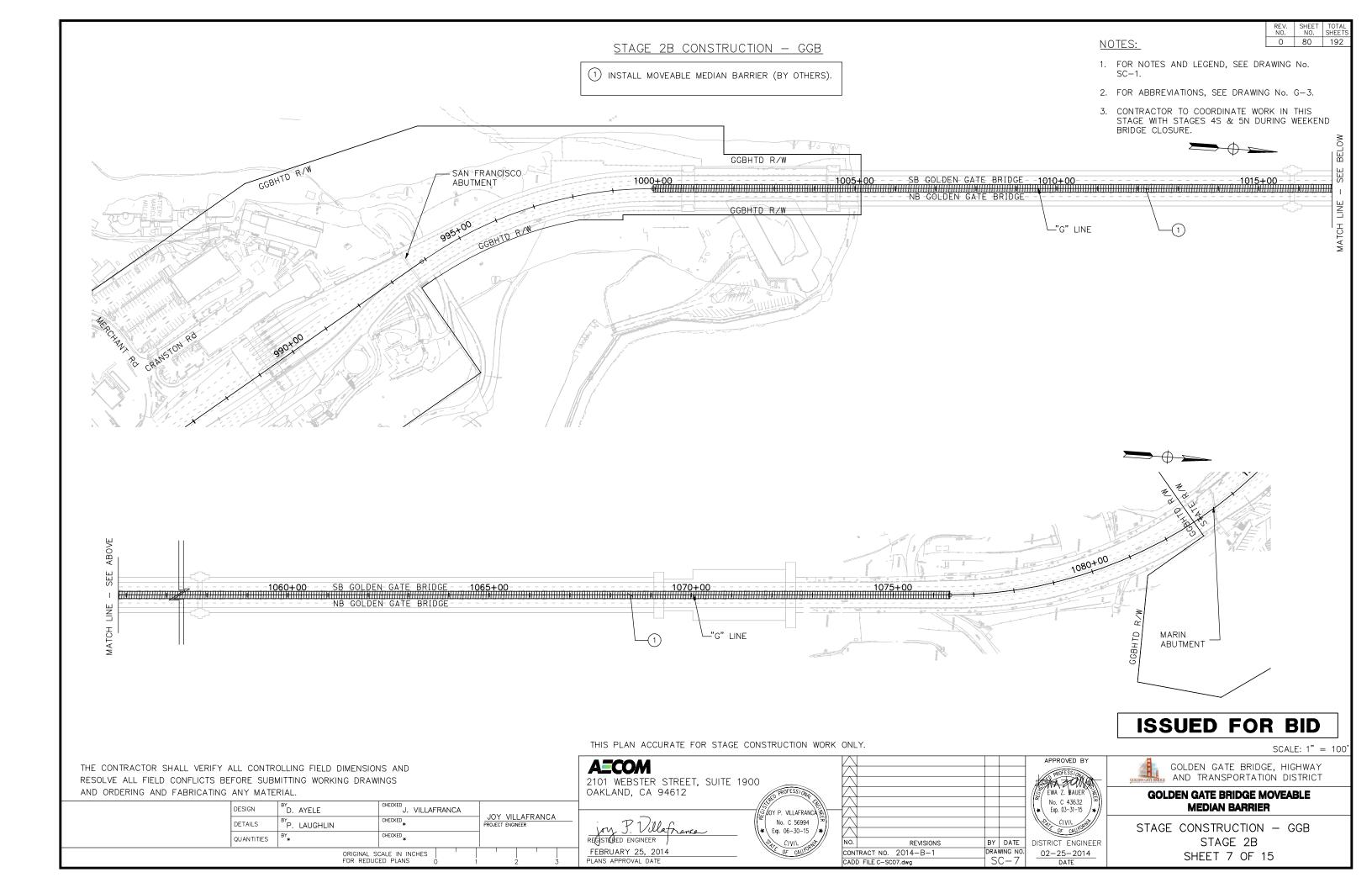
				-	
NC	DTES:		REV. NO. O	SHEET NO. 77	TOTAL SHEETS 192
1.		BBREVIATIONS AND/OR LEGEND, SEE			
2.		TIONS, SEE DRAWING No. G-3.			
3.		O COORDINATE WORK IN THIS STAGE ALLATION DURING WEEKEND BRIDGE			
4.	COORDINATE TH	HIS STAGE WITH STAGES 2B AND 5N			
5.		NEEDS TO BE PERFORMED AS FIRST RK IN THIS STAGE.			
	DEN SATE BRIDG SCRUD RAW			<u>E: 1"</u> =	
	APPROVED BY	GOLDEN GATE BRIDG	E, HIC DN DIS	SHWAY STRICT	
	€ EWA Z. BAUER No. C 43632 Exp. 03-31-15	GOLDEN GATE BRIDGE M MEDIAN BARRIEF	-	BLE	
PL 04/18/14	CIVIL OF CAUTORNA	STAGE CONSTRUCTION – SOL		PPRO	АСН
BY DATE D DRAWING NO. SC-4	DISTRICT ENGINEER 02-25-2014 DATE	STAGE 4S SHEET 4 OF 1	5		
	DATE				

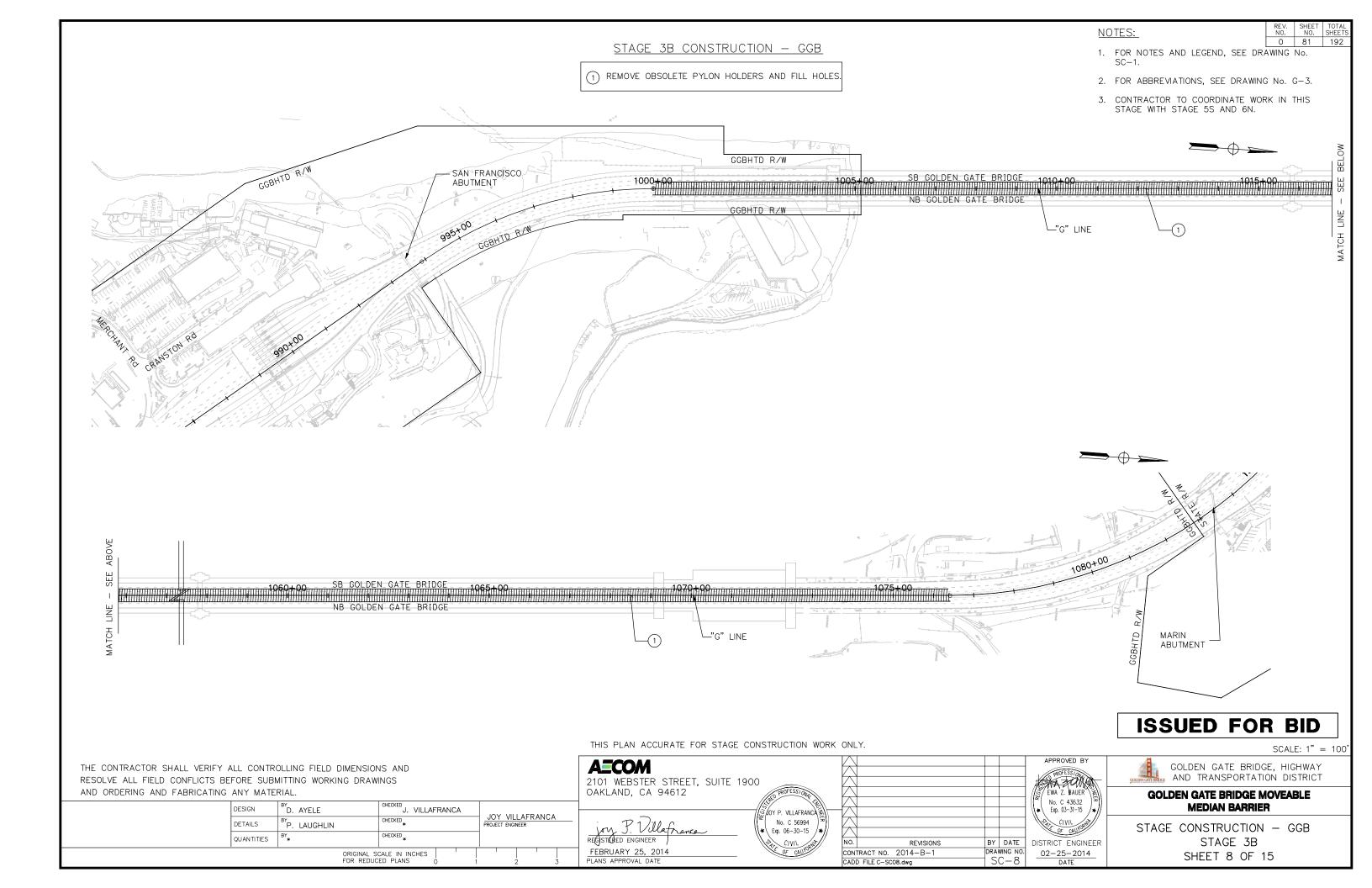


CADD FILE C-SC05.dwg

		REV. SHEET NO. NO.	TOTAL SHEETS
	ATE 0	0 78	192
	<u>OTES:</u>		
1.	FOR NOTES AND LEGEND, SEE DRA SC-1.	AWING No.	
2.	FOR ABBREVIATIONS, SEE DRAWING	G No. G-3.	
3.	COORDINATE WORK IN THIS STAGE	WITH STAGE	S
	3B AND 6N.		
	$\checkmark$		
CCRI			
GGBHTD R.M			
	<		
OLDFN A	***		
OLDEN GATE BRIDGE			
DEN GATE BRIDGE			
	Who.		
	IIII BATTA		
- 4			
// `>			
		SCALE:1" =	- 100'
APPROVED BY	GOLDEN GATE BRIDG		
PROFESSION	COLDENCATE BRIDGE AND TRANSPORTATI	ON DISTRICT	
EWA Z. BAUER No. C 43632	GOLDEN GATE BRIDGE M MEDIAN BARRIEI		
Exp. 03-31-15			
JV 04/18/14 BY DATE DISTRICT ENGINEER	STAGE CONSTRUCTION – SOU STAGE 5S	лн арькс	ACH
$\begin{array}{c c} \hline Drawing NO. \\ \hline SC-5 \\ \hline Date \\ \hline Dat$	SHEET 5 OF 1	5	
DATE			

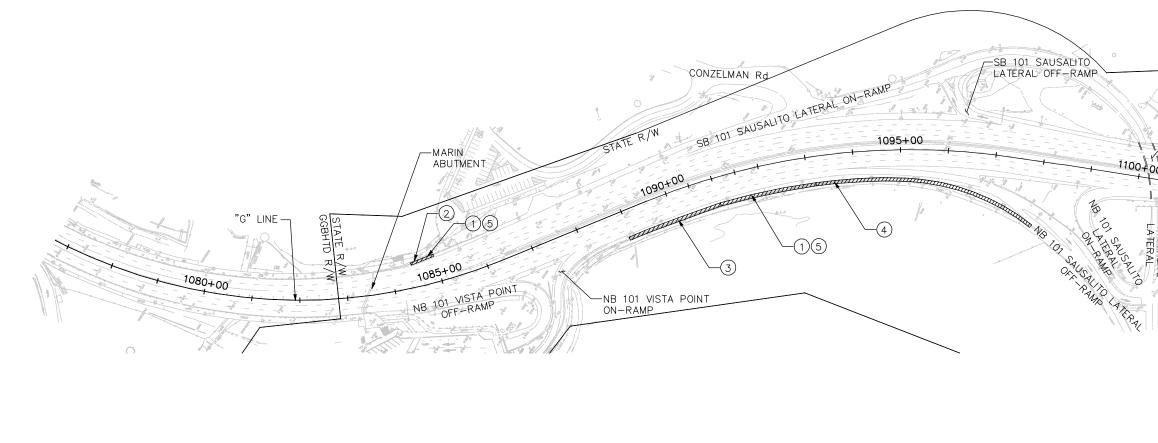




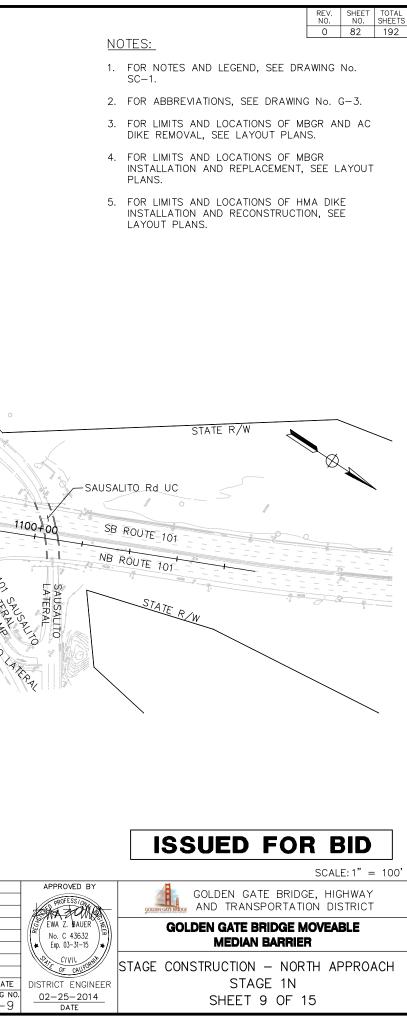


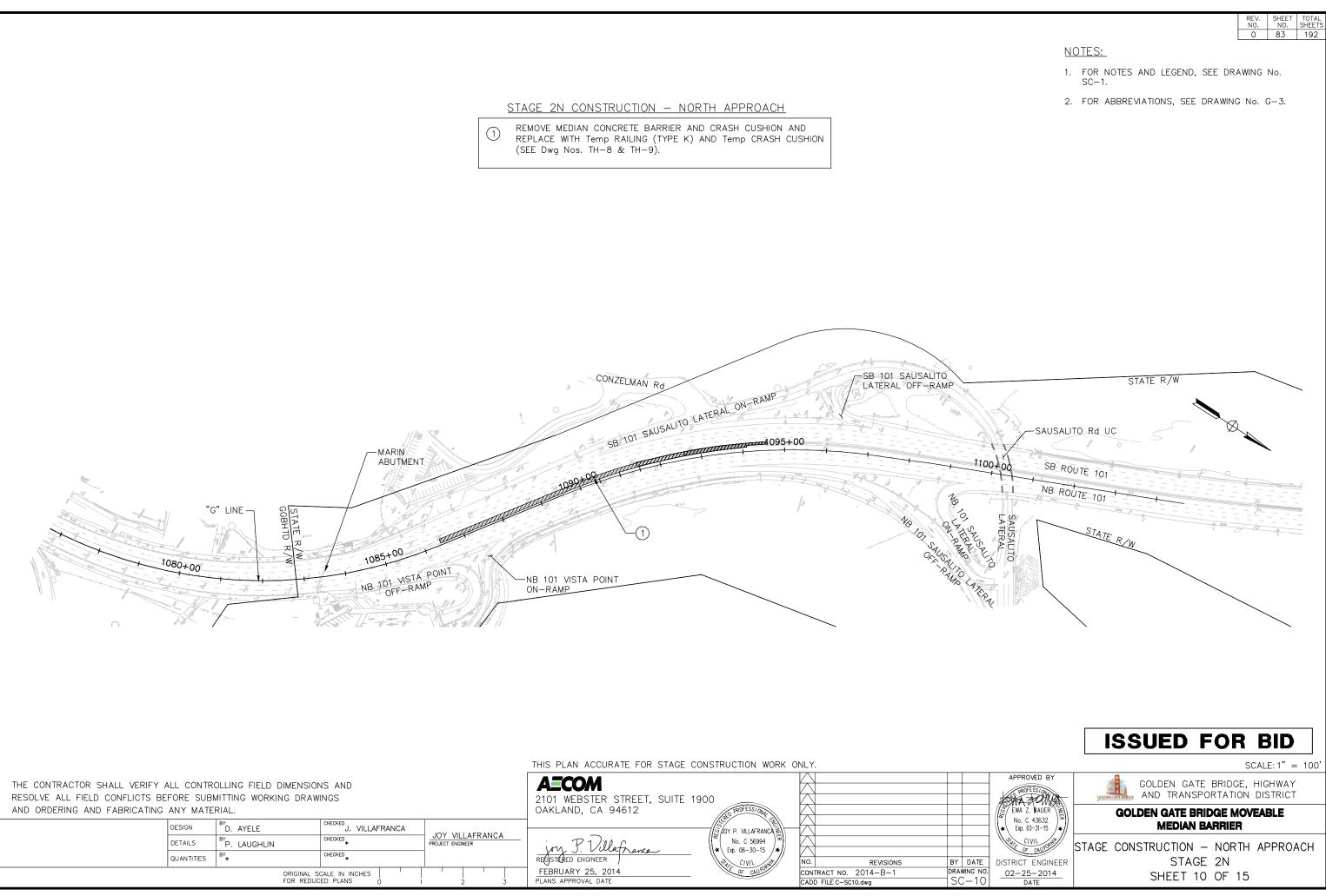
#### STAGE 1N CONSTRUCTION - NORTH APPROACH

- () INSTALL Temp RAILING (TYPE K) AND CRASH CUSHIONS.
- (2) REMOVE PORTION OF Exist GUARD RAIL AND AC DIKE. INSTALL DRAINAGE SYSTEM #1. RECONSTRUCT GUARD RAIL & HMA DIKE.
- (3) REMOVE PORTION OF Exist GUARD RAIL AND AC DIKE. INSTALL DRAINAGE SYSTEM # 2. RECONSTRUCT GUARD RAIL.
- (4) INSTALL MGS & HMA DIKE.
- (5) REMOVE Temp RAILING (TYPE K) AND CRASH CUSHIONS.



					THIS PLAN ACCURATE FOR STAGE CON	STRUCTION WORK	ONLY.	
THE CONTRACTOR SHALL VERIFY A RESOLVE ALL FIELD CONFLICTS BE AND ORDERING AND FABRICATING	FORE SUB	MITTING WORKING DRA			AECOM 2101 WEBSTER STREET, SUITE 190 OAKLAND, CA 94612	O SD PROFESSIONAL		
	DESIGN DETAILS QUANTITIES	^{BY} D. AYELE ^{BY} P. LAUGHLIN ^{BY} *	CHECKED J. VILLAFRANCA CHECKED *	DOY VILLAFRANCA	voy P. Villafranca REGISTERED ENGINEER	00 P. VILLAFRANCA No. C 56994 ★ Exp. 06-30-15 C/VIL	NO. REVISIONS	BY DATE
			SCALE IN INCHES 1 DUCED PLANS 0		FEBRUARY 25, 2014 Plans approval date	CIVIL OF CAUTOMIT	CONTRACT NO. 2014-B-1 CADD FILE C-SC09.dwg	drawing n SC-9

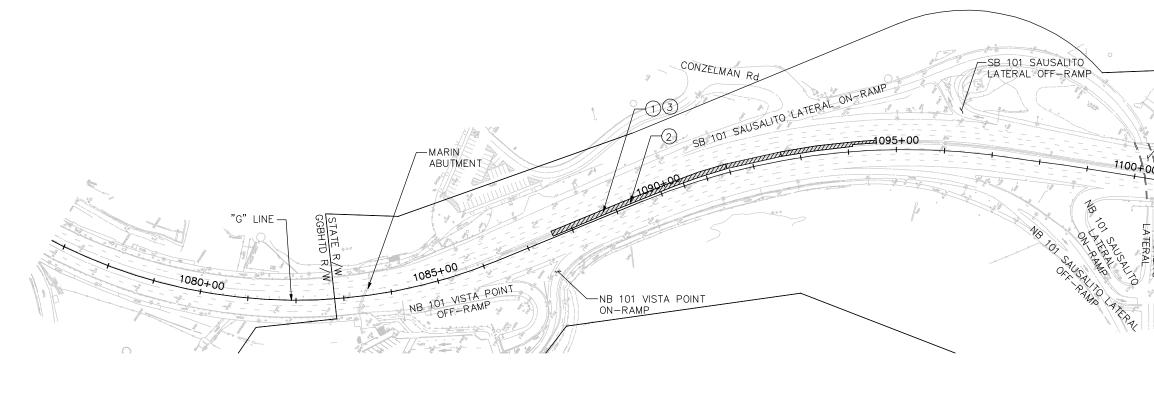




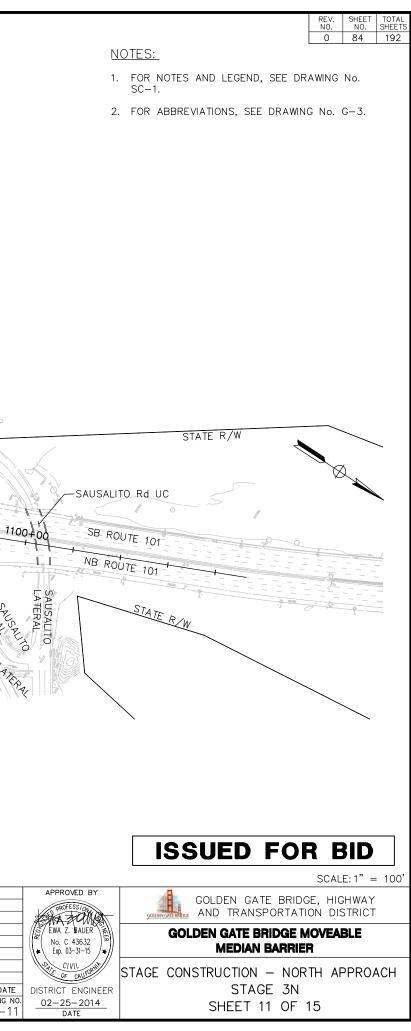
		THIS PLAN ACCURATE FOR STAGE CONSTRUCTION WORK ONLY.
	THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS AND	
	RESOLVE ALL FIELD CONFLICTS BEFORE SUBMITTING WORKING DRAWINGS	2101 WEBSTER STREET, SUITE 1900
	AND ORDERING AND FABRICATING ANY MATERIAL.	OAKLAND, CA 94612
ľ	DESIGN BY D. AYELE CHECKED J. VILLAFRANCA	
	DETAILS BY P. LAUGHLIN CHECKED JOY VILLAFR	RANCA (2 No. C 56994 ) (2)
	QUANTITIES BY* CHECKED*	
ľ	ORIGINAL SCALE IN INCHES	FEBRUARY 25, 2014 CONTRACT NO. 2014-B-1 DRAWING
	FOR REDUCED PLANS 0 1 2	3 PLANS APPROVAL DATE CADD FILE C-SC10 dwg

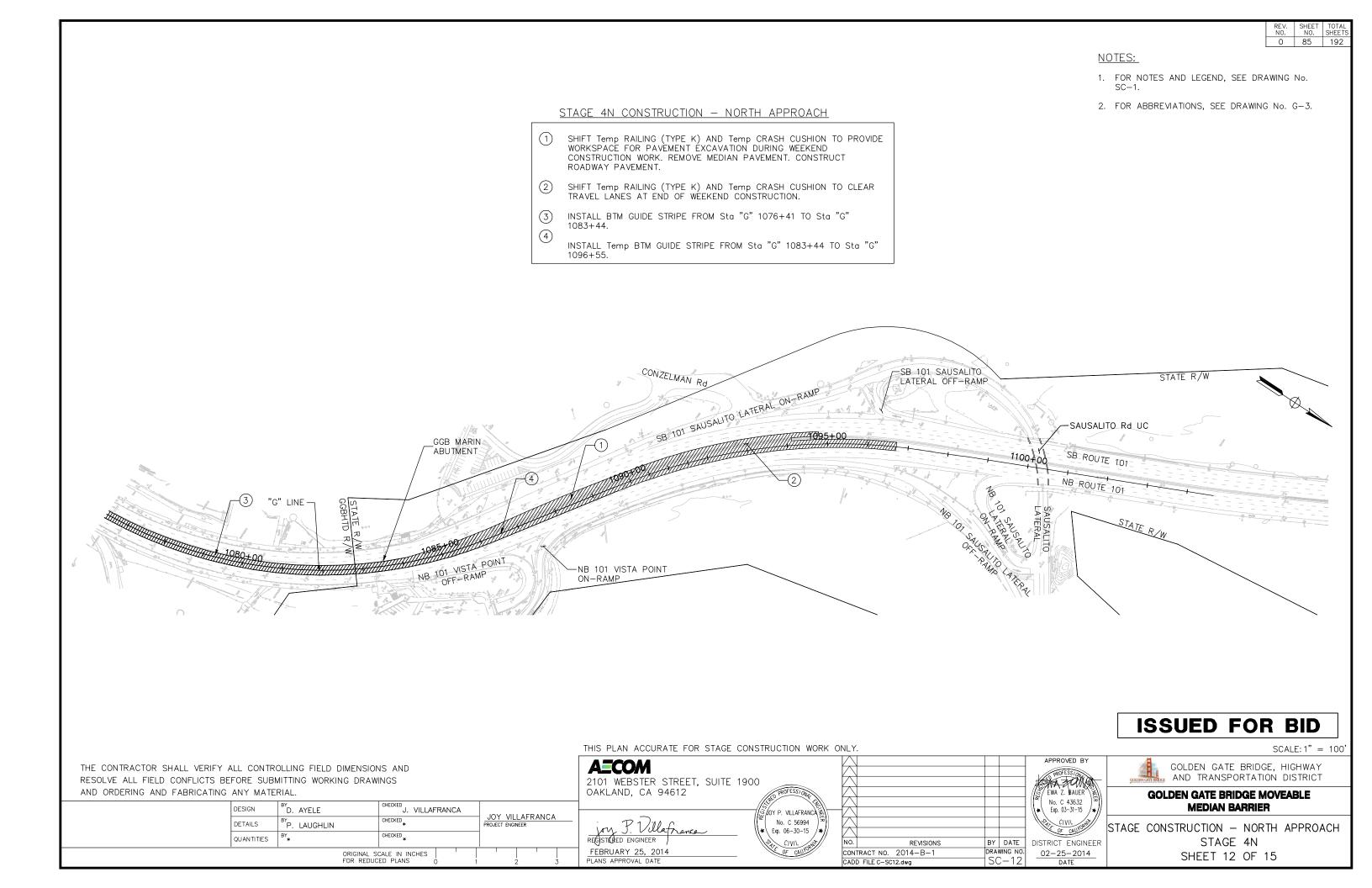


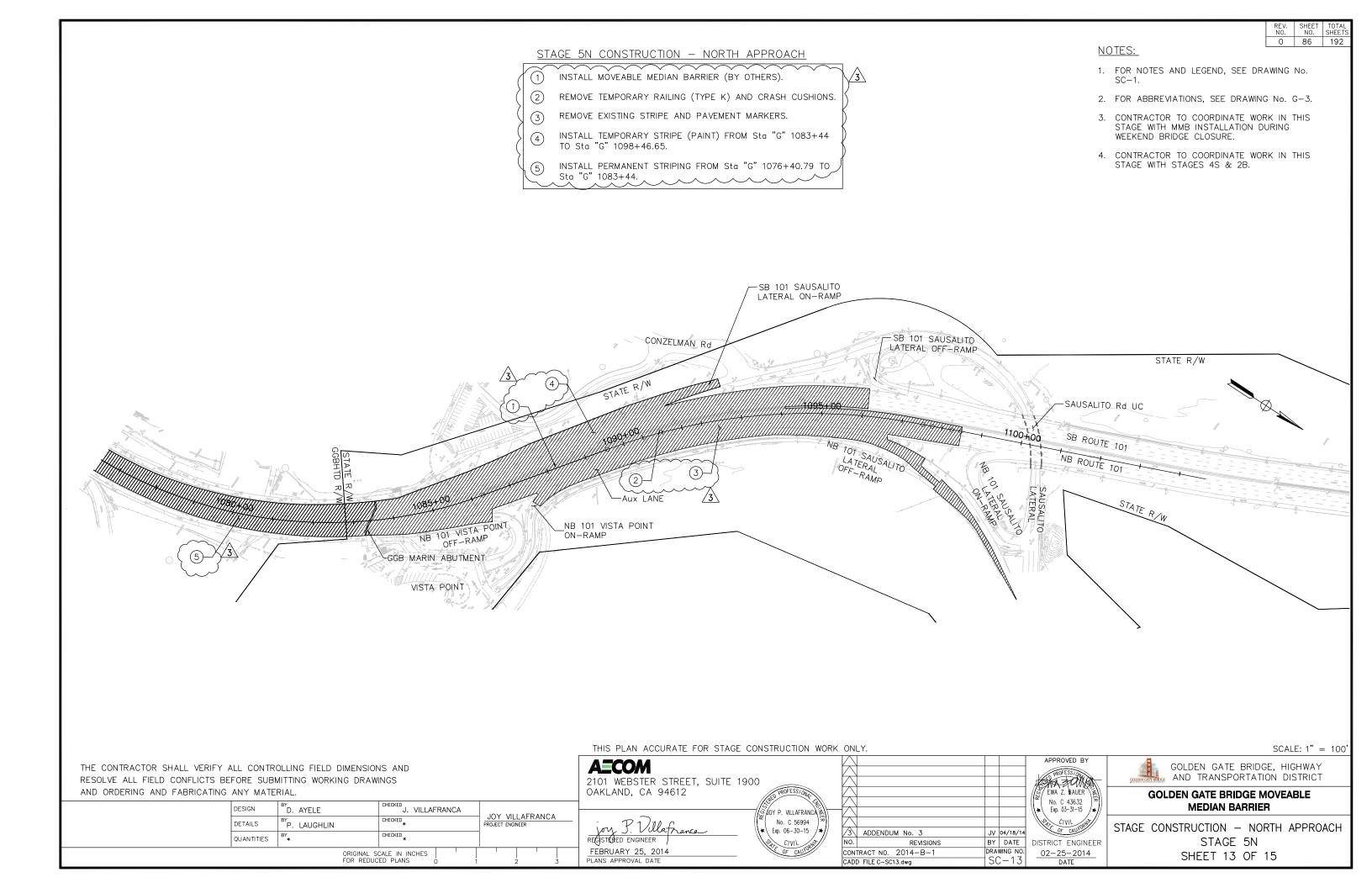
- SHIFT Temp RAILING (TYPE K) AND TEMP CRASH CUSHION TO PROVIDE WORKSPACE FOR CONSTRUCTION OF DRAINAGE SYSTEMS #3 AND #4 DURING NIGHT TIME.
- (2) REMOVE AND MODIFY DRAINAGE SYSTEMS #3 AND #4.
- (3) SHIFT Temp RAILING (TYPE K) AND Temp CRASH CUSHION TO CLEAR TRAVEL LANES AT END OF SHIFT.

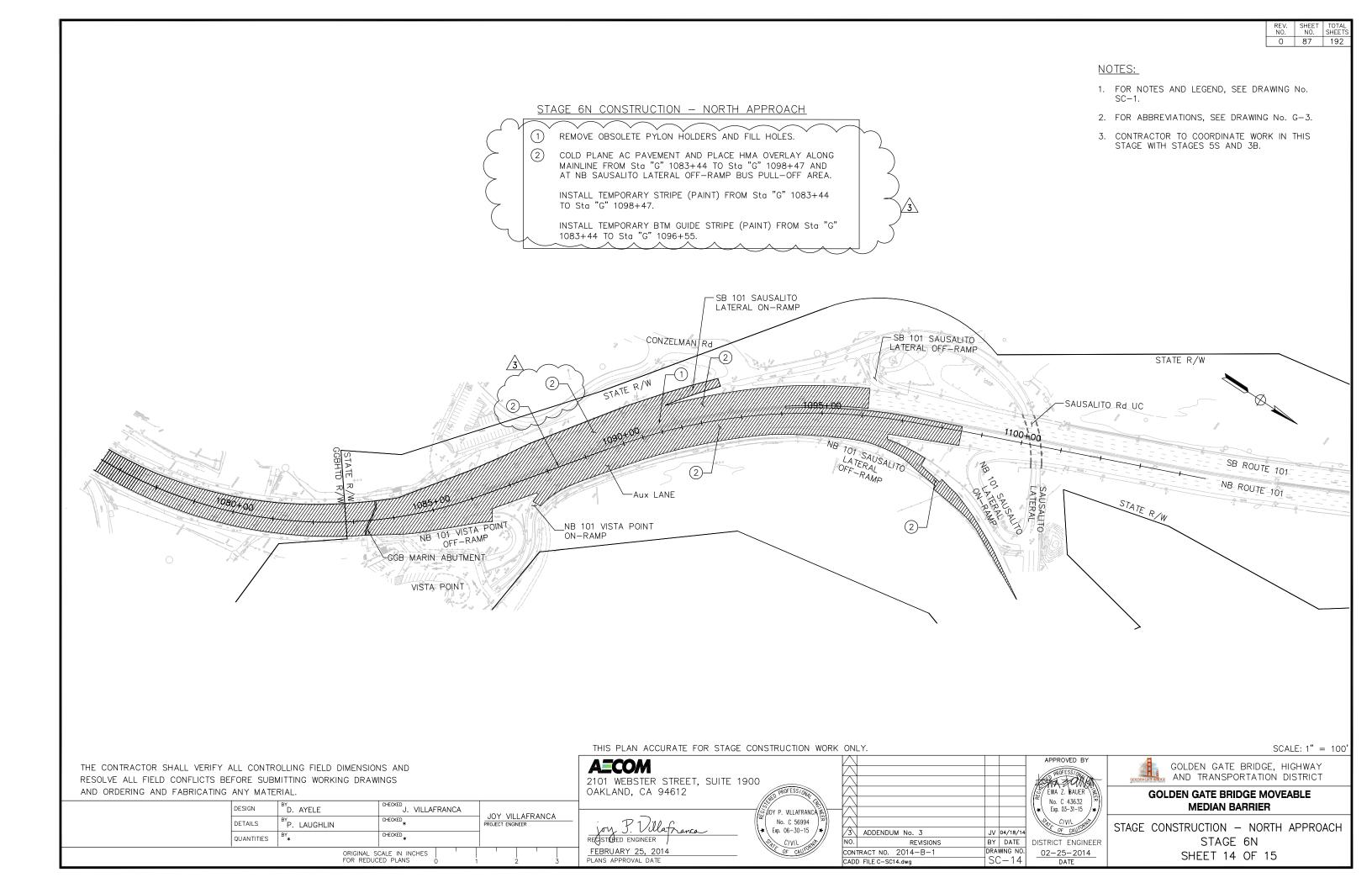


			THIS PLAN ACCURATE FOR STAGE	CONSTRUCTION WORK	ONLY.	
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSION RESOLVE ALL FIELD CONFLICTS BEFORE SUBMITTING WORKING DRAW AND ORDERING AND FABRICATING ANY MATERIAL.			AECOM 2101 WEBSTER STREET, SUITE OAKLAND, CA 94612	1900		
DESIGN BYD. AYELE DETAILS BYP. LAUGHLIN QUANTITIES BY*	CHECKED J. VILLAFRANCA CHECKED * CHECKED *	JOY VILLAFRANCA PROJECT ENGINEER	joy P. Villafranca REGISTIGED ENGINEER	60 P. VILLAFRANCA # No. C 56994 ★ Exp. 06-30-15 C/V/L 0F califient	NO. REVISIONS	BY DATE
ORIGINAL S FOR REDUC	CALE IN INCHES	2 3	FEBRUARY 25, 2014 Plans approval date	OF CAULOUS	CONTRACT NO. 2014-B-1 CADD FILE C-SC11.dwg	drawing n SC—1

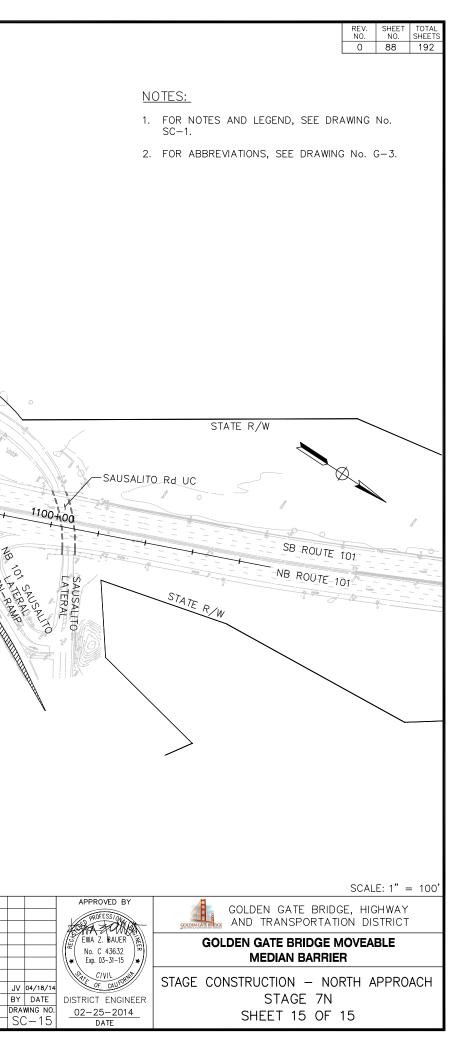




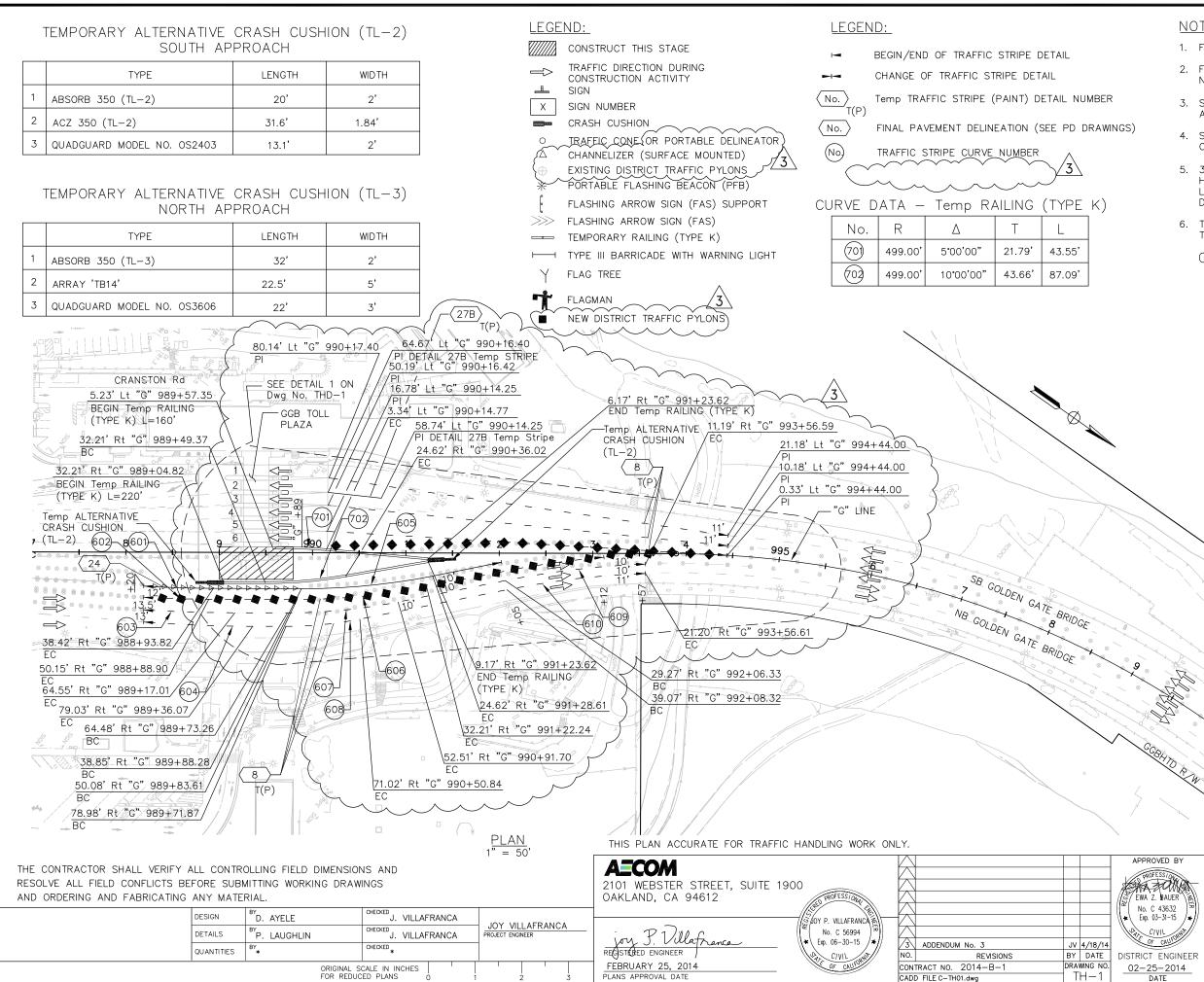




			(1) REM GUII (2) INS FRC SAL INS	<u>7N CONSTRUCTION – NORT</u> IOVE TEMPORARY STRIPE (PAINT) AI DE STRIPE (PAINT). TALL PERMANENT STRIPE ALONG MA M Sta "G" 1083+44 TO Sta "G" 10 ISALITO LATERAL OFF RAMP BUS PL TALL PERMANENT BTM GUIDE STRIPE 3+44 TO Sta "G" 1096+55.	ND TEMPORARY BTM INLINE AND RAMPS 98+47 AND NB JLL OFF AREA.	
	GCBHTD R/W	SGB MARIN ABUTME VISTA POINT	North Hard Hard Hard Hard Hard Hard Hard Hard	CONZELMAN Rd STATE R/W STATE R/W (1) AUX LANE 101 VISTA POINT -RAMP	SB 101 SAUSALITO LATERAL ON-RAMP	SB 101 SAUSALITO LATERAL OFF-RAMP
THE CONTRACTOR SHALL VERIFY ALL CONTRO RESOLVE ALL FIELD CONFLICTS BEFORE SUBM AND ORDERING AND FABRICATING ANY MATE DESIGN	MITTING WORKING DRA RIAL. ^{BY} D. AYELE	AWINGS CHECKED J. VILLAFRANCA	JOY VILLAFRANCA	THIS PLAN ACCURATE FOR STAC AECOM 2101 WEBSTER STREET, SUITE OAKLAND, CA 94612	1900	K ONLY.
DETAILS QUANTITIES	BY P. LAUGHLIN BY *	CHECKED * CHECKED * CHECKED * L SCALE IN INCHES  DUCED PLANS 0	PROJECT ENGINEER	FEBRUARY 25, 2014	− No. C 56994 Exp. 06-30-15 C/VIL C/VIL C/C/VIL C/C/VIL C/VIL	3     ADDENDUM No. 3     J       NO.     REVISIONS     B       CONTRACT NO. 2014-B-1     D ¹ CADD FILE C-SC15.dwg     S

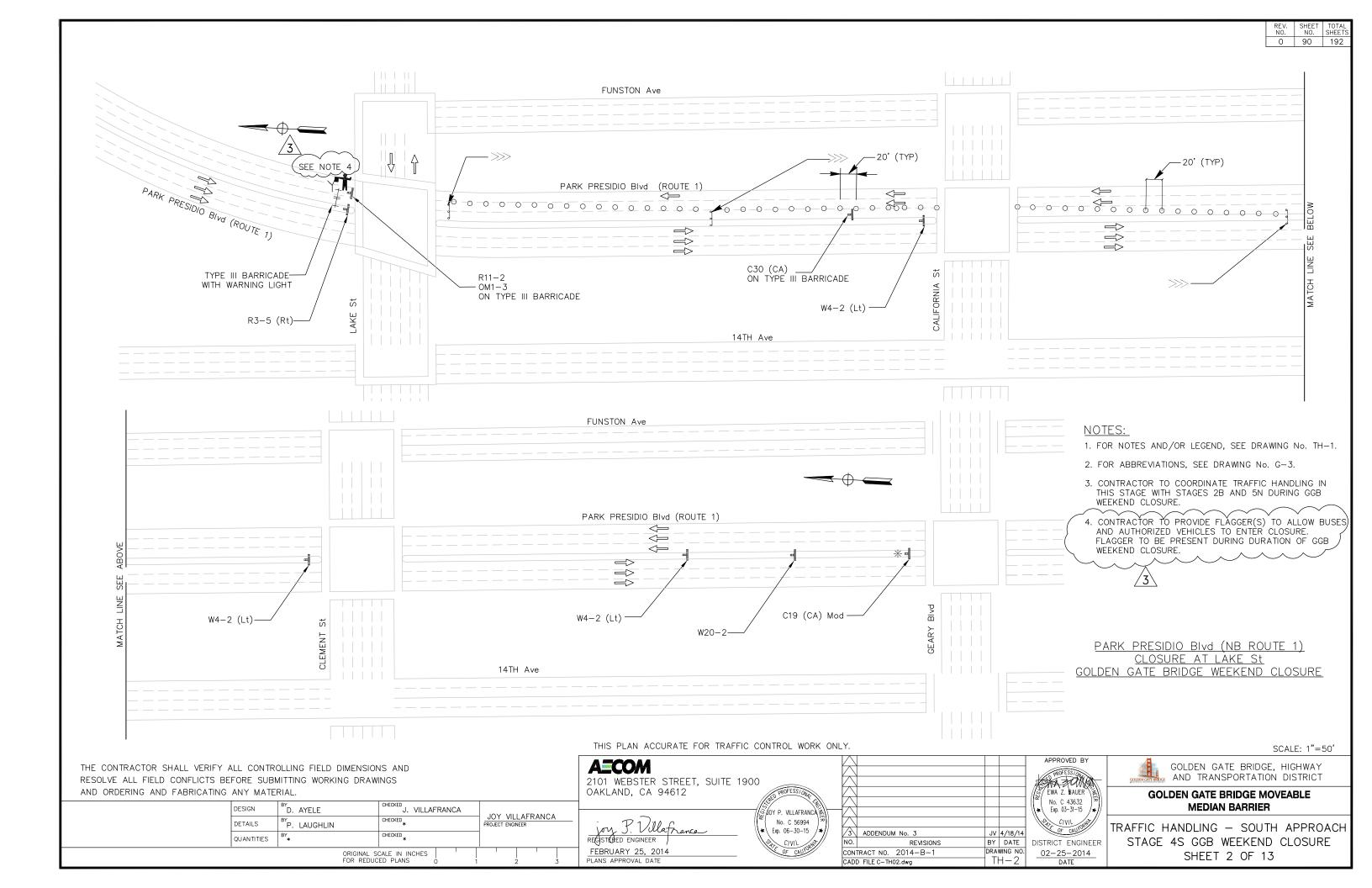


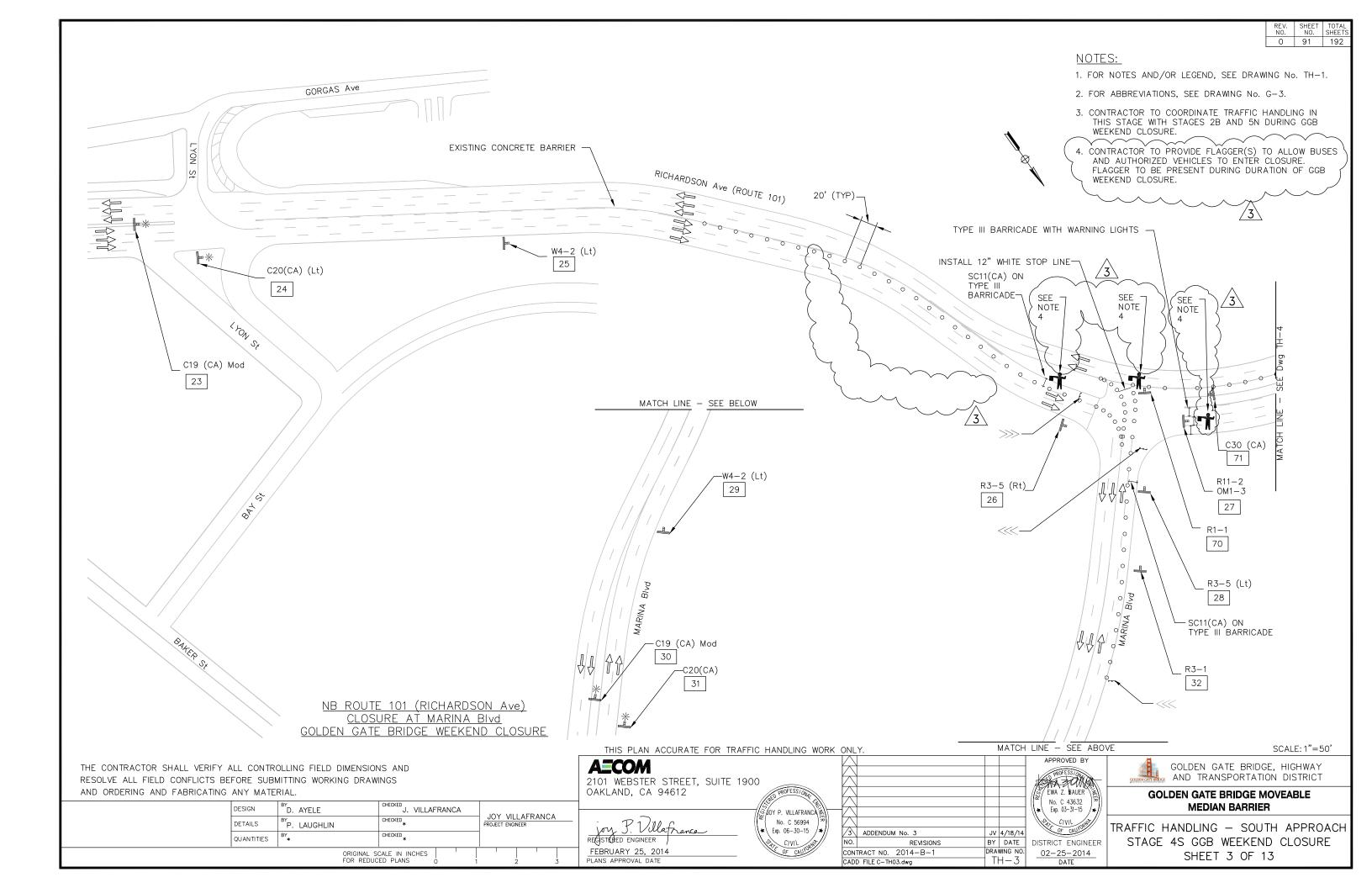
# Attachment B2: Traffic Handling Plans— Short-Term Project

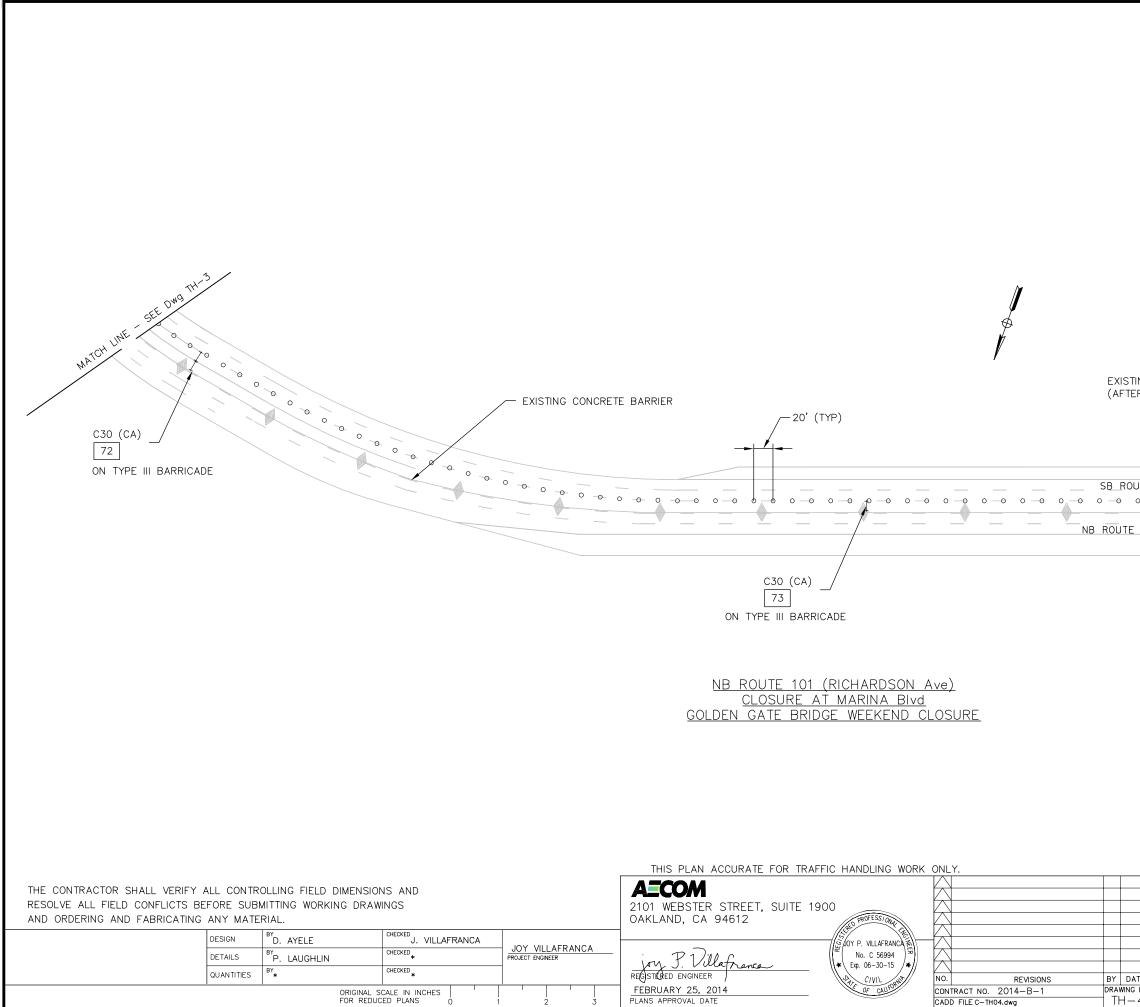


	NC	DTE	S:			REV. NO.		TOTAL SHEETS 192
	1.			VIATIONS,	SEE DRAWING	L		192
	2.			ONAL CON TO CS-7	ISTRUCTION A	REA SIGN	IS, SEE	Dwg
MBER	3.				F ALONG TEMP OF RAILING.	P RAILING	(TYPE	K)
RAWINGS)	4.		TRAFFI SURES.	C CONTRO	DL PLANS FOR	R TEMPOR	ARY LAI	NE
K)	5.	ΗΟΊ LAN	WEVER, ( IE CONF	CONTRACT	JRATION SHOV OR SHALL IMF IS ON BRIDGE	PLEMENT	ALL THF	
	6.				HOURS WILL E CHART OF SP			
-		CU	rve (	DATA -	- Temp T	RAFFIC	STRI	PE
			No.	R	Δ	Т	L	
			601	1300.00'	3°17'11"	37.29'	74.56'	
			602	1200.00'	3°19'30"	34.83'	69.64'	
			603	1600.00'	3°30'03"	48.90'	97.76'	
			604	1500.00'	4°27'52"	58.47'	116.88	,
			605	700.00'	11°33'43"	70.87'	141.26	,
4			606	700.00'	11°25'24"	70.01'	139.56	,,
			607)	600.00'	11°23'12"	59.82'	119.24	,
			608	400.00'	11°23'12"	39.88'	79.50'	
			609	943.00'	9 <b>°</b> 12'16"	75.91'	151.49	,
			610	933.00'	9°10'55"	74.92'	149.52	,
	the set of	1 × 1 × 200 × 4 ×		GGBHTD RX				
\						SCAL	_E: 1" =	50'
APPROVED	Ver	_	GOLDEN GAT		EN GATE BR TRANSPORT,			
₩ Z. BAUK WA Z. BAUK No. C 4363 ★ Exp. 03–31–1	ER FR	)	(		GATE BRIDGI 1EDIAN BARF		BLE	
/18/14 DATE DISTRICT ENG	ORNIA				LING - SC 15 TO 45	OUTH A	PPROA '3S	АСН
NG NO. 02-25-20			∕ 5∖	S	HEET 1 OF	13		

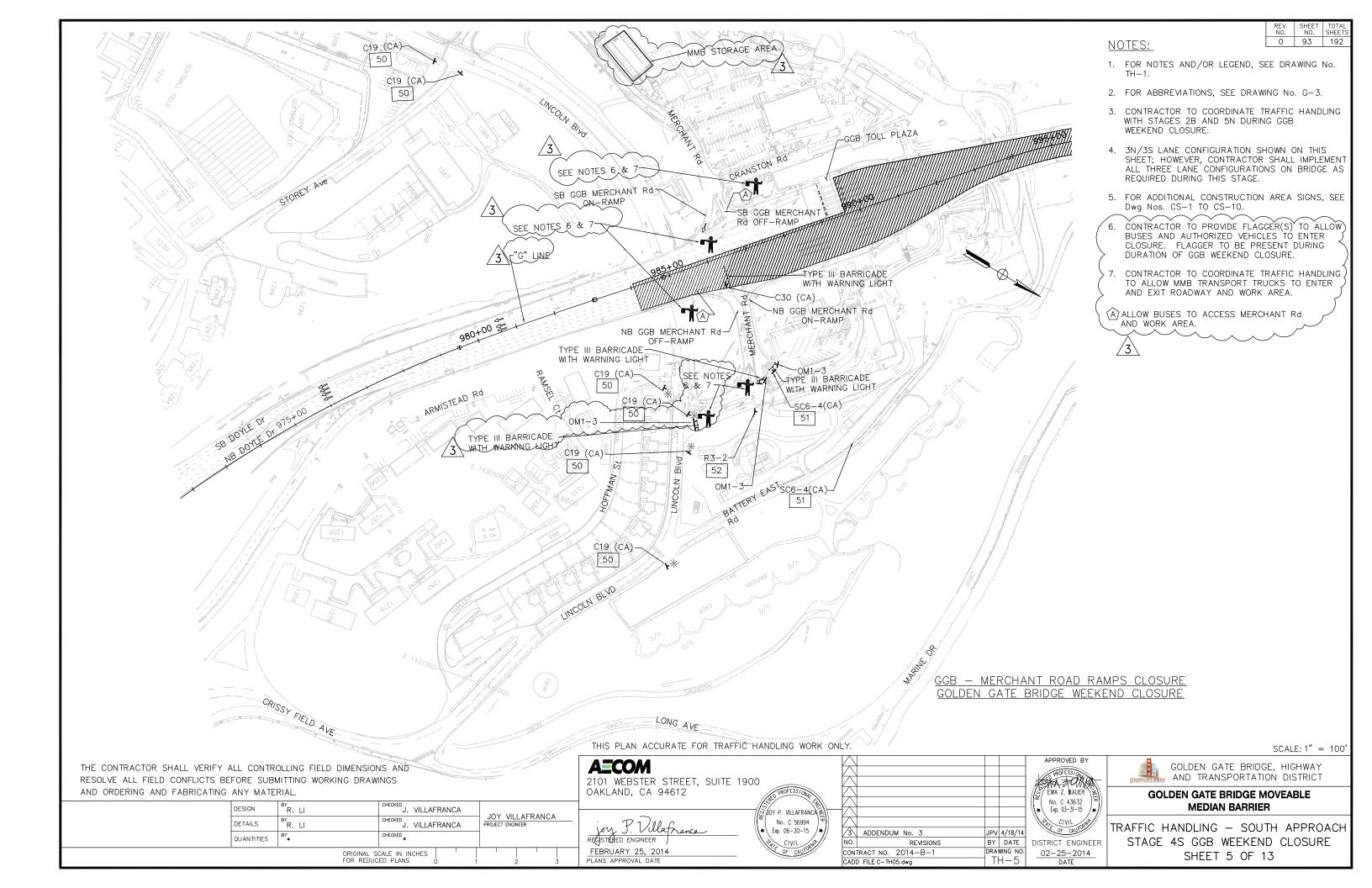
DATE



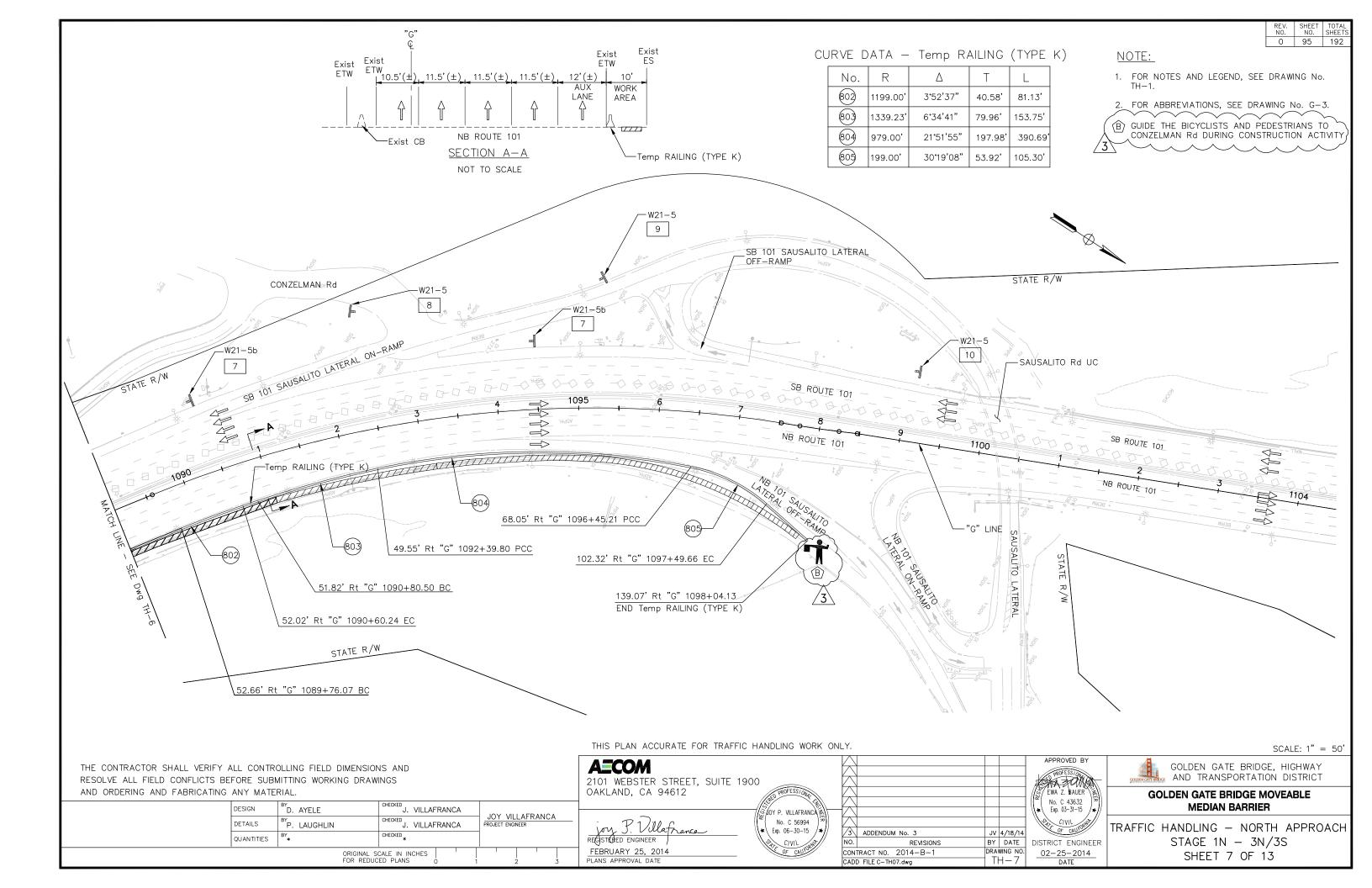




APPROVED BY         APPROVED BY         No. C. 4452         Image: Struct Engineer         No. C. 4452         Image: Struct Engineer         DATE: DISTRICT ENGINEER		
NOTES: 1. FOR NOTES AND/OR LEGEND, SEE DRAWING NO. TH-1. 2. FOR ABBREVIATIONS, SEE DRAWING NO. G-3. 3. CONTRACTOR TO COORDINATE TRAFFIC HANDLING IN WEEKEND CLOSURE. STINC MOVEABLE BARRIER TERMOON CONFIGURATION) OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101		
STING MOVEABLE BARRIER TERMOON CONFIGURATION) OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OU	NOTES	
2. FOR ABBREVIATIONS, SEE DRAWING No. G-3.     3. CONTRACTOR TO COORDINATE TRAFFIC HANDLING IN THIS STAGE WITH STAGES 2B AND 5N DURING GGB      STING MOVEABLE BARRIER TERMOON CONFIGURATION)      OUTE_101      OUTE_101      OUTE_101      OUTE_101      CLOSED      C20 (CA) (Lt)      TABLE TO COORDINATE TRAFFIC BRIDGE MOVEABLE     SCALE: 1"=50'      COUTE 100 DITECT EVOLUCE      TABLE OF THE DIDE BRIDGE MOVEABLE     MEDIAN BARRIER      TRAFFIC HANDLING – SOUTH APPROACH      STAGE 14 GE 13      CLOSURE      SUFFICIT EVOLUCE      TAFFIC HANDLING – SOUTH APPROACH      STAGE 14 GE 13      SUFFICIT EVOLUCE      SAFE 14 GE 13      SUFFICIT EVOLUCE      SUFFICI      SUFFICI      SUFFICI      SUFFICI      SUFFICI      SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUFFICI       SUF		
STING MOVEABLE BARRIER TERMOON CONFIGURATION) OUTE_101 OUTE_101 OUTE_101 CLOSED) CONFIGURATION) CONFIGURATION) CONFIGURATION) CONFIGURATION) CONFIGURATION) CONFIGURATION) CONFIGURATION) CONFIGURATION) CONFIGURATION) CONFIGURATION CONFIGURATION) CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION CONFIGURATION C		
STING MOVEABLE BARRIER TERNOON CONFIGURATION) OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_101 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OUTE_100 OU		
APPROVED BY         APPROVED BY         Image: District Engineer 0.2-25-2014         DISTRICT ENGINEER 0.2-25-2014             Image: District Engineer 0.2-25-2014	THIS STAGE WITH STAGES 2B AND 5N D	
APPROVED BY         APPROVED BY         Image: District Engineer 0.2-25-2014         DISTRICT ENGINEER 0.2-25-2014             Image: District Engineer 0.2-25-2014		
APPROVED BY         APPROVED BY         Image: District Engineer 0.2-25-2014         DISTRICT ENGINEER 0.2-25-2014             Image: District Engineer 0.2-25-2014		
APPROVED BY         APPROVED BY         Image: District Engineer 0.2-25-2014         DISTRICT ENGINEER 0.2-25-2014             Image: District Engineer 0.2-25-2014		
APPROVED BY         APPROVED BY         Image: District Engineer 0.2-25-2014         DISTRICT ENGINEER 0.2-25-2014             Image: District Engineer 0.2-25-2014		
APPROVED BY         APPROVED BY         Image: District Engineer 0.2-25-2014         DISTRICT ENGINEER 0.2-25-2014             Image: District Engineer 0.2-25-2014		
APPROVED BY         APPROVED BY         Image: District Engineer 0.2-25-2014         DISTRICT ENGINEER 0.2-25-2014             Image: District Engineer 0.2-25-2014		
APPROVED BY         APPROVED BY         Image: District Engineer 0.2-25-2014         DISTRICT ENGINEER 0.2-25-2014             Image: District Engineer 0.2-25-2014		
APPROVED BY         APPROVED BY         Image: District Engineer 0.2-25-2014         DISTRICT ENGINEER 0.2-25-2014             Image: District Engineer 0.2-25-2014		
OUTE_101 CLOSED FE 101 (CLOSED) R3-2 C20 (CA) (Lt) R3-2 T5 C20 (CA) (Lt) R3-2 T5 C20 (CA) (Lt) R3-2 T4 C20 (CA) (Lt) C20 (CA) (CA) (CA) (CA) (CA) (CA) (CA) (CA)	STING MOVEABLE BARRIER	
APPROVED BY         NG 40325-2014         DISTRICT ENGINEER         DISTRICT ENGINEER         DISTRICT ENGINEER         DISTRICT ENGINEER         TRAFFIC HANDLING – SOUTH APPROACH         STAGE 4S GGB WEEKEND CLOSURE         SHEFT 4 OF 13	TERNOON CONFIGURATION)	
APPROVED BY         NG 40325-2014         DISTRICT ENGINEER         DISTRICT ENGINEER         DISTRICT ENGINEER         DISTRICT ENGINEER         TRAFFIC HANDLING – SOUTH APPROACH         STAGE 4S GGB WEEKEND CLOSURE         SHEFT 4 OF 13		
APPROVED BY         NG 40325-2014         DISTRICT ENGINEER         DISTRICT ENGINEER         DISTRICT ENGINEER         DISTRICT ENGINEER         TRAFFIC HANDLING – SOUTH APPROACH         STAGE 4S GGB WEEKEND CLOSURE         SHEFT 4 OF 13		
R3-2       C20 (CA) (Lt)         R3-2       75         75       74         ISSUED FOR BID         SCALE: 1"=50'         COLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT         GOLDEN GATE BRIDGE, MIGHWAY AND TRANSPORTATION DISTRICT         GOLDEN GATE BRIDGE MOVEABLE MEDIAN BARRIER         TRAFFIC HANDLING - SOUTH APPROACH STAGE 4S GGB WEEKEND CLOSURE SHEFT 4 OF 13		
R3-2 C20 (CA) (Lt) 74 C20 (CA) (Lt) 75 C20 (CA) (Lt) 75 C20 (CA) (Lt) 75 C20 (CA) (Lt) 74 C20 (CA) (Lt) 74 C20 (CA) (Lt) 74 C20 (CA) (Lt) 75 C20 (CA) (CA) (CA) (CA) (CA) (CA) (CA) (CA)		
75       74         Tage: Tage	TE 101 (CLOSED)	
75       74         Tage: Tage		
APPROVED BY NG VG 25-2014 APPROVED THATE INGINEER NG VG 22-25-2014 APPROVED BY APPROVED BY		
SCALE: 1"=50' APPROVED BY EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 3.3-15 DATE DISTRICT ENGINEER DATE DISTRICT ENGINEER DISTRICT ENGINEER	74	
SCALE: 1"=50' APPROVED BY EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 3.3-15 DATE DISTRICT ENGINEER DATE DISTRICT ENGINEER DISTRICT ENGINEER		
SCALE: 1"=50' APPROVED BY EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 3.3-15 DATE DISTRICT ENGINEER DATE DISTRICT ENGINEER DISTRICT ENGINEER		
SCALE: 1"=50' APPROVED BY EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 3.3-15 DATE DISTRICT ENGINEER DATE DISTRICT ENGINEER DISTRICT ENGINEER		
SCALE: 1"=50' APPROVED BY EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 3.3-15 DATE DISTRICT ENGINEER DATE DISTRICT ENGINEER DISTRICT ENGINEER		
SCALE: 1"=50' APPROVED BY EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 3.3-15 DATE DISTRICT ENGINEER DATE DISTRICT ENGINEER DISTRICT ENGINEER		
SCALE: 1"=50' APPROVED BY EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 3.3-15 DATE DISTRICT ENGINEER DATE DISTRICT ENGINEER DISTRICT ENGINEER		
SCALE: 1"=50' APPROVED BY EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 3.3-15 DATE DISTRICT ENGINEER DATE DISTRICT ENGINEER DISTRICT ENGINEER		
SCALE: 1"=50' APPROVED BY EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 2. BAUER EWA 3.3-15 DATE DISTRICT ENGINEER DATE DISTRICT ENGINEER DISTRICT ENGINEER		
APPROVED BY GOLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT GOLDEN GATE BRIDGE MOVEABLE MEDIAN BARRIER TRAFFIC HANDLING – SOUTH APPROACH STAGE 4S GGB WEEKEND CLOSURE SHEFT 4 OF 13	ISSUED FOR	R BID
GOLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT GOLDEN GATE BRIDGE MOVEABLE MEDIAN BARRIER TRAFFIC HANDLING – SOUTH APPROACH STAGE 4S GGB WEEKEND CLOSURE 02-25-2014 SHEFT 4 OF 1.3		SCALE: 1"=50'
GOLDEN GATE BRIDGE MOVEABLE MEDIAN BARRIER TRAFFIC HANDLING – SOUTH APPROACH STAGE 4S GGB WEEKEND CLOSURE 02-25-2014 SHEFT 4 OF 1.3		
DATE DISTRICT ENGINEER NG NO. 02-25-2014 NG NO. 02-25-25-2014 NG NO. 02-25-25-25-25-25-25-25-25-25-25-25-25-25		
DATE DISTRICT ENGINEER STAGE 4S GGB WEEKEND CLOSURE		
$A = \frac{-02}{20} \frac{20}{2011}$	DATE DISTRICT ENGINEER STAGE 4S GGB WEEKEN	
	NG NO. 02-25-2014 SHEFT 4 OF 1	

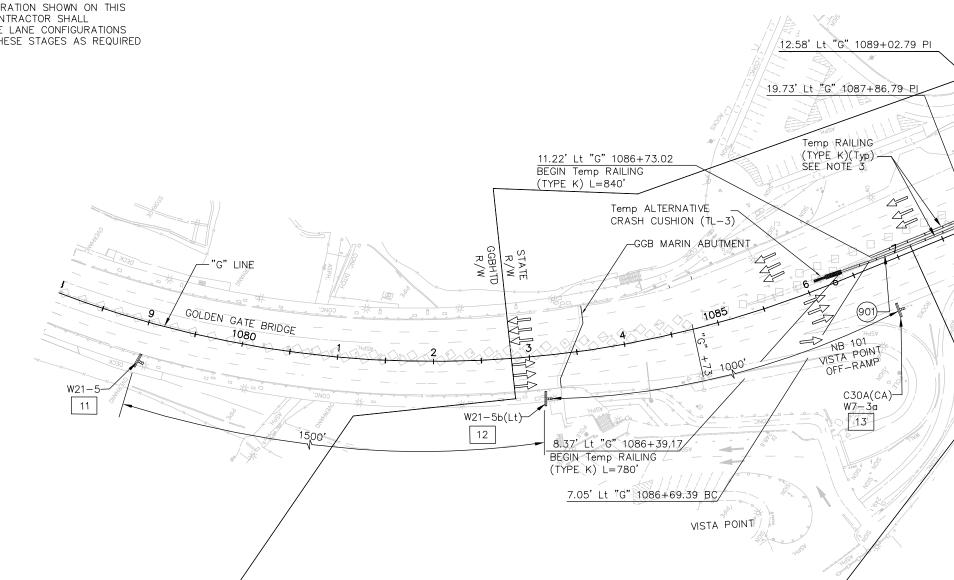


CURVE DATA - Temp RAILING (TYPE K) No. R <u>A</u> <u>T</u> <u>L</u> 60 99.00' 21'07'47" 18.46' 36.51'	REV.       SHEET       TOTAL SHEETS         0       94       192         NOTES:
Tomo ALTEDNATIVE ODASH CUSHION (TL Z)	
Temp ALTERNATIVE CRASH CUSHION (TL-3)	
S1.97" L. "0" "DSH-98.90         300 Temp HALMG (1996 K)         300 Temp HALMG (1996 K)           S5.24" IL "0" "DSH-95.26.29         G.53.8 (A)         300 Temp HALMG (1996 K)           G.5.90" LL "0" TORH-41.56         FP         G.53.8 (A)         400 Temp HALMG (1996 K)           G.5.90" LL "0" TORH-41.56         FP         G.53.8 (A)         400 Temp HALMG (1996 K)           G.5.90 LL "0" TORH-41.56         FP         G.53.8 (A)         400 Temp HALMG (1996 K)           G.5.90 LL "0" TORH-41.56         FP         G.53.8 (A)         400 Temp HALMG (1996 K)           HE GOLDEN GATE BROOK         200 Temp HALMG (1996 K)         400 Temp HALMG (1996 K)         400 Temp HALMG (1996 K)           W21-5         Temp HALMG (1996 K)         G.53.8 (A)         400 Temp HALMG (1996 K)         400 Temp HALMG (1996 K)           W21-5         Temp HALMG (1996 K)         G.53.8 (A)         G.53.8 (A)         400 Temp HALMG (1996 K)         400	
	ISSUED FOR BID
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS AND RESOLVE ALL FIELD CONFLICTS BEFORE SUBMITTING WORKING DRAWINGS AND ORDERING AND FABRICATING ANY MATERIAL.	SCALE: 1"=50'  GOLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT  GOLDEN GATE BRIDGE MOVEABLE
DESIGN BY D. AYELE J. VILLAFRANCA	MEDIAN BARRIER
DE TAILS BY. LAUGHLIN CHECKED J. VILLAFRANCA QUANTITIES BY. CHECKED * CHECKED * DISTRICT ENGINEER CIVIL * NO. C 56094 QUANTITIES BY. CIVIL * NO. C 56094 REGISTERED ENGINEER CIVIL * NO. C 56094 REGISTERED ENGINEER DISTRICT ENGINE	TRAFFIC HANDLING – NORTH APPROACH EER STAGE 1N – 3N/3S
ORIGINAL SCALE IN INCHES O 1 2 3 PLANS APPROVAL DATE CAUTOR CAUTOR OF CAUTOR	A SHEET 6 OF 13



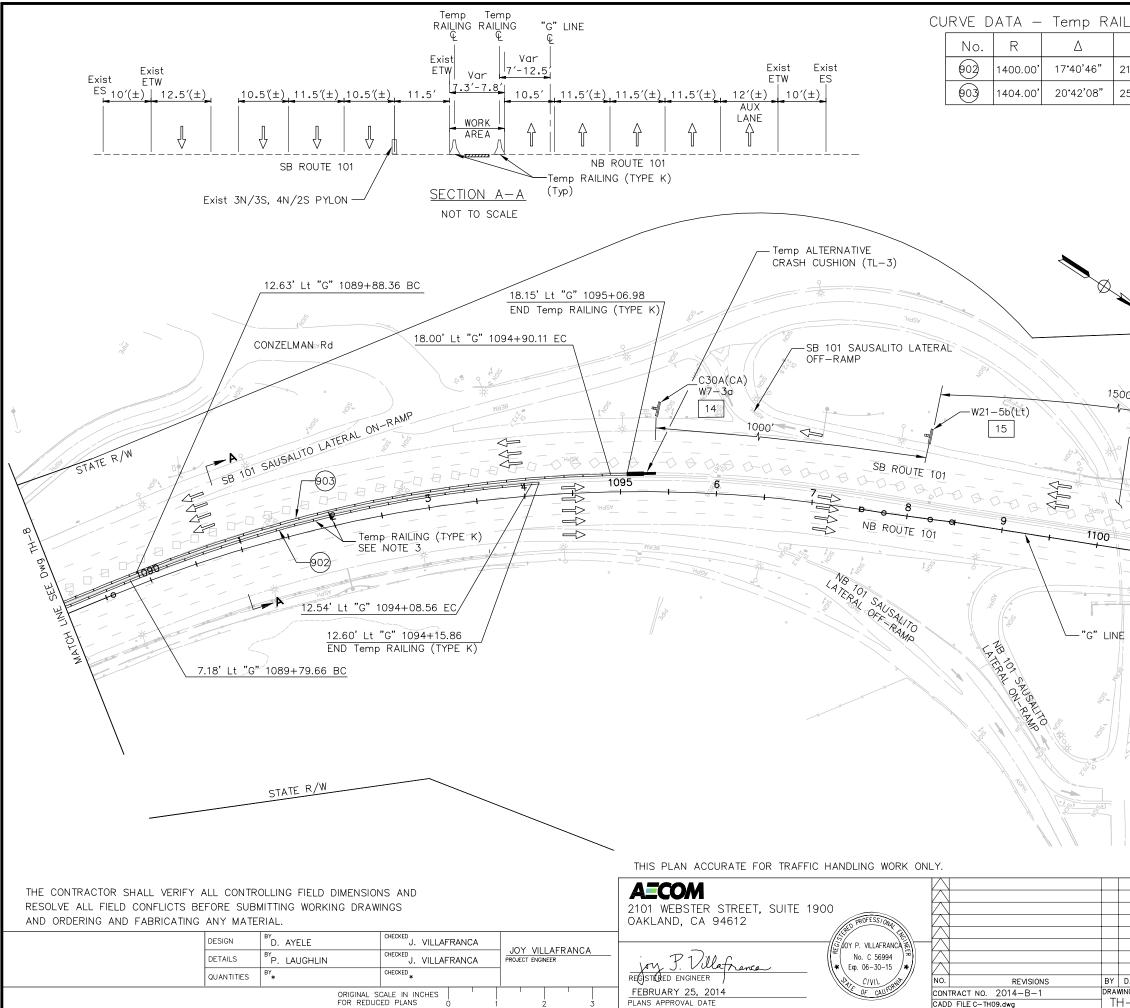
### NOTES:

- 1. FOR NOTES AND LEGEND, SEE DRAWING No. TH-1.
- 2. FOR ABBREVIATIONS, SEE DRAWING No. G-3.
- CONTRACTOR TO SHIFT Temp RAILING (TYPE K) AS NEEDED TO PROVIDE WORK AREA DURING NIGHT TIME CONSTRUCTION AND SHIFT Temp RAILING (TYPE K) WITHIN MEDIAN AREA AND OUTSIDE OF TRAVELED WAY AS SHOWN AFTER COMPLETION OF NIGHT TIME WORK AND PRIOR TO OPENING OF INSIDE TRAVELED LANES. SEE TRAFFIC CONTROL PLANS FOR TEMPORARY LANE CLOSURES.
- 4. 3N/3S LANE CONFIGURATION SHOWN ON THIS SHEET; HOWEVER, CONTRACTOR SHALL IMPLEMENT ALL THREE LANE CONFIGURATIONS ON BRIDGE DURING THESE STAGES AS REQUIRED DURING THIS STAGE.

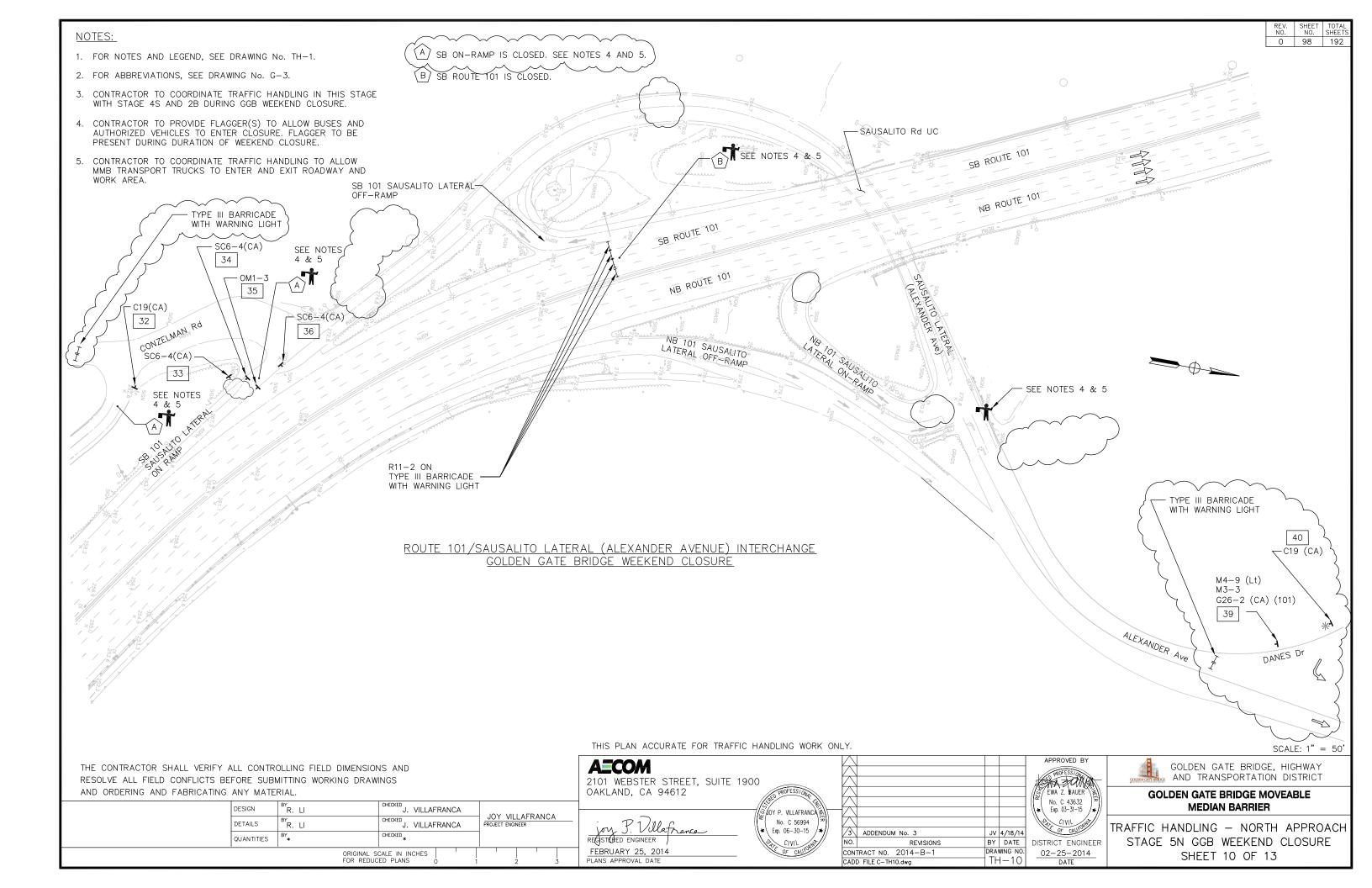


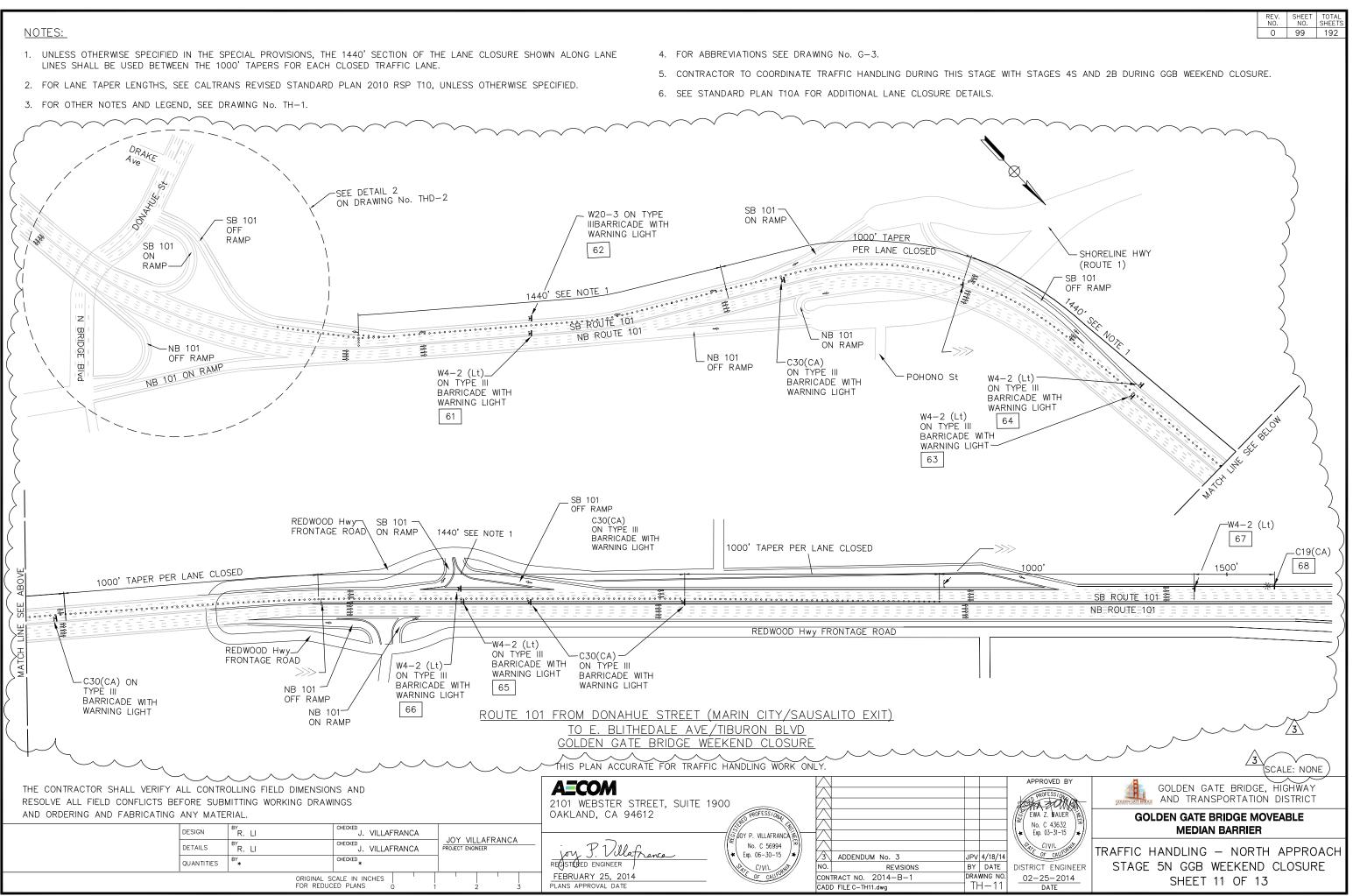
					THIS PLAN ACCURATE FOR TRAFFI	C HANDLING WORK O	NLY.	
THE CONTRACTOR SHALL VERIFY					AECOM			
RESOLVE ALL FIELD CONFLICTS B			WINGS		2101 WEBSTER STREET, SUITE 1	900		
AND ORDERING AND FABRICATING	J ANY MAIE	RIAL.			OAKLAND, CA 94612	RED PROPESS/ONAL CA		
	DESIGN	D. AYELE	J. VILLAFRANCA	JOY VILLAFRANCA		SOOY P. VILLAFRANCA		
	DETAILS	P. LAUGHLIN	J. VILLAFRANCA	PROJECT ENGINEER	joy P. Villafranca	() ⁶ No. C 56994 () ⁵⁰ (★ Exp. 06-30-15 () (★ )		
	QUANTITIES	BY *	CHECKED *	_	REGISTERED ENGINEER	Par CIVIL ONT	NO. REVISIONS	BY DATE
			SCALE IN INCHES		FEBRUARY 25, 2014 PLANS APPROVAL DATE	OF CALLFOR	CONTRACT NO. 2014-B-1 CADD FILE C-TH08.dwg	drawing no. TH-8

					EV. SHEET 10. NO. 0 96	TOTAL SHEETS 192
X	CURVE D	ATA –	Temp RA	iling (	TYPE k	<)
	No.	R	Δ	Т	L	
\	(901)	999.00'	02•39'13"	23.14'	46.26'	
PI						
STATE R/W						
	7					
	1 1º1					
SB ROUTE I	1016					
I P	OUTE 101					
NB		Ĺ				
Helse		MATCH LING				
X - X	A AB	10 FAIN				
3 \!       2 *	Į1					
	NB 101 VISTA POINT ON-RA					
	STAT	ER/W	Ą			
			$\backslash$			
6.13' Lt	"G" 1087+16.	19 EC	·			
		ISS	JED F	OR	BID	
		н		S	CALE: 1"	= 50'
APPROVED			OLDEN GATE ND TRANSPO			
EWA Z. BAU	ER	NO & TRANSPORTICION CONTRET	EN GATE BRII	GE MO		
Exp. 03-31-1	5					
BY DATE DISTRICT ENC			NDLING — E 2N TO 4			ACH
$\begin{array}{c c} \hline & \\ \hline \\ \hline$			SHEET 8		.,	



LING (TYPE K)       Image: Notes and legend, see drawing no.         T       L         17.72       432.001         56.45       507.301         Image: Softward Construction System Drawing No.         Image: Softward Construction System Drawing No.         Image: Softward Construction System Drawing Constructions Shift Temp Rating (TYPE K) Within MEDIAN AREA AND OUTSIDE OF TRAVELED LANES. SEE TRAFFIC COMPLETION OF NIGHT Time Constructions Shift Temp Rating (TYPE K) Within MEDIAN AREA AND OUTSIDE OF TRAVELED LANES. SEE TRAFFIC COMPLETION OF NIGHT TIME CONSTRUCTION SHOWN AFTER COMPLETION OF NIGHT TIME CONSTRUCTIONS FOR TEMPERING OF INSIDE TRAVELED LANES. SEE TRAFFIC CONFIGURATION SHOWN ON THIS SHEET; HOWEVER, CONTRACTOR SHALL MITCHES STAGES AS REQUIRED DURING THIS STAGE.         STATE R/W         Or         SAUSALITO Rd UC         Image: Software Construction Shift Temp Rating (TYPE K) WITH THREE LANES CONTRACTOR SHALL MITCHES STAGES AS REQUIRED DURING THIS STAGE.         STATE R/W         Or         SAUSALITO Rd UC         Image: Software Construction State Construction Struction Struction State Construction Struction State C							
T       L         117.72       432.00         56.45       507.30         1       FOR NOTES AND LEGEND, SEE DRAWING No. G-3.         3.       CONTRACTOR TO SHIFT Temp RALING (TYPE K) INTHE CONSTRUCTION, SHET Temp RALING (TYPE K) INTHE CONSTRUCTION, SHET Temp RALING OF INSIDE TRAVELED WAY AS SHOWN AFTER COMPLETION OF INGHT TIME CONSTRUCTION, SHET TEMPORARY LANE CLOSURES.         1.       SIN/3S LANE CONFIGURATION SHOWN ON THIS SHEET; HOWER, CONTRACTOR SHALL IMPLEMENT ALL THREE LANE CONFIGURATIONS ON BRIDGE DURING THESE STAGES AS REQUIRED DURING THIS STAGE.    STATE R/W            IT     IT           IN ASSALLITO Rd UC     W21-5           IT     IT           IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT     IT       IT <td< td=""><td>LING</td><td>(TYPE</td><td></td><td></td><td></td><td></td><td>TOTAL SHEETS 192</td></td<>	LING	(TYPE					TOTAL SHEETS 192
<ul> <li>17.72' 432.00'</li> <li>17.72' 432.00'</li> <li>17.72' 432.00'</li> <li>18.645' 507.30'</li> <li>19. FOR ABBREMATIONS, SEE DRAWING No. G-3.</li> <li>10. CONTRACTOR TO SHIFT Temp RAILING (TYPE K) AS NEEDED TO PROVIDE WORK AREA DURING NIGHT TIME CONSTRUCTION. SHIFT Temp RAILING (TYPE K) WITHIN MEDIAN AREA AND OUTSIDE OF TRAVELED WAY AS SHOWN AFTER COMPLETION OF NIGHT TIME WORK AND PRIOR TO OPENING OF NIGHT TIME WORK AND THANS SHOWN ON THIS IMPLEMENT ALL THREE LANE CONFIGURATION SHOWN ON THIS IMPLEMENT ALL THREE LANE CONFIGURATION ON BRIDGE DURING THESE STAGES AS REQUIRED DURING THIS STACE.</li> </ul>	Т	L					192
SAUSALITO Rd UC      SAU	217.72'	432.00'	1.		RAWING	G No.	
AS NEEDED TO PROVIDE WORK AREA DURING (TYPE K) WITHIN MEDIAN AREA AND OUTSIDE OF TRAVELED WAY AS SHOWN AFTER COMPLETION OF NIGHT TIME WORK AND PRIOR TO OPENING OF NISDE TRAVELED LANSES SEE TRAFFIC CONTRACTOR SHALL INPLEMENT AREA LIC CONFIGURATION SHOWN ON THIS SHEET; HOWEVER, CONTRACTOR SHALL INPLEMENT ALL THREE LANE CONFIGURATIONS ON BRIDGE DURING THESE STAGES AS REQUIRED DURING THIS STAGE. STATE R/W NO SAUSALITO Rd UC W21-5 16 10 10 10 10 10 10 10 10 10 10	256.45'	507.30'	2.	FOR ABBREVIATIONS, SEE DRAWN	IG No.	G-3.	
STATE R/W STATE R/W			3.	AS NEEDED TO PROVIDE WORK A NIGHT TIME CONSTRUCTION. SHIF (TYPE K) WITHIN MEDIAN AREA A TRAVELED WAY AS SHOWN AFTE OF NIGHT TIME WORK AND PRIOR OF INSIDE TRAVELED LANES. SEE CONTROL PLANS FOR TEMPORAR	REA D T Tem AND OU R COM TO C TRAF	ÙRING p RAIL JTSIDE PLETIO PENIN( FIC	NG OF N
V       VU21-5         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         <			4.	SHÉET; HOWEVER, CONTRACTOR IMPLEMENT ALL THREE LANE CON ON BRIDGE DURING THESE STAGE	SHALL NFIGUR	ATIONS	5
V       VU21-5         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         10       104         <							
SAUSALITO Rd UC W21-5 16 10 104 104 104 104 104 104 104	STAT	E R/W					
APPROVED BY NO CHASS DISTRICT ENGINEER DISTRICT	)0'						
The first of the second	SAU	SALITO R	d UC				5
The first of the second		$\langle \rangle$					
APPROVED BY EXACE 1° = 50° DISTRICT ENGINEER MO KO DISTRICT ENGINEER DUSTRICT ENGINER DUSTRICT ENGINEER DUSTRICT ENGINER	×	· · · ·		₩ <u>21−5</u>			
APPROVED BY USTRICT ENGINEER DISTRICT ENGINEER D	# _			16			
APPROVED BY USTRICT ENGINEER DISTRICT ENGINEER D		200					and the second division of
APPROVED BY USTRICT ENGINEER DISTRICT ENGINEER D		1			],],]	14W	
APPROVED BY DISTRICT ENGINEER DUSTRICT ENGINEER							-
APPROVED BY NG KOL DISTRICT ENGINEER NG KOL DISTRICT ENGINEER NG KOL DISTRICT ENGINEER DISTRICT ENGIN			• BEKW			104	
APPROVED BY ENA Z. BAUER No. C 43632 ENA Z. BAUER DISTRICT ENGINEER DISTRICT ENGINEER 02-25-2014 NG NO. DISTRICT ENGINE 02-25-2014 NG NO. DISTRICT ENGINEER 02-25-		o		BERN C			
APPROVED BY ENA Z. BAUER No. C 43632 ENA Z. BAUER DISTRICT ENGINEER DISTRICT ENGINEER 02-25-2014 NG NO. DISTRICT ENGINE 02-25-2014 NG NO. DISTRICT ENGINEER 02-25-	SAUS,	× s.L			J.ª		
APPROVED BY ENA Z. BAUER No. C 43632 ENA Z. BAUER DISTRICT ENGINEER DISTRICT ENGINEER 02-25-2014 NG NO. DISTRICT ENGINE 02-25-2014 NG NO. DISTRICT ENGINEER 02-25-	ALITC	TATE					
APPROVED BY ENA Z. BAUER No. C 43632 ENA Z. BAUER DISTRICT ENGINEER DISTRICT ENGINEER 02-25-2014 NG NO. DISTRICT ENGINE 02-25-2014 NG NO. DISTRICT ENGINEER 02-25-	) LAT	R/W					
APPROVED BY         EWA Z. BAUER         EWA Z. BAUER         GOLDEN GATE BRIDGE, HIGHWAY         AND TRANSPORTATION DISTRICT         GOLDEN GATE BRIDGE MOVEABLE         MOL OF CONTRACTOR         DATE         DISTRICT ENGINEER         DATE         DISTRICT ENGINEER	ERAL	_					
APPROVED BY         EWA Z. BAUER         EWA Z. BAUER         GOLDEN GATE BRIDGE, HIGHWAY         AND TRANSPORTATION DISTRICT         GOLDEN GATE BRIDGE MOVEABLE         MOL OF CONTRACTOR         DATE         DISTRICT ENGINEER         DATE         DISTRICT ENGINEER							
APPROVED BY         EWA Z. BAUER         EWA Z. BAUER         GOLDEN GATE BRIDGE, HIGHWAY         AND TRANSPORTATION DISTRICT         GOLDEN GATE BRIDGE MOVEABLE         MOL OF CONTRACTOR         DATE         DISTRICT ENGINEER         DATE         DISTRICT ENGINEER	3ERM						
APPROVED BY         EWA Z. BAUER         EWA Z. BAUER         GOLDEN GATE BRIDGE, HIGHWAY         AND TRANSPORTATION DISTRICT         GOLDEN GATE BRIDGE MOVEABLE         MOL OF CONTRACTOR         DATE         DISTRICT ENGINEER         DATE         DISTRICT ENGINEER	900N	2	l				
APPROVED BY         EWA Z. BAUER         EWA Z. BAUER         GOLDEN GATE BRIDGE, HIGHWAY         AND TRANSPORTATION DISTRICT         GOLDEN GATE BRIDGE MOVEABLE         MOL OF CONTRACTOR         DATE         DISTRICT ENGINEER         DATE         DISTRICT ENGINEER		4	$\overline{\ }$		_		
APPROVED BY GOLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT GOLDEN GATE BRIDGE MOVEABLE MEDIAN BARRIER TRAFFIC HANDLING – NORTH APPROACH STAGE 2N TO 4N – 3N/3S SHEFT 9 OF 13				ISSUED FOF	<u>}</u>	BID	
GOLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT GOLDEN GATE BRIDGE MOVEABLE MEDIAN BARRIER TRAFFIC HANDLING – NORTH APPROACH STAGE 2N TO 4N – 3N/3S SHEFT 9 OF 13					SCAL	E: 1" =	= 50'
DATE NG NO. DISTRICT ENGINEER NG NO. DISTRICT ENGINEER NG NO. DISTRICT ENGINEER NG NO. DISTRICT ENGINEER NG NO. DISTRICT ENGINEER NG NO. DISTRICT ENGINEER STAGE 2N TO 4N – 3N/3S SHEFT 9 OF 13							
DATE DISTRICT ENGINEER STAGE 2N TO 4N - 3N/3S NG NO. 02-25-2014 SHEFT 9 OF 1.3		¥ No. C 436 ₽ Exp. 03-31-	32 🖼	GOLDEN GATE BRIDGE M	oveal		
NG NO. 02-25-2014 SHEFT 9 OF 1.3		OF CAU					ACH
	NG NO.	02-25-2				32	
	-3	DATE					





# 12" WHITE DIAGONAL PAVEMENT MARKINGS-50' SPACING (8) T(P) 12.00' Lt "G" 1086+30.15 EC DETAIL 11 STRIPE (Temp) TYPE VI ARROW 7.00' Lt "G" 1086+30.15 EC +1+ 35.00' Lt "G" 1086+29.50 EC (2 – 75' SPACING) BTM GUIDE STRIPE (Temp) DETAIL 13M STRIPE (Temp)/ 5.00' Lt "G" 1086+30.15 EC BTM GUIDE STRIPE (Temp)

ROUTE 101085

657658

659

(27B)_{T(P)}

45.72' Lt "G" 1083+64.12 BC 24.00' Lt "G" 1086+29.50 EC BEGIN DETAIL 27B STRIPE (Temp) (27В) DETAIL 13M STRIPE (Temp) 49.35' Lt "<u>G" 1086+15.32 EC</u> DETAIL 27B STRIPE (Temp) 653 (660) 11 34.68' Lt "G" 1083+45.00 BC (13M)T(P)(661 BEGIN DETAIL 13M STRIPE (Temp) (652) 23.68' Lt "G" 1083+45.00\ 651 SB SB END DETAIL 8 STRIPE (FINAL) 9 5 SB BEGIN DETAIL 13M STRIPE (Temp) 7

1080 - 3^{11.76'} 11.97' 1.85' 1.65' GGB 2 "G" LINE +656) CALTRANS/GGBHTD-R/W LINE <u>23.49' Rt "G" 1083+45.</u>00

END DETAIL 8 STRIPE (FINAL)

BEGIN DETAIL 11 STRIPE (Temp) "G" 1083+45.00 BEGIN DETAIL 13M STRIPE (Temp) END DETAIL & STRIPE (FINAL) 34.61' Rt "G" 1083+45.00 BC BEGIN DETAIL 11 STRIPE (Temp) BEGIN DETAIL 27B STRIPE (Temp) VISTA POINT <u>11.85' Rt "G" 1083+45.00</u> END DETAIL 8 STRIPE (FINAL) BEGIN DETAIL 11 STRIPE (Temp)

DETAIL 11 STRIPE (Temp) 24.00' Rt "G" 1086+30.17 EC DETAIL 13M STRIPE (Temp)

'18

TA POINT

36

亇(P)

-∕T(P)

(13M)

11.97' Lt "G"1083+45.00 END DETAIL 8 STRIPE (FINAL)

-CONFORM TO EXISTING STRIPE

³9x 36A T(P)

STRIPING (RAMP) (27B) T(P) "G" 1086+30.15 EC

DETAIL 11 STRIPE (Temp) 5.00' Rt "G" 1086+29.35 EC

BTM GUIDE STRIPE (Temp) 7.00' Rt "G" 1086+29.52 EC BTM GUIDE STRIPE (Temp) 12.00' Rt "G" 1086+29.52 EC

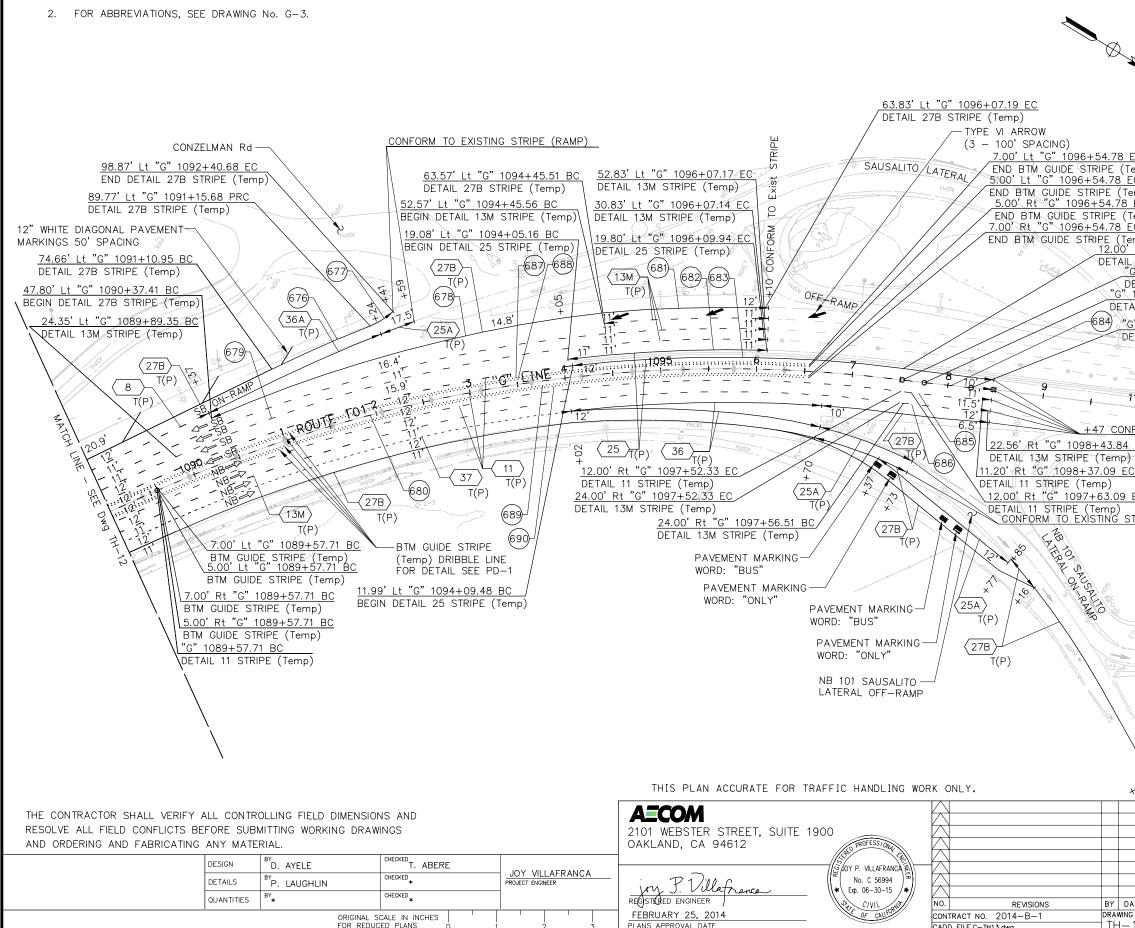
- CONFORM TO EXISTING

				THIS PLAN ACCURATE FOR TR	AFFIC HANDLING WORK	CONLY.	
RESOLVE ALL FIELD CO	LL VERIFY ALL CONTROLLING FIELD DIME INFLICTS BEFORE SUBMITTING WORKING ( ABRICATING ANY MATERIAL.			<b>AECOM</b> 2101 WEBSTER STREET, SUITE OAKLAND, CA 94612	1900		
	DESIGN BY DETAILS BY P. LAUGHLIN QUANTITIES BY	CHECKED CHECKED CHECKED CHECKED	JOY VILLAFRANCA PROJECT ENGINEER	Voy P. Villafranca REGISTERED ENGINEER	OV P. VILLAFRANCA No. C 56994 ★ Exp. 06-30-15 ★ C/VIL	NO. REVISIONS	BY DATE
		INAL SCALE IN INCHES REDUCED PLANS 0		FEBRUARY 25, 2014 PLANS APPROVAL DATE	OF CALLFORM	CONTRACT NO. 2014-B-1	DRAWING N

### NOTES:

- 1. FOR ADDITIONAL NOTES AND LEGEND, SEE DRAWING No. TH-1.
- 2. FOR ABBREVIATIONS, SEE DRAWING No. G-3.
- 3. FOR BTM GUIDE STRIPE AND DETAIL 13M DETAILS, SEE DRAWING No. PD-1

					REV. NO. O		DTAL EETS 92
						100 1	32
Ø							
		CURVE	DATA	–Temp T	RAFFIC	STRIPE	-
		No.	R	Δ	Т	L	
		(651)	1092.00'	13°57'32"	133.68'	266.04'	
		652	1100.00'	14°23'48"	138.93'	276.40'	$\left  \right $
		653	1105.00'	14°32'42"	141.01'	280.51'	$\left  \right $
		654	1100.00'	14°39'18"	141.45'	281.36'	
		655	1105.00'	14*48'06"	143.53'	285.47'	$\left  \right $
		656	1110.00'	14*56'49"	145.61'	289.57'	
		657	1107.00'	15°04'26"	146.46'	291.24'	-
$\setminus$		658	1112.00'	15°13'02"	148.54'	295.34'	
		659	1020.00'	15°37'59"	153.75'	305.59'	
		660	1070.00'	05°04'27"	47.41'	94.76'	$\left  \right $
		(661)	1081.00'	13°47'05"	130.67'	260.08'	
		IS	SUE	DFC	R F	<b>3ID</b>	]
						.E: 1" =	」 50'
	APPROVED BY		GOLDE	N GATE BR			00
	PROFESSION	GOLDEN GATE	AND -	FRANSPORT.	ATION DIS	STRICT	
	EWA Z. BAUER No. C 43632 ★ Exp. 03-31-15	G		ate Bridgi Edian Barf		BLE	
	SAF CIVIL OF CAUTORNIT	TRAFFIC		_ING — N		PPROA	СН
TE NO.	DISTRICT ENGINEER		STA	GES 6N 8	& 7N		2.,
NU. 2	02-25-2014 DATE		SHE	ET 12 OF	- 13		

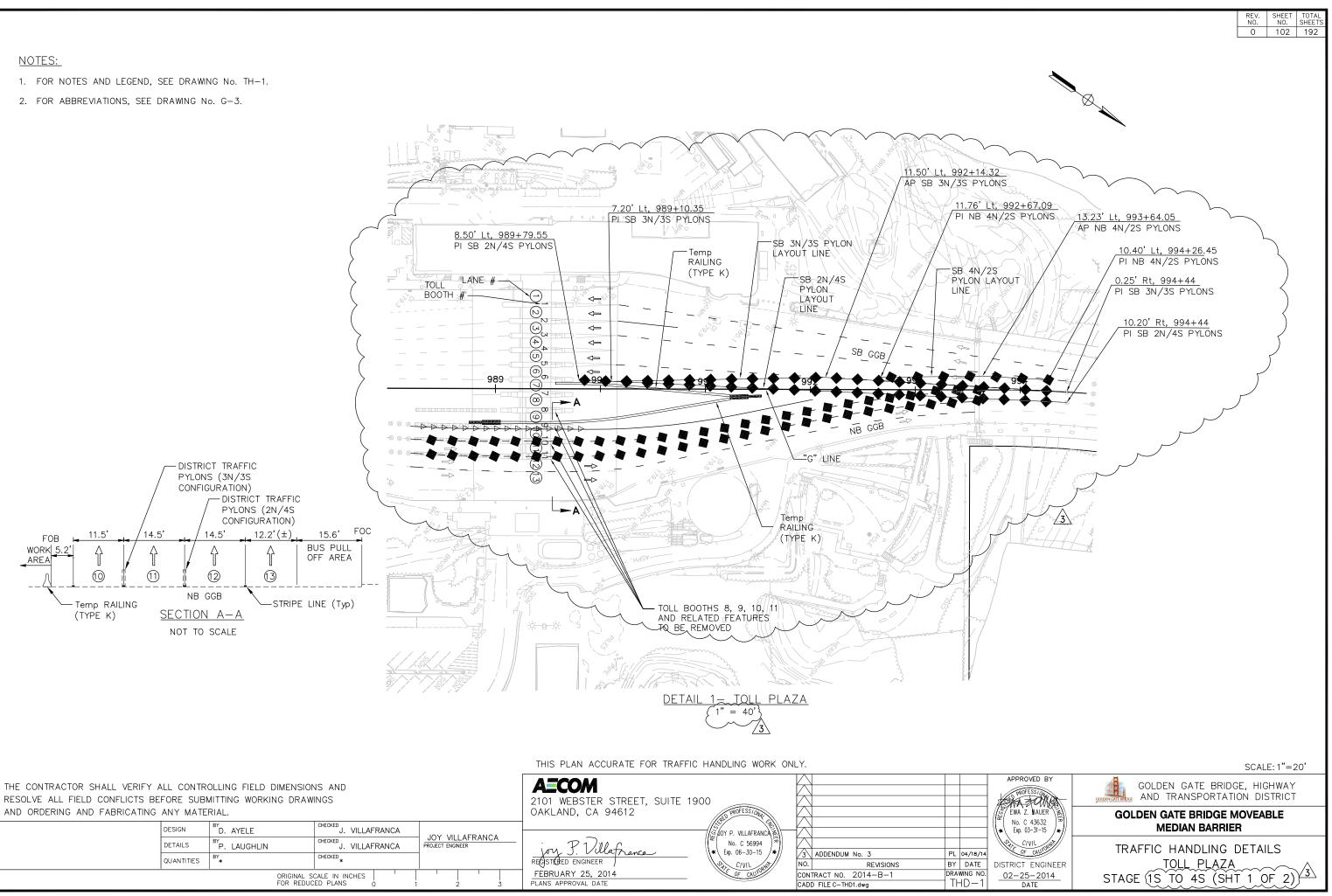


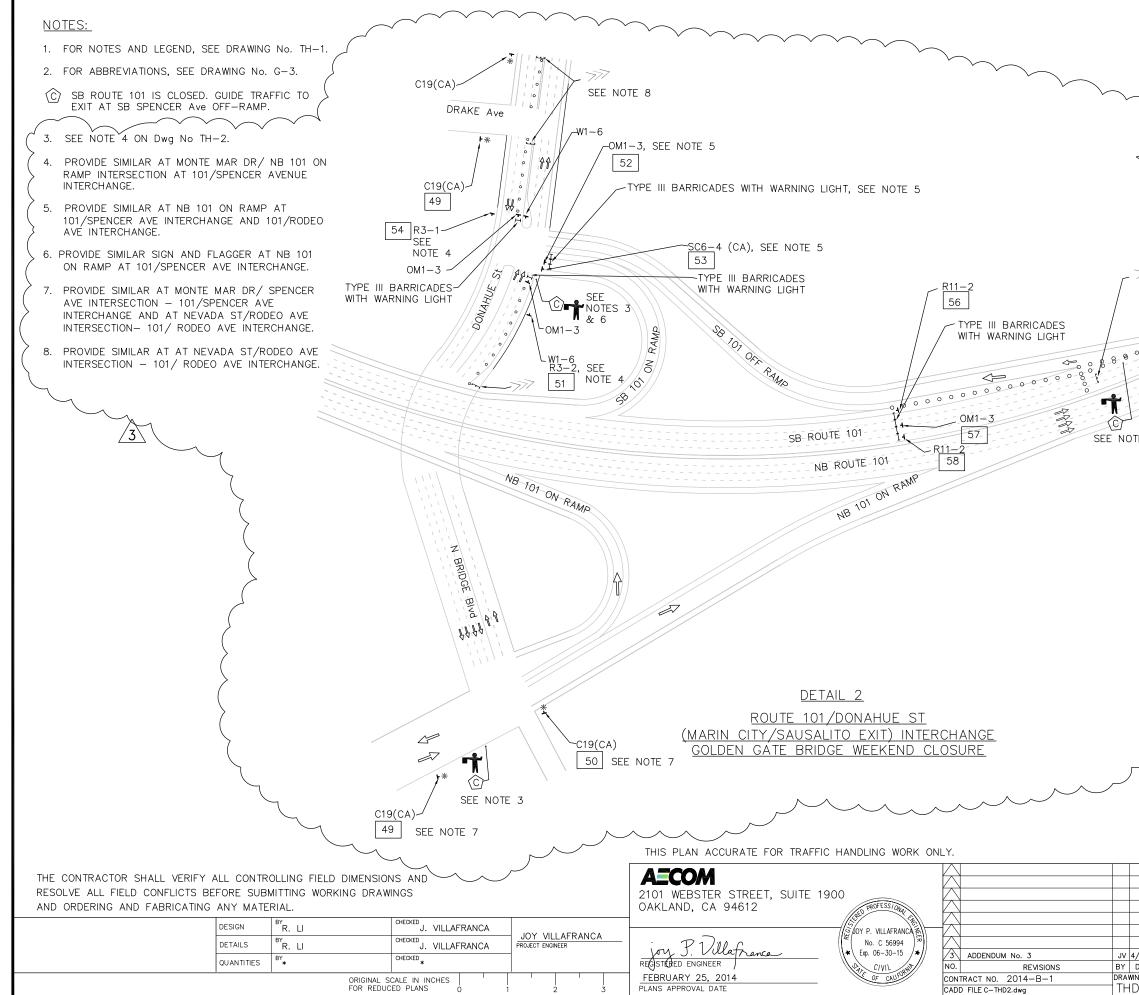
CADD FILE C-TH13.dwg

NOTES:

1. FOR NOTES AND LEGEND, SEE DRAWING No. TH-1.

				REV. NO.	NO. S	TOTAL HEETS 192
					101	192
CL	JRVE [	DATA -	Temp TF	RAFFIC	STRIPI	NG
	No.	R	Δ	Т	L	
$\searrow$	676	1412.00'	04•31'59"	55.89'	111.71'	
×	677	75.00'	21°38'42"	14.34'	28.33'	
	678	1427.94'	17*01'09"	213.65'	424.16'	
	679	1400.00'	25 <b>°</b> 47'19"	320.50'	630.13'	
	680	1448.00'	31°26'32"	407.59'	794.62'	
54.78 EC	681)	1433.00'	06•44'57"	84.50'	168.80'	
IPE (Temp) 4.78 EC	682	1405.00'	08 <b>°</b> 27'50"	103.97'	207.55'	
PE (Temp) 54.78 EC	683	1460.00'	13°33'57"	173.65'	345.68'	
194.78 LC 1PE (Temp) 4.78 LC	684)	1150.00'	02 <b>°</b> 26'07"	24.45'	48.88'	
4.7 <u>6 EC</u> PE (Temp) 12.00' Lt "G" 1097+52.33 EC DETAIL 25 STRIPE (Temp)	685	1162.00'	03*40'25"	37.27'	74.51'	]
DETAIL 25 STRIPE (Temp) "G" 1097+52.33 EC	686	1174.00'	04 <b>'</b> 18'40"	44.19'	88.34'	1
DETAIL 11 STRIPE (Temp) "G" 1097+75.56 BC	687	1455.00'	17•52'36"	228.84'	453.97'	
DETAIL 11 STRIPE (Temp)	688	1453.00'	27*34'57"	356.66'	699.48'	]
84) "G" 1098+24.44 EC DETAIL 11 STRIPE (Temp)	689	1443.00'	27•34'57"	354.20'	694.67'	1
+ + ← SB 8	690	1441.00'	27•34'57"	353.71'	693.70'	]
SB						_
1100 SB © 6	⊗	0 0 0				
7 CONFORM TO EXISTING STRIP	<u>'ING' NB</u>		©	⊗ ⊗ 3	Ø Ø	
<u>43.84 EC</u> Temp)	NB	$\hat{\gamma}$			+	
.09 EC	• BEKM	a D		O BEKN		
<u>53.09 BC</u>	SALITO	Rd UC			- X-	
mp) IING STRIPE (RAMP)						
A A A						
ASPH.						
So S						
		0115	D -			ך
~ <u>^</u>	15	<b>30</b> E	D FC			
x62 X	Л				_E: 1" =	50'
APPROVED BT	GOLDEN GAT		IN GATE BR TRANSPORT			
	(		ATE BRIDGI Edian Barf		BLE	
C/VIL OF CALIFORNIA TI	RAFFIC		ING – NO		PPROA	СН
BY DATE DISTRICT ENGINEER DRAWING NO. 02-25-2014			GES 6N 6 EET 13 0			
TH-13  date						





					REV. NO. O	SHEET NO. 103	TOTAL SHEETS 192
				L		100	102
~~~~							
*							
	$\sum$						
	$\sum$						
777							
	ý						
<i></i> .	ý						
0.0-0	)						
	$\Big)$						
	) )						
TE 3	$\langle$						
	$\left\{ \right.$						
	$\int$						
	Ś						
	5						
	5						
_	)						
)							
5							
Ţ							
$\int$							
$\mathcal{I}$							
					,	$\sqrt{3}$	
					Z SCAL	E:{1" =	= 80'}
APPROVED BY	GOLDEN GATE BR	GOLE	EN GATE	BRIDG	E, HIG	HWAY	$\sim$
₩A Z. BAUER No. C 43632 ★ Exp. 03-31-15		OLDEN	GATE BRI MEDIAN B	DGE M	OVEA		
CIVIL CIVIL	TF		HANDL			LS	$\overline{\mathbf{A}}$
DATE DISTRICT ENGINEER	STAGE 51	NO	RTH AP	PROA	СН	$\sim$	3 )F 2)}
	JIAGE JI	1 000	WLLINEN		JUNE		

## TRAFFIC CONTROL SIGNS

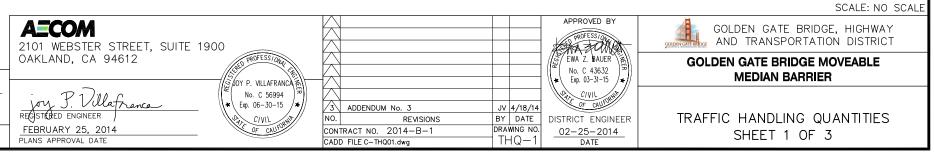
		<u>iraffic</u>		<u> </u>		510115
STAGE	DRAWING	SIGN CODE	(H :	SIZE × V) × IN)		SIGN MESSAGE
GINGE	No.	[N]	HORIZ	VERT		
			IN	IN	EA	
STAGE 4S	TH-2	C19(CA)	48	48	1	ROAD CLOSED AHEAD
STAGE 4S	TH-2	C30(CA)	48	48	1	LANE ENDS
STAGE 4S	TH-2	OM1-3	18	18	1	TYPE 1 OBJECT MARKER
STAGE 4S	TH-2	R3-5(Rt)	30	36	1	RIGHT TURN ONLY
STAGE 4S	TH-2	R11-2	48	30	1	ROAD CLOSED
STAGE 4S	TH-2	W4-2(Lt)	48	48	3	LEFT MERGE
STAGE 4S	TH-2	W20-2	48	48	1	DETOUR AHEAD
STAGE 4S	TH-3	C19(CA)(Mod)	48	48	2	RAMP CLOSED AHEAD
STAGE 4S	TH-3	C-20(CA)(Lt)	48	48	2	LEFT LANE CLOSED AHEAD
STAGE 4S	TH-3	C-20(CA)(Rt)	48	48	2	RIGHT LANE CLOSED AHEAD
STAGE 4S	TH-3	C30 (CA)	48	48	1	LANE CLOSED
STAGE 4S	TH-3	OM1-3	18	18	1	TYPE 1 OBJECT MARKER
STAGE 4S	TH-3	R1-1	30	30	1	STOP
STAGE 4S	TH-3	R3-1	36	36	1	NO RIGHT TURN
STAGE 4S	TH-3	R3-5(Lt)	30	36	1	LEFT TURN ONLY
STAGE 4S	TH-3	R3-5(Rt)	30	36	1	RIGHT TURN ONLY
STAGE 4S	TH-3	R11-2	48	30	1	ROAD CLOSED
STAGE 4S	TH-3	SC11(CA)	54	42	2	LANE CLOSED
STAGE 4S	TH-3	W4-2(Lt)	48	48	2	LEFT MERGE
STAGE 4S	TH-4	C20(CA)(Lt)	48	48	1	LEFT LANE CLOSED AHEAD
STAGE 4S	TH-4	C30(CA)	48	48	2	LANE CLOSED
STAGE 4S	TH-4	R3-2	36	36	1	NO LEFT TURN
STAGE 4S	TH-5	C19(CA)	48	48	6	ROAD CLOSED AHEAD
STAGE 4S	TH-5	C30(CA)	48	48	1	LANE CLOSED
STAGE 4S	TH-5	OM1-3	18	18	2	TYPE 1 OBJECT MARKER
STAGE 4S	TH-5	R3-2	36	36	1	NO LEFT TURN
STAGE 4S	TH-5	SC6-4(CA)	48	60	2	RAMP CLOSED (MORE THAN ONE DAY)
STAGE 1N	TH-6	C30A(CA)	48	30	4	SHOULDER CLOSED
STAGE 1N	TH-6	W7-3a	36	30	2	NEXT XX MILES
STAGE 1N	TH-6	W21-5	48	48	1	SHOULDER WORK
STAGE 1N	TH-6	W21-5b(Rt)	48	48	1	RIGHT SHOULDER CLOSED 1000 FEET
STAGE 1N	TH-7	W21-5	48	48	3	SHOULDER WORK
STAGE 1N	TH-7	W21-5b(Rt)	48	48	2	RIGHT SHOULDER CLOSED 1000 FEET
STAGES 2S TO 4N	TH-8	C30A(CA)	48	48	1	SHOULDER CLOSED
	•	·	SUBTO	TAL	56	
-						-

							REV.         SHEET           NO.         NO.           0         104
		TRAF	FIC	CO	NTR	)L SIGNS	
STAGE	DRAWING No.	SIGN CODE [N]	SIGN (H	SIZE × V) × IN)	EA	SIGN MESSAGE	
STAGES 2N TO 4N	TH-8	W7-3a	36	30	1	NEXT XX MILES	
STAGES 2N TO 4N	TH-8	W21-5	48	48	1	SHOULDER WORK	
STAGES 2N TO 4N	TH-8	W21-5b(Lt)	48	48	1	RIGHT SHOULDER CLOSED 1000 FEET	
STAGES 2N TO 4N	TH-9	C30A(CA)	48	48	1	SHOULDER CLOSED	
STAGES 2N TO 4N	TH-9	W7-3a	36	30	1	NEXT XX MILES	
STAGES 2N TO 4N	TH-9	W21-5	48	48	1	SHOULDER WORK	
STAGES 2N TO 4N	TH-9	W21-5b(Lt)	48	48	1	RIGHT SHOULDER CLOSED 1000 FEET	
STAGE 5N	TH-10	C19(CA)	48	48	3	ROAD CLOSED AHEAD	
STAGE 5N	TH-10	G26-2(CA)(101)	35	30	1	U.S. ROUTE MARKER	
STAGE 5N	TH-10	M3-3	36	18	1	SOUTH	
STAGE 5N	TH-10	M4-9(Lt)	48	36	2	DETOUR	
STAGE 5N	TH-10	OM1-3	18	18	1	TYPE 1 OBJECT MARKER	
STAGE 5N	TH-10	R11-2	48	30	4	ROAD CLOSED	
STAGE 5N	TH-10	SC6-4(CA)	48	60	3	RAMP CLOSED (MORE THAN ONE DAY)	
STAGE 5N	TH-11	C19(CA)	48	48	1	ROAD CLOSED AHEAD	
STAGE 5N	TH-11	C30(CA)	48	48	4	LANE CLOSED	
STAGE 5N	TH-11	W4-2(Lt)	48	48	6	LEFT MERGE	
STAGE 5N	TH-11	W20-3	48	48	1	A ROAD CLOSED AHEAD	
STAGE 5N	THD-2	C19 (CA)	48	48	8	3 ROAD CLOSED AHEAD	
STAGE 5N	THD-2	OM1-3	18	18	86	TYPE 1 OBJECT MARKER	
STAGE 5N	THD-2	R3-1	36	36	<u>5</u> 2	NO LEFT TURN	
STAGE 5N	THD-2	R3-2	36	36	{ 2 )	NO RIGHT TURN	
STAGE 5N	THD-2	R11-2	48	30	2	ROAD CLOSED	
STAGE 5N	THD-2	W1-6	36	36	4	RAMP CLOSED (MORE THAN ONE DAY)	
	•		SUBTO	TAL	58	5	
			τοτρ	L.	(114	3	

[N] - NOT A SEPARATE PAY ITEM. PAID UNDER "TRAFFIC CONTROL SYSTEM".

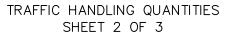
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS AND
RESOLVE ALL FIELD CONFLICTS BEFORE SUBMITTING WORKING DRAWINGS
AND ORDERING AND FABRICATING ANY MATERIAL.

G ANY MATERIAL.											0AI
	DESIGN	D. AYELE		J. VILLA	JOY VILLAFRANCA						
	DETAILS	^{by} P. LAUGHLIN		J. VILLAFRANCA							
	QUANTITIES	BY *		CHECKED *			1			REG	
ORIGINAL SC FOR REDUCE			CALE IN INCHES ED PLANS	0	1	I	2	1	3	FEE PLAN	



					1		<u>TEM</u>		ARY -				<u>e qu</u>	<u>anti</u>	TIES	1		MPORAR	~	
					4" BLUE		4" V	VHITE	KARI IRA		4" YELLOW			8" WHITE				-mporar Ment Ma (paint)		
	STAGE	SHEET No.	LOCATION/STATION	DIRECTION	BTM GUIDE STRIPE DRIBBLE LINE	DETAIL 8 (17-7)	DETAIL 11 (36-12)	DETAIL 13M (34-14)	DETAIL 27B	DETAIL 24	DETAIL 25	DETAIL 25A	DETAIL 36	DETAIL 36A	DETAIL 37 (12-3)	TYPE VI ARROW	"BUS"	"ONLY"	STOP LINE	
	$\wedge$				LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	SQFT	SQFT	SQFT	SQFT	5
	15 TO 4S	1)	"G" 988+20 TO 992+0							386										⊢
3	1S TO 4S	+	"G" 988+20 TO 993+1			496			-											
(	1S TO 4S	+	"G" 988+20 TO 993+5			542														–
	15 TO 45		"G" 988+20 TO 993+5		$\frown$	542 1292	h		57	3										⊢
	1S TO 4S	TH-1 TH-3	"G" 990+14 TO 994+4 MARINA BIVd/RICHARDSON			1292	ł			<u> </u>									16	┢
		TH-12 - TH-13																	10	┢
		TH-12 - TH-13							1768											<u></u> μ
	5N & 6N		"G" 1083+85 TO 1084+8						1700							168				$\vdash$
		TH-12 - TH-13						2550								100				
		TH-12 - TH-13						2544												
		TH-12 - TH-13					2130													
	5N & 6N	TH-12 - TH-13	"G" 1083+45 TO 1096+	55 SB	2622															
	5N & 6N	TH-12 - TH-13	3 "G" 1083+45 TO 1096+5	55 SB	2622															
	5N & 6N	TH-12 - TH-13	3 "G" 1083+45 TO 1098+4	47 CL			3004													
		TH-12 - TH-13		55 NB	2618															
		TH-12 - TH-13			2616															∟
		TH-12 - TH-13					2998													╘
		TH-12 - TH-13						2990												⊢
	5N & 6N		"G" 1083+45 TO 1086+3						598											⊢
	5N & 6N		"G" 1083+61 TO 1086+2 "G" 1083+61 TO 1086+4										154							⊢
	5N & 6N 5N & 6N		"G" 1086+44 TO 1087+8						280				170	-						⊢
	5N & 6N		"G" 1087+64 TO 1087+8						200					72						⊢
		TH-12 - TH-13												/2	1218					$\vdash$
		TH-12 - TH-13							2786						1210					
		TH-12 - TH-13		37 SB		332														
	5N & 6N	TH-13	"G" 1090+37 TO 1092+2	24 SB										394						
	5N & 6N	TH-13	"G" 1092+24 TO 1092+3	59 SB								74								
	5N & 6N	TH-13	"G" 1090+37 TO 1096+	10 SB					1192											
	5N & 6N	TH-13	"G" 1094+53 TO 1096+	51 SB												252				
	5N & 6N	TH-13	"G" 1094+46 TO 1096+	10 SB				342												
	5N & 6N		"G" 1094+05 TO 1096+	10 SB							416									
	5N & 6N		"G" 1094+09 TO 1098+4	47 SB							880									L
	5N & 6N		"G" 1094+02 TO 1096+										522							∟
	5N & 6N		"G" 1094+02 TO 1096+"						-				522							⊢
	5N & 6N	TH-13	"G" 1096+70 TO 1098+4			$\sim$	λ		350											⊢
			SHEET S	UBTOTAL	10478	3204	8132	8426	(7031)	386	1296	74	1368	466	1218	420	0	0	16	
							3		/3	7										
			LLING FIELD DIMENSIONS AN	D					AECC											
		'S BEFORE SUBMI TING ANY MATER	TTING WORKING DRAWINGS						101 WEB			SUITE 1	900	BOFESS/A	. k	}				
				J. VILLAFR				-		, 07 94			(Stated)	- WAI						
		DESIGN DETAILS	CHECKED			JOY VILL	AFRANCA	$-\square$		2 1	0		1121	P. VILLAFRANC) Io. C 56994		}				
			P. LAUGHLIN	J. VILLAFR	ANCA	FRUJEUT ENGIN	-17	5	Joy J.	Ville	Franca	/		. 06-30-15	//	ADDENDUN			PL ·	
		QUANTITIES	*	<del>۴</del>				f	egstæed ei FEBRUARY	25, 2014	, F		State	CIVIL OF CALLFORNI			REVISI 2014–B-		BY DRAW	ING N
			ORIGINAL SCALE IN FOR REDUCED PLA	NS 0	1 1	2	3		LANS APPRO							D FILE C-TH			TH	

							REV. NO. O	SHEET NO. 105	TOTAL SHEETS 192
NG		PA	TEMPOR VEMENT						
STOP LINE	DIAGONAL STRIPING	NON- REFLECTIVE	RETF	ROREFLEC	CTIVE				
ST	S, DI	TYPE A	TYPE C	TYPE G	TYPE H				
QFT	SQFT	EA	EA	EA	EA				
16	816								
	010								
		216		54					
		216		54					
		252		63					
					7				
					8				
			4	37	4				
					17 4				
					+				
		32		8					
					9 19				
					22				
					22				
16	010	716		010	112				
16	816	/16	4	216	112				
		APPROVED BY							SCALE
		DROFESS/ON		OLDEN GATE BRIDGE	GOLDEN AND TR	GATE BRIDO ANSPORTATI	GE, HIC ON DIS	GHWAY STRICT	
+		EWA Z. BAUER No. C 43632				TE BRIDGE N		BLE	
	//	★ Exp. 03-31-15	∥⊨		MED	DIAN BARRIE	R		
_	/18/14	OF CALLFORNIA					1		
DRAW	NG NO.	ISTRICT ENGINEE		IRAFI		NDLING QI ET 2 OF		IIE2	
	2-2	DATE			- · · <b>L</b>				



				4"			TEMPOR			RIPE (PA 4"	STRIPE						EMPORAR MENT MA				TEMPOF				
			z	BLUE		4" V	VHITE			YELLOW			B" WHITE				(PAINT)			PA	VEMENT	MARKER			
STAGE	SHEET No.	LOCATION/STATION	DIRECTION	BTM GUIDE STRIPE DRIBBLE LINE	DETAIL 8 (17-7)	DETAIL 11 (36–12)	DETAIL 13M (34-14)	DETAIL 27B	DETAIL 24	DETAIL 25	DETAIL 25A	DETAIL 36	DETAIL 36A	DETAIL 37 (12-3)	TYPE VI ARROW	"BUS"	"ONLY"	OP LINE		STOP LINE	DIAGONAL STRIPING	NON- REFLECTIVE	RET	ROREFLE	CTIVE
				GUI			DE	DE			DE		DE							TYPE A	TYPE C	TYPE G	TYPE H		
				LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	SQFT	SQFT	SQFT	SQFT	SQFT	EA	EA	EA	EA		
: 6N	TH-13	"G" 1096+70 TO 1097+73	NB								206												9		
И	TH-13	"G" 1096+70 TO 1097+73	NB					308																	
δN	TH-13	"G" 1097+31	NB													40									
ŝN	TH-13	"G" 1097+48	NB														44								
5N	TH-13	"G" 1098+09	NB													40									
6N	TH-13	"G" 1098+23	NB														44								
6N	TH-13	"G" 1097+37 TO 1098+77	NB								346												15		
6N	TH-13	"G" 1098+85 TO 1099+16	NB					76																	
		SHEET SUBTO	DTAL	0	0	0	0	384		0	552	0	0	0	0	80	88	0	0	0	0	0	24		
		TOTAL							43015 [°]	$\mathbf{i}$							1420			716		356			
										3															

STAGE	DRAWING No.	FLASHING ARROW SIGN [N]	FLAGMAN [N]	TRAFFIC CONES [N]	BARRICADE (TYPE III) W/LIGHTS [N]	PORTABLE FLASHING BEACON [N]	
		EA	EA	EA	EA	EA	]
STAGE 4S	TH-2	3	1	48	4	1	
STAGE 4S	TH-3	3	3	72	5	4	
STAGE 4S	TH-4	0	$\sum_{i=1}^{n}$	59	3	0	] ⁄3√
STAGE 4S	TH-5	0	(5)	0	( )	4	] —
STAGE 1N	TH-6, TH-7	0	2)	0	0 3	1	
STAGE 5N	TH-10	0	$\left  \right\rangle 4 \left  \right\rangle$	0	6	1	
STAGE 5N	TH-11	3		413	10	1	
STAGE 5N	THD-2	(6)	(4 {	44	6	8	
	TOTAL	{15	18 )	636	(43)	(20)	
		<u> </u>	3	3	~3	3	

			TEMPORARY RAILING	TEMPORARY ALTERNATIVE	TEMPORARY	CHANNELIZEF (SURFACE
STAGE	DRAWING No.	STATION LIMITS	(TYPE K)	CRASH CUSHION (TL-2)	CRASH CUSHION (TL-3)	MOUNTED)
$\sim \sim \sim$			FT	EA	EA	EA EA
STAGE 1S	) TH-1	"G" 989+57.35 Lt TO 991+23.62 Rt	160	1	0	(16
STAGE 15		"G" 989+04.82 Rt TO 991+23.62 Rt	220	1	0	> o
STAGE 1N	∫ TH−6	"G" 1084+41.56 Lt TO 1085+68.90 Lt	120	0	1	0
STAGE 1N	(тн−6, тн−7	"G" 1087+95.66 Rt TO 1098+04.13 Rt	1000	0	1 (	0
	) /H-8. TH-9	"G" 1086+39.17 Lt TO 1094+15.86 Lt	780	0	1,	0
STAGE 2N	)	"G" 1086+73.02 Lt TO 1095+06.98 Lt	840	0	1	0
$\overline{\gamma}$	,	TOTAL	3120	2	4	16

[N] - NOT A SEPARATE PAY ITEM. PAID UNDER "TRAFFIC CONTROL SYSTEM".

[N] - NOT A SEPARATE PAY ITEM. PAID UNDER "TRAFFIC CONTROL SYSTEM".

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS AND RESOLVE ALL FIELD CONFLICTS BEFORE SUBMITTING WORKING DRAWINGS AND ORDERING AND FABRICATING ANY MATERIAL

١G	ANY MATE	RIAL.									
	DESIGN	D. AYELE		CHECKED J. \	/ILLAFRANC	A				٨	_
	DETAILS	P. LAUGHLIN		J. \	/ILLAFRANC	A	JOY V PROJECT EN		KANC.	A	
	QUANTITIES	BY *		CHECKED *							R
			ORIGINAL SO FOR REDUC	CALE IN INC ED PLANS	HES 0	1	I	2	I	3	

				_	
	AECOM	$\square$	J		
	ALCOM	$\land$			
	2101 WEBSTER STREET, SUITE 1900	$\square$			
	OAKLAND, CA 94612	$\square$			
		$\square$			
	(Support P. VILLAFRANCA	$\nabla$			
-	$(2^{2})$ No. C 56994 $(2^{3})$	$\square$			
	voy P. Villafranca (* Exp. 06-30-15 /*)	3	ADDENDUM No. 3	JCH	04/1
	REGSTERED ENGINEER	NO.	REVISIONS	BY	DA
		CON	TRACT NO. 2014-B-1	DRA	
	PLANS APPROVAL DATE	CAD	D FILE C-THQ03.dwg	1 T⊢	IQ-
					_



# Attachment B3: Traffic Control Plans— Short-Term Project

### CONSTRUCTION TRAFFIC NOTES:

- NOT LESS THAN ONE PERSON SHALL BE ASSIGNED AND DEDICATED 1 TO FULL TIME MAINTENANCE OF TRAFFIC CONTROL DEVICES ON ALL NIGHT LANE CLOSURES OR DAYTIME CLOSURES EXCEEDING 1 MILE IN LENGTH INCLUDING THE TAPER.
- ALL ADVANCE WARNING SIGNS FOR CLOSURES SHALL BE 48"X48" 2. MINIMUM OR LARGER UNLESS OTHERWISE SPECIFIED IN THE SPECIAL PROVISIONS OR SHOWN ON THE PLANS.
- ALL ADVANCE WARNING SIGN INSTALLATIONS SHALL BE EQUIPPED 3. WITH FLAGS FOR DAYTIME CLOSURES. FLASHING BEACONS SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLANS DURING NIGHT LANE CLOSURES OR DURING HOURS OF DARKNESS.
- A G20-2 "END ROAD WORK" SIGN AS APPROPRIATE SHALL BE 4. PLACED AT THE END OF PROJECT.
- 5. PLACE A C30(CA) "LANE CLOSED" SIGN ON A FLAG TREE EVERY 2000' THROUGHOUT THE LENGTH OF THE LANE CLOSURE.
- ONE FLASHING ARROW SIGN SHALL BE PLACED FOR EACH LANE 6. CLOSED. THE FIRST FLASHING ARROW SIGN SHALL BE TYPE I. ALL OTHERS MAY BE EITHER TYPE I OR TYPE II UNLESS OTHERWISE SPECIFIED IN THE SPECIAL PROVISIONS.
- ALL CONES SHALL BE 28" MIN HEIGHT. DURING HOURS OF 7. DARKNESS, THEY SHALL BE FITTED WITH RETROREFLECTIVE SLEEVES AS SPECIFIED IN STANDARD SPECIFICATIONS. WHERE INDICATED THEY SHALL BE INTERNALLY ILLUMINATED. MAXIMUM SPACING SHALL BE 50', UNLESS OTHERWISE SHOWN ON THE PLANS.
- UNLESS OTHERWISE SPECIFIED IN THE SPECIAL PROVISIONS, A 8. MINIMUM OF 3 CONES SHALL BE PLACED TRANSVERSELY ACROSS EACH CLOSED LANE AND SHOULDER AT EACH LOCATION WHERE A TAPER ACROSS A TRAFFIC LANE ENDS AND EVERY 2000'. TWO TYPE II BARRICADES MAY BE USED INSTEAD OF THE 3 CONES. THE TRANSVERSE ALIGNMENT OF THE CONES OR BARRICADES ON THE CLOSED SHOULDER MAY BE SHIFTED FROM THE TRANSVERSE ALIGNMENT TO PROVIDE ACCESS TO THE WORK.
- 9. FOR TRAFFIC LANE AVAILABILITY AND HOURS OF OPERATION, SEE ∕3∖ THE SPECIAL PROVISIONS. FOR ALLOWED LANE CLOSURE CONFIGURATIONS AT WORK AREAS. SEE DRAWING TC-2 TO (TC-19.
- 10. TRAFFIC LANE CLOSURES SHALL CONFORM TO THESE PLANS AND CALTRANS STANDARD PLAN T-10, EXCEPT THAT, CALTRANS STANDARD PLAN T-11 SHALL BE USED WHERE DISTANCE CONSTRAINTS PREVENT THE USE OF CALTRANS STANDARD PLAN T-10
- 11. ALL SIGNS SHALL BE EITHER ILLUMINATED OR REFLECTORIZED.
- A MINIMUM 1500' OF SIGHT DISTANCE SHALL BE PROVIDED, WHERE 12. POSSIBLE, FOR VEHICLES APPROACHING THE FIRST FLASHING ARROW SIGN. LANE CLOSURES SHALL NOT BEGIN AT THE TOPS OF VERTICAL CRESTS OR ON A HORIZONTAL CURVE.
- 13. IF PORTABLE DELINEATORS AS DESCRIBED IN SECTION 12-3.04 OF THE STANDARD SPECIFICATIONS ARE USED IN LIEU OF CONES, THE SPACING SHOWN ON THE PLANS SHALL BE REDUCED BY ONE-HALF.
- 14. GGBHTD TRAFFIC CONTROL PYLON TUBES AT 50' MAX SPACING TO REMAIN EXCEPT WHERE IN CONFLICT WITH LANE CHANGES. PYLON TUBES THAT REMAIN AND ARE USED FOR DELINEATION SHALL ONLY BE ALLOWED ON LEFT SIDE OF AN OPEN LANE. PYLON TUBES SHALL NOT BE USED FOR DELINEATION ON RIGHT SIDE OF VEHICLES.

- 15. PEDESTRIAN AND BICYCLE ACCESS ALONG THE BRIDGE SIDEWALKS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE SPECIFIED. CONSTRUCTION WARNING SIGNS SHALL BE INSTALLED TO ALERT PEDESTRIANS AND BICYCLISTS OF THE CONSTRUCTION WORK AREA.
- 16. MEDIAN LANE CLOSURES SHALL CONFORM TO THE DETAILS FOR OUTSIDE LANE CLOSURES EXCEPT THAT A "LEFT" OVERLAY SHALL BE PLACED OVER THE "RIGHT" ON THE SIGNS AS APPROPRIATE.
- 17. DUPLICATE ADVANCE WARNING SIGNS INSTALLATIONS ON OPPOSITE SHOULDERS ARE NOT REQUIRED FOR DAYTIME OPERATIONS IF AT LEAST ONE HALF OF THE AVAILABLE LANES REMAIN OPEN TO TRAFFIC
- 18. UNLESS OTHERWISE SPECIFIED IN THE SPECIAL PROVISIONS, THE 500' SECTION OF THE LANE CLOSURE SHOWN ALONG LANELINES SHALL BE USED BETWEEN THE 1000' CLOSURE TAPERS WHEN TWO OR MORE ADJACENT TRAFFIC LANES ARE TO BE CLOSED.
- 19. THE LANE CLOSURE HOURS SHALL CONFORM TO THE LANE CLOSURE CHART OF THE SPECIAL PROVISIONS.
- $\overline{3}$ 20. FOR ABBREVIATIONS, SEE DRAWING No. G-3.
- ALL CONSTRUCTION AREA SIGNS SHALL BE COVERED WHEN NOT IN 21. USE OR WHEN NOT NEEDED.

REVISIONS

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS AND
RESOLVE ALL FIELD CONFLICTS BEFORE SUBMITTING WORKING DRAWINGS
AND ORDERING AND FABRICATING ANY MATERIAL.

DESIGN

DETAILS

QUANTITIES

D. AYELE

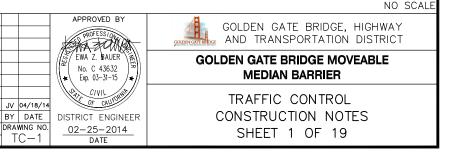
BY *

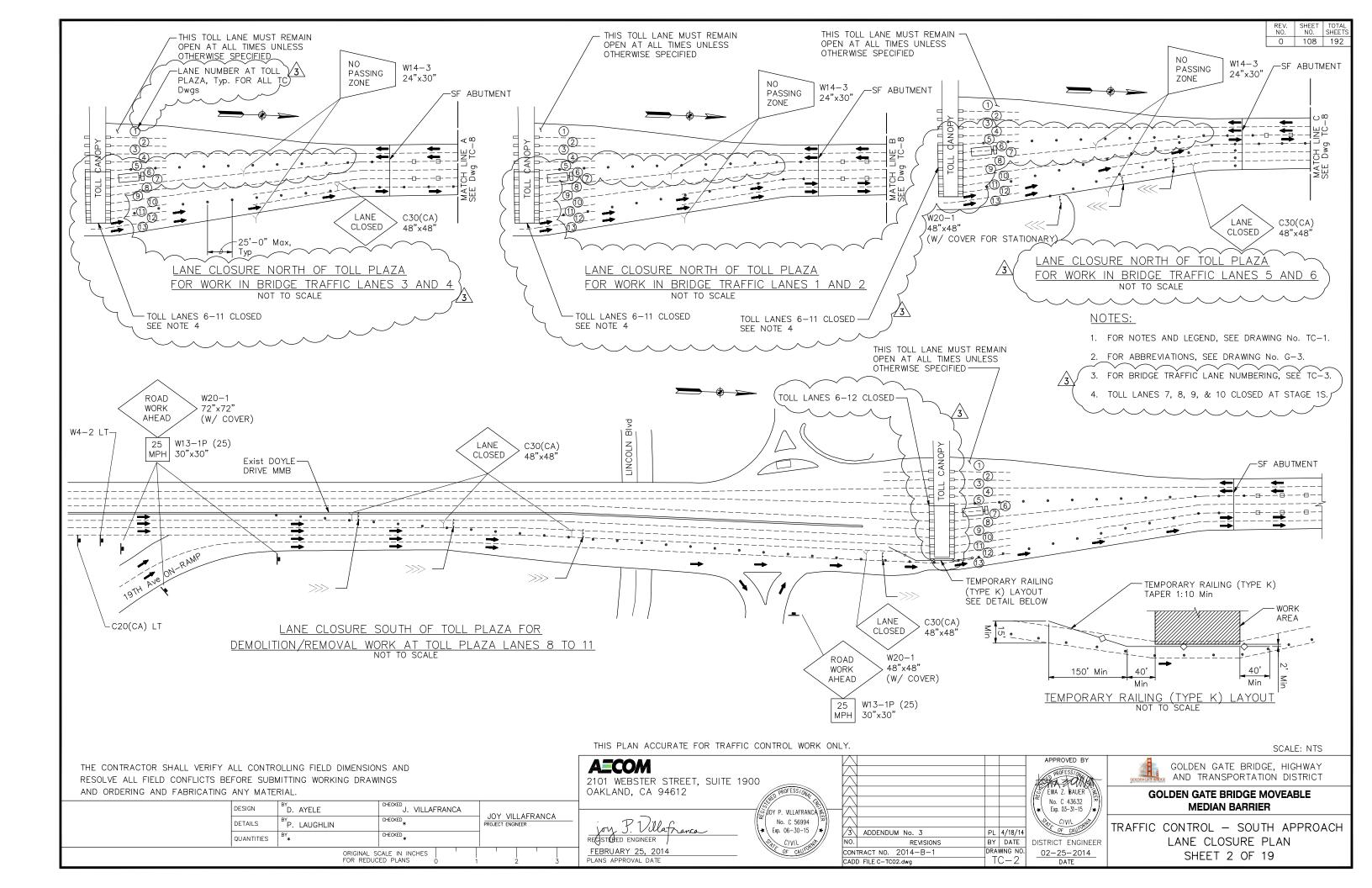
^bP. LAUGHLIN

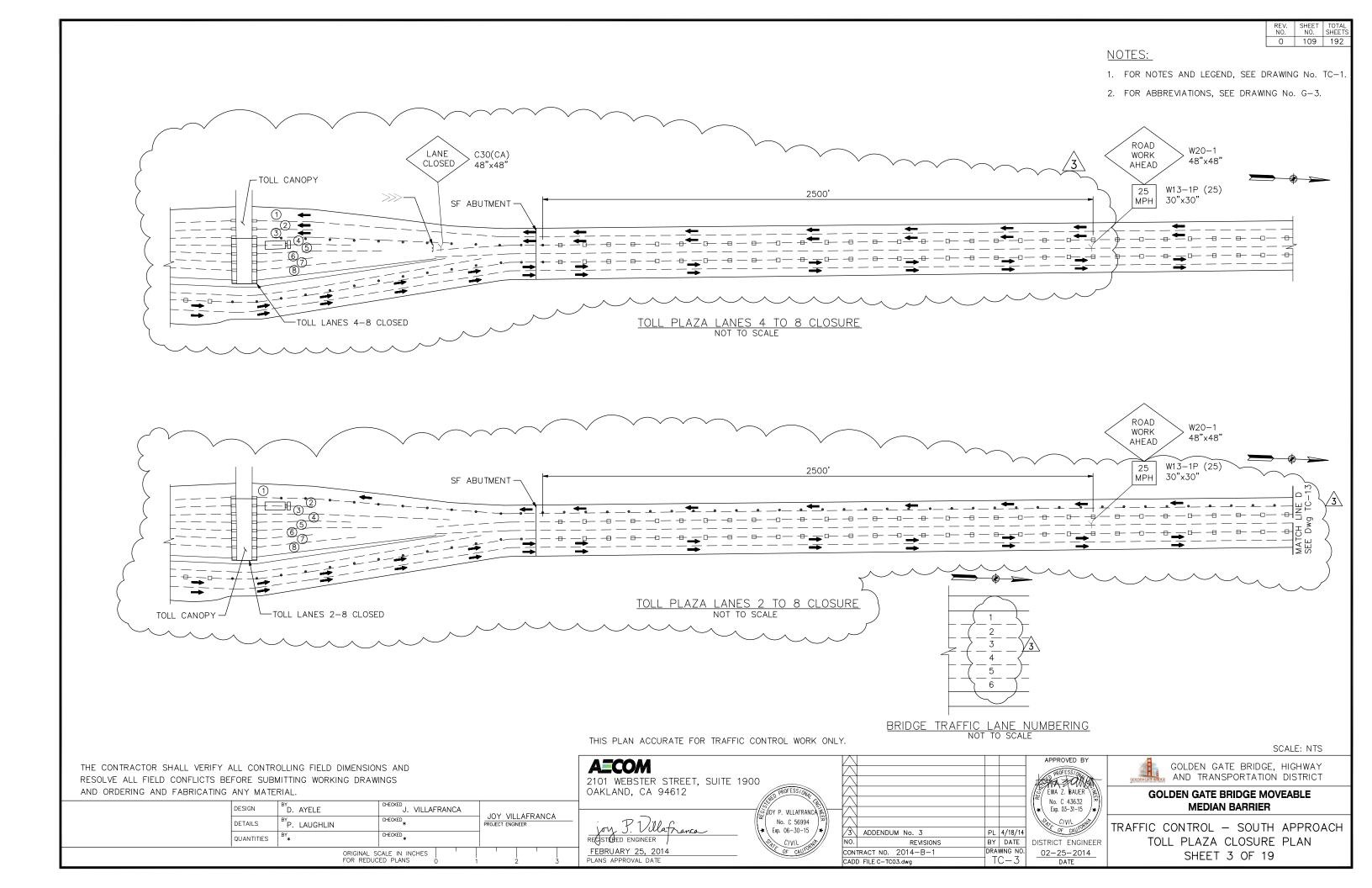
IG DRAW	NGS		2101 WEBSTER STREET, SUITE 1900		
			OAKLAND, CA 94612	A	
	J. VILLAFRANCA		SOY P. VILLAFRANCA	H	
	CHECKED *	JOY VILLAFRANCA PROJECT ENGINEER	vou P. Villafrance ((* No. C 56994))	$\square$	
	CHECKED *			/3 NO.	ADDENDUM No. 3 REVISION
	CALE IN INCHES		FEBRUARY 25, 2014	CONT	RACT NO. 2014-B-1
FOR REDUC	ED PLANS 0 1	2 3	PLANS APPROVAL DATE	CADD	FILE C-TC01.dwg

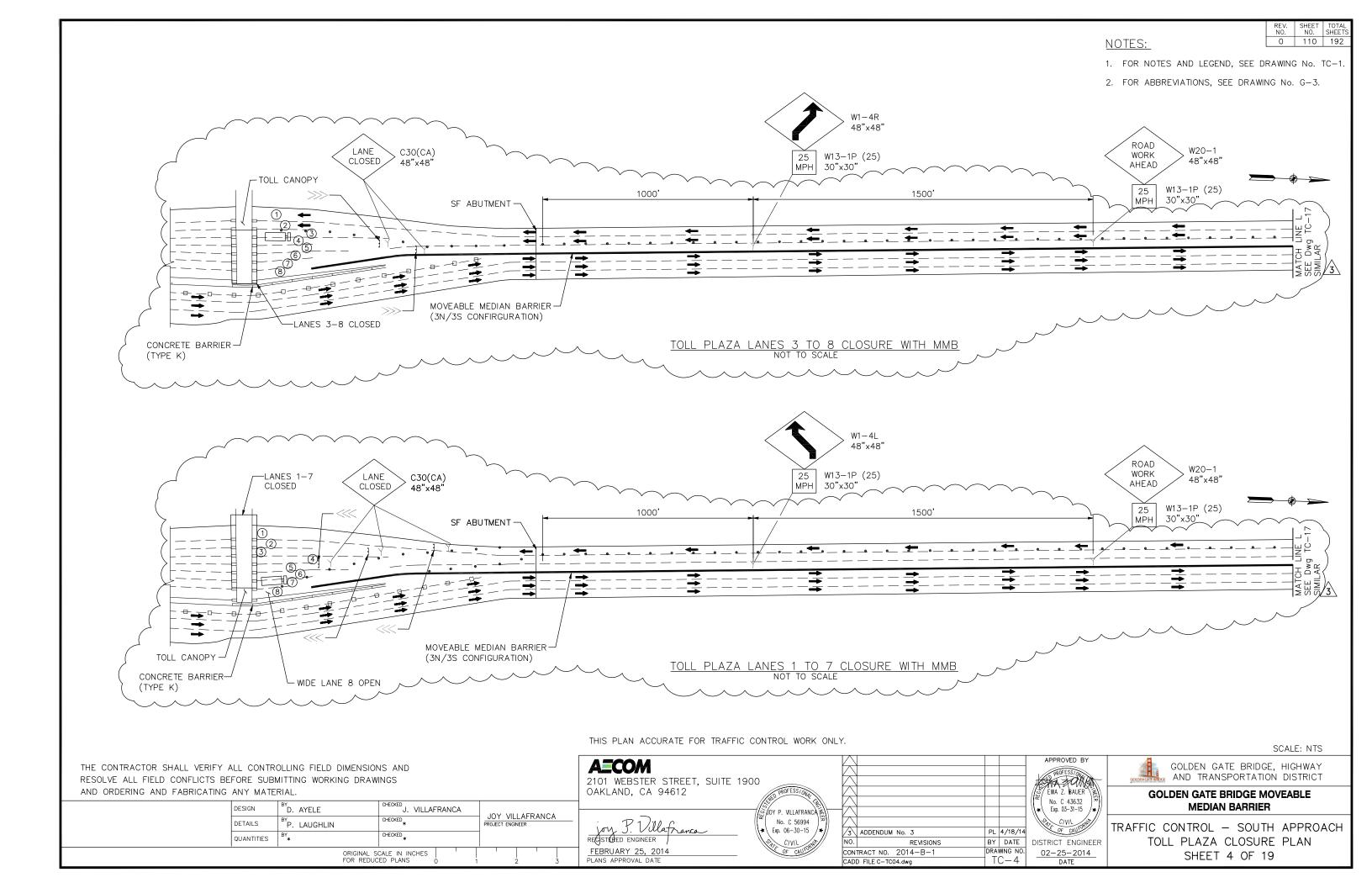
ATCOM

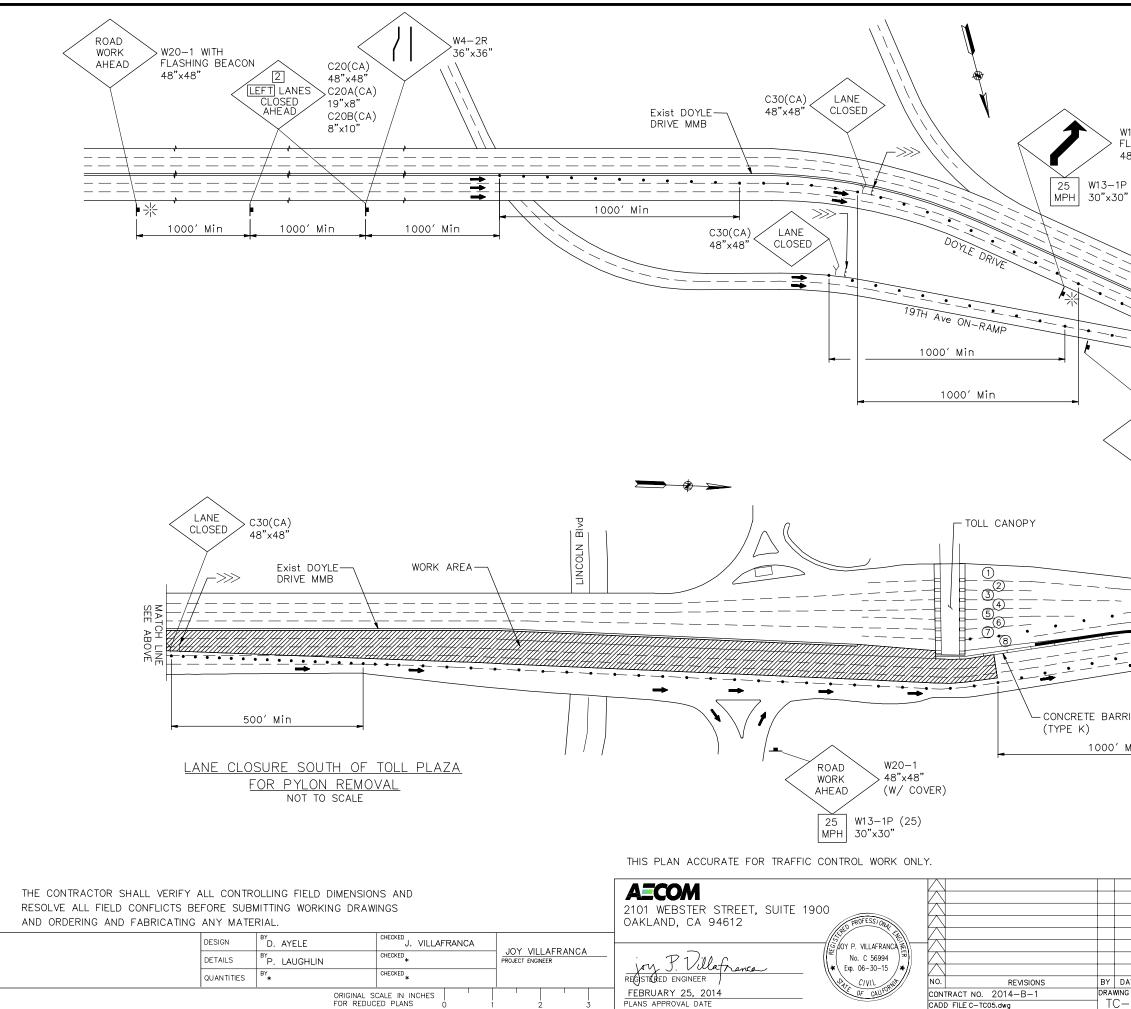
		REV. NO.	SHEET NO.	TOTAL SHEETS
		0	107	192
<u>LEGEND</u>				
	WORK AREA			
٠	TRAFFIC CONE OR PORT	ABLE	DELINE	ATOR
þ	SIGN OR PCMS			
	DISTRICT TRAFFIC PYLON	V		
>>>>	FAS			
0 0	FLASHING ARROW SIGN	(FAS)	SUPPO	RT
Y	FLAG TREE			
-	DIRECTION OF TRAVEL D CONSTRUCTION ACTIVITY			
	CONCRETE BARRIER (TY	PE K)		
	Exist DOYLE DRIVE MMB			
	MMB			
L ا	TMCC W/FLASHING "CAU	JTION"	SIGN	
*	PORTABLE FLASHING BE	ACON	(PFB)	



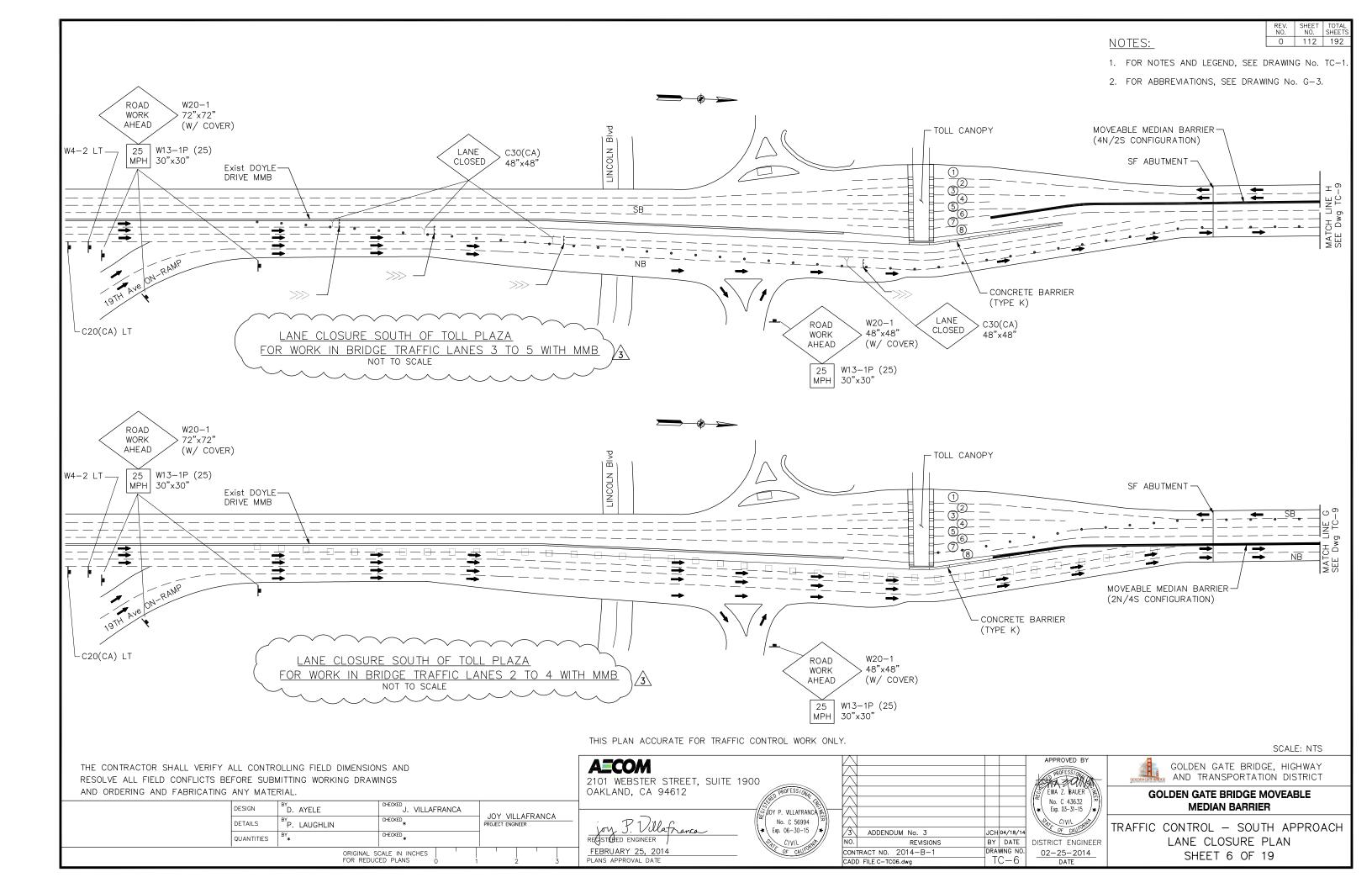


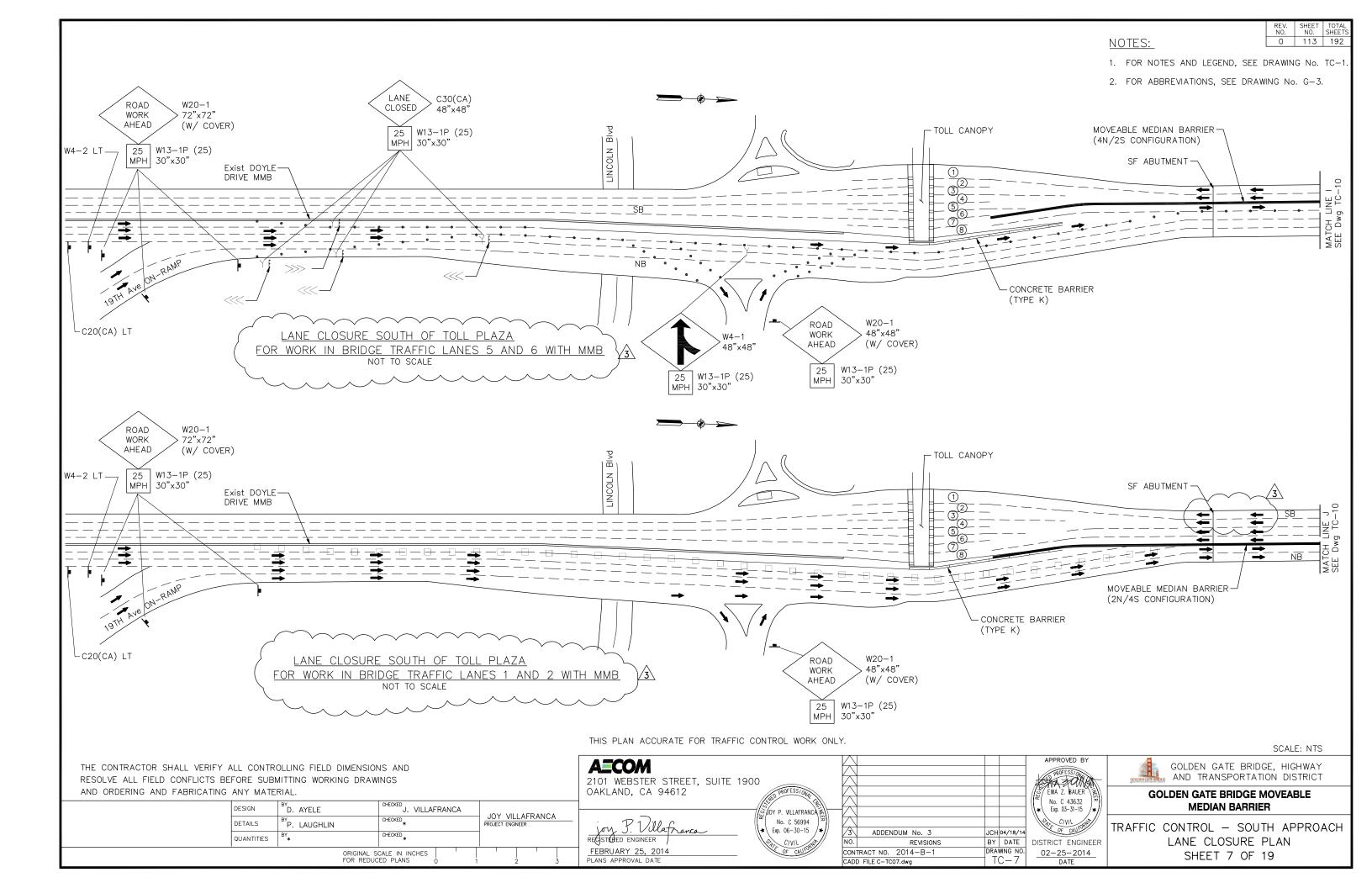


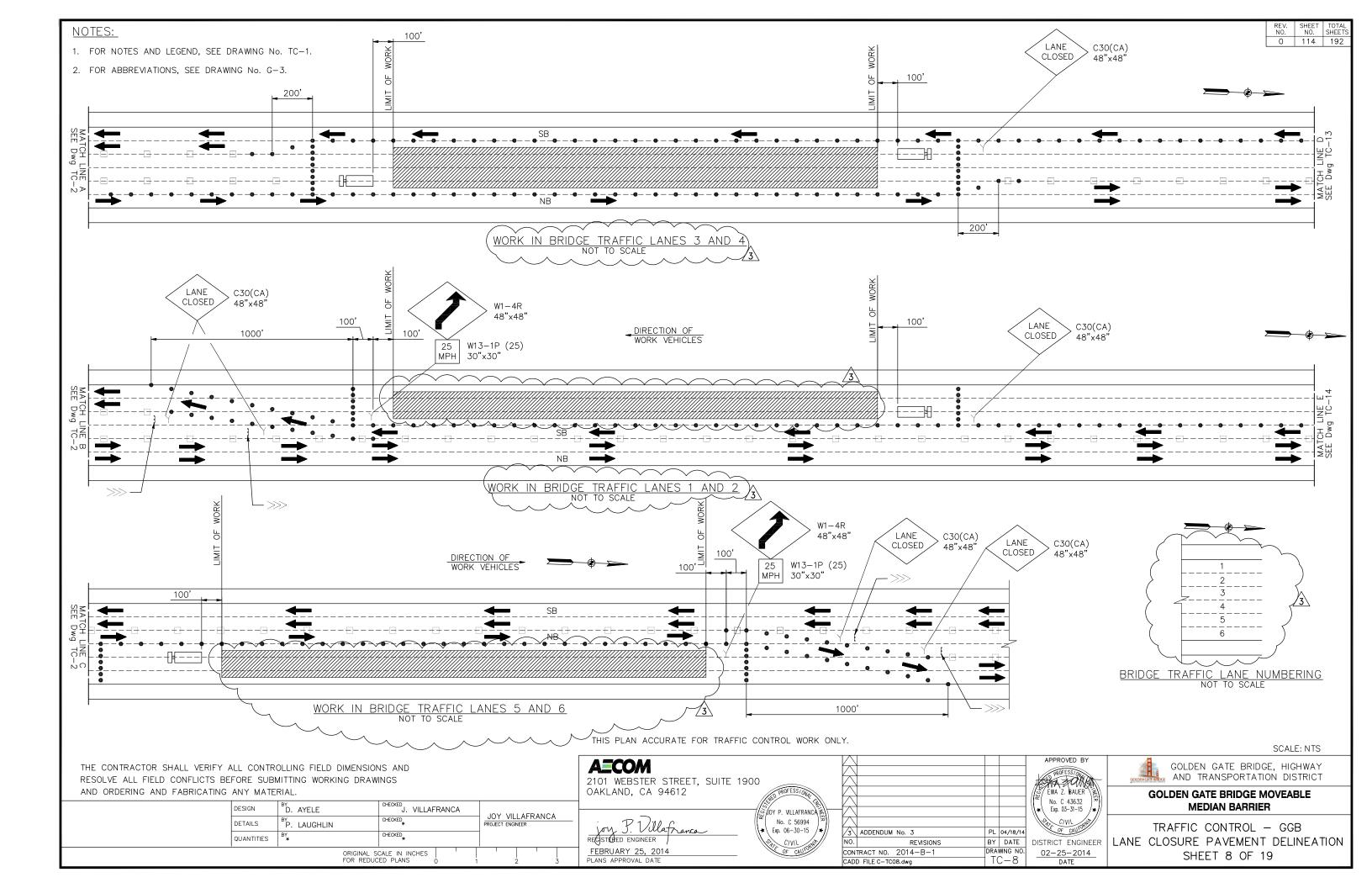


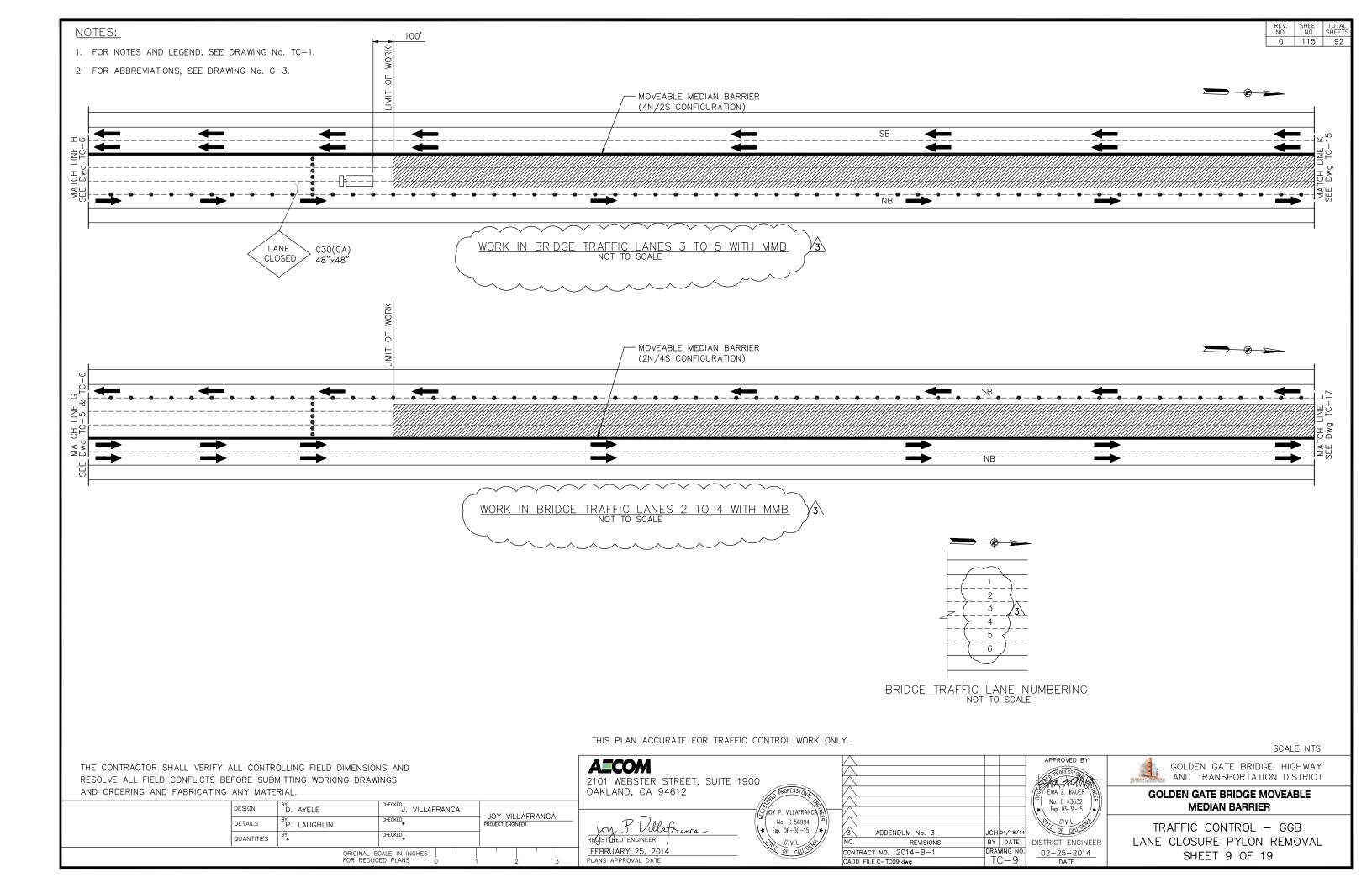


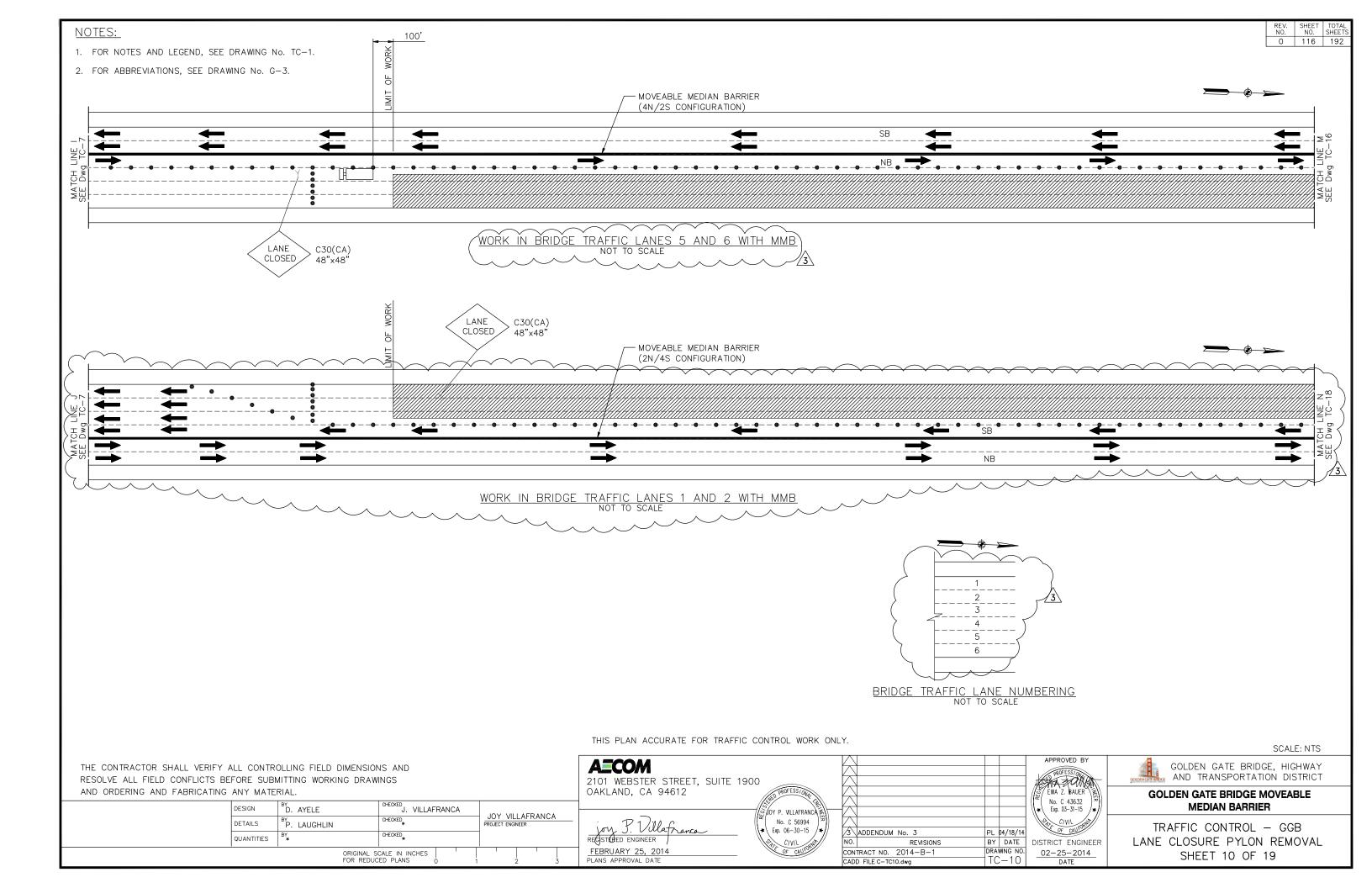
	NOTES.	REV. NO.SHEET NO.TOTAL SHEETS0111192
	NOTES: 1. FOR NOTES AND LEGEND, SEE	
	2. FOR ABBREVIATIONS, SEE DRAW	
W1—4R WITH FLASHING BEACON 48"x48"		
1P (25) 0"		
LANE CLOSED	C30(CA) 48"x48"	
	>	
	MATCH LINUL	
250' SHIFT W4-2R		
36"x36"		
SF ABUT	MENT -	
		9 0     0
••••_		MAICH LINE SEE Dwg TO-
		ΣΩ
RRIER		
′Min 🗕		
MOVEABLE ME (2N/4S CONFI	dian barrier —/ guration)	
	ISSUED FO	R BID
		SCALE: NTS
APPROVED BY	GOLDEN GATE BRIDG	SCALE: NTS GE, HIGHWAY
EWA Z. BAUER No. C 43632	GOLDEN GATE BRIDG AND TRANSPORTATI	SCALE: NTS GE, HIGHWAY ION DISTRICT
	GOLDEN GATE BRIDG AND TRANSPORTATI GOLDEN GATE BRIDGE N MEDIAN BARRIE	SCALE: NTS GE, HIGHWAY ION DISTRICT MOVEABLE R
	GOLDEN GATE BRIDG AND TRANSPORTATI	SCALE: NTS GE, HIGHWAY ION DISTRICT MOVEABLE R ITH APPROACH PLAN

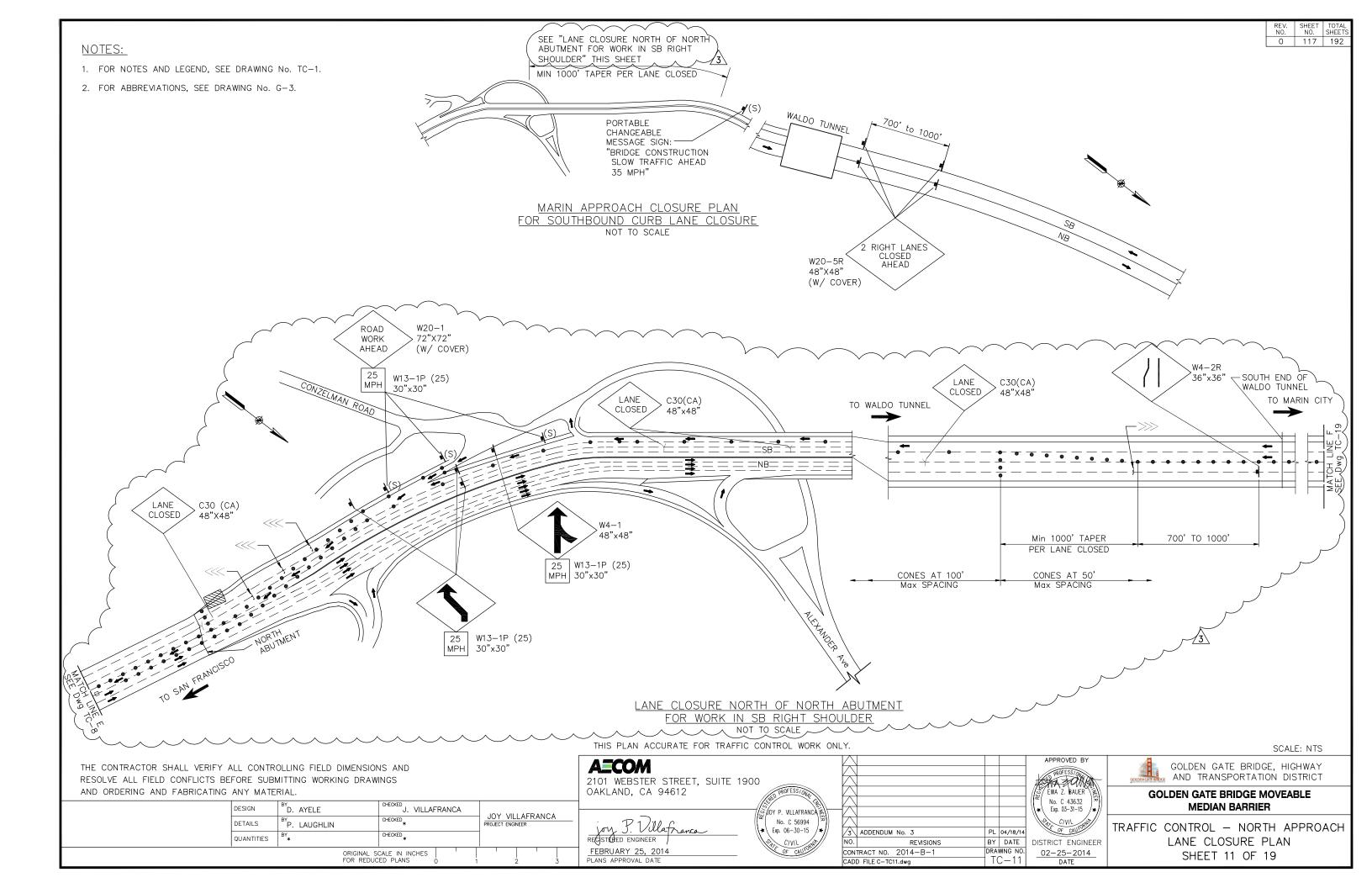


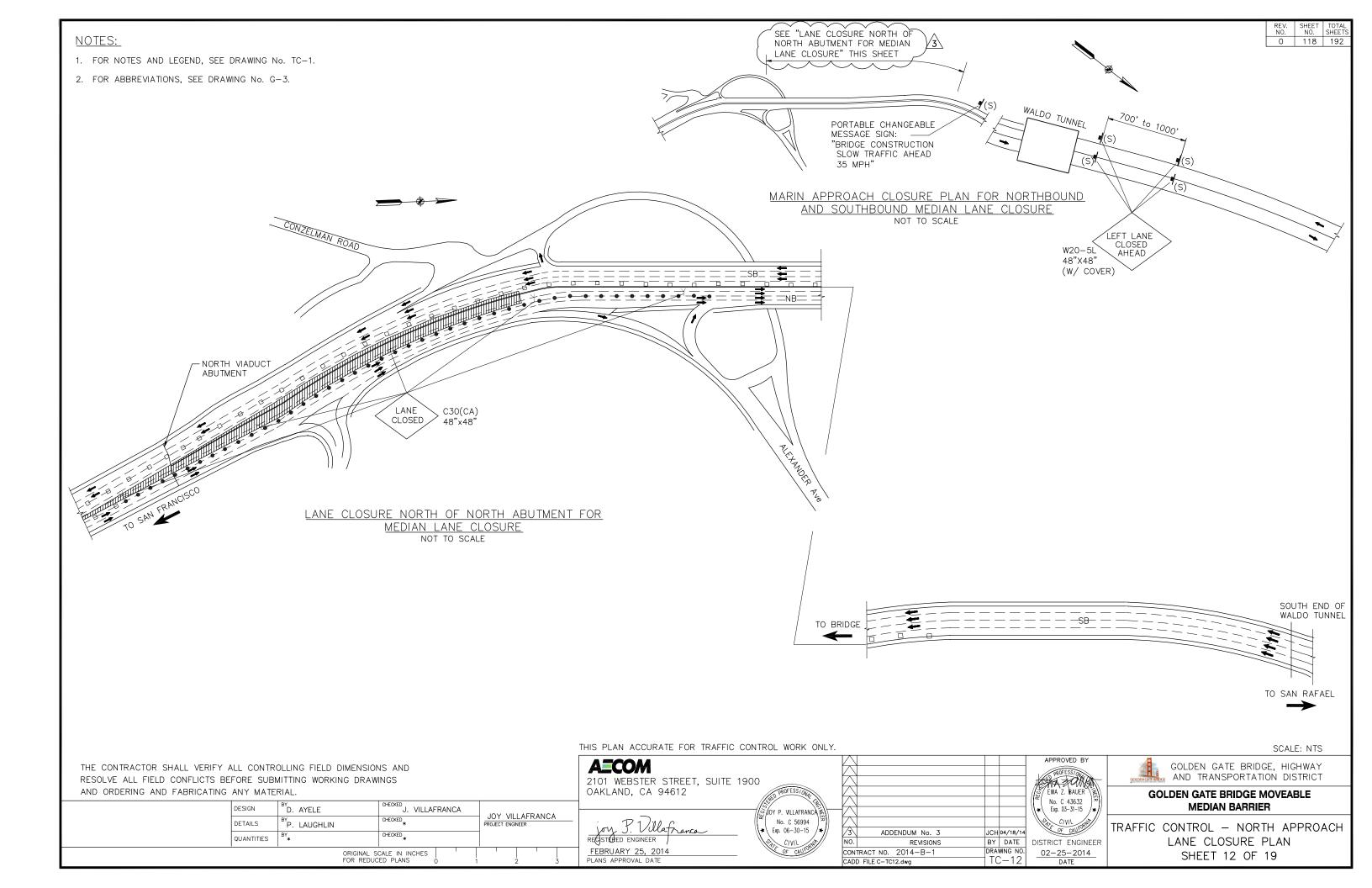


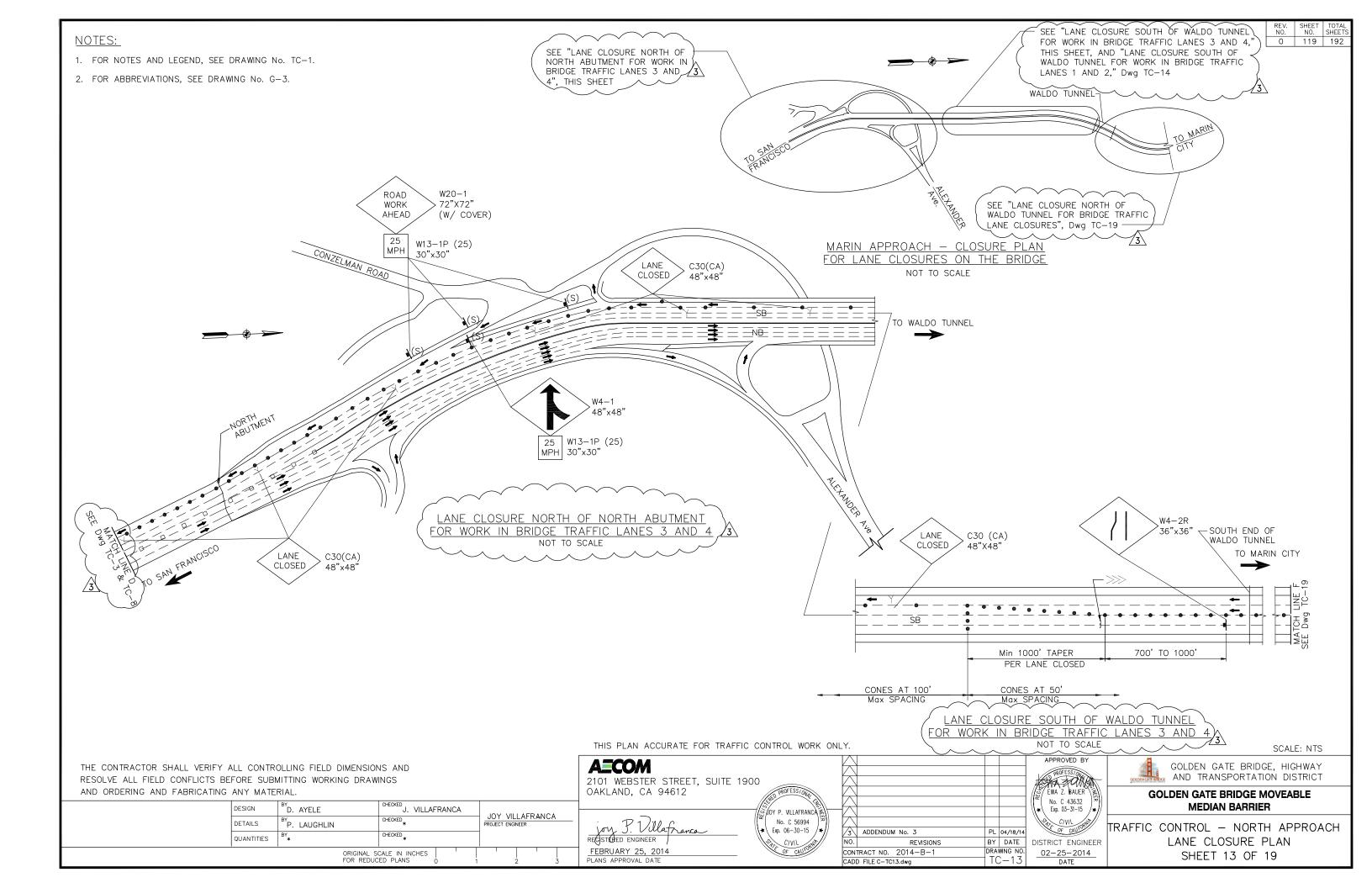


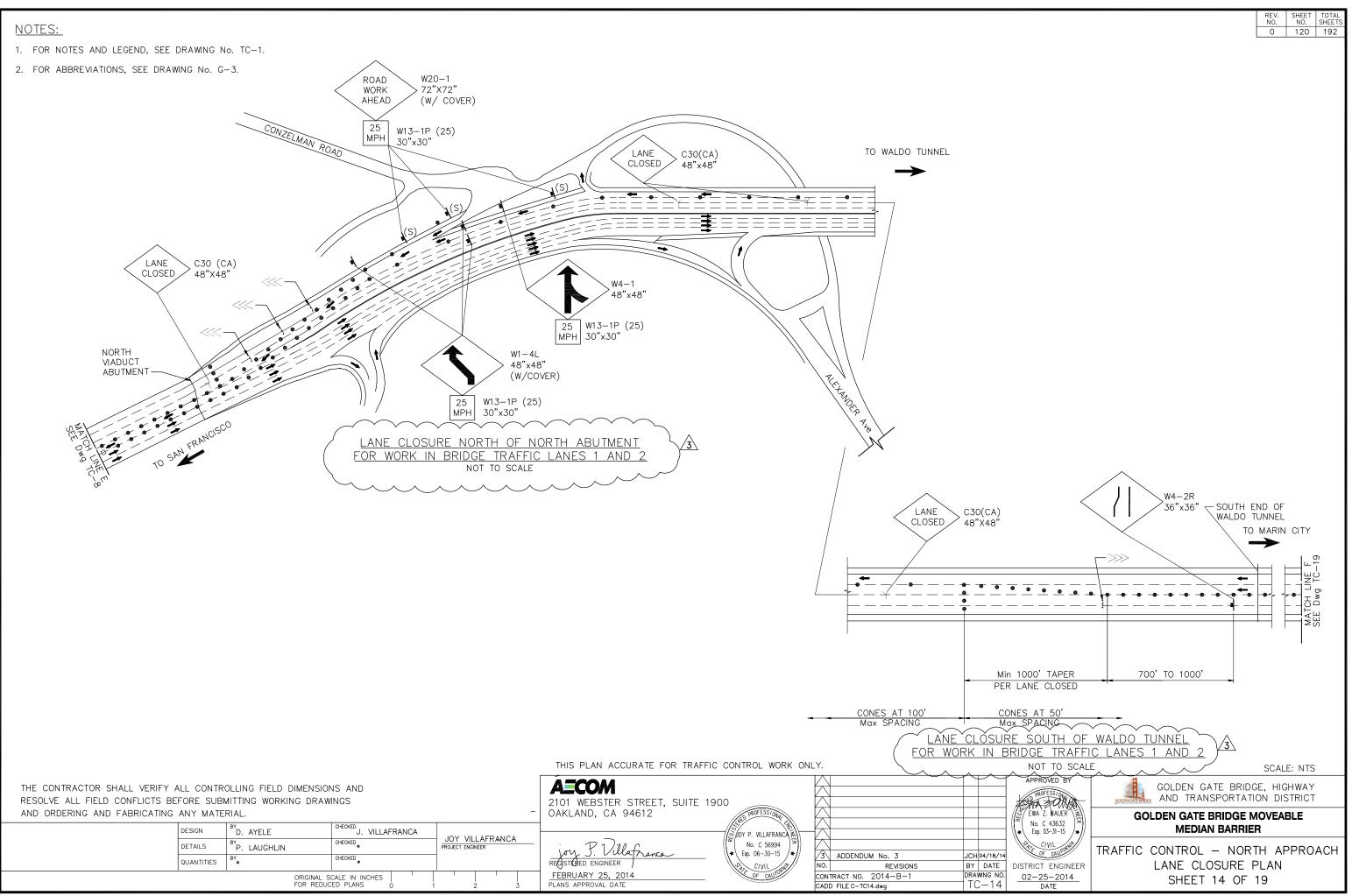








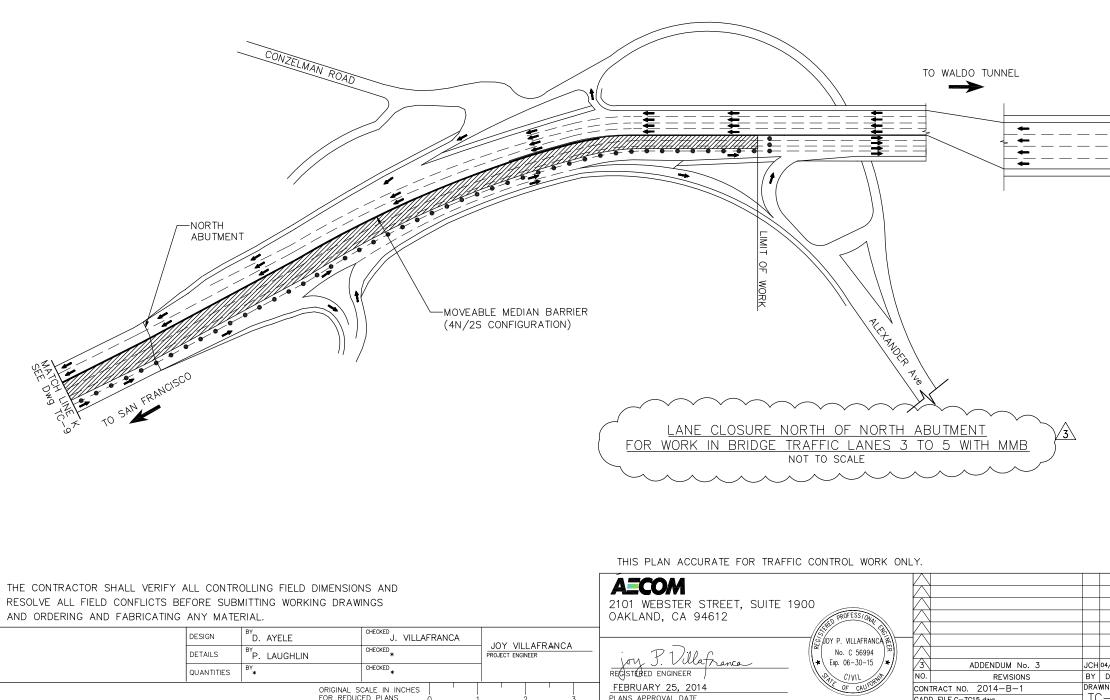




### <u>NOTE:</u>

1. FOR NOTES AND LEGEND, SEE DRAWING No. TC-1.

2. FOR ABBREVIATIONS, SEE DRAWING No. G-3.



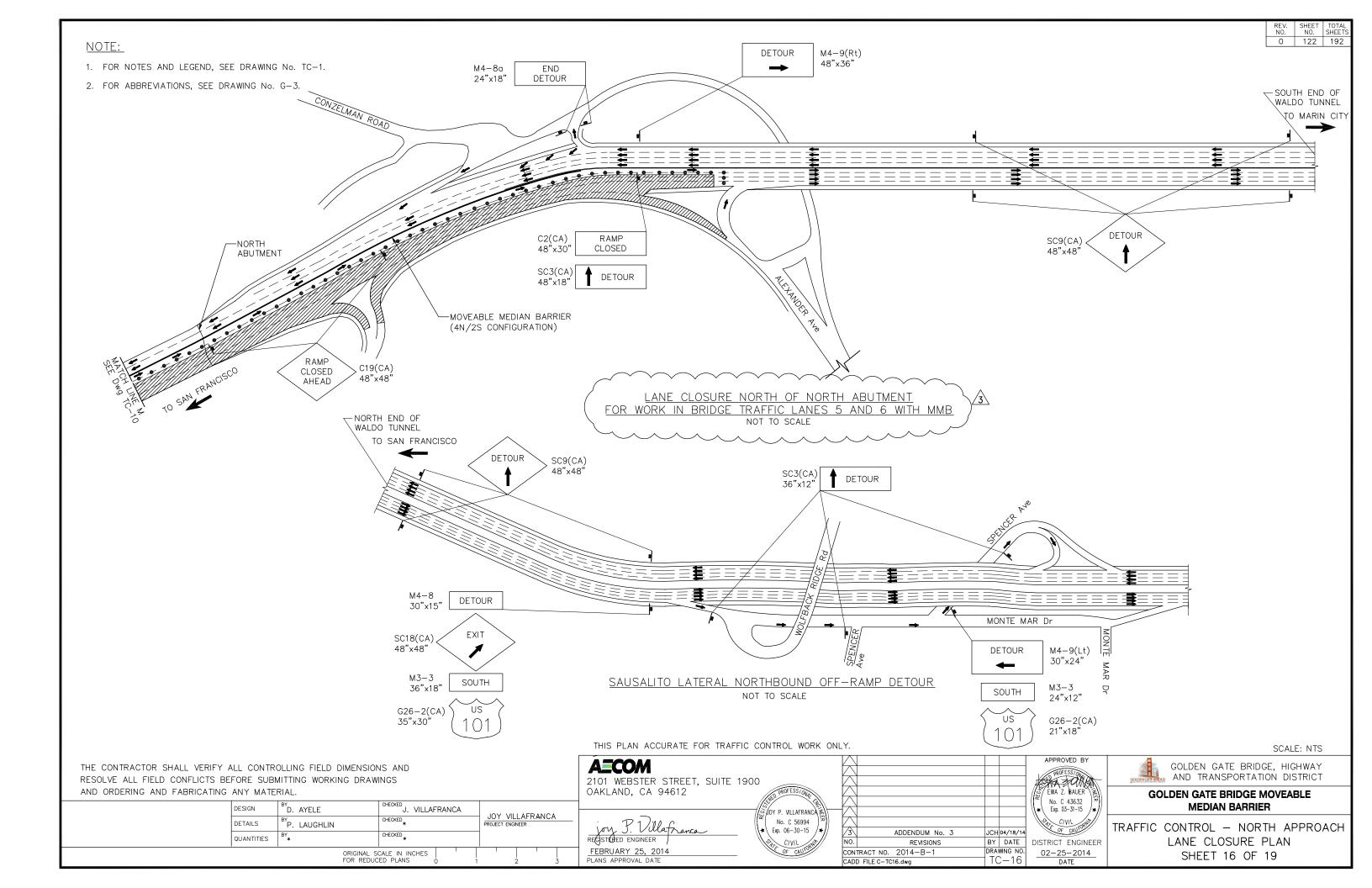
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

FEBRUARY 25, 2014 PLANS APPROVAL DATE

CONTRACT NO. 2014-B-1

CADD FILE C-TC15.dwg

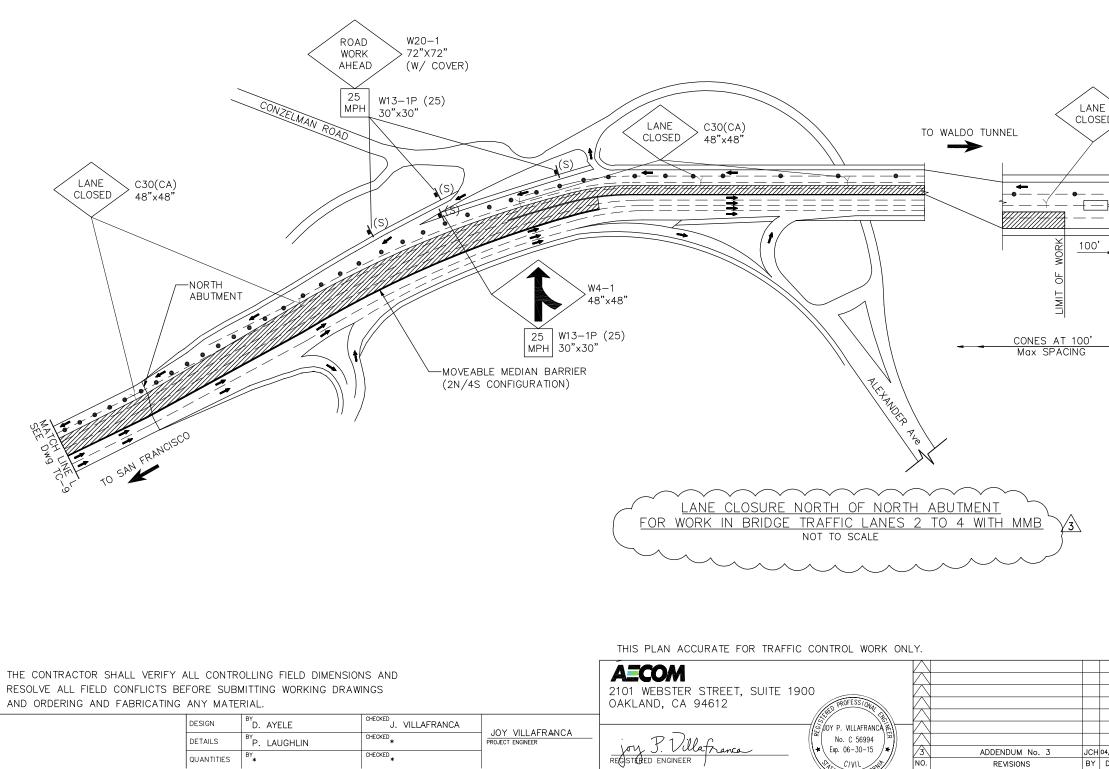
	REV. SHEET TOTAL NO. NO. SHEETS 0 121 192
	SOUTH END OF WALDO TUNNEL TO MARIN CITY
APPROVED BY	SCALE: NTS



### NOTE:

1. FOR NOTES AND LEGEND, SEE DRAWING No. TC-1.

2. FOR ABBREVIATIONS, SEE DRAWING No. G-3.



FEBRUARY 25, 2014 PLANS APPROVAL DATE

CHECKED *

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

QUANTITIES

BY *

¥∖Exp. 06-30-15 /

OF CALLE

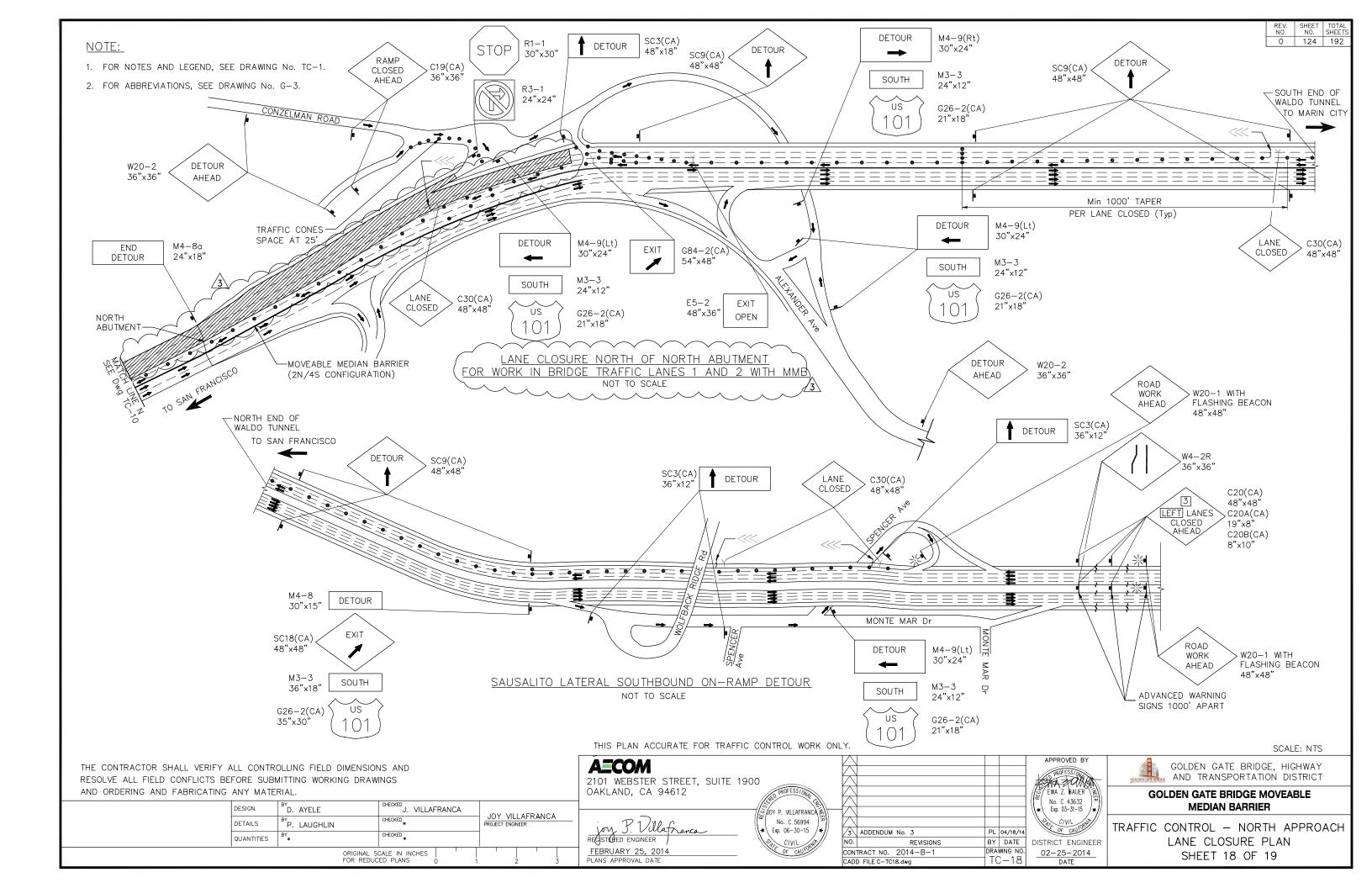
ADDENDUM No. 3

REVISIONS

CONTRACT NO. 2014-B-1

CADD FILE C-TC17.dwg

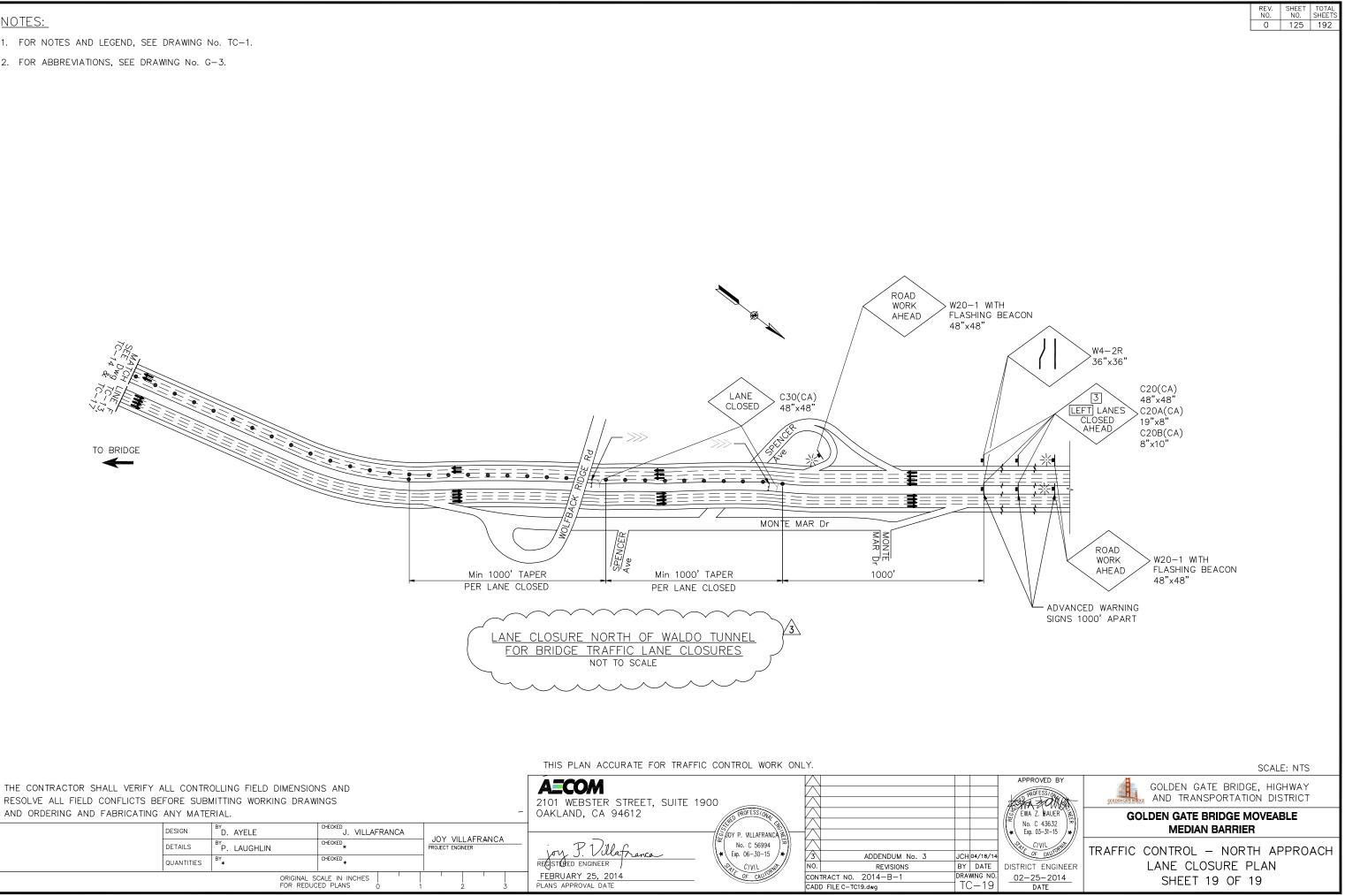
	REV. NO.SHEET NO.TOTAL SHEETS0123192
LANE CLOSED 48"X48"	W4-2R 36"x36" SOUTH END OF WALDO TUNNEL TO MARIN CITY
Min 1000' PER LANE OO' CONES AT IG Max SPAC	CLOSED
7	
APPROVED BY	SCALE: NTS
PROFESSION	GOLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT
x C(y) x C(y) x C(y)	GOLDEN GATE BRIDGE MOVEABLE MEDIAN BARRIER
JCH 04/18/14 BY DATE DRAWING NO. DCAUTION DATE DATE DATE DATE	TRAFFIC CONTROL – NORTH APPROACH LANE CLOSURE PLAN SHEET 17 OF 19
C-17  DATE	



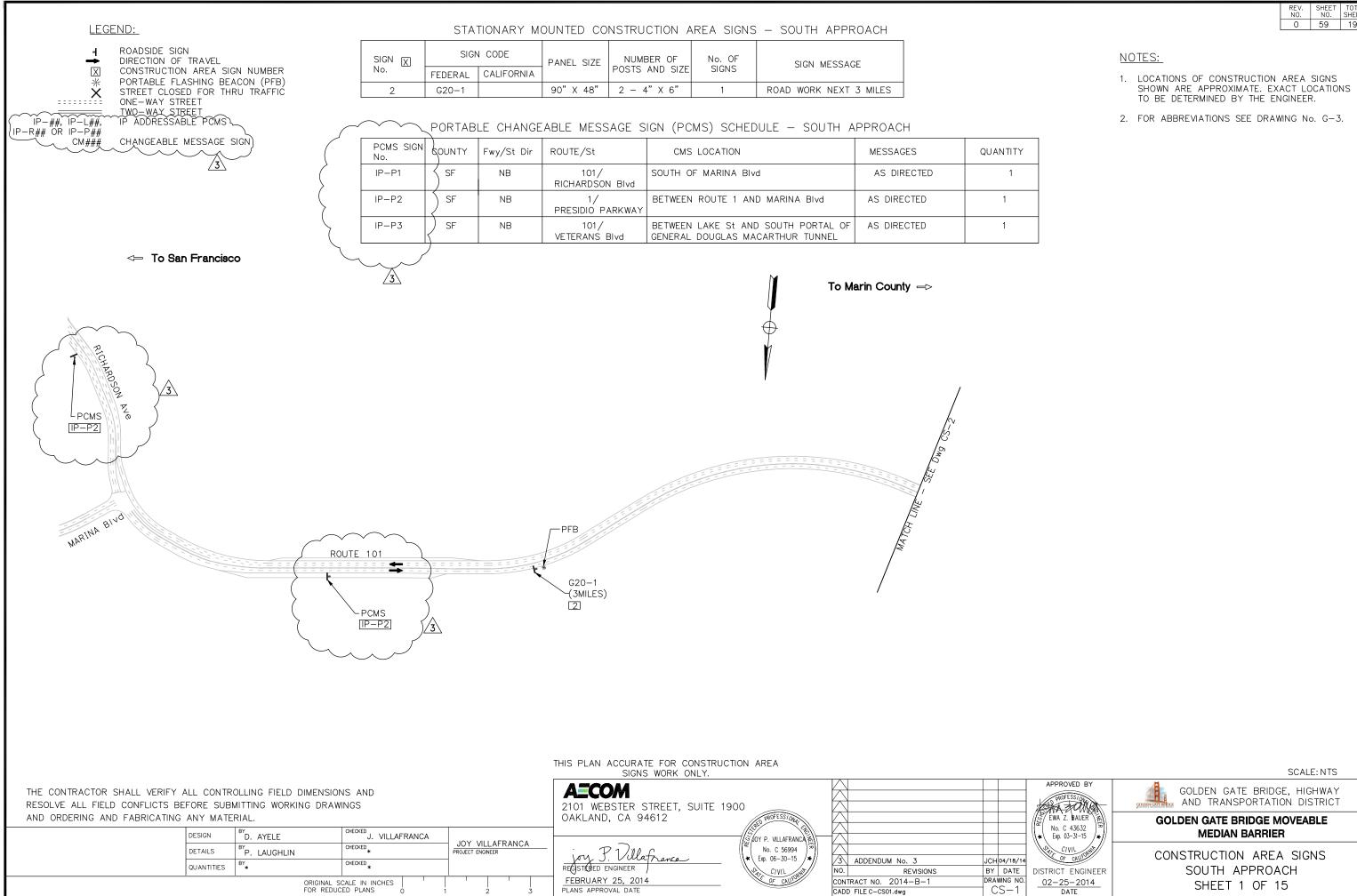


1. FOR NOTES AND LEGEND, SEE DRAWING No. TC-1.

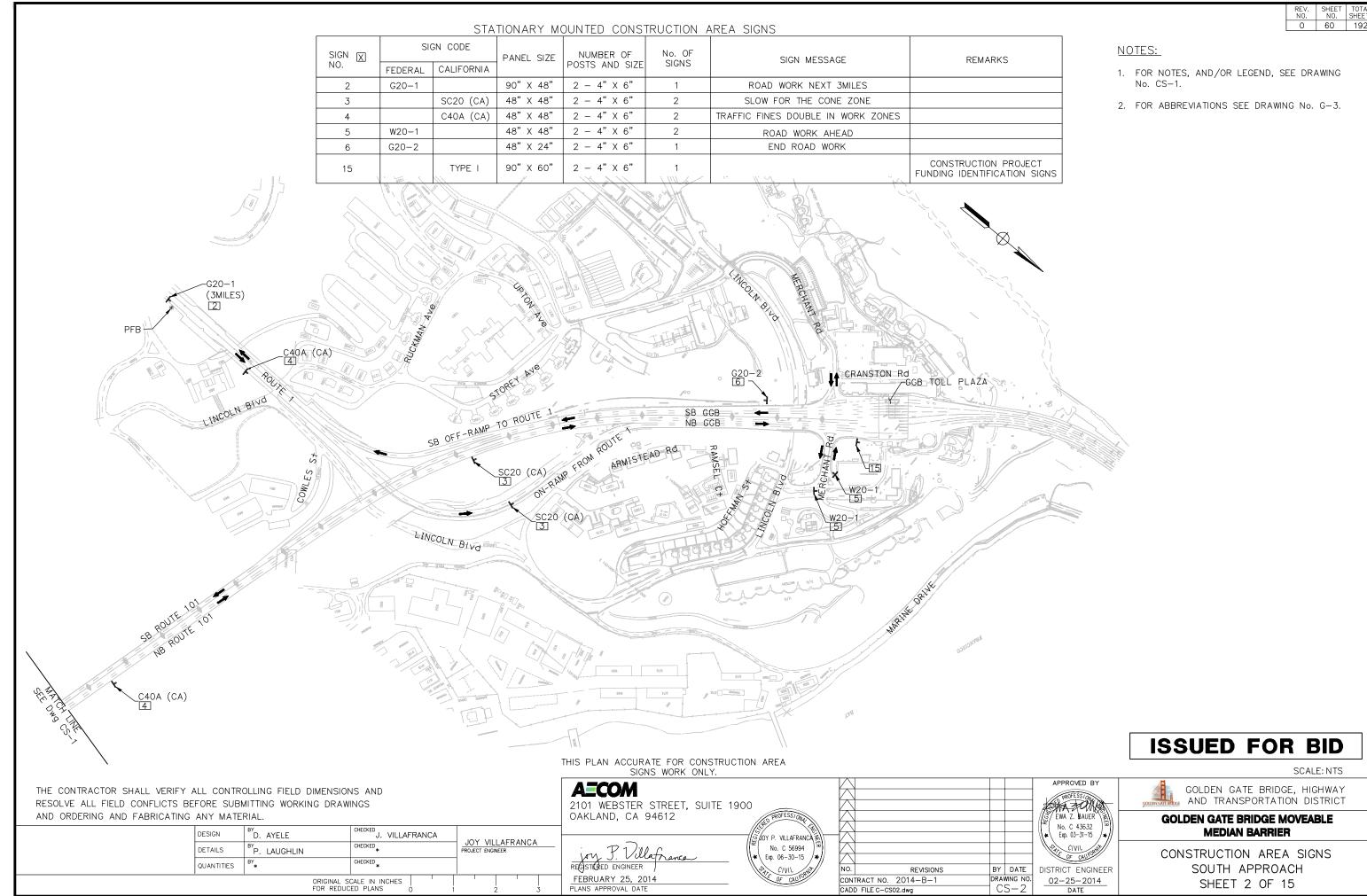
2. FOR ABBREVIATIONS, SEE DRAWING No. G-3.



Attachment B4: Construction Area Signs (Detour Plans) — Short-Term Project



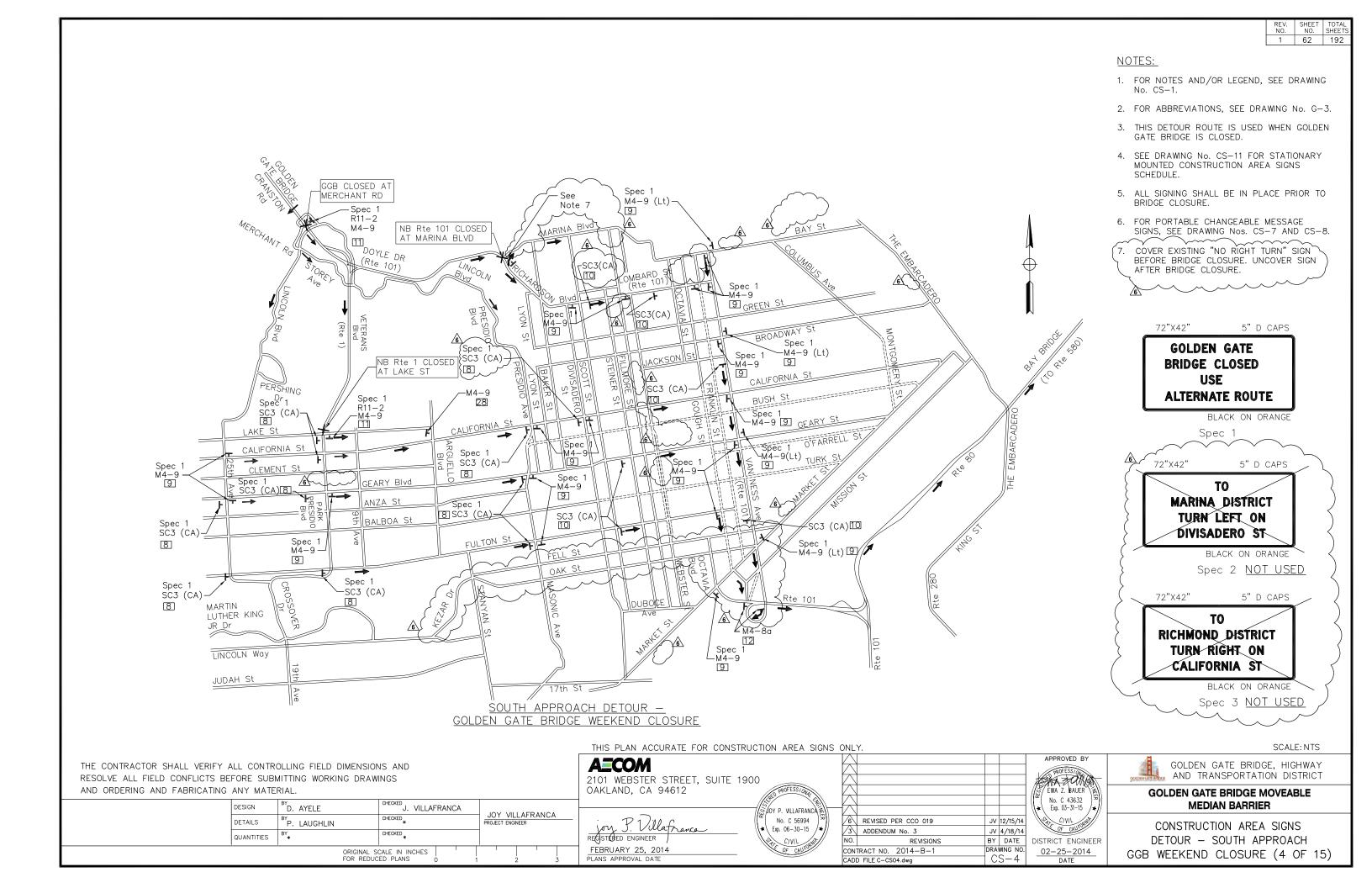
								REV. NO.	SHEET NO.	TOTAL SHEETS
								0	59	192
	NL	OTES	ς.							
	1.	SHC	DWN A	ARE A	PPR0)	KIMATE	E. EX.	AREA ACT LO IGINEEF	SIGNS DCATIO R.	NS
	2.	FOR	R ABB	REVIA	TIONS	SEE	DRAW	ING N	o. G-3	5.
ITY										
1										

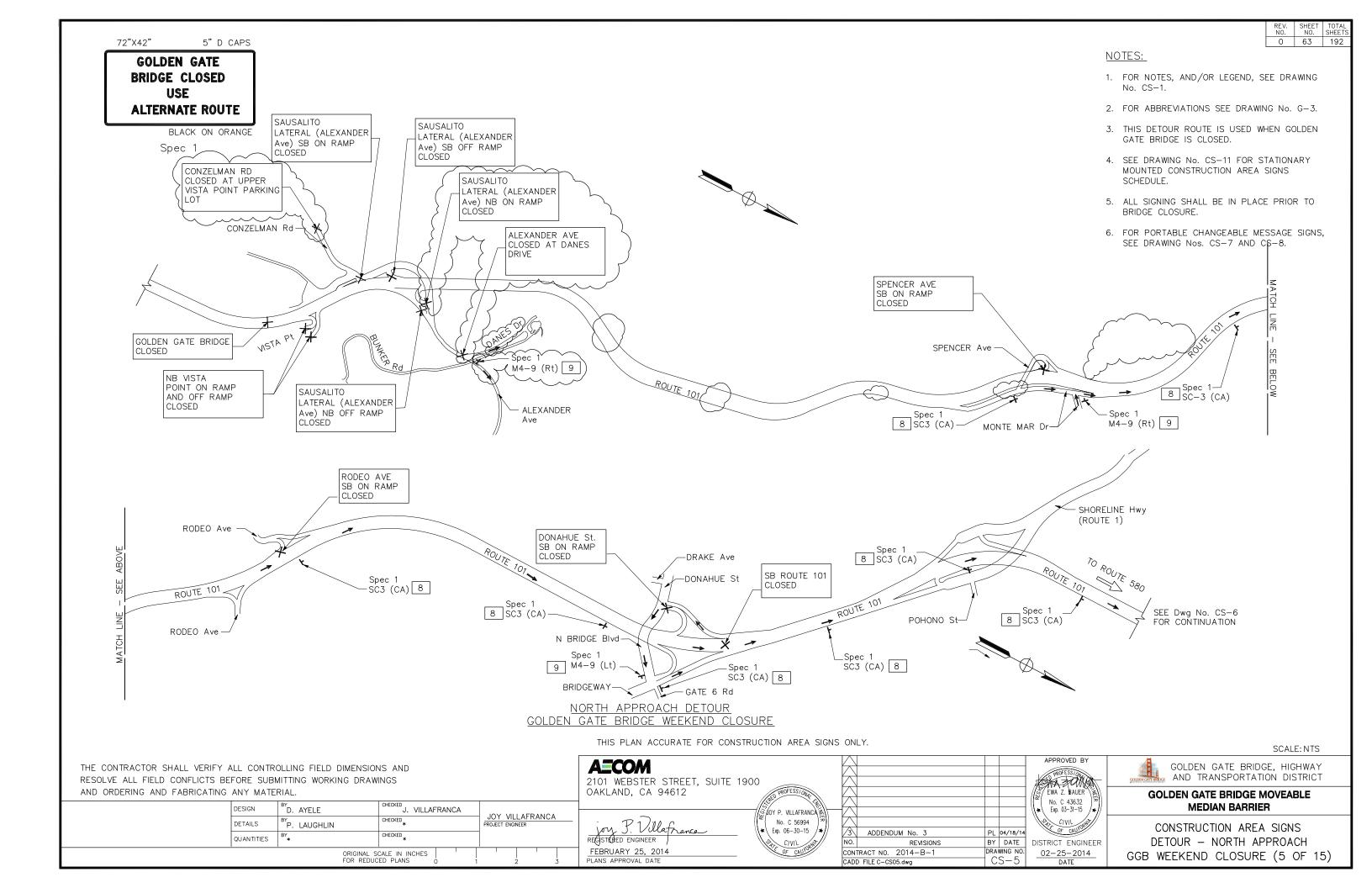


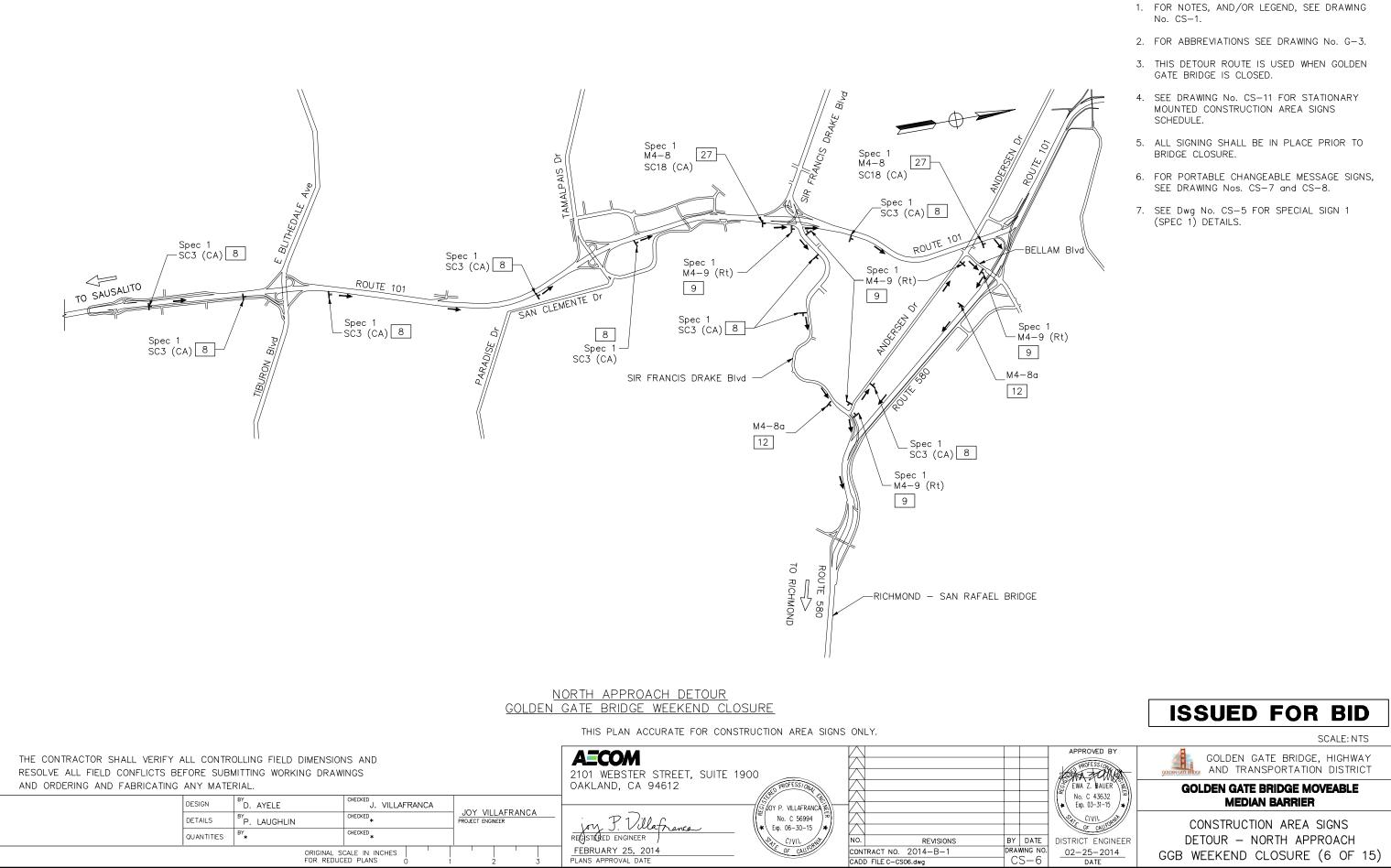
			REV. NO.	SHEET NO.	TOTAL SHEETS
			0	60	192
	NC	)TES:			
	1.	FOR NOTES, AND/OR LEGEND, S No. CS-1.	ee dr <i>i</i>	AWING	
	2.	FOR ABBREVIATIONS SEE DRAWN	IG No.	G-3.	
ROJECT ON SIGNS					
/					



	SIA	MIONARY M	OUNTED CO	ONSTRUCTION A	REA SIGNS	5 — NORTH APPROACH							REV. SHEET NO. NO.
		IGN CODE											0 61
SIGN X NO.	FEDERAL	CALIFORNIA	PANEL SIZE	NUMBER OF POSTS AND SIZE	No. OF SIGNS	SIGN MESSAGE	REMARKS				NOTES		
2	G20-1		90" X 48"	2 - 4" X 6"	1	ROAD WORK NEXT 3 MILES					1. FOR No.	NOTES, AND/OR LEG	END, SEE DRAWING
3		SC20 (CA)	48" X 48"	2 - 4" X 6"	4	SLOW FOR THE CONE ZONE						ABBREVIATIONS SEE	DRAWING No. C-3
4		C40A (CA)	48" X 48"	2 - 4" X 6"	2	TRAFFIC FINES DOUBLE IN WORK ZONES					2. 100	ADDICE VIA HOINS SEE	DRAWING NO. 6-3.
5	W20-1		48" X 48"	2 - 4" X 6"	4	ROAD WORK AHEAD							
6	G20-2		48" X 24" 48" X 48"	$2 - 4" \times 6"$ $2 - 4" \times 6"$	4	END ROAD WORK							
7	W20-1				•	ROAD WORK 2 1/2 MILES	CONSTRUCTION PRO	DJECT					
15		TYPE I	48" X 60"	2 - 4" X 6"	1		FUNDING IDENTIFICATIO	N SIGNS					
				SON						TADIE MECC	AGE SIGN (PCMS) SCHEDULE -		
				CONTELMAN Rd		G20-2 「⑥     SB SAUSALITO							
				-AZ	/	/ [6] SB SAUSALITO _ <u>SC</u> 20 (CA) / LATERAL OFF-RAM	PCMS SIGN P No.	COUNTY	Fwy/St Dir	ROUTE/St	CMS LOCATION	MESSAGES	QUANTITY
	L C	CONZELMAN Rd	-	Ro Wi	20-1	/ 3 / _SC20 (CA)	P4	MRN	SB	101	NEAR MARIN CITY/ SAUSALITO EXIT	AS DIRECTED	1
		WAN Rd				C40(CA)	P5	MRN	SB	101	NEAR SPENCER Ave EXIT	AS DIRECTED	1
_ ^{−GGB}				SB SAUSALITO			(CA)						
			15			4				SC	20 (CA) ]		
S MG						SB	ROUTE 101 / 6	a R	1 o V				
						NB SAUSALITO	ROUTE 101 / 161						
			No.	SC2	20 (CA) LATE	NB SAUSALITO RAL OFF-RAMP					X X		
				3	· · ·	G20-2			~				
		- Mal		$\Sigma$						0			
	0	VIS		NB Y	VISTA		B SAUSALITO ATERAL ON-RAMP		-				
			NB VISTA		NT ON-RAMP		20-1			2			
W		POIN	IT OFF-RAMP		1					1			
						T,	2						
				5		PFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF	2	ics Dr			_ ₩20-1 (2½MILE	s)	
						REAT NOES	2	DANES Dr			₩20-1 (2½MILE	S)	
				5		REFAMILIER PAR		DANES Dr			₩20-1 (2½MILE	S)	
				5		ELEXTRUDER RA		DANES Dr			₩20-1 (2½MILE	S)	
				5		PERTANDER Pre		DANES Dr VKER Rd			₩20-1 (2½MILE	s)	
		MOORF		5		PERTANDER Pre		DANES Dr IKER Rd			₩20-1 (2½MILE	s)	×ø.
		MOORE Rd		5		BUNKER Rd		DANES Dr DANES Rd			₩20-1 (2½MILE	s)	×
		MOORE Rd		5		PERTANDER Pre		DANES Dr			₩20-1 (2½MILE	s)	× ×
		MOORE Ry		5		BUNKER Rd		DANES Dr NKER Rd			₩20-1 (2½MILE	s)	620-17
		MOORE Rd				BUNKER Rd		DANES Dr			W20-1 (2½MILE	S)	G20-1 (3MILES)
		MOORE Rd	EAS			PERTANDER Pre		DANES Dr			₩20-1 (2½MILE		G20-1 (3MILES) [2]
		MOORE Ry	EASI			BUNKER Rd		DANES Dr					(3MILES) 2
		MOORE Rd	ETASI			BUNKER Rd		DANES Dr				S) WALDO TUNNEL	(3MILES)
		MOORE Rd	EAST			BUNKER Rd	BU					WALDO TUNNEL	(3MILES) 2 + + + + + + + + + + + + + + + + + + +
		MOORE Ry	EASI			BUNKER Rd	BU					WALDO TUNNEL NO	(3MILES) 2 ← = = = = = =
		MOORE Rd	EASI			BUNKER Rd	BU					WALDO TUNNEL NO	(3MILES) 2
		MOORE Ry	EAST			BUNKER Rd	BU	DANES Dr DANES Dr JKER Rd				WALDO TUNNEL NO	(3MILES) 2 •••••••••••••••••••••••••••••••••••
		MOORE Rd	E-3-51			BUNKER Rd	BU				WALDO TUNNEL SOUTH PORTAL	WALDO TUNNEL NO WA	(3MILES) 2 ARTH OF ALDO TUNNEL PFB
		MOORE Rd	EAST			BUNKER Rd	BUN				WALDO TUNNEL SOUTH PORTAL	WALDO TUNNEL NO	(3MILES) [2] PRTH OF ALDO TUNNEL PFB
		MOORE Rg	EFAST			BUNKER Rd	BUN BUN STANDAREA				WALDO TUNNEL SOUTH PORTAL	WALDO TUNNEL NO WA	(3MILES) [2] PRTH OF ALDO TUNNEL PFB
TRACTOR SHALL	VERIEY					BUNKER Rd BUNKER Rd THIS PLAN ACCURATE FO	BUN BUN STANDAREA				WALDO TUNNEL SOUTH PORTAL	WALDO TUNNEL ISSUED F	(3MILES) 2 PRTH OF ALDO TUNNEL PFB FOR BID SCALE: NTS
TRACTOR SHALL ALL FIELD CON		LL CONTROLLIN	NG FIELD DIME	NSIONS AND		BUNKER Rd BUNKER Rd RRAY Cir THIS PLAN ACCURATE FO SIGNS WO	DR CONSTRUCTION AREA RK ONLY.				WALDO TUNNEL SOUTH PORTAL		(3MILES) 2 PRTH OF LDO TUNNEL PFB FOR BID SCALE: NTS
	IFLICTS BEF	LL CONTROLLIN FORE SUBMITTI	NG FIELD DIME NG WORKING [	NSIONS AND		BUNKER Rd BUNKER Rd THIS PLAN ACCURATE FO	DR CONSTRUCTION AREA RK ONLY.				WALDO TUNNEL SOUTH PORTAL		(3MILES) 2 PRTH OF ALDO TUNNEL PFB FOR BID SCALE: NTS BRIDGE, HIGHWAY ORTATION DISTRICT
ALL FIELD CON	IFLICTS BEF BRICATING A	LL CONTROLLIN FORE SUBMITTII ANY MATERIAL	NG FIELD DIME NG WORKING [	NSIONS AND		BUNKER Rd BUNKER Rd THIS PLAN ACCURATE FO SIGNS WO AECOM 2101 WEBSTER STREE OAKLAND, CA 94612	DR CONSTRUCTION AREA RK ONLY. ET, SUITE 1900	ALCHAM STORE			WALDO TUNNEL SOUTH PORTAL	WALDO UNVEL NO ISSUED F	(3MILES) 2 PRTH OF ALDO TUNNEL PFB FOR BID SCALE: NTS BRIDGE, HIGHWAY ORTATION DISTRICT IDGE MOVEABLE
ALL FIELD CON	IFLICTS BEF BRICATING A	LL CONTROLLIN FORE SUBMITTII ANY MATERIAL DESIGN ^{BY} D.	NG FIELD DIME NG WORKING E	NSIONS AND DRAWINGS	MUR MUR	BUNKER Rd BUNKER Rd RRAY Cir THIS PLAN ACCURATE FO SIGNS WO AECOM 2101 WEBSTER STREET OAKLAND, CA 94612	DR CONSTRUCTION AREA RK ONLY. ET, SUITE 1900	ALETANO STOLET CHERT			WALDO TUNNEL SOUTH PORTAL	WALDO UNVEL NO AND TRANSPO GOLDEN GATE AND TRANSPO GOLDEN GATE BRI MEDIAN B	(3MILES) 2 PRTH OF ALDO TUNNEL PFB FOR BID SCALE: NTS BRIDGE, HIGHWAY ORTATION DISTRICT DGE MOVEABLE ARRIER
ALL FIELD CON	IFLICTS BEF BRICATING A	LL CONTROLLIN FORE SUBMITTII ANY MATERIAL DESIGN ^{BY} D.	NG FIELD DIME NG WORKING E AYELE LAUGHLIN	NSIONS AND DRAWINGS	MUR MUR	BUNKER Rd BUNKER Rd THIS PLAN ACCURATE FO SIGNS WO ACCOM 2101 WEBSTER STREE OAKLAND, CA 94612	DR CONSTRUCTION AREA RK ONLY. ET, SUITE 1900	ALETANO STOLET CHERT		REVISIONS	WALDO TUNNEL SOUTH PORTAL	WALDO WALDO WALDO WALDO WALDO WA SSUED F AND TRANSPO GOLDEN GATE BAND TRANSPO GOLDEN GATE BRI MEDIAN BL CONSTRUCTION	(3MILES) 2 TOPORTATION DISTRICT CORTATION DISTRICT DGE MOVEABLE ARRIER AREA SIGNS
ALL FIELD CON	IFLICTS BEF BRICATING A	LL CONTROLLIN FORE SUBMITTI ANY MATERIAL. DESIGN ^{BY} D. DETAILS ^{BY} P.	NG FIELD DIME NG WORKING E AYELE LAUGHLIN	NSIONS AND DRAWINGS	MUR MUR	BUNKER Rd BUNKER Rd RRAY Cir THIS PLAN ACCURATE FO SIGNS WO AECOM 2101 WEBSTER STREE OAKLAND, CA 94612 Y VILLAFRANCA T ENGINEER	DR CONSTRUCTION AREA RK ONLY. ET, SUITE 1900	ALETANO STOLET CHERT			WALDO TUNNEL SOUTH PORTAL	WALDO UNVEL NO AND TRANSPO GOLDEN GATE AND TRANSPO GOLDEN GATE BRI MEDIAN B	(3MILES) [2] PRTH OF ALDO TUNNEL PFB FOR BID SCALE: NTS SCALE: NTS BRIDGE, HIGHWAY ORTATION DISTRICT IDGE MOVEABLE AREA SIGNS PROACH

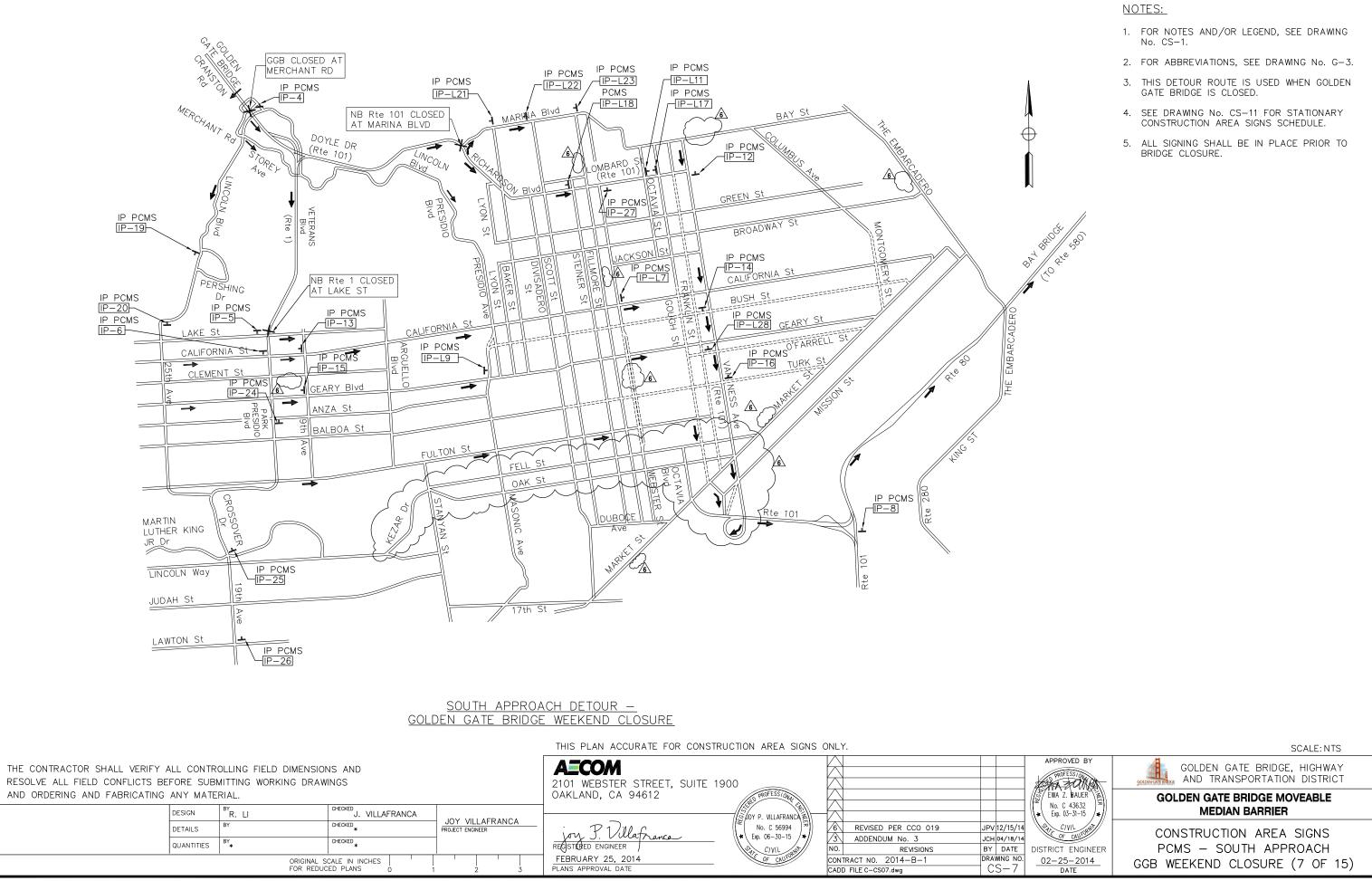




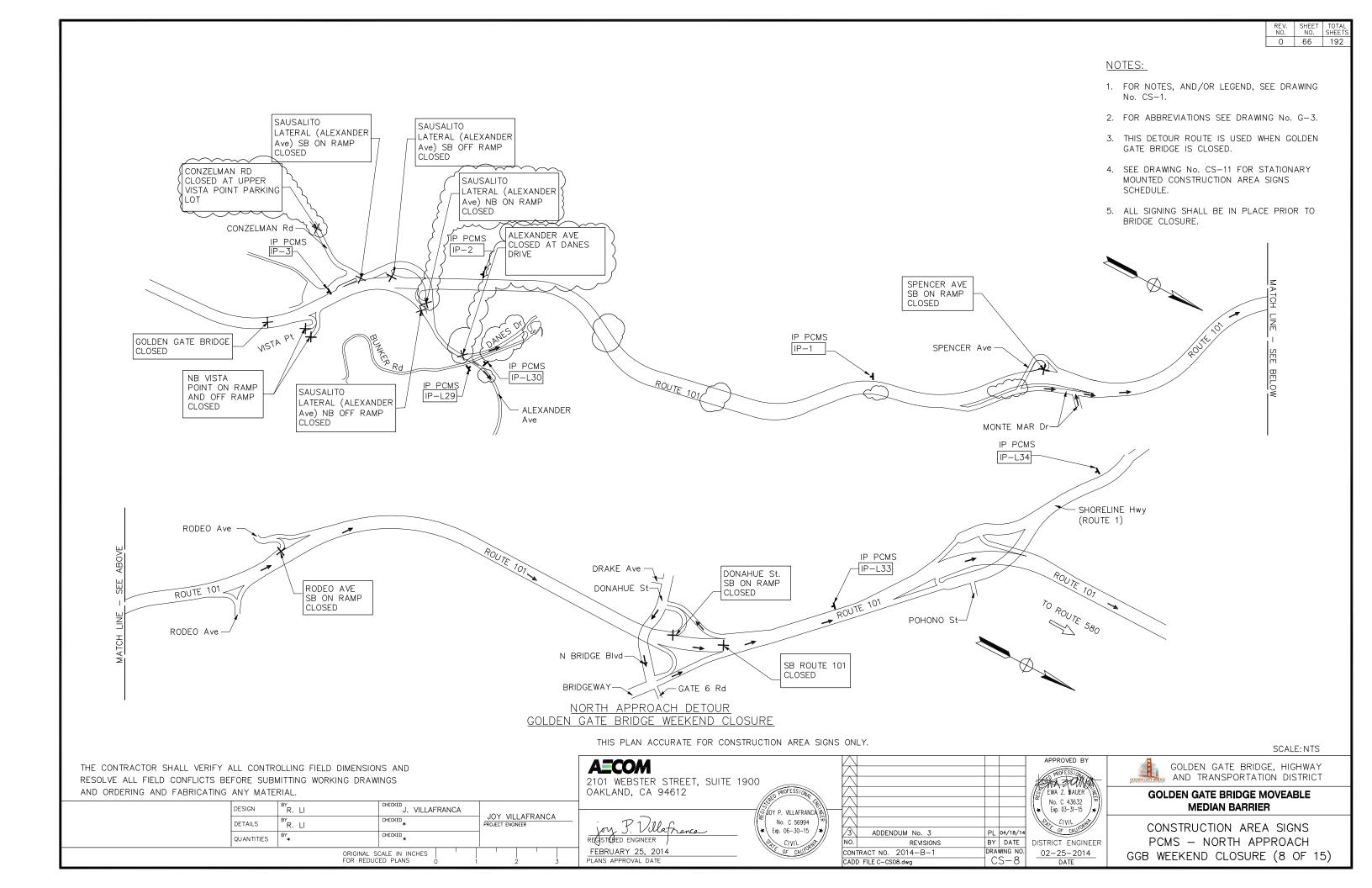


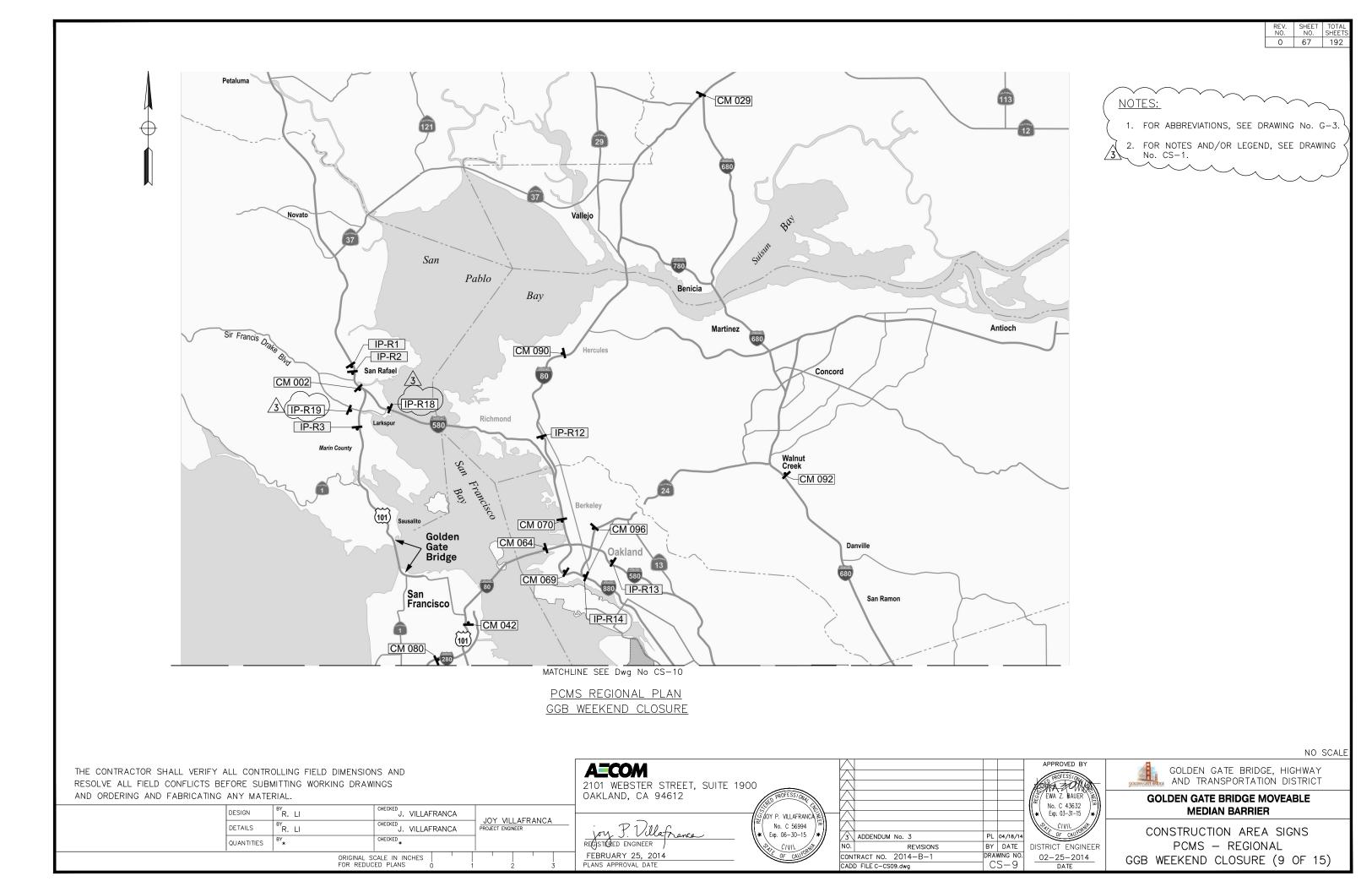
		REV.	SHEET	τοται
		NO. 0	NO. 64	TOTAL SHEETS 192
N	OTES:			
1.	FOR NOTES, AND/OR LEGEND, SI No. CS-1.	EE DRA	WING	
2	. FOR ABBREVIATIONS SEE DRAWN	IG No.	G-3.	
3.	. THIS DETOUR ROUTE IS USED W GATE BRIDGE IS CLOSED.	HEN GO	DLDEN	
4.	. SEE DRAWING No. CS-11 FOR S MOUNTED CONSTRUCTION AREA S SCHEDULE.		ARY	
5.	. ALL SIGNING SHALL BE IN PLACE BRIDGE CLOSURE.	E PRIO	R TO	
6	. FOR PORTABLE CHANGEABLE ME SEE DRAWING Nos. CS-7 and C		SIGNS	,
7.	. SEE Dwg No. CS-5 FOR SPECIAI (SPEC 1) DETAILS.	_ SIGN	1	
//				

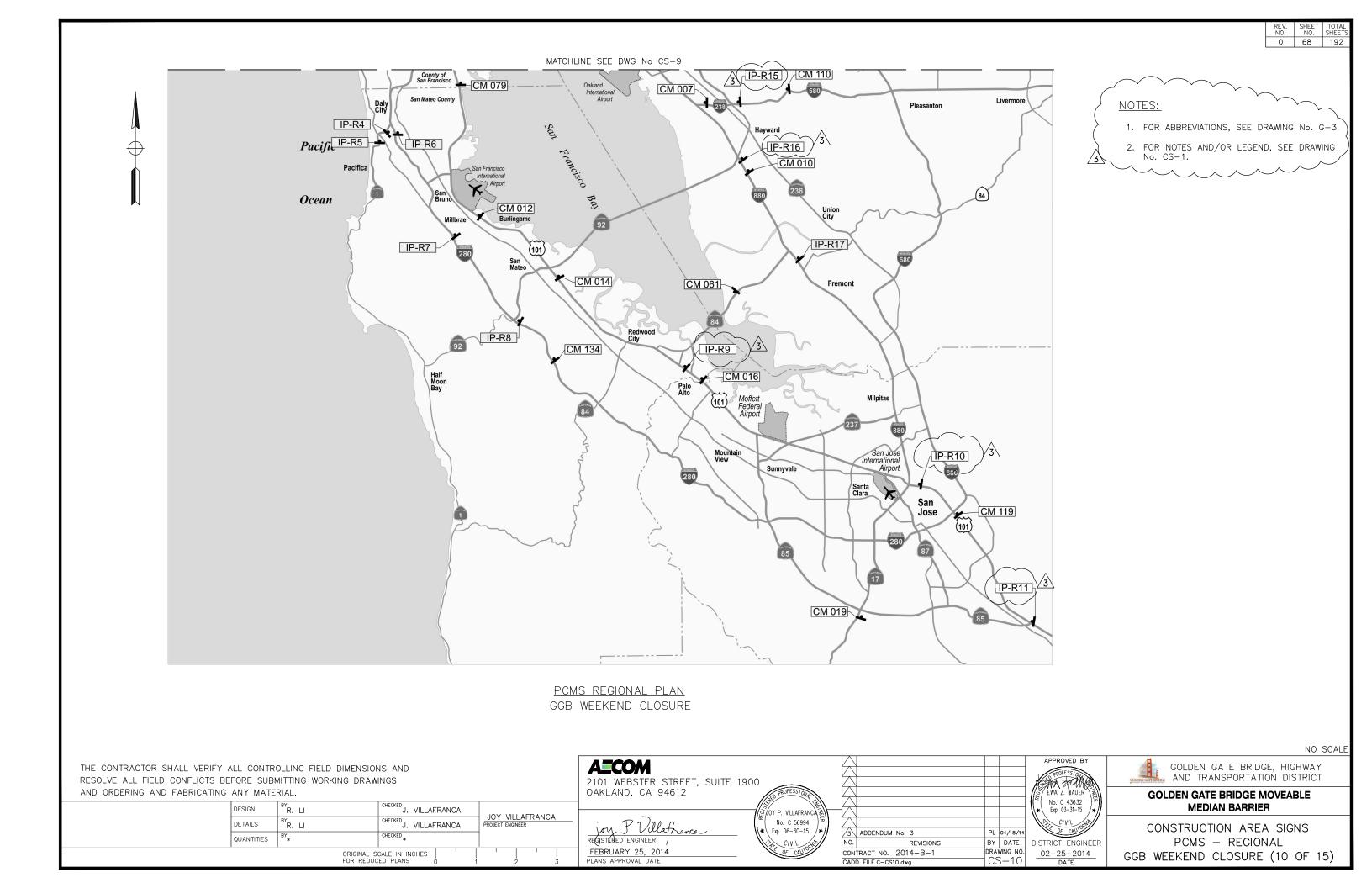




			REV. NO.	SHEET NO.	TOTAL SHEETS					
			1	65	192					
	NC	DTES:								
	<ol> <li>FOR NOTES AND/OR LEGEND, SEE DRAWN No. CS-1.</li> </ol>									
	2.	FOR ABBREVIATIONS, SEE DRA	WING I	No. G-	3.					
	3.	THIS DETOUR ROUTE IS USED GATE BRIDGE IS CLOSED.	WHEN	GOLDE	ΪN					
	4.	SEE DRAWING No. CS-11 FOR CONSTRUCTION AREA SIGNS S								
	5.	ALL SIGNING SHALL BE IN PLA BRIDGE CLOSURE.	ACE PF	RIOR TO	D					
<u> </u>										







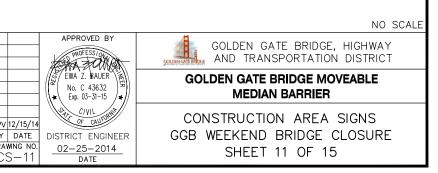
## SOUTH APPROACH DETOUR - STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

DRAWING No.	SIGN No.		SIGN CODE		PANEL SIZE	NUMBER OF	No. OF		]
		FEDERAL	CALIFORNIA	SPECIAL		POST & SIZE	SIGNS	SIGN MESSAGE	
			SC3 (CA)		48"X18"	2-4"X6"	(10)	DETOUR WITH ARROW	
	8			SPEC 1	72"X42"	6		GOLDEN GATE BRIDGE CLOSED USE ALTERNATE ROUTE	
	9			SPEC 1	72"X42"			GOLDEN GATE BRIDGE CLOSED USE ALTERNATE ROUTE	
		M4-9			48"X36"	2-4"X6"	( 21 )	DETOUR WITH ARROW	
	10		SC3 (CA)		48"X18"	2-4"X6"	کر 6 ک	DETOUR WITH ARROW	
	11			SPEC 1	72"X42"		2	GOLDEN GATE BRIDGE CLOSED USE ALTERNATE ROUTE	
		M4-9			48"X36"	2-4"X6"	2	DETOUR WITH ARROW	
		R11-2			48"X36"	2-4"X6"	2	ROAD CLOSED	
CS-4	12	M4-8a			24"X18"	2-4"X6"	2	END DETOUR	
	(-13		SC3 (CA)		48"X18"	2-4"X6"		DETOUR WITH ARROW	NOT USED
	{			SPEC 1	72"X42"		1	GOLDEN GATE BRIDGE CLOSED USE ALTERNATE ROUTE	NOT USED
	<u>}</u>			SPEC 2	72"X42"		11	TO MARINA DISTRICT TURN LEFT ON DIVISADERO ST	NOT USED
	( -14		SC3 (CA)		48"X18"	2-4"X6"	1	DETOUR WITH ARROW	<u>not used</u> ·
	{			SPEC 1	<u>72"X42"</u>		1	GOLDEN GATE BRIDGE CLOSED USE ALTERNATE ROUTE	NOT USED
				SPEC 3	72"X42"		1	TO RICHMOND DISTRICT TURN RIGHT ON CALIFORNIA ST	NOT USED
	28	M4-9			48"X36"	2-4"X6"		DETOUR WITH ARROW	J

# NORTH APPROACH DETOUR - STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

DRAWING No.	SIGN No.		SIGN CODE		PANEL SIZE	NUMBER OF	No. OF	SIGN MESSAGE	
		FEDERAL	CALIFORNIA	SPECIAL		POST & SIZE	SIGNS	SIGIN MESSAGE	
			SC3 (CA)		48"X18"	2-4"X6"	15	DETOUR WITH ARROW	
	8			SPEC 1	72"X42"		15	GOLDEN GATE BRIDGE CLOSED USE ALTERNATE ROUTE	
	9			SPEC 1	72"X42"		9	GOLDEN GATE BRIDGE CLOSED USE ALTERNATE ROUTE	
CS-5, CS-6		M4-9			48"X36"	2-4"X6"	9	DETOUR WITH ARROW	
	10		SC3 (CA)		48"X18"	2-4"X6"	1	DETOUR WITH ARROW	
	27			SPEC 1	72"X42"		3	GOLDEN GATE BRIDGE CLOSED USE ALTERNATE ROUTE	
		M4-8			30"X15"	2-4"X6"	3	END DETOUR	
			SC18 (CA)		48"X48"	2-4"X6"	3	EXIT WITH ARROW	
CS-6	12	M4-8a			24"X18"	2-4"X6"	1	END DETOUR	

THE CONTRACTOR SHALL VERIFY AL RESOLVE ALL FIELD CONFLICTS BEF AND ORDERING AND FABRICATING A	ORE SUB	MITTING WORKING DRAW			AECOM 2101 WEBSTER STREET, SUITE 1900 OAKLAND, CA 94612	RD PROFESS/DIA			
( 	DESIGN DETAILS QUANTITIES	BY D. AYELE BY P. LAUGHLIN BY	CHECKED J. VILLAFRANCA CHECKED J. VILLAFRANCA CHECKED *	JOY VILLAFRANCA PROJECT ENGINEER	joy P. Villafranca	JOY P. VILLAFRANCA No. C 56994 Exp. 06-30-15 ★	6 NO.	REVISED PER CCO 019 REVISIONS	JPV BY
		ORIGINAL S FOR REDUC	CALE IN INCHES		FEBRUARY 25, 2014			RACT NO. 2014-B-1 FILE C-CS11.dwg	



REV.<br/>NO.SHEET<br/>NO.TOTAL<br/>SHEETS169192



# LOCAL PORTABLE CHANGEABLE MESSAGE SIGNS (IP PCMS) SCHEDULE

					LOCAL PORTABLE CHANGEABL	<u>e message sign</u>	ISI (IP PUN	<u>IS) SCHED</u>	<u>ULE</u>			
	3					TWO WEEKS PRIOR TO C	LOSURE IP PCMS	MESSAGE	DURING	CLOSURE READIN	G	]
DRAWING No.		COUNTY	FWY/ST	ROUTE/ST	IP PCMS LOCATION	1ST FLASH	2ND FLASH	3RD FLASH	1ST FLASH	2ND FLASH	3RD FLASH	QUANTITY
CS-8	No.	MRN	DÍR SB	101	NORTH OF WALDO TUNNEL	GOLDEN GATE BR CLOSURE	FRI _ PM THRU MON _ AM	EXPECT DELAYS				1
CS-8	IP-2 <	MRN	SB	101	NORTH OF SAUSALITO EXIT	GOLDEN GATE BR CLOSURE		EXPECT DELAYS				1
CS-8	IP-3	MRN	SB	101	SOUTH OF SAUSALITO EXIT	GOLDEN GATE BR CLOSURE MONTH XX-XX		EXPECT DELAYS				1
CS-7	IP-4	SF	SB	101	SOUTH OF GGB TOLL PLAZA	GOLDEN GATE BR CLOSURE MONTH XX-XX		EXPECT DELAYS				1
CS-7	IP-5	SF	SB	1	NORTH OF LAKE ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-6 <	SF	SB	1	NORTH OF CALIFORNIA ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-L7	SF	EB	CALIFORNIA ST	EAST OF WEBSTER ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-8	SF	NB	101	SOUTH OF 101/80 INTERCHANGE	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-L9	SF	EB	GEARY BLVD	WEST OF MASONIC	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-L11	SF	SB	LOMBARD ST	EAST OF OCTAVIA	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-12	SF	NB	VAN NESS AVE	JUST SOUTH OF LOMBARD ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-13	SF	WB	CALIFORNIA ST	WEST OF 9TH AVE	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-14	SF	SB	VAN NESS AVE	JUST NORTH OF BUSH ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-15 <	SF	WB	GEARY BLVD	WEST OF 9TH AVE	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-16	SF	NB	VAN NESS AVE	JUST NORTH OF TURK ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-L17	SF	NB	LOMBARD ST	WEST OF GOUGH	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-L18	SF	NB	LOMBARD ST	JUST NORTH OF STEINER ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-19	SF	SB	LINCOLN BLVD	JUST SOUTH OF PERSHING DR	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7	IP-20	SF	NB	25TH AVE	JUST NORTH OF LAKE ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS AND RESOLVE ALL FIELD CONFLICTS BEFORE SUBMITTING WORKING DRAWINGS AND ORDERING AND FABRICATING ANY MATERIAL.

9	ANT MATE	NIAL.		
	DESIGN	^{by} R. LI	J. VILLAFRANCA	JOY VILLAFRANCA
	DETAILS	^{by} R. LI	J. VILLAFRANCA	PROJECT ENGINEER
	QUANTITIES	BY *	CHECKED *	
		ORIGINAL S FOR REDUC	CALE IN INCHES	

AECOM		
2101 WEBSTER STREET, SUITE 1900		
OAKLAND, CA 94612	$\wedge$	
(Story P. VILLAFRANCA RA		
Log J. Villatranca (* Exp. 06-30-15 /*/	3 ADDENDUM No. 3	JCH 04/1
	NO. REVISIONS	BY DA
	CONTRACT NO. 2014-B-1	DRAWING
PLANS APPROVAL DATE	CADD FILE C-CS12.dwg	CS-



REV.<br/>NO.SHEET<br/>NO.TOTAL<br/>SHEETS070192

				LOCAL PORTABLE CHANGE	ABLE MESSAGE	SIGNS	PCMS))SC	HFDUI F			
^											_
					TWO WEEKS PRIOR TO CLOSURE IP PCMS MESSAGE			DURING CLOSURE READING			
DRAWING No.	COUNTY	FWY/ST DIR	ROUTE/ST	( IP PCMS LOCATION	1ST FLASH	2ND FLASH	3RD FLASH	1ST FLASH	2ND FLASH	3RD FLASH	QUANTITY
CS-7 IP-L21 <	SF	WB	MARINA BLVD	JUST EAST OF BAKER ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS				1
CS-7 IP-L22	SF	WB	MARINA BLVD	JUST EAST OF SCOTT ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS				1
CS-7 IP-L23	SF	WB	MARINA BLVD	JUST EAST OF FILMORE ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS				1
CS-7 IP-24	SF	NB	1	JUST SOUTH OF ANZA ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS				1
CS-7 IP-25	SF	NB	19TH AVE	NORTH OF MARTIN LUTHER KING DR	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7 IP-26	SF	NB	19TH AVE	NORTH OF LAWTON ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7 IP-27	SF	NB	WEBSTER ST	SOUTH OF LOMBARD ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-7 IP-L28	SF	NB	FRANKLIN ST	JUST NORTH OF O'FARRELL ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE ALT ROUTE	EXPECT DELAYS	1
CS-8 IP-L29	MRN	NB	BUNKER RD	SOUTH OF ALEXANDER AVE	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE NB 101 FOR ALT ROUTE	EXPECT DELAYS	1
CS-8 IP-L30 4	MRN	WB	ALEXANDER AVE	EAST OF BUNKER RD	GOLDEN GATE BR CLOSURE	FRI _ PM THRU	EXPECT DELAYS	GOLDEN GATE BR CLOSED	USE NB 101 FOR	EXPECT DELAYS	1
	MRN	SB	101	SPENCER AVE EXIT	GOLDEN GATE BR CLOSURE MONTH XX-XX		EXPECT DELAYS	COLDEN CATE BR CLOSED	ALL TRAFFIC MUST	EXPECT DELAYS	
		SB		NORTH OF RODEO AVE	GOLDEN GATE BR CLOSURE	FRI _ PM_THRU	EXPECT DELAYS	COLDEN CATE BR CLOSED	LAST EXIT AT SPENCER /USE ALT ROUTE	EXPECT DELAYS	1
CS-8 IP-L33	MRN	SB	101	NORTH OF MARIN CITY/SAUSALITO	GOLDEN GATE BR CLOSURE MONTH XX-XX	(	EXPECT DELAYS	GOLDEN GATE BR CLOSED	LAST EXIT AT MARIN CITY /USE ALT ROUTE	EXPECT DELAYS	
CS-8 IP-L34	MRN	SB	1	NORTH OF ROUTE 101/1 INTERCHANGE	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	EXPECT DELAYS	GOLDEN GATE BR CLOSED	LAST EXIT AT MARIN CITY /USE ALT ROUTE	EXPECT DELAYS	1

 $\frown$ 

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS AND
RESOLVE ALL FIELD CONFLICTS BEFORE SUBMITTING WORKING DRAWINGS
AND ORDERING AND FABRICATING ANY MATERIAL.

DESIGN

DETAILS

QUANTITIES

R. LI

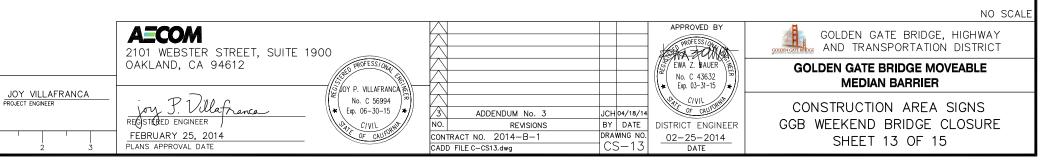
R. LI

BY * J. VILLAFRANCA

CHECKED J. VILLAFRANCA

CHECKED *

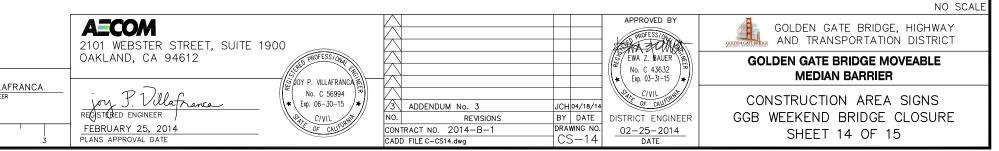
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



REV.<br/>NO.SHEET<br/>NO.TOTAL<br/>SHEETS071192

3				REGIONAL PORTABLE CHANGEAN	TWO WEEKS PRIOR	TO CLOSURE	DURING CLOSURE	READING	
RAWING No. (IP PCMS	COUNTY	FWY/ST DIR	ROUTE/ST	IP PCMS LOCATION	1ST FLASH	2ND FLASH	1ST FLASH	2ND FLASH	QUANTITY
CS-9 IP-R1	MRN	SB	101	1 MILE NORTH OF 101/580 JUNCTION	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 BAY BR TO SF	1
CS-9 IP-R2	MRN	SB	101	1/2 MILE NORTH OF 101/580 JUNCTION	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 BAY BR TO SF	1
CS-9 IP-R3	MRN	SB	101	JUST NORTH OF TIBURON BLVD/EAST BLITHEDALE AVE	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 BAY BR TO SF	1
CS-10 IP-R4 5	) SM	NB	1	JUST NORTH OF CLARINADA AVE	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 BAY BR TO MARIN	1
CS-10 IP-R5	) SM	NB	1	1/2 MILE SOUTH OF GATEWAY DR UNDERCROSSING	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 BAY BR TO MARIN	1
CS-10 IP-R6	SM	NB	280	500' JUST SOUTH OF SERRAMONTE BLVD	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 BAY BR TO MARIN	1
CS-10 IP-R7	SM	NB	280	JUST NORTH OF MILLBRAE AVE	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 BAY BR TO MARIN	1
CS-10 IP-R8	SM	NB	280	SOUTH OF 280/92 INTERCHANGE	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 BAY BR TO MARIN	1
CS-10 IP-R9	SM	NB	101	1/2 MILE SOUTH OF 84	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 BAY BR TO MARIN	1
CS-10 IP-R10	SCL	NB	101	1 MILE SOUTH OF 101/880 JUNCTION	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 TO MARIN	1
CS-10 IP-R11	SCL	NB	101	1/2 MILE SOUTH OF 85	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 TO MARIN	1
CS-9 IP-R12	CC CC	WB	80	NEAR MCDONALD AVE	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 TO MARIN	1
CS-9 IP-R13	ALA	WB	580	AT CHETWOOD ST OVERCROSSING	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 TO MARIN	1
CS-9 IP-R14	) ALA	NB	880	880/980 SPLIT GORE AREA	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 TO MARIN	1
CS-10 IP-R15	) ALA	WB	580	1/2 MILE EAST OF 238/580	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 TO MARIN	1
CS-10 IP-R16	ALA	NB	880	SOUTH OF 880/92 INTERCHANGE	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 TO MARIN	1
CS-10 IP-R17	ALA	NB	880	JUST SOUTH OF ROUTE 84	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 TO MARIN	1
CS-9 IP-R18	MRN	WB	580	1/4 MILE EAST OF SIR FRANCIS DRAKE BLVD	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 BAY BR TO SF	1
	MRN	WB	SIR FRANCIS DRAKE BLVD	1/4 MILE EAST OF 101	GOLDEN GATE BR CLOSURE MONTH XX-XX	FRI _ PM THRU MON _ AM	GOLDEN GATE BR CLOSED	USE 580 BAY BR TO SF	1

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS AND RESOLVE ALL FIELD CONFLICTS BEFORE SUBMITTING WORKING DRAWINGS AND ORDERING AND FABRICATING ANY MATERIAL.



BRICATING	ANT MATE	TIAL.						
	DESIGN	^{by} R. LI		J. VILLA	FRANCA			_
	DETAILS	^{by} R. LI		J. VILLA	FRANCA	PROJECT ENG		<u>A</u>
	QUANTITIES	BY *		CHECKED *				
			ORIGINAL S FOR REDUC	CALE IN INCHES ED PLANS	0 1	1	2	$\frac{1}{3}$

				<u>R</u>	EGIONAL CHANGEABLE MESSAGE	SIGNS (CMS) SCHED	<u>ULE</u>	
						THREE WEEKS PRIOR TO CLOSURE	TWO WEEKS PRIOR TO CLOSURE	DURING CLOSURE
DRAWING No	. CMS No.	COUNTY	FWY/ST DIR	ROUTE/ST	CMS LOCATION	MESSAGE	MESSAGE	MESSAGE
CS-9	СМ 002	MRN	SB	101	SOUTH OF SAN PEDRO RD UNDERCROSSING	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE 580 BAY BR TO SF
CS-10	СМ 007	ALA	SB	238	SOUTH OF ASHLAND AVE UNDERCROSSING	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE 580 TO MARIN
CS-10	СМ 010	ALA	NB	880	NORTH OF INDUSTRIAL PKWY	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE 580 TO MARIN
CS-10	СМ 012	SM	NB	101	NORTH OF BROADWAY OVERCROSSING	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE BAY BR 580 TO MARIN
CS-10	CM 014	SM	NB	101	SOUTH OF HILLSDALE BLVD	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE BAY BR 580 TO MARIN
CS-10	СМ 016	SM	NB	101	NORTH OF EMBARCADERO RD OVERCROSSING	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE BAY BR 580 TO MARIN
CS-10	СМ 019	SCL	NB	85	NORTH OF RUSSO RD PEDESTRIAN OVERCROSSING	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE 580 TO MARIN
CS-9	СМ 029	SOL	WB	80	WEST OF WEIGH STATION	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE 580 BAY BR TO SF
> CS-9	CM 042	SF	NB	101	NORTH OF 23RD ST OVERCROSSING	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE BAY BR 580 TO MARIN
> CS-10	CM 061	ALA	SB	84	AT KGO STATION	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE BAY BR 580 TO MARIN
> _{CS-9}	СМ 064	ALA	WB	80	AT SAN FRANCISCO INCLINE BEGINNING OF BRIDGE	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE BAY BR 580 TO MARIN
CS-9	СМ 069	ALA	NB	880	OVER 5TH ST	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX—XX	GOLDEN GATE BR CLOSED USE 580 TO MARIN
CS-9	См 070	ALA	WB	80	WEST OF ROUTE 13 (ASHBY AVE)	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX—XX	GOLDEN GATE BR CLOSED USE 580 TO MARIN
CS-9	СМ 079	SF	NB	101	NORTH OF CANDLESTICK EXIT	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX—XX	GOLDEN GATE BR CLOSED USE BAY BR 580 TO MARIN
> ^{CS-9}	СМ 080	SF	NB	280	NORTHBOUND ON MISSION ST OVERCROSSING	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE BAY BR 580 TO MARIN
> CS-9	СМ 090	сс	WB	80	EAST OF APPIAN WY	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE 580 BAY BR TO SF
CS-9	СМ 092	сс	NB	680	SOUTH OF RUDGEAR UNDERCROSSING	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE 580 BAY BR TO SF
CS-9	СМ 096	ALA	WB	24	SHATTUCK AVE AND 55TH	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE 580 TO MARIN
CS-10	CM 110	ALA	WB	580	JUST EAST OF CASTRO VALLEY BLVD	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE 580 TO MARIN
CS-10	CM 119	SCL	NB	280	SOUTH OF TULLY RD OVERCROSSING	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE 580 TO MARIN
CS-10	СМ 134	SM	NB	280	JUST NORTH OF MILLBRAE AVE	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSURE MONTH XX-XX	GOLDEN GATE BR CLOSED USE BAY BR 580 TO MARIN

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS AND RESOLVE ALL FIELD CONFLICTS BEFORE SUBMITTING WORKING DRAWINGS AND ORDERING AND FABRICATING ANY MATERIAL.

DESIGN

DETAILS

QUANTITIES

R. LI

R. LI

BY *

J. VILLAFRANCA

CHECKED J. VILLAFRANCA

CHECKED *

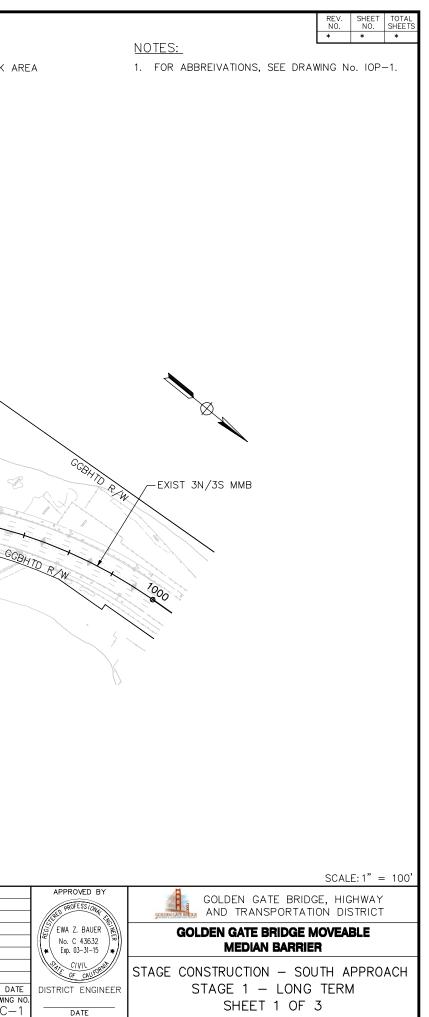
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

	AECOM 2101 WEBSTER STREET, SUITE 1900 OAKLAND, CA 94612			
JOY VILLAFRANCA PROJECT ENGINEER	P. VILLAFRANCA No. C 56994 * EQUISIBLE ENGINEER	3 ADDENDUM No. 3		4/17/14
	FEBRUARY 25, 2014     OF CALLONG       PLANS APPROVAL DATE     OF CALLONG	NO.         REVISIONS           CONTRACT NO.         2014-B-1           CADD FILE C-CS15.dwg	DRAWN	date ng no. —15



Attachment B5: Stage Construction – Long-Term Project

	NOTE:	LEGEND:
	THE NUMBERING OF THE CONSTRUCTION WORK ITEMS ON THE STAGE CONSTRUCTION SHEETS ARE NOT	WORK
	INTENDED TO INDICATE THE WORK SEQUENCE.	
STACE 1 CONSTRUCTIO	<u> DN – SOUTH APPROACH</u>	
(1) INSTALL CONCRETE E	BARKIER	
NERCHA A		
PRESIDIO TRUST R/W		
BRESIDIO TRO		
		0
	"G" LINE	
		- 100
	990 1 1 91 9 601 pp	995
STATE A	SOLDEN (	GATE BRIDGE
		20
		Q
PRESIDIO IRUST R/W		
MERCHANN		
MUL		
THIS PLAN ACCU	URATE FOR STAGE CONSTRUCTION WORK ONLY.	
AECOM		
2101 WEBSTEF	r st. ste, 1900 🦳 📈	
DESIGN BY CHECKED OAKLAND, CA		
DESIGN     BY     CHECKED     OAKLAND, CA       DETAILS     BY     CHECKED     JOY VILLAFRANCA       PROJECT ENGINEER     BY     CHECKED	SOY P. VILLAFRANCA S	
DESIGN BY CHECKED JOY VILLAFRANCA	00Y P. VILLAFRANCA → No. C 56994 ★ Exp. 06-30-15 ★	



	TRUST R/W (4) NB DOYLE D		99 ///////////////////////////////////	GB TOLL PLAZA	
DESIGN BY*	CHECKED *	20	is plan accurate for stage c A=COM 101 webster st. ste, 1900 Akland, ca 94612	SEL OROFESSIONA	
DETAILS BY*	CHECKED *	2' O PROJECT ENGINEER	AECOM 101 WEBSTER ST. STE, 1900 AKLAND, CA 94612	KEP PROFESS/004 SOV P. VILLAFRANCA FE No. C 56994 ★ Exp. 06-30-15 ★	
DETAILS BY* QUANTITIES BY*		2' O PROJECT ENGINEER	AECOM 101 Webster st. ste, 1900		

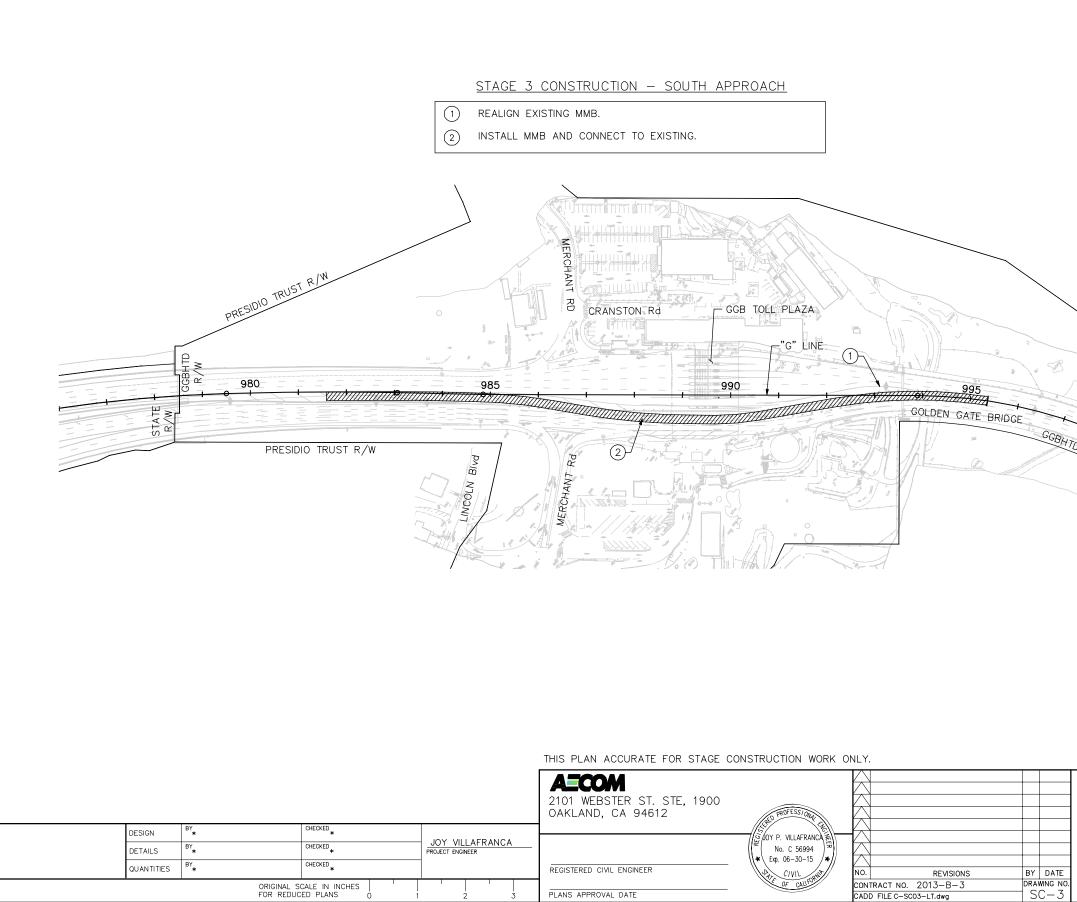
REMOVE EXISTING STRIPING AND MARKERS
 REMOVE PYLON MOUNTING HOLES

(4) INSTALL TRAFFIC STRIPING.
 (5) INSTALL BTM GUIDE STRIPING.

(3) INSTALL PYLON MOUNTING HOLES.

STAGE 2 CONSTRUCTION - SOUTH APPROACH

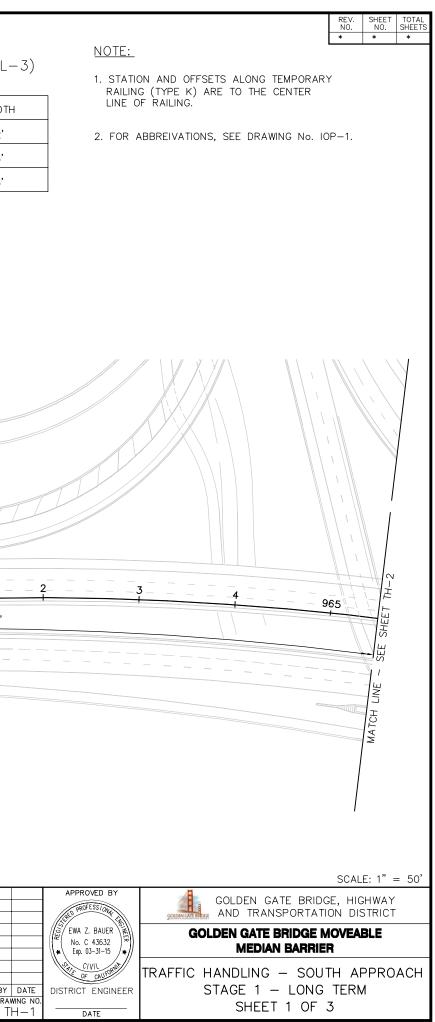
				REV. NO.	SHEET NO.	TOTAL SHEETS *
<u>N0</u>	<u> </u>			*	τ.	<b></b>
1. F	OR NOTES AN	ND/OR LEGEND	, SEE DRAWIN	IG No.		
SC-	1.					
2. F	OR ABBREIVA	TIONS, SEE DF	RAWING No. IC	P-1.		
	4					
		×.				
			•			
CCBHID		IST 2N/4S MM	D			
- MRT	N W LA	131 ZIV/ 43 MIM	D			
Gan	$\sum (\theta)$					
GGBHTD R/W						
	1000					
		2 [°]				
	4 N					
	$\mathbf{X}$					
	$\langle \rangle$					
				SCAL	E:1" =	= 100'
APPROVED BY	/	GOLDEN	GATE BRIDG	E. HIG	HWAY	
ROFESS/ONA	3	GATTE BRIDGE AND TH	RANSPORTATI	ON DIS	STRICT	
EWA Z. BAUER No. C 43632 €xp. 03-31-15	SINE R		te bridge m Dian Barriei		BLE	
EXP. UJ-31-15		CONSTRUC				АСН
DATE DISTRICT ENGIN			10N - 30C 2 - LONG			
ng no. C—2 date	_		ET 2 OF			



			REV. NO.	SHEET NO.	TOTAL SHEETS *
	NOTE:		<u> </u>		<u> </u>
		OTES AND/OR LEGEND, SEE DRAWN	IG No.		
	SC-1. 2. FOR <i>4</i>	BBREIVATIONS, SEE DRAWING No. IC	)P-1.		
		,,, , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , ,			
		4			
	GGO				
B	GCBHTD R W	–EXIST 3N/3S MMB			
	- RA				
GBHT	D R/W				
	S R/W	100			
		1000			
	$\langle \rangle$				
				"	1051
	APPROVED BY	GOLDEN GATE BRIDG		E:1" =	
	Statu PROFESS/ON/41-58	COLOR CALLER AND TRANSPORTATI	ON DIS	STRICT	
	(	GOLDEN GATE BRIDGE M MEDIAN BARRIEI		BLE	
	CIVIL OF CALLFORNIT	STAGE CONSTRUCTION - SOL		PPRO	АСН
DATE NG NO.	DISTRICT ENGINEER	STAGE 3 – LONG	TERN		
<u>-3</u>	DATE	SHEET 3 OF	5		

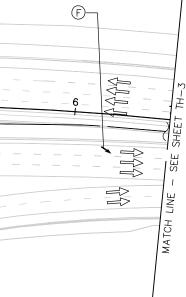
Attachment B6: Traffic Handling Plans– Long-Term Project

#### LEGEND: TEMPORARY ALTERNATIVE CRASH CUSHION (TL-3) NORTH APPROACH CONSTRUCT THIS STAGE TRAFFIC DIRECTION DURING TYPE LENGTH WIDTH $\Rightarrow$ CONSTRUCTION ACTIVITY _E SIGN 1 ABSORB 350 (TL-3) 32' 2' X SIGN NUMBER 2 | ARRAY 'TB14' 5' 22.5' OR CRASH CUSHION 3 QUADGUARD MODEL NO. OS3606 3' 22' 0 TRAFFIC CONES OR PORTABLE DELINEATOR $\diamond$ DISTRICT TRAFFIC PYLONS * PORTABLE FLASHING BEACON (PFB) E FLASHING ARROW SIGN (FAS) SUPPORT $>\!\!>\!\!>$ FLASHING ARROW SIGN (FAS) TEMPORARY RAILING (TYPE K) (F)FINAL PAVEMENT DELINEATION (SEE PD SHEETS) $\langle \overline{XX} \rangle_{+}$ TEMPORARY TRAFFIC STRIPE $\sim$ SB ON RAMP FROM ROUTE 1 ₿\$₿ SB-PRESIDIO PARKWAY 960 955 1500' ₽₽₽ ₽ NB PRESIDIO PARKWAY _C20 (CA) (Lt) 1 THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY. AECOM 2101 WEBSTER ST. STE, 1900 OAKLAND, CA 94612 PROFESS/ONAL HECKED * DESIGN BY * SOY P. VILLAFRANCA 新 JOY VILLAFRANCA CHECKED BY * No. C 56994 DETAILS ¥∖Exp. 06-30-15 / CHECKED * QUANTITIES BY * REGISTERED CIVIL ENGINEER BY DATE REVISIONS DRAWING NO ORIGINAL SCALE IN INCHES FOR REDUCED PLANS CONTRACT NO. 2013-B-3 PLANS APPROVAL DATE CADD FILE C-TH01-LT.dwg

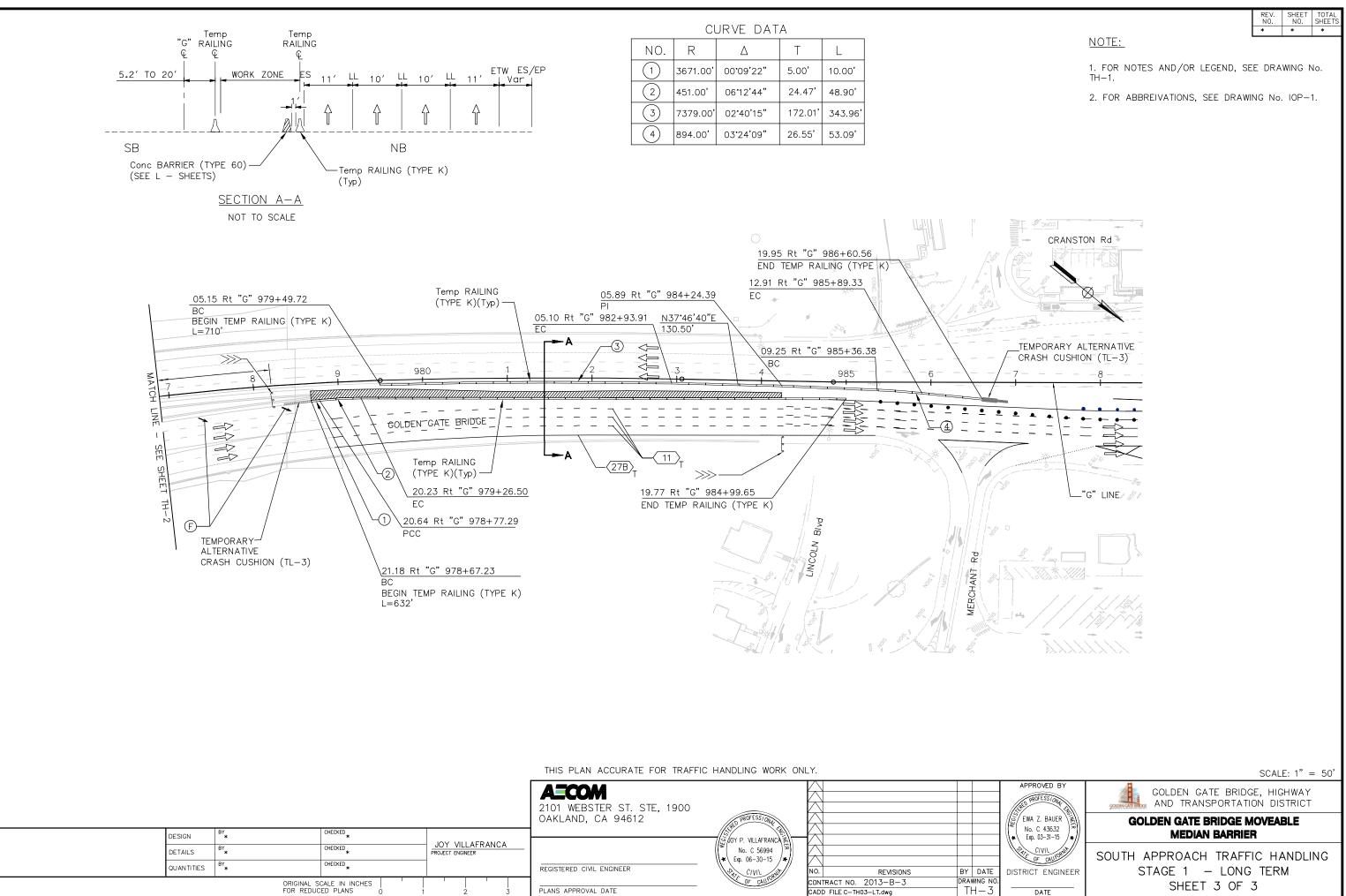


					$\checkmark_{\otimes}$
					Ň
MATCH LINE			SB OFF RAMP TO ROL	TE 1	9
	8	9	970		
SEE SHEET TH-1	7 1500' W4-2 (Lt)-				
	2			ON-RAMP FROM ROUTE 1	
		SB ON RAMP TO	80116		
				S PLAN ACCURATE FOR TRAFFIC HANDLIN	NG WORK ONLY.
DESIGN	BY CHECKED *		A=COM 2101 WEBSTER ST. STE, 1900 OAKLAND, CA 94612	CS OV P. VILLAFRANCA R	
DETAILS QUANTITIES	BY CHECKED CHE	JOY VILLAFRANCA           PROJECT ENGINEER           0         1         2         3	REGISTERED CIVIL ENGINEER	( ²² No. C 56994 ★ Exp. 06-30-15 ★	VISIONS BY DATE -B-3 DRAWING NO rg TH-2

	REV. NO.	SHEET NO.	TOTAL SHEETS
NOTE:	*	*	*
1. FOR NOTES AND/OR LEGEND, SE TH–1.	e dra	WING N	1o.
2. FOR ABBREIVATIONS, SEE DRAWI	NG No.	10P-1	1.

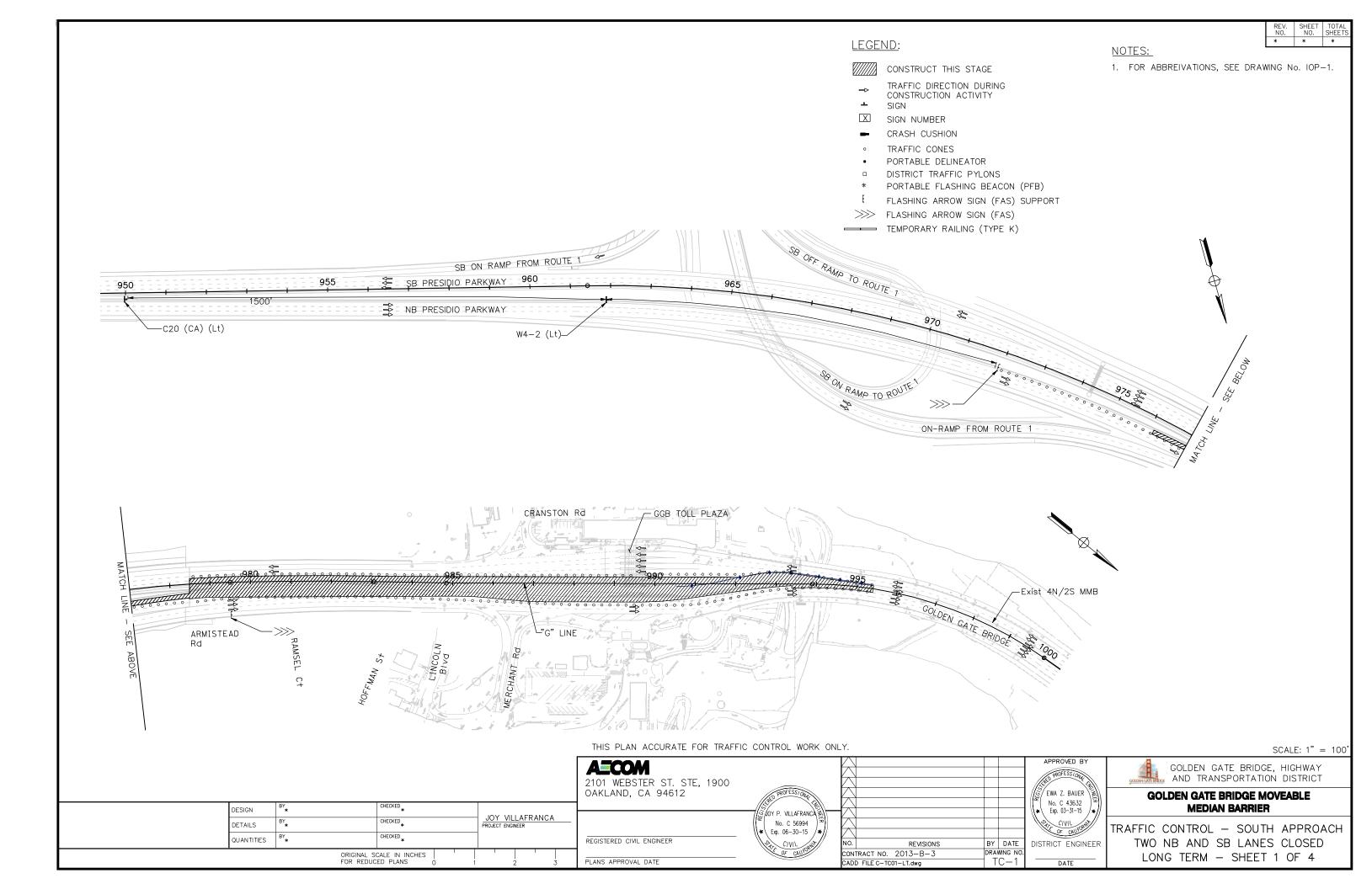


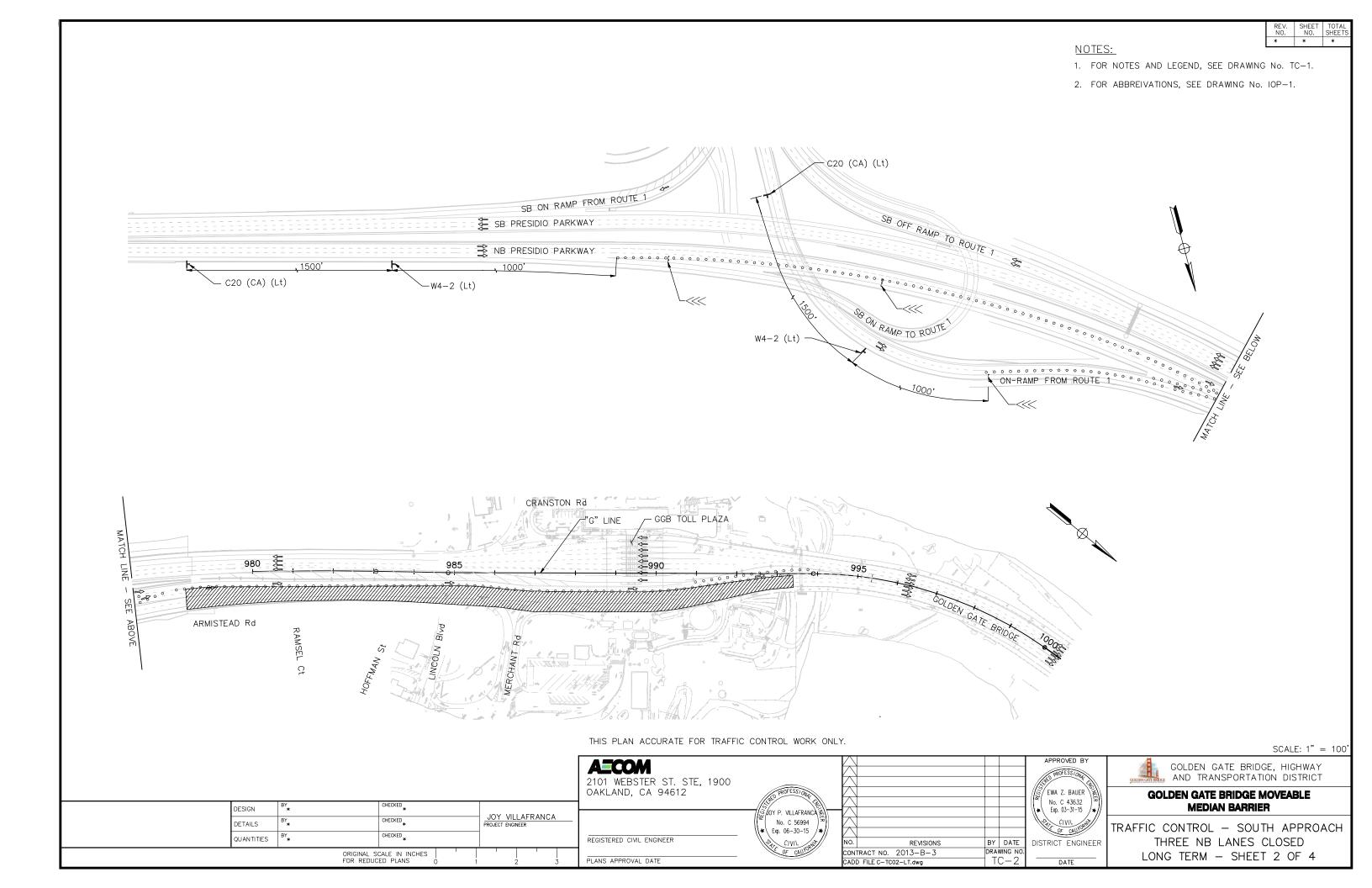


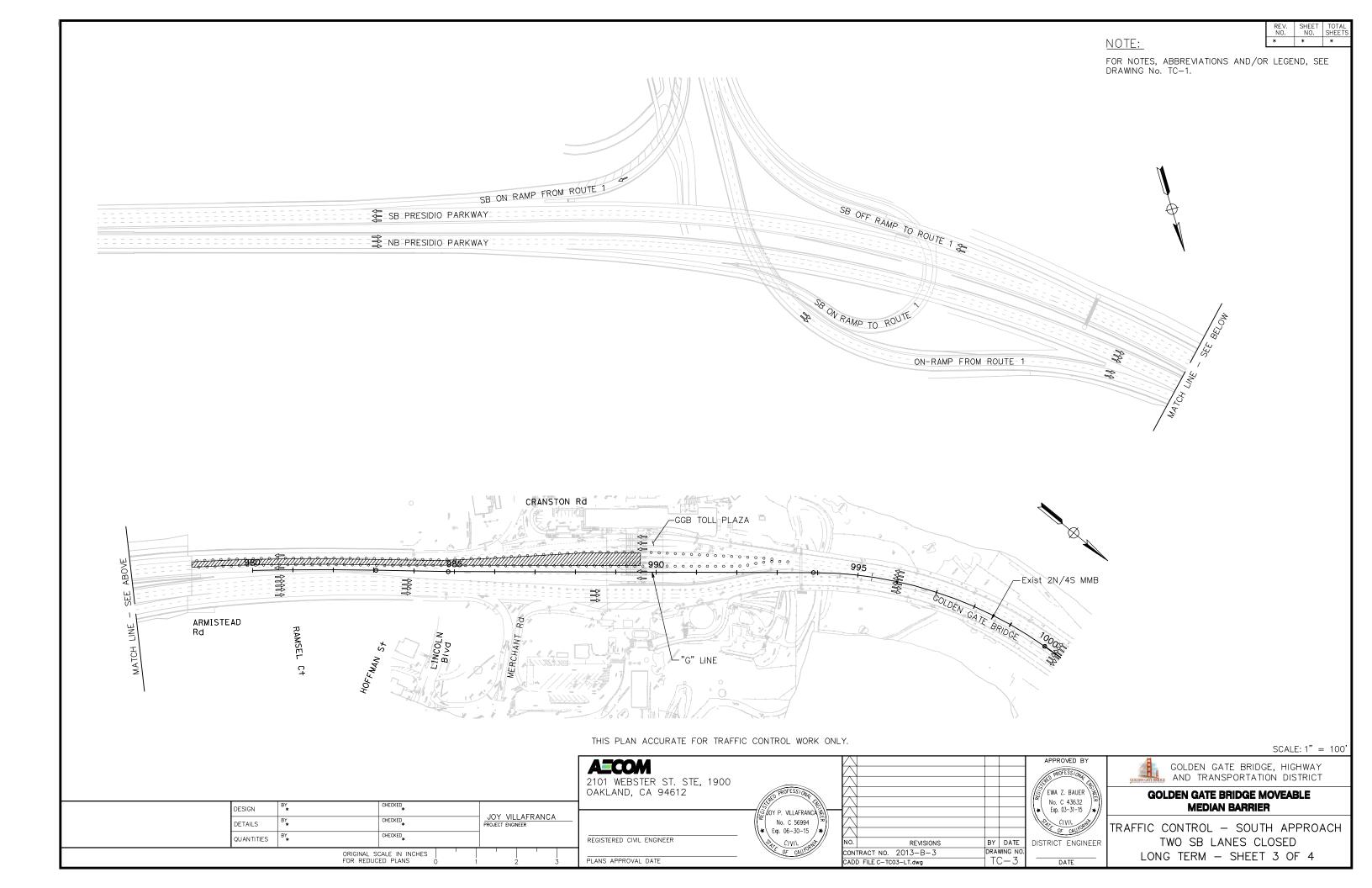


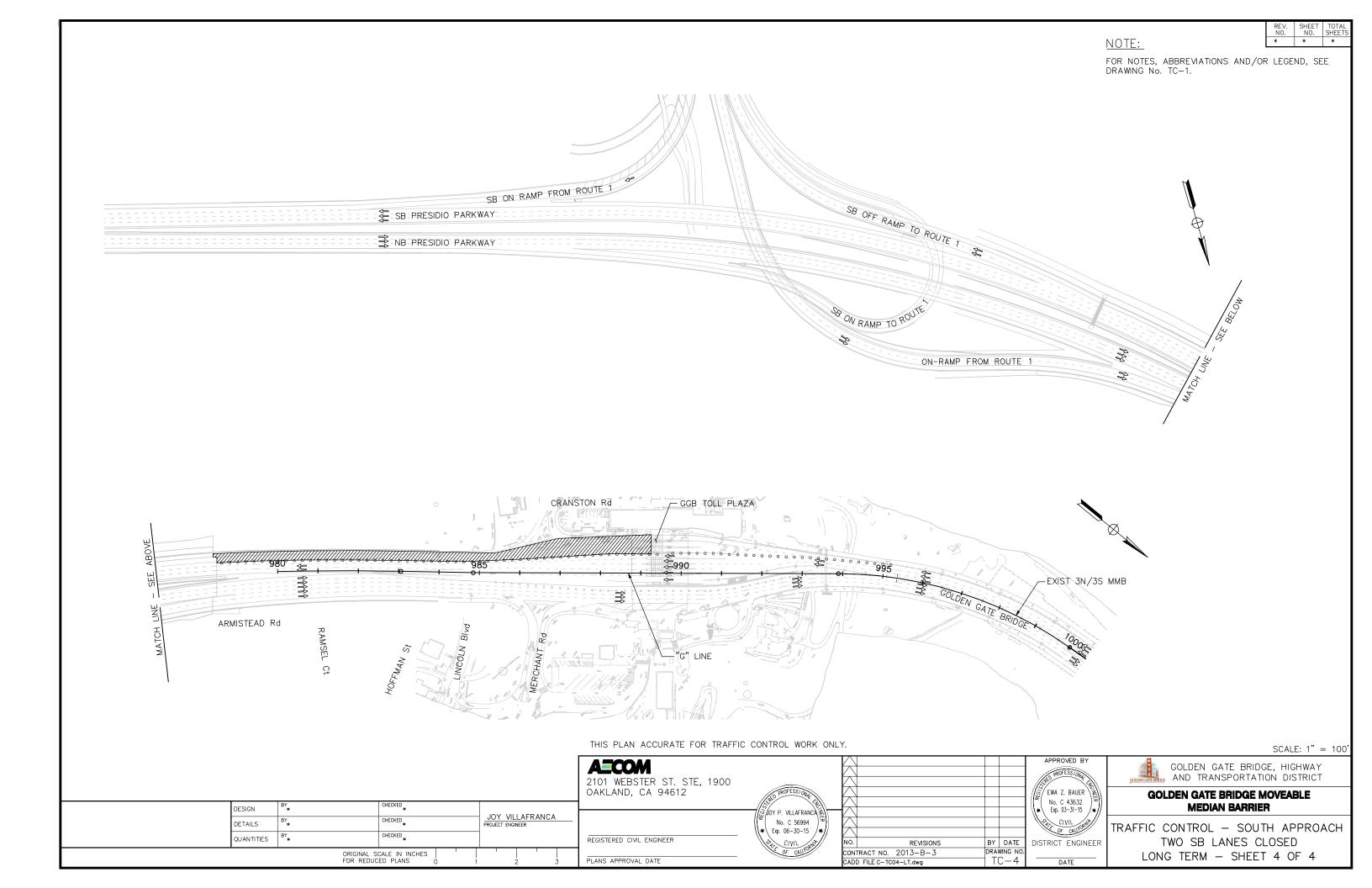
	REV. NO. *	SHEET NO. *	TOTAL SHEETS *
NOTE:			
1. FOR NOTES AND/OR LEGEND, SE TH-1.	E DRA	WING N	10.
2. FOR ABBREIVATIONS, SEE DRAW	NG No.	IOP-	1.

# Attachment B7: Traffic Control Plans– Long-Term Project









Attachment C1: Lane and Ramp Closure Charts

x		Sat	Sun	Mon	Tues	Wed	Thu	Fri	Sat	Sun
Х	н									
	XX	xx	xx							
	SD						-			
	XX									
		Н								
х	xx	xx	xx							
		SD								
		XX								
			Н							
	х	xx	xx	xx						
			SD							
			xx							
				Н						
	х	xx	xx	xx	xxx					
				SD						
	х	XX	XX	XX	XXX					
					Н					
				х	XX					
					SD					
				х	XX					
						Н				
					Х	XX				
						SD				
						XX				
							н			
						Х	XX	XX	XX	XX
							SD			
							XX			
egeno										
			quiremer							
Х					must be				er 2pm.	
XX					must be					
XXX				eled way	must be	open for	use by	traffic un	til 7pm.	
H SD	Designa Special	ated holi	day							

## Lane Closure Charts

							Free	way	//Ex		Cha sswa			Rec	quire	mei	nts								
Count	ty: S	an F	ran	cisc	o/Ma						ction					-		SF 9	9.74	4/N	IRN	0.29	)		
Closu	re lir	nits	: US	-10	1/Gc	lder	n Ga	ate E	Bridg	je, b	etwe	en (	04-S	SF-1	01 PI	V 9.	74 ;	anc	1 04	1-M	RN-	101	PM	0.29	9
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	5 1	6	17	18	; 1	92	0 2	21 2	2 2	23 24
Mon											#	#	#	#								2	2	2	1
Tue- Thu																1									
Fri																2									
Sat	Sat     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1<																								
Sun																									
Leger 1 2	Legend: 1 Provide at least 1 through freeway lane open in direction of travel																								
#	Nor	thbo	ounc	l cur	rb la	ne c	on b	ridge	e ma	ay be	e clo	sed													
			e clo uireo		e pei	mitt	ed.	Wo	rk a	llowe	ed w	ithin	the	higł	וway	wh	ere	sho	oulc	der	or la	ane (	closi	ure i	s
REMA	ARK	S:																							
•			st o end			wou	ld b	e op	oen t	o tra	affic	throu	ugho	out F	Projec	ct co	onst	ruc	tior	ו (e	xce	pt fo	r 52	-hou	ır

							- Free	wa	//Ex		Cha			Rec	uire	mei	nts								
Coun	ty: S	an F	ran	cisc	o/Ma			-		-	ction	-						SF	9.7	′4/N	1RN	0.29	)		
Closu	ıre lir	nits	: US	-10	1/Gc	lder	ו Ga	ate E	Bridg	je, b	etwe	en (	04-S	F-10	01 PN	V 9	74	an	d 0	4-N	IRN	-101	PM	0.2	9
Hour 2	24 [·]	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	5 -	6	17	ˈ 18	8 '	9 2	20 2	21 2	2 2	23 24
Mon	Tue-     1     1     1     1     #     #     #     #     #     #     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1 <th1< th="">     1     <th1< th=""> <th1< t<="" td=""><td>1</td></th1<></th1<></th1<>															1									
Tue- Thu	Thu     Image: Constraint of the second																								
Fri																									
Sat	Sat         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1																								
Sun																									
Leger 1 2 #	Pro Pro Sou No	vide ithbe lane	e at l ound	east d cu sure	t 2 a rb la	djac ine d	ent	thro ridg	ugh e ma	free ay b	eway	land	es o	pen	n of tr in dir מאראימע	ect	on				or l	ane	closi	ure i	s
REM/	A	t lea	st o end			wou	ld b	e op	oen t	o tra	affic	throu	ugho	out F	Projec	ct co	onst	ru	ctio	n (e	exce	pt fo	r 52	-hou	ır

		Compl		i2-hou reewa		ekei	nd c			re H	our	5						
County: San Fra	ancisco/Ma	arin	Rout	te/Dire	ction	: US	5-101	I/NB	SB	P№	1: SF	9.7	′4/N	IRN	0.29	)		Τ
Closure limits: 0	Golden Ga	te Bridg	е															
Hour 24 1 2		56	7	89	10	11	12	13	14 1	5 1	61	7 1	81	92	02	1 2	22	3 24
Mon C C (	C C																	
Fri																1		
Sat         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C															С			
Sun       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C															С			
2 Provide a C Freeway No comp REMARKS: • Detour traf • Simultaneo Northboun Sausalito L Southbo	bus closure d Route 10 Lateral off- bund Rout r Ave on-r shall be us beekend clo	djacent osed co ay or ex Drawing es of the 01: Mero ramp. e 101: N amp, Ro sed only osure be	throu mplet press y No. e follo chant Merch odeo y durir	CS-7 Wing CS-7	and C amps off a pad c on-rar	e is CS-8 s are nd o ff-ra mp, l	allov e allc n-ra mp, Dona	ved. wwec mps Sau ahue	l: , Vist salitc st. c and	a Po Lat	bint o eral amp	off- { on-	& on and	off- y at	ram 040	ıps, 0 hr:		

						0.01	mal		-	our	-	ekei	nd c		-	<b>1</b> 0		_						
Coun	ty: N	larin				COI	_						5-10 ⁻	-	losu				0.29	/MR	N 3.	57		$\dashv$
Closu	ire lii	nits	: Frc	om G	Gold	en G	ate	Bric	lge t	o Sa	ausa	lito/	Mari	n Ci	ty (D	onał	nue	Stre	et) I	nter	char	ige		
Hour a	Hour 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 2 Mon C C C C C I I I I I I I I I I I I I I															23 24								
	Mon C C C C .																							
Sat	Sat       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C <thc< th=""> <thc< th=""> <thc< th=""></thc<></thc<></thc<>															С								
Sun	Sun C C C C C C C C C C C C C C C C C C C															С								
Legel C	Legend: C Freeway and expressway may be closed completely. No complete freeway or expressway closure is allowed																							
REM	ARK	S:																						
•	S This 52-h Prov	Iltan outh pend chai our v ide d	eou: bou cer <i>I</i> rt sh weel one	s clo nd F Ave all b keno 12-f	Sure Rout on-r oe us d clo eet v	es of e 10 amp sed o sure wide	f the 1: N , Rc only e beg lan	folle ferc deo duri ginn e op	owin hant Ave ing c ing s	ig ra Roa e on one Satu n dir	ad o -ram irday rectio	ff-ra ip ai / at / on o	imp, nd D 0000 of tra	Sau ona ) hrs vel t	l: Isalito hue S and o aut sions	St or ope	n-ran ning	np. Mo	nda	y at	0400	) hrs		

									50 k	) nour		rt no		امما	150									
						Со	mpl					•			losu	re H	our	S						
Coun	ty: S	an F	- ran	cisc	0					Direc									32/S	F 9.	74			
Closu	Closure limits: From Marina Blvd. to Golden Gate Bridge																							
Hour 2	lour 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Mon C C C C C															23 24								
Mon	Mon C C C C																							
Sat																С								
Sun	Sun C C C C C C C C C C C C C C C C C C C															С								
Leger C	Legend: C Freeway and expressway may be closed completely. No complete freeway or expressway closure is allowed																							
• {   •     •	Deto Simu North ar This 52-ho Provi	ur tr Iltan nbou nd o chai our v ide d	eou: Ind I n-ra rt sh weel	s clo Rout mps all b keno 12-f	bsure te 1( s, an be us d clo eet v	es of 01: N d Sa sed o sure wide	f the Mari ausa only e be lan	alito   duri ginn e op	owin Ivd Late ing c ing s ing s	on-ra eral c one Satu n dir	amp off-ra irday ecti	o, Me amp y at ( on o	ercha 0000 f tra	ant I ) hrs vel t	d: Road s and o aut sions.	ope hori:	ning	Mo	nda	y at	040	0 hrs	5	

									52-h		Cha we			losı	ıre							 	
						Cor	nple	ete F	=ree	way	/Ex	pres	swa	ay C	losu	re H	ours	5					
Coun	ty: S	an F	Fran	cisc	0			Rou	ute/C	Direc	tion	: SR	-1/N	IB		PM	1: SF	= 5.8	1/S	F 7.	04		
Closu	ıre liı	mits	: Fro	om L	.ake	Stre	et to	o US	S-10	1													
																23 24							
Mon																							
Sat	Sat       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C <thc< th=""> <thc< th=""> <thc< th=""></thc<></thc<></thc<>															С							
Sun																С							
Leger C	ege_nd:																						
	No	com	plet	e fre	ewa	ay or	. ext	ores	swa	y clo	sure	e is a	allov	ved.									
REM	ARK	S:																					
• - 	Prov	chai our v ide (	rt sh weel one	all b kend 12-	e us d clo feet	sed o sure wide	only beg e la	duri ginn ne c	ing c ing s open	Satu i in	dire	ctior	n of	trav	and el to sions.	auth							nce

## **Ramp Closure Charts**

Chart no. 7 Complete Ramp Closure Hours/Ramp Lane Requirements County: Marin Route/Direction: US-101/NB PM: MRN 0.065 & 0.084														
County: Marin Route/Direction: US-101/NB PM: MRN 0.065 & 0.084														
Closure limits: Vista Point On-Ramp/Off-Ramp														
Hour 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 2														
Mon-         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C														
Thu         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C														
Sun         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C														
Legend:          C       Ramp may be closed completely         No Ramp Closure Permitted         REMARKS:														

				С	om	plet	e Ra	amp	Clo		Cha e Ho		o. 8 s/Ra	mp	Lane	e Re	qui	iren	nent	s			
Count	ty: N	larin	1					Ro	ute/I	Dire	ction	1: US	S-10	1/NE	3	F	·M:	MR	N 0.2	264			Ť
Closu	re liı	mits	: Sa	usal	ito L	.ater	al C	Off-R	lamp	C													
Hour 2	Hour 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Mon- C C C C C C C I I I I I I I I I I I I															23 24							
Mon-         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C															С								
Thu         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C															С								
Sat	Fri         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C															С							
Sun																С							
Leger															·					·	·		
С	Rar	mp r	nay	be d	close	ed c	omp	olete	ly														
	No	Ran	np C	losı	ure F	Pern	nitte	d															
REMA	ARK	S:																					
•	D	etou	ır tra	affic	to n	exto	off-r	amp	).														

				с	om	plete	e Ra	mp	Clo				io. 9 s/Ra	mp	Lane	e Re	equ	irem	nent	s					
Count	y: N	larin	1					<u> </u>					S-10	<u> </u>			<u> </u>		N 0.						Ť
Closu	re lii	nits	: Sa	usal	ito L	.ater	al O	n-R	amp	)															
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	3 24
Mon- Thu	С	С	С	С	С	С																	(	2	С
Fri	Thu         Image: Constraint of the second sec															С									
Sat	Fri C C C C C C C C C C C C C C C C C C C															С									
Sun																С									
Leger C		np r	nay	be c	close	ed co	omp	letel	У		·	·	·	·				<u>.</u>				<b>.</b>	·		
	No	Ran	np C	losı	ure F	Perm	nitteo	d																	
REMA	ARK	S:																							
•	D	etou	ır tra	affic	per	Drav	wing	No	. TC	-18.															

									52-H	-	har we	• • • •			ILE									
						Ran	np C								Requ	iren	nent	s						
Count	:y: N	larin	1					Rou	ute/D	Direc	ction	: US	-10	1/NE	}	PN	1: M	RN	0.65	&0.	084			
Closu	Closure limits: Vista Point On-Ramp/Off-Ramp																							
Hour 2																23 24								
Mon	Mon C C C C .																							
Sat	Mon C C C C															С								
Sun	Sat         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C															С								
Leger C	Rar	•				ed co			У			1			1	1	1	1	1			1		
	No	Ran	np C	Josi	ure H	Perm	ntte	d																
	⁻ his	cha				sed ( sure			•		irday	/ at (	0000	) hrs	s and	ope	ning	Мо	nda	y at	0400	0 hrs	3	

									52-h		har we			losi	ire						 		
						Ran	np C								Requ	iren	nent	s					
Count	ty: N	larir	۱					Rou	ute/C	Direc	tion	: US	5-10 ⁻	I/NE	3	PN	1: M	RN (	0.26	4	 		
Closu	Closure limits: Sausalito Lateral Off-Ramp																						
Hour 2	lour 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 2 Mon C C C C I I I I I I I I I I I I I I I															3 24							
Mon	Mon C C C C																						
Sat	Sat         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C															С							
Sun																С							
Leger	nd:				1								1		1								
С	Rar	np r	nay	be o	close	ed co	omp	letel	у.														
	No	Rar	np C	losi	ure F	Perm	nitteo	d.															
5	This 52-h	cha our '	wee	kend		sure	e be	ginn	ing S	Satu					and o aut		•						

with Section 5-1.04, "Order of Work" of the Special Provisions.Detour traffic per Drawing No. CS-8.

									52-ł	C nour	har we				ıre							
						Ran	np C	los	ure	Hou	rs/F	Ram	p La	ane	Requ	iren	nent	S				
Count	ty: N	larir	l					Rou	ute/E	Direc	tion	: US	5-10 ⁻	1/SE	}	ΡN	1: M	RN	1.71			
Closu	Closure limits: Spencer Ave. On-Ramp																					
Hour 2																3 24						
Mon	Mon C C C C .																					
Sat	Sat       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C <thc< th=""> <thc< th=""> <thc< th=""></thc<></thc<></thc<>															С						
Sun																С						
Leger C	Legend:																					
• F • V	This 52-h Prov vith	cha our ide ( Sec	wee one tion	keno 12-f 5-1.	d clo eet v	sure wide 'Ord	e beg lan ler o	ginn e op f Wo	ing s en i ork"	n dir	irday ectio	/ at ( on o	f tra	vel t	s and o aut sions.	horiz						

									52-h	-			. 13 nd c		ıre									
						Ran	np C	los	ure	Hou	rs/F	Ram	p La	ine	Requ	iren	nent	S						
Coun	ty: N	larir	1					Roι	ute/C	Direc	tion	: US	6-10 ⁻	I/SE	3	PN	1: M	RN (	).23	5				
Closu	re liı	mits	: Sa	usal	ito L	ater	al O	ff-R	amp	)														
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	5 1	6 1	7 1	8 1	92	0 2	1 2	2 2	3 24
Mon	С	С	С	С																				
Sat																								
Sun																								
Leger																								
С	Rar	mp r	nay	be c	close	ed co	omp	letel	у															
	No	Ran	np C	losı	ure F	Perm	itteo	b																
• F	This 52-ho Prov	cha our ide d	weel one	keno 12-f	d clo eet v	sure vide	beg lan	ginn e op	ing ( en i	Satu n dir	recti	on o	of tra	vel t	s and									

with Section 5-1.04, "Order of Work" of the Special Provisions. • Detour traffic per Drawing No. CS-8.

									52-h	C nour	har wee			losı	ıre									
						Ran	וף C	los	ure	Hou	rs/R	lam	p La	ine	Requ	iren	nent	S						
Count	ty: N	larir	I					Rou	ute/C	Direc	tion	: US	-10	I/SB	5	PN	1: M	RN (	0.17	0				
Closu	re lii	nits	: Sa	usal	ito L	ater.	al O	n-R	amp	)														
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	51	61	71	81	92	02	1 2	22	3 24
Mon	С	С	С	С																				
Sat	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Sun	Sun C C C C C C C C C C C C C C C C C C C																							
Leger C	egend: C Ramp may be closed completely. No Ramp Closure Permitted.																							
	No	Ran	np C	losi	ure ⊦	'erm	nitteo	d.																
• F • V	This 52-h Prov	cha our ide o Sec	weel one tion	kend 12-f 5-1.	d clo eet v 04, '	sure vide 'Ord	e beg lan er o	ginn e op f Wo	ing s en i ork"	Satu n dir	ectio	o nc	f tra	vel t	and o aut sions.	horiz								

									52-h				. 15 nd c	losı	ıre									
						Ran	np C		-		-				Requ	iren	nent	s						
Count	ty: N	larir	l					Rou	ute/D	Direc	tion	: US	6-10 ⁻	I/SE	}	P№	1: M	RN 2	2.56					
Closu	re liı	nits	: Ro	deo	Ave	On	-Rar	mp																
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	5 1	6 1	7 1	8 1	92	0 2	21 2	2 2	23 24
Mon	С	С	С	С																				
Sat	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Sun																								
Leger																								
С	Rar	np i	nay	be o	close	ed co	omp	letel	у.															
	No	Rar	np C	Closu	ure F	Perm	nitteo	d.																
5	This 52-h	cha our	wee	kend	d clo	sure	e beg	ginn	ing S	Satu	-				s and o aut		-							

with Section 5-1.04, "Order of Work" of the Special Provisions.Detour traffic per Drawing No. CS-8.

									52-h	C nour	har we				ıre									
						Ran	np C	los	ure	Hou	rs/F	lam	p La	ane	Requ	iren	nent	S						
Count	ty: N	1arir	I					Roι	ute/C	Direc	tion	: US	5-10 ⁻	1/SE	}	ΡN	1: M	RN :	3.40					
Closu	re li	mits	: Do	nah	ue S	Stree	t O	n-Ra	amp															
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	5 1	6 1	7 1	8 1	92	0 2	1 2	2 2	3 24
Mon	С	С	С	С																				
Sat	C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C																							
Sun																								
Leger C																								
• F • V	ARK This 52-h Prov vith	S: cha our ide o Sec	rt sh wee one tion	all b kend 12-f 5-1.	be us d clo eet v	sed o sure wide 'Ord	durir e beq land	ng or ginn e op f Wo	ing s en i ork"	Satu n dir	ectio	on o	f tra	vel t	s and o aut sions.	horiz								

									52-ł	_			. 17 nd c		ıre									
						Ran	וp C								Requ	iren	nent	s						
Count	ty: S	an F	Fran	cisc	0			Rou	ute/D	Direc	tion	: US	5-10 ⁻	1/NE	3	P№	1: SI	= 9.8	30 ai	nd 9	.82			
Closu	re li	mits	: Me	rcha	ant F	Roac	l Off	-Ra	mp/0	On-F	Ram	р												
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	5 1	6 1	7 1	8 1	92	0 2	21 2	2 2	3 24
Mon	С	С	С	С																				
Sat	c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c																							
Sun																								
Leger C																								
					ure F				,															
•	This 52-h Prov	cha our v ⁄ide	wee one	kend 12-	feet	sure wide	e beq e lar	ginn ne oj	ing : pen	Satu in di	irect	ion (	of tra	avel	s and to au sions.	thori								

Detour traffic per Drawing No. CS-7. ٠

						_				nour		ekei	nd c	losi		_								
			_			Ran	np C								Requ									
Count	ty: S	an I	-ran	CISC	0			Κοι	ite/L	Direc	tion	: 08	5-10	1/SE	5	PN	/I: SI	= 9.8	32					
Closu	re lii	nits	: Me	rcha	ant F	Road	l Off	-Ra	mp															
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	51	61	7 1	81	92	0 2	1 2	2 2	23 24
Mon	С	С	С	С																				
Sat	c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c       c																							
Sun																								
Leger C																								
• F • V	This 52-h Prov vith	cha our v ide ( Sec	weel one tion	keno 12-f 5-1.	d clo eet v 04, '	sure wide "Ord	e be lan ler o	ginn e op	ing s en i ork"	Satu n dir	recti	on o	f tra	vel t	s and o aut sions.									

## Attachment C2: Lane and Ramp Closure and Damage Summary and Calculations

Lanes Open	Fwy Capacity
1	1,200
2	2,600
3	4,560
4	6,080

Chart 1: Northbound Golden Gate Bridge

	Sun	day	Monday-	Thursday	Frie	day	Satu	rday
Hours	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lanes Open
0-1	708	1	509	1	407	1	1,514	2
1-2	480	1	221	1	381	1	501	1
2-3	394	1	135	1	209	1	378	1
3-4	246	1	131	1	129	1	185	1
4-5	175	1	173	1	111	1	167	1
5-6	218	1	384	1	322	1	300	1
6-7	450	1	818	1	891	1	708	1
7-8	866	1	2,367	2	2,201	2	1,121	1
8-9	1,196	1	3,239	3	3,152	3	2,031	2
9-10	1,567	2	2,757	3	2,873	3	3,361	3
10-11	2,876	3	1,968	2	2,551	2	4,008	3
11-12	3,281	3	2,471	2	3,480	3	4,214	3
12-13	3,935	3	2,396	2	4,334	3	4,262	3
13-14	3,013	3	2,842	3	4,425	3	3,321	3
14-15	2,565	2	3,965	3	4,639	4	3,745	3
15-16	3,230	3	4,095	3	4,312	3	3,835	3
16-17	3,721	3	4,284	3	4,530	3	4,439	3
17-18	3,650	3	5,203	4	5,079	4	3,730	3
18-19	2,663	3	5,210	4	4,007	3	2,794	3
19-20	2,053	2	3,349	3	3,203	3	2,698	3
20-21	1,818	2	2,529	2	2,066	2	2,698	3
21-22	1,684	2	2,074	2	1,494	2	2,058	2
22-23	1,112	1	1,061	1	1,361	2	2,060	2
23-24	720	1	845	1	1,142	1	1,281	2

Notes:

1 = Provide at least one through freeway lane open in direction of travel

2 = Provide at least two through freeway lanes open in direction of travel

 $\mathbf{3}=\mathbf{Provide}$  at least three through freeway lanes open in direction of travel

4 = Provide at least four through freeway lanes open in direction of travel

### DAMAGE CALCULATIONS FOR LATE LANE CLOSURE PICK UP

Route	US 101 NB, Golden Gate Bridge
Locations	Chart 1: Northbound Golden Gate Bridge
Traffic Date	Construction Conditions Lane Closure
Condition	Two lanes open to through traffic
Closure	Overnight closure
Capacity	2,600 VPH per Lane

	Demand	Capacity	Cum	Cum	Cum	Average	Time	Cum	Unit Delay	Total Cost
	Demana	Oapacity	Demand	Capacity	Queue	Queue	Interval	Delay	Cost	Delay
Hour of Day	а	b	С	d	е	f	g	h	j	k
	а	b	a1+a2+	b1+b2+	c-d	(e1+e2)/2		fxg		hxj
	VEH	VEH	VPH	VEH	VEH	VEH	MIN	VEH.MIN	\$	\$
5 - 6 AM	384	2,600	384	2,600	0	0	60	0	\$0.19	\$0
6 - 7 AM	818	2,600	1,202	5,200	0	0	60	0	\$0.19	\$0
7 - 8 AM	2,367	2,600	3,569	7,800	0	0	60	0	\$0.19	\$0
8 - 9 AM	3,239	2,600	6,808	10,400	0	0	60	0	\$0.19	\$0
9 - 10 AM	2,757	2,600	9,565	13,000	0	0	60	0	\$0.19	\$0

(from 2011 Truck Data) [C=.19(1-T%)+0.40XT%]

 Truck %:
 1.33%
 (from 2

 Unit delay cost:
 \$
 0.193

 (Based on \$0.19 for VEH and \$0.40 for truck)

	aony	
Average delay cost of first 2 hours Delay Cost for 10 min =	\$0 \$0 /12	\$0
Average delay cost of first 5 hours Delay Cost for 10 min =	\$0 \$0 /30	\$0

AECO

Lanes Open	Fwy Capacity
1	1,200
2	2,600
3	4,560
4	6,080

### Chart 2: Southbound Golden Gate Bridge

	Sur	day	Monday-	Thursday	Friday		Saturday	
Hours	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lanes Open
0-1	431	1	251	1	175	1	343	1
1-2	197	1	119	1	108	1	208	1
2-3	145	1	84	1	114	1	127	1
3-4	134	1	152	1	140	1	145	1
4-5	213	1	428	1	413	1	209	1
5-6	493	1	1,181	1	1,290	2	451	1
6-7	935	1	3,317	3	2,846	3	991	1
7-8	962	1	5,291	4	4,482	3	1,370	2
8-9	1,487	2	5,453	4	4,546	3	2,252	2
9-10	1,880	2	4,287	3	3,619	3	2,837	3
10-11	2,137	2	3,112	3	3,160	3	3,356	3
11-12	2,736	3	2,737	3	2,737	3	3,574	3
12-13	2,560	2	2,356	2	2,337	2	3,242	3
13-14	3,086	3	2,423	2	2,562	2	2,926	3
14-15	3,281	3	2,537	2	2,838	3	3,128	3
15-16	3,420	3	2,554	2	3,105	3	3,421	3
16-17	3,675	3	3,095	3	3,029	3	3,589	3
17-18	3,677	3	3,655	3	2,553	2	3,169	3
18-19	3,084	3	2,773	3	2,504	2	3,124	3
19-20	2,525	2	1,759	2	1,775	2	2,020	2
20-21	2,152	2	1,389	2	1,258	2	2,020	2
21-22	1,682	2	1,166	1	1,148	1	1,402	2
22-23	907	1	747	1	889	1	1,213	2
23-24	470	1	338	1	611	1	960	1

Notes:

1 = Provide at least one through freeway lane open in direction of travel

2 = Provide at least two through freeway lanes open in direction of travel

3 = Provide at least three through freeway lanes open in direction of travel

4 = Provide at least four through freeway lanes open in direction of travel

#### DAMAGE CALCULATIONS FOR LATE LANE CLOSURE PICK UP

Route	US 101 SB, Golden Gate Bridge
Locations	Chart 2: Southbound Golden Gate Bridge
Traffic Date	Construction Conditions Lane Closure
Condition	Two lanes open to through traffic
Closure	Overnight Closure
Capacity	2,600 VPH per Lane

	Demand	Capacity	Cum Demand	Cum Capacity	Cum Queue	Average Queue	Time Interval	Cum Delay	Unit Delay Cost	Total Cost Delay
Hour of Day	а	b	С	d	е	f	g	h	j	k
	а	b	a1+a2+	b1+b2+	c-d	(e1+e2)/2		fxg		hxj
	VEH	VEH	VPH	VEH	VEH	VEH	MIN	VEH.MIN	\$	\$
5 - 6 AM	1,181	2,600	1,181	2,600	0	0	60	0	\$0.19	\$0
6 - 7 AM	3,317	2,600	4,498	5,200	0	0	60	0	\$0.19	\$0
7 - 8 AM	5,291	2,600	9,789	7,800	1,989	995	60	59,670	\$0.19	\$11,504
8 - 9 AM	5,453	2,600	15,242	10,400	4,842	3,416	60	264,600	\$0.19	\$51,013
9 - 10 AM	4,287	2,600	19,529	13,000	6,529	5,686	60	546,060	\$0.19	\$105,277

 Truck %:
 1.33%
 (from 2011 Truck Data)

 Unit delay cost:
 \$ 0.193
 [C=.19(1-T%)+0.40XT%]

(Based on \$0.19 for VEH and \$0.40 for truck)

Average delay cost of first 2 hours delay cost for 10 min =	\$0 \$0 /12	\$0
Average delay cost of first 3 hours delay cost for 10 min =	\$11,504 \$11,504 /18	\$639

Fwy
Capacity
0
1,200
2,600
4,560
6,080

#### Chart 1: Northbound Golden Gate Bridge

	Su	nday	Monday-	Thursday	Fri	day	Saturday	
Hours	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lanes Open
0-1	708	1	509	1	407	1	1,514	2
1-2	480	1	221	1	381	1	501	1
2-3	394	1	135	1	209	1	378	1
3-4	246	1	131	1	129	1	185	1
4-5	175	1	173	1	111	1	167	1
5-6	218	1	384	1	322	1	300	1
6-7	450	1	818	1	891	1	708	1
7-8	866	1	2,367	2	2,201	2	1,121	1
8-9	1,196	1	3,239	3	3,152	3	2,031	2
9-10	1,567	2	2,757	3	2,873	3	3,361	3
10-11	2,876	3	1,968	2	2,551	2	4,008	3
11-12	3,281	3	2,471	2	3,480	3	4,214	3
12-13	3,935	3	2,396	2	4,334	3	4,262	3
13-14	3,013	3	2,842	3	4,425	3	3,321	3
14-15	2,565	2	3,965	3	4,639	4	3,745	3
15-16	3,230	3	4,095	3	4,312	3	3,835	3
16-17	3,721	3	4,284	3	4,530	3	4,439	3
17-18	3,650	3	5,203	4	5,079	4	3,730	3
18-19	2,663	3	5,210	4	4,007	3	2,794	3
19-20	2,053	2	3,349	3	3,203	3	2,698	3
20-21	1,818	2	2,529	2	2,066	2	2,698	3
21-22	1,684	2	2,074	2	1,494	2	2,058	2
22-23	1,112	1	1,061	1	1,361	2	2,060	2
23-24	720	1	845	1	1,142	1	1,281	2

Notes:

1 = Provide at least one through freeway lane open in direction of travel

2 = Provide at least two through freeway lanes open in direction of travel

3 = Provide at least three through freeway lanes open in direction of travel

4 = Provide at least four through freeway lanes open in direction of travel

### DAMAGE CALCULATIONS FOR LATE LANE CLOSURE PICK UP

Route	US 101 NB, Golden Gate Bridge
Locations	Chart 1: Northbound Golden Gate Bridge
Traffic Date	Construction Conditions Lane Closure
Condition	Zero lanes open to through traffic
Closure	Weekend closure
Capacity	0 VPH per Lane

	Demand	Capacity	Cum Demand	Cum Capacity	Cum Queue	Average Queue	Time Interval	Cum Delav	Unit Delay Cost	Total Cost Delav
Hour of Day	а	b	C	d	e	Gueue		h	cosi	k
riour or Day	a	b	a1+a2+	b1+b2+	c-d	(e1+e2)/2	g	fxg	1	h x j
	VEH	VEH	VPH	VEH	VEH	VEH	MIN	VEH.MIN	\$	\$
4 - 5 AM	173	0	173	0	173	87	60	5190	\$0.19	\$1,001
5 - 6 AM	384	0	557	0	557	365	60	21,900	\$0.19	\$4,222
6 - 7 AM	818	0	1,375	0	1,375	966	60	79,860	\$0.19	\$15,396
7 - 8 AM	2,367	0	3,742	0	3,742	2,559	60	211,470	\$0.19	\$40,770
8 - 9 AM	3,239	0	6,981	0	6,981	5,362	60	475,200	\$0.19	\$91,615
Truck %:	1.33%		(from 2011 T	ruck Data)						
Unit delay cost:		\$ 0.193		[C=.19(1-T%)	+0.40XT%]					

(Based on \$0.19 for VEH and \$0.40 for truck)

Minimum Delay Cost: \$ 1,000 per 10 minutes

Time (Hours)	Minimum Delay Cost	Avg. Cost/ 10 Minutes	Vol. Based Delay Cost	Avg. Cost/ 10 Minutes	Final Delay Cost
1	\$ 6,000	\$ 1,000	\$ 1,001	\$ 167	\$ 6,000
2	\$ 12,000	\$ 1,000	\$ 4,222	\$ 704	\$ 12,000
3	\$ 18,000	\$ 1,000	\$ 15,396	\$ 2,566	\$ 18,000
4	\$ 24,000	\$ 1,000	\$ 40,770	\$ 6,795	\$ 40,770
5	\$ 30,000	\$ 1,000	\$ 91,615	\$ 15,269	\$ 91,615

	Fwy
Lanes Open	Capacity
0	0
1	1,200
2	2,600
3	4,560
4	6,080

#### Chart 2: Southbound Golden Gate Bridge

	Sun	day	Monday-	Thursday	Frie	day	Saturday	
Hours	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lane: Oper
0-1	431	1	251	1	175	1	343	1
1-2	197	1	119	1	108	1	208	1
2-3	145	1	84	1	114	1	127	1
3-4	134	1	152	1	140	1	145	1
4-5	213	1	428	1	413	1	209	1
5-6	493	1	1,181	1	1,290	2	451	1
6-7	935	1	3,317	3	2,846	3	991	1
7-8	962	1	5,291	4	4,482	3	1,370	2
8-9	1,487	2	5,453	4	4,546	3	2,252	2
9-10	1,880	2	4,287	3	3,619	3	2,837	3
10-11	2,137	2	3,112	3	3,160	3	3,356	3
11-12	2,736	3	2,737	3	2,737	3	3,574	3
12-13	2,560	2	2,356	2	2,337	2	3,242	3
13-14	3,086	3	2,423	2	2,562	2	2,926	3
14-15	3,281	3	2,537	2	2,838	3	3,128	3
15-16	3,420	3	2,554	2	3,105	3	3,421	3
16-17	3,675	3	3,095	3	3,029	3	3,589	3
17-18	3,677	3	3,655	3	2,553	2	3,169	3
18-19	3,084	3	2,773	3	2,504	2	3,124	3
19-20	2,525	2	1,759	2	1,775	2	2,020	2
20-21	2,152	2	1,389	2	1,258	2	2,020	2
21-22	1,682	2	1,166	1	1,148	1	1,402	2
22-23	907	1	747	1	889	1	1,213	2
23-24	470	1	338	1	611	1	960	1

1 = Provide at least one through freeway lane open in direction of travel
 2 = Provide at least two through freeway lanes open in direction of travel

3 = Provide at least three through freeway lanes open in direction of travel

4 = Provide at least four through freeway lanes open in direction of travel

#### DAMAGE CALCULATIONS FOR LATE LANE CLOSURE PICK UP

Route	US 101 SB, Golden Gate Bridge
Locations	Chart 2: Southbound Golden Gate Bridge
Traffic Date	Construction Conditions Lane Closure
Condition	Zero lanes open to through traffic
~	

Closure Weekend Closure Capacity 0 VPH per Lane

	Demand	Capacity	Cum Demand	Cum Capacity	Cum Queue	Average Queue	Time Interval	Cum Delay	Unit Delay Cost	Total Cost Delay
Hour of Day	а	b	с	d	е	f	g	h	j	k
	а	b	a1+a2+	b1+b2+	c-d	(e1+e2)/2		fxg		hxj
	VEH	VEH	VPH	VEH	VEH	VEH	MIN	VEH.MIN	\$	\$
4 - 5 AM	428	0	428	0	428	214	60	12,840	\$0.19	\$2,475
5 - 6 AM	1,181	0	1,609	0	1,609	1,019	60	61,110	\$0.19	\$11,782
6 - 7 AM	3,317	0	4,926	0	4,926	3,268	60	257,160	\$0.19	\$49,579
7 - 8 AM	5,291	0	10,217	0	10,217	7,572	60	650,340	\$0.19	\$125,381
8 - 9 AM	5,453	0	15,670	0	15,670	12,944	60	1,230,900	\$0.19	\$237,309
Truck %:	1.33%		(from 2011 T	ruck Data)						

1.33% \$ 0.193 (from 2011 Truck Data)

Unit delay cost: (Based on \$0.19 for VEH and \$0.40 for truck)

Minimum Delay Cost: \$ 1,000 per [C=.19(1-T%)+0.40XT%] 10 minutes

Time (Hours)	Minimum Delay Cost	Avg. Cost/ 10 Minutes	Vol. Based Delay Cost	Avg. Cost/ 10 Minutes	Final Delay Cost		
1	\$ 6,000	\$ 1,000	\$ 2,475	\$ 413	\$ 6,000		
2	\$ 12,000	\$ 1,000	\$ 11,782	\$ 1,964	\$ 12,000		
3	\$ 18,000	\$ 1,000	\$ 49,579	\$ 8,263	\$ 49,579		
4	\$ 24,000	\$ 1,000	\$ 125,381	\$ 20,897	\$ 125,381		
5	\$ 30,000	\$ 1,000	\$ 237,309	\$ 39,551	\$ 237,309		

#### **Ramp Closure Damage Calculations**

		Sur	nday			Monday-	Thursda	у		Fr	iday		Saturday			
Hours	Vista Point	Monte Mar	Total	Closure	Vista Point	Monte Mar	Total	Closure	Vista Point	Monte Mar	Total	Closure	Vista Point	Monte Mar	Total	Closure
0-1	32	41	73	С	29	20	49	С	12	30	42	С	40	44	84	С
1-2	32	20	52	С	10	14	24	С	14	7	21	С	20	19	39	С
2-3	16	14	30	С	15	12	27	С	4	19	23	С	9	19	28	С
3-4	18	14	32	С	6	12	18	С	3	8	11	С	16	7	23	С
4-5	3	7	10	С	1	5	6	С	1	5	6	С	7	10	17	С
5-6	6	8	14	С	3	15	18	С	7	10	17	С	11	10	21	С
6-7	11	8	19	С	11	15	26	С	10	8	18	С	7	7	14	С
7-8	29	24	53	С	44	39	83	С	31	46	77	С	30	25	55	С
8-9	70	34	104	С	47	58	105	С	29	69	98	С	52	44	96	С
9-10	153	42	195	С	96	81	177	С	78	44	122	С	71	69	140	С
10-11	277	71	348	С	146	63	209	С	147	81	228	С	163	78	241	С
11-12	316	124	440	С	157	102	259	С	164	103	267	С	288	88	376	С
12-13	335	127	462	С	188	95	283	С	191	102	293	С	411	132	543	С
13-14	381	158	539	С	222	97	319	С	163	132	295	С	416	122	538	С
14-15	347	139	486	С	198	91	289	С	170	137	307	С	367	163	530	С
15-16	387	147	534	С	139	134	273	С	132	134	266	С	403	156	559	С
16-17	383	186	569	С	157	156	313	С	165	178	343	С	382	173	555	С
17-18	306	125	431	С	119	168	287	С	176	154	330	С	405	137	542	С
18-19	290	129	419	С	42	168	210	С	151	146	297	С	365	134	499	С
19-20	170	105	275	С	65	124	189	С	140	171	311	С	158	100	258	С
20-21	106	64	170	С	42	98	140	С	78	125	203	С	117	98	215	С
21-22	56	59	115	С	49	69	118	С	47	68	115	С	84	64	148	С
22-23	45	37	82	С	31	78	109	С	61	78	139	С	59	61	120	С
23-24	37	34	71	С	29	37	66	С	52	71	123	С	39	63	102	С

C = Ramp may be completely closed

Route: NB US 101

Traffic Date: Short Term Construction Closure

Direction: Northbound

Condition: To be conducted during Stage 2 construction activities

Duration: Overnight closure only

Ramp Closure: NB Vista Point On-Ramp

Ramp Detour: NB Spencer/Monte Mar On-Ramp

#### DAMAGE CALCULATIONS FOR LATE LANE CLOSURE PICK UP

 Route
 US 101 NB, Vista Point On-Ramp

 Locations
 NB Vista Point On-Ramp

 Traffic Date
 Construction Conditions Ramp Closure

 Condition
 Ramp Closure and Detour

 Closure
 Overnight Closure

 Capacity
 1,200 VPH per lane

Lieur of Dou	Deman d	Capacity	Cum Demand	Cum Capacity	Cum Queue	Average Queue	Time Interval	Cum Delay	Unit Delay Cost	Total Cost Delay
Hour of Day	а	b	С	d	е	f	g	h	j	k
	а	b	a1+a2+	b1+b2+	c-d	(e1+e2)/2		fxg		hxj
	VEH	VEH	VPH	VEH	VEH	VEH	MIN	VEH.MIN	\$	\$
5 - 6 AM	18	1,200	18	1,200	0	0	60	0	\$0.19	\$0.00
6 - 7 AM	26	1,200	44	2,400	0	0	60	0	\$0.19	\$0.00
7 - 8 AM	83	1,200	127	3,600	0	0	60	0	\$0.19	\$0.00
8 - 9 AM	105	1,200	232	4,800	0	0	60	0	\$0.19	\$0.00
9 - 10 AM	177	1,200	409	6,000	0	0	60	0	\$0.19	\$0.00
Truck %:	1 3 3 9/-		(from 2011 Truck Dat	ta)						

 Truck %:
 1.33%
 (from 2011 Truck Data)

 Unit delay cost:
 \$ 0.193
 [C=.19(1-T%)+0.40XT%]

Unit delay cost: \$ 0.193 [C=.19(1-1%)+0.40X1% (Based on \$0.19 for VEH and \$0.40 for truck)

Average delay cost of 2 first hours delay cost for 10 min =	\$0.00 \$0.00 /12	\$0.00
Average delay cost of 5 first hours	\$0.00	
delay cost for 10 min =	\$0.00 /60	\$0.00

#### Ramp Closure Damage Calculations

		S	unday	Sunday			Monday-Thursday					Friday				Saturday				
Hours	Sausalito Lateral	Vista Point	Monte Mar	Total	Closure	Sausalito Lateral	Vista Point	Monte Mar	Total	Closure	Sausalito Lateral	Vista Point	Monte Mar	Total	Closure	Sausalito Lateral	Vista Point	Monte Mar	Total	Closure
0-1	59	28	24	111	С	18	5	12	35	С	34	11	18	63	С	59	24	26	109	С
1-2	38	22	12	72	С	10	11	8	29	С	19	9	4	32	С	39	16	11	66	С
2-3	23	10	8	41	С	14	4	7	25	С	24	2	11	37	С	24	8	11	43	С
3-4	13	11	8	32	С	7	1	7	15	С	7	1	5	13	С	15	11	4	30	С
4-5	11	3	4	18	С	12	2	3	17	С	13	2	3	18	С	12	10	6	28	С
5-6	10	9	5	24	С	36	6	9	51	С	34	9	6	49	С	15	4	6	25	С
6-7	43	14	5	62	С	71	10	9	90	С	58	13	5	76	С	28	7	4	39	С
7-8	46	30	14	90	С	124	19	23	166	С	108	21	27	156	С	50	27	15	92	С
8-9	98	68	20	186	С	236	36	34	306	С	199	30	41	270	С	107	41	26	174	С
9-10	236	168	25	429	С	223	61	48	332	С	241	84	26	351	С	185	85	41	311	С
10-11	338	258	42	638	С	208	116	37	361	С	257	135	48	440	С	286	164	46	496	С
11-12	444	296	73	813	С	248	163	60	471	С	268	177	61	506	С	286	299	52	637	С
12-13	418	282	75	775	С	231	169	56	456	С	263	142	60	465	С	383	360	78	821	С
13-14	450	300	93	843	С	234	174	57	465	С	274	134	78	486	С	365	358	72	795	С
14-15	549	384	82	1,015	С	280	216	54	550	С	245	145	81	471	С	387	409	96	892	С
15-16	481	464	87	1,032	С	273	187	79	539	С	277	128	79	484	С	390	413	92	895	С
16-17	399	252	110	761	С	255	169	92	516	С	248	130	105	483	С	428	436	102	966	С
17-18	308	221	74	603	С	322	103	99	524	С	271	142	91	504	С	351	286	81	718	С
18-19	187	182	76	445	С	229	106	99	434	С	241	112	86	439	С	218	190	79	487	С
19-20	174	109	62	345	С	176	78	73	327	С	165	97	101	363	С	129	99	59	287	С
20-21	140	52	38	230	С	131	50	58	239	С	128	44	74	246	С	107	71	58	236	С
21-22	99	36	35	170	С	123	32	41	196	С	120	39	40	199	С	92	63	38	193	С
22-23	78	38	22	138	С	94	30	46	170	С	98	49	46	193	С	90	38	36	164	С
23-24	45	24	20	89	С	54	26	22	102	С	73	32	42	147	С	65	36	37	138	С

C = Ramp may be completely closed Route: NB US 101 Traffic Date: Short Term Construction Closure Direction: Northbound Condition: To be conducted during Stage 2 construction activities Construction of the second sec

#### DAMAGE CALCULATIONS FOR LATE LANE CLOSURE PICK UP

 DAMAGE CALCULATIONS FOR LATE LANE CLOSURE PICK UP

 Route
 US 101 NB, Vista Point Off-Ramp and Sausalito Lateral Off-Ramp

 Locations
 NB Vista Point Off-Ramp and Sausalito Lateral Off-Ramp

 Traffic Date Short Term Construction Conditions Ramp Closures
 Condition

 Condition
 Ramp Closure and Detour

 Closure
 Overnight Closure

 Capacity
 1,200 VPH per lane

Hour of	Demand	Capacity	Cum Demand	Cum Capacity	Cum Queue	Average Queue	Time Interval	Cum Delay	Unit Delay Cost	Total Cost Delay
Day	а	b	С	d	e	f	g	h	j	k
	а	b	a1+a2+	b1+b2+	c-d	(e1+e2)/2		fxg		hxj
	VEH	VEH	VPH	VEH	VEH	VEH	MIN	VEH.MIN	\$	\$
5 - 6 AM	51	1,200	51	1,200	0	0	60	0	\$0.19	\$0.00
6 - 7 AM	90	1,200	141	2,400	0	0	60	0	\$0.19	\$0.00
7 - 8 AM	166	1,200	307	3,600	0	0	60	0	\$0.19	\$0.00
8 - 9 AM	306	1,200	613	4,800	0	0	60	0	\$0.19	\$0.00
9 - 10 AM	332	1,200	945	6,000	0	0	60	0	\$0.19	\$0.00

 Truck %:
 1.33%
 (from 2011 Truck Data)

 Unit delay cost:
 \$ 0.193
 [C=.19(1-T%)+0.40XT%]

 (Based on \$0.19 for VEH and \$0.40 for truck)
 \$ 0.19 for VEH and \$ 0.40 for truck

Average delay cost of 2 first hours delay cost	\$0.00	
for 10 min =	\$0.00 /12	\$0.00
Average delay cost of 5 first hours delay cost	\$0.00	
for 10 min =	\$0.00 /60	\$0.00

## **Ramp Closure Damage Calculations**

	Sunday				Monday-Thursday				Friday				Saturday			
Hours	Sausalito Lateral	Monte Mar	Total	Closure												
0-1	77	20	97	С	31	10	41	С	30	15	45	С	55	21	76	С
1-2	27	10	37	С	15	7	22	С	16	3	19	С	40	9	49	С
2-3	27	7	34	С	11	6	17	С	12	9	21	С	24	9	33	С
3-4	13	7	20	С	10	6	16	С	16	4	20	С	14	3	17	С
4-5	14	3	17	С	9	2	11	С	18	2	20	С	15	5	20	С
5-6	14	4	18	С	47	7	54	С	33	5	38	С	18	5	23	С
6-7	26	4	30	С	107	7	114	С	95	4	99	С	28	3	31	С
7-8	64	11	75	С	222	19	241	С	219	22	241	С	84	12	96	С
8-9	97	16	113	С	281	28	309	С	245	33	278	С	118	21	139	С
9-10	178	20	198	С	233	39	272	С	237	21	258	С	192	33	225	С
10-11	261	34	295	С	222	30	252	С	235	39	274	С	228	37	265	С
11-12	354	59	413	С	252	49	301	С	311	50	361	С	310	42	352	С
12-13	452	61	513	С	275	46	321	С	337	49	386	С	434	63	497	С
13-14	554	76	630	С	266	46	312	С	372	63	435	С	436	59	495	С
14-15	662	67	729	С	256	44	300	С	409	66	475	С	574	78	652	С
15-16	652	71	723	С	252	64	316	С	404	64	468	С	688	75	763	С
16-17	757	89	846	С	304	75	379	С	394	85	479	С	639	83	722	С
17-18	785	60	845	С	373	81	454	С	459	74	533	С	629	66	695	С
18-19	609	62	671	С	267	81	348	С	424	70	494	С	593	64	657	С
19-20	440	50	490	С	186	59	245	С	294	82	376	С	470	48	518	С
20-21	320	31	351	С	146	47	193	С	226	60	286	С	353	47	400	С
21-22	176	28	204	С	130	33	163	С	183	33	216	С	237	31	268	С
22-23	108	18	126	С	88	37	125	С	188	37	225	С	154	29	183	С
23-24	43	16	59	С	44	18	62	С	121	34	155	С	136	30	166	С

C = Ramp may be completely closed

Route: SB US 101

Traffic Date: Short Term Construction Closure

Direction: Southbound

Condition: To be conducted during Stage 5 construction activities

Duration: Overnight closure only

Ramp Closure: SB Sausalito Lateral On-Ramp

Ramp Detour: SB Spencer/Monte Mar On-Ramp

# DAMAGE CALCULATIONS FOR LATE LANE CLOSURE PICK UP

Route	US 101 SB, Sausalito Lateral On-Ramp
Locations	SB Sausalito Lateral On-Ramp
	•
Traffic Date	Short-Term Construction Conditions Ramp Closure
Condition	Ramp Closure and Detour
Closure	Overnight Closure
Capacity	1,200 VPH per lane

Hour of Dou	Demand	Capacity	Cum Demand	Cum Capacity	Cum Queue	Average Queue	Time Interval	Cum Delay	Unit Delay Cost	Total Cost Delay
Hour of Day	а	b	с	d	е	f	g	h	j	k
	а	b	a1+a2+	b1+b2+	c-d	(e1+e2)/2		fxg		hxj
	VEH	VEH	VPH	VEH	VEH	VEH	MIN	VEH.MIN	\$	\$
5 - 6 AM	54	1,200	54	1,200	0	0	60	0	\$0.19	\$0.00
6 - 7 AM	114	1,200	168	2,400	0	0	60	0	\$0.19	\$0.00
7 - 8 AM	241	1,200	409	3,600	0	0	60	0	\$0.19	\$0.00
8 - 9 AM	309	1,200	718	4,800	0	0	60	0	\$0.19	\$0.00
9 - 10 AM	272	1,200	990	6,000	0	0	60	0	\$0.19	\$0.00
Truck 0/1	4 220/		from 2011 Truck	Deta)						

 Truck %:
 1.33%
 (from 2011 Truck Data)

 Unit delay cost:
 \$ 0.193
 [C=.19(1-T%)+0.40XT%]

 (Based on \$0.19 for VEH and \$0.40 for truck)

Average delay cost of 2 first hours delay cost for 10 min =	\$0.00 \$0.00 /12	\$0.00
Average delay cost of 5 first hours delay cost	\$0.00	
for 10 min =	\$0.00 /60	\$0.00

Freeway	Peal	k Capacity (pc	/h) ⁽¹⁾
Freeway	Saturday	Sunday	Monday
Interstate 580	3,146	3,146	3,146

			Existing Tr	affic Volume			Detour Traffic Volumes			Total ClosureTraffic Volume			
Hours	Golden G	Golden Gate Bridge (Southbound)			Interstate 580 Richmond-San Rafael Bridge (Eastbound)			Golden Gate Bridge (Southbound)			Interstate 580 Richmond-San Rafael Bridge (Eastbound)		
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	
0-1	358	486	244	361	489	236	358	486	244	719	975	480	
1-2	200	212	139	184	267	150	200	212	139	384	479	289	
2-3	119	138	107	125	153	133	119	138	107	244	291	240	
3-4	124	130	157	116	93	112	124	130	157	240	223	269	
4-5	174	170	510	171	124	355	174	170	510	345	294	865	
5-6	406	335	1312	328	214	904	406	335	1312	734	549	2216	
6-7	839	690	2875	591	455	1544	839	690	2875	1430	1145	4419	
7-8	1491	963	4377	1064	718	2043	1491	963	4377	2555	1681	6420	
8-9	2197	1564	4844	1403	1066	2128	2197	1564	4844	3600	2630	6972	
9-10	2861	2442	3665	1872	1580	1840	2861	2442	3665	4733	4022	5505	
10-11	3054	3417	3040	2282	2131	1842	3054	3417	3040	5336	5548	4882	
11-12	3485	3796	2925	2311	2271	1913	3485	3796	2925	5796	6067	4838	
12-13	3727	4403	2758	2036	2200	1893	3727	4403	2758	5763	6603	4651	
13-14	3775	4139	2663	2055	2159	1952	3775	4139	2663	5830	6298	4615	
14-15	3626	3337	2878	2316	2459	2388	3626	3337	2878	5942	5796	5266	
15-16	3098	2988	3004	2256	2473	2697	3098	2988	3004	5354	5461	5701	
16-17	2927	3549	3322	2726	2739	3213	2927	3549	3322	5653	6288	6535	
17-18	3384	3238	3473	2730	2994	3481	3384	3238	3473	6114	6232	6954	
18-19	2788	2620	2812	2608	2797	2371	2788	2620	2812	5396	5417	5183	
19-20	2294	2257	1865	2108	2260	1680	2294	2257	1865	4402	4517	3545	
20-21	2087	2013	1439	1604	1646	1231	2087	2013	1439	3691	3659	2670	
21-22	1721	1649	1118	1481	1476	1039	1721	1649	1118	3202	3125	2157	
22-23	1517	1083	665	1357	1001	697	1517	1083	665	2874	2084	1362	
23-24	1010	519	344	848	531	399	1010	519	344	1858	1050	743	

#### Notes:

xxxx All	ssenger cars per hour lanes on GGB open to traffic ume exceeds capacity
Assumptions	
Speed Limit	65 mph Speed limit
Base Capacity	1850 pc/h/lane
Lanes	2
Volume Distribution	0% of GGB traffic will not drive and/or use public transit and other modes of tranpsortation. 100% of GGB detour traffic will use Interstate 580
Adjustment for Heavy Vehicles	0.97
Volume / Capacity	0.94
Peak Hour Factor	0.95
Adjustment for Driver Pop.	0.975
Average Rate of Vehicle Storage	100 vehicles / lane / mile

#### DAMAGE CALCULATIONS FOR LATE LANE CLOSURE PICK UP

Route	Interstate 580 Westbound
Traffic Date	Detour Conditions Weekend Closure of GGB
Condition	Two lanes open to through traffic
Closure	52 hour weekend closure

	Demand	Capacity	Cum Demand	Cum Output	Cum Queue	Average Queue	Time Interval	Cum Delay	Unit Delay Cost	Total Cost Delay
Hour of Day	а	b	c	d	e	f	g	h	i	k
	а	b	ac+c1+	b2+c1+	c-d	(e1+e2)/2		fxg		h xj
	VEH	VEH	VPH	VEH	VEH	VEH	MIN	VEH.MIN	\$	\$
4 - 5 AM	865	3,146	865	3,146	0	0	60	0	\$0.25	\$0.00
5 - 6 AM	2,216	3,146	3,081	4,011	0	0	60	0	\$0.25	\$0.00
6 - 7 AM	4,419	3,146	7,500	6,227	1,273	637	60	38,190	\$0.25	\$9,461
7 - 8 AM	6,420	3,146	13,920	10,646	3,274	2,274	60	136,410	\$0.25	\$33,792
8 - 9 AM	6,972	3,146	20,892	17,066	3,826	3,550	60	213,000	\$0.25	\$52,765

(from 2012 Truck Data: http://traffic-counts.dot.ca.gov/docs/2012_aadt_truck.pdf) [C=veh(1-T%)+trucks*(T%)] (Based on \$0.24 for VEH and \$0.48 for Trucks)

Assumptions	
-------------	--

Average Effective Vehicle Length (A)	/	25 Feet
Truck %:		3.41%
Unit delay cost:	\$	0.25
Veh	\$	0.24
Trucks	\$	0.48
PM 9.96		
AADT		189,000
Trucks		6,445
Trucks in Traffic		0.034
Passenger Car Equiv.		2

#### Delay Costs

Average delay cost of first 2 hours delay cost	for 10 min =	\$0 \$0 /12	\$0
Average delay cost of first 5 hours delay cost	for 10 min =	\$52,765.39 \$52,765 /30	\$1,758.85

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - RICHMOND-SAN RAFAEL BRIDGE (EASTBOUND)

Day	Hours	Demand a a VEH	Capacity b b VEH	Cum Demand c a2+c1 VPH	Cum Output d b2+c1+ VEH	Cum Queue e c-d VEH	Average Queue f (e1+e2)/2 VEH	Average Queue Distance g f/(Vplm*Lanes) MILES	Average Queue Delay h (e1+(a2-b2))/b2 HOURS
	0-1	719	3.146	719	3,146	0	0	0.0	0.0
	1-2	384	3,146	1,103	3,865	0	0	0.0	0.0
	2-3	244	3,146	1,347	4,249	0	0	0.0	0.0
	3-4	240	3,146	1,587	4,493	0	0	0.0	0.0
	4-5	345 734	3,146	1,932	4,733	0	0	0.0	0.0
	5-6 6-7	1.430	3,146 3,146	2,666 4.096	5,078 5.812	0	0	0.0	0.0
	7-8	2,555	3,146	6,651	7,242	0	0	0.0	0.0
	8-9	3,600	3,146	10,251	9,797	454	227	1.1	0.1
	9-10	4,733	3,146	14,984	13,397	1,587	1,021	5.1	0.6
	10-11	5,336	3,146	20,320	18,130	2,190	1,889	9.4	1.2
Saturday	11-12	5,796	3,146	26,116	23,466	2,650	2,420	12.1	1.5
	12-13	5,763	3,146	31,879	29,262	2,617	2,634	13.2	1.7
	13-14 14-15	5,830 5,942	3,146 3,146	37,709 43,651	35,025 40,855	2,684 2,796	2,651 2,740	13.3 13.7	1.7
	15-16	5,354	3,140	49,005	46,797	2,208	2,502	12.5	1.6
	16-17	5,653	3,140	54,658	52,151	2,507	2,358	11.8	1.5
	17-18	6,114	3,146	60,772	57,804	2,968	2,738	13.7	1.7
	18-19	5,396	3,146	66,168	63,918	2,250	2,609	13.0	1.7
	19-20	4,402	3,146	70,570	69,314	1,256	1,753	8.8	1.1
	20-21	3,691	3,146	74,261	73,716	545	901	4.5	0.6
	21-22 22-23	3,202 2,874	3,146	77,463 80,337	77,407	56	301 28	1.5	0.2
	22-23	2,874	3,146 3,146	80,337 82,195	80,609 83,483	0	28	0.1 0.0	0.0
	0-1	975	3,146	83,170	85,341	0	0	0.0	0.0
	1-2	479	3,146	83,649	86,316	0	0	0.0	0.0
	2-3	291	3,146	83,940	86,795	0	0	0.0	0.0
	3-4	223	3,146	84,163	87,086	0	0	0.0	0.0
	4-5	294	3,146	84,457	87,309	0	0	0.0	0.0
	5-6	549	3,146	85,006	87,603	0	0	0.0	0.0
	6-7	1,145	3,146	86,151	88,152	0	0	0.0	0.0
	7-8	1,681	3,146	87,832	89,297	0	0	0.0	0.0
	8-9 9-10	2,630 4,022	3,146 3,146	90,462 94,484	90,978 93,608	0 876	0 438	0.0	0.0
	10-11	5,548	3,146	100,032	97,630	2,402	1,639	8.2	1.0
	11-12	6,067	3,146	106,099	103,178	2,921	2,662	13.3	1.7
Sunday	12-13	6,603	3,146	112,702	109,245	3,457	3,189	15.9	2.0
	13-14	6,298	3,146	119,000	115,848	3,152	3,305	16.5	2.1
	14-15	5,796	3,146	124,796	122,146	2,650	2,901	14.5	1.8
	15-16	5,461	3,146	130,257	127,942	2,315	2,483	12.4	1.6
	16-17 17-18	6,288	3,146 3,146	136,545 142,777	133,403 139,691	3,142 3,086	2,729 3,114	13.6 15.6	1.7 2.0
	17-18	5,417	3,146	142,777	145,923	2,271	2,679	13.4	2.0
	19-20	4,517	3,146	152,711	151.340	1.371	1.821	9.1	1.2
	20-21	3,659	3,146	156,370	155,857	513	942	4.7	0.6
	21-22	3,125	3,146	159,495	159,516	0	257	1.3	0.2
	22-23	2,084	3,146	161,579	162,641	0	0	0.0	0.0
	23-24	1,050	3,146	162,629	164,725	0	0	0.0	0.0
	0-1	480	3,146	163,109	165,775	0	0	0.0	0.0
	1-2 2-3	289 240	3,146 3,146	163,398 163,638	166,255 166,544	0	0	0.0	0.0
	3-4	240	3,146	163,638	166,784	0	0	0.0	0.0
	4-5	865	3,146	163,907	167,053	0	0	0.0	0.0
	5-6	904	3,146	165,676	167,918	0	0	0.0	0.0
	6-7	1,544	3,146	167,220	168,822	0	0	0.0	0.0
	7-8	2,043	3,146	169,263	170,366	0	0	0.0	0.0
	8-9	2,128	3,146	171,391	172,409	0	0	0.0	0.0
	9-10	1,840	3,146	173,231	174,537	0	0	0.0	0.0
	10-11	1,842	3,146	175,073	176,377	0	0	0.0	0.0
Monday	11-12 12-13	1,913	3,146 3,146	176,986 178,879	178,219 180,132	0	0	0.0	0.0
	13-14	1,893	3,146	180,831	180,132	0	0	0.0	0.0
	14-15	2,388	3,146	183,219	183,977	0	0	0.0	0.0
	15-16	2,697	3,146	185,916	186,365	0	0	0.0	0.0
	16-17	3,213	3,146	189,129	189,062	67	34	0.2	0.0
	17-18	3,481	3,146	192,610	192,275	335	201	1.0	0.1
	18-19	2,371	3,146	194,981	195,756	0	168	0.8	0.0
	19-20	1,680	3,146	196,661	198,127	0	0	0.0	0.0
	20-21 21-22	1,231	3,146 3,146	197,892 198,931	199,807 201.038	0	0	0.0	0.0
				190,931	201,038	0	0	0.0	0.0
	22-23	697	3,146	199,628	202,077	0	0	0.0	0.0

Notes:

Freeway	Peak Capacity (pc/h) ⁽¹⁾						
Fieeway	Saturday	Sunday	Monday				
Interstate 580	3,146	3.146	3,146				

			Existing Tr	affic Volume			Det	our Traffic Volu	imes	Total ClosureTraffic Volume			
Hours	Golden G	Golden Gate Bridge (Northbound)			Interstate 580 Richmond-San Rafael Bridge (Westbound)			Golden Gate Bridge (Northbound)			Interstate 580 Richmond-San Rafael Bridge (Westbound)		
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	
0-1	1070	999	619	490	487	305	1070	999	619	1560	1486	924	
1-2	583	612	346	222	323	195	583	612	346	805	935	541	
2-3	437	470	173	195	201	119	437	470	173	632	671	292	
3-4	243	259	129	144	135	179	243	259	129	387	394	308	
4-5	179	172	163	277	203	393	179	172	163	456	375	556	
5-6	373	217	386	508	332	1085	373	217	386	881	549	1471	
6-7	603	426	1059	1032	621	2933	603	426	1059	1635	1047	3992	
7-8	1223	814	2348	1737	1024	3653	1223	814	2348	2960	1838	6001	
8-9	2100	1562	3095	2380	1428	3417	2100	1562	3095	4480	2990	6512	
9-10	3044	2565	2815	2796	2072	2818	3044	2565	2815	5840	4637	5633	
10-11	3829	3441	2971	3207	2570	2162	3829	3441	2971	7036	6011	5133	
11-12	3727	3633	3183	3206	2934	2097	3727	3633	3183	6933	6567	5280	
12-13	3486	3027	3275	3288	2892	1992	3486	3027	3275	6774	5919	5267	
13-14	3266	2955	3259	3282	2925	2080	3266	2955	3259	6548	5880	5339	
14-15	3000	2624	3812	3272	2631	1810	3000	2624	3812	6272	5255	5622	
15-16	2883	2368	4423	2867	2686	1938	2883	2368	4423	5750	5054	6361	
16-17	3071	2460	4621	2533	2519	2110	3071	2460	4621	5604	4979	6731	
17-18	4223	3863	4953	2373	2396	2252	4223	3863	4953	6596	6259	7205	
18-19	5622	5643	4195	1884	1865	2090	5622	5643	4195	7506	7508	6285	
19-20	3136	3109	2737	1411	1578	1425	3136	3109	2737	4547	4687	4162	
20-21	2029	2309	1961	1281	1435	1001	2029	2309	1961	3310	3744	2962	
21-22	1882	2433	1635	1374	1219	929	1882	2433	1635	3256	3652	2564	
22-23	2306	1932	1233	1335	949	716	2306	1932	1233	3641	2881	1949	
23-24	1539	1067	795	735	588	476	1539	1067	795	2274	1655	1271	

#### Notes:

⁽¹⁾ pc/h pa	ssenger car	s per hour
XXXX AI	lanes on G	GB open to traffic
	lume excee	
Assumptions		
Speed Limit	65 mph	Speed limit
Base Capacity	1850	VPH per Lane
Lanes	2	
Volume Distribution		of GGB traffic will not drive and/or use public transit and other modes of tranpsortation.
Volume Distribution	100%	of GGB detour traffic will use Interstate 580
djustment for Heavy Vehicles	0.97	
Volume / Capacity	0.99	
Peak Hour Factor	0.95	
Adjustment for Driver Pop.	0.975	
Average Rate of Storage	100	vehicles / lane / mile

Route	Interstate 580 Westbound
Traffic Date	Detour Conditions Weekend Closure of GGB
Condition	Two lanes open to through traffic
Closure	52 hour weekend closure

	Demand	Capacity	Cum Demand	Cum Output	Cum Queue	Average Queue	Time Interval	Cum Delay	Unit Delay Cost	Total Cost Delay
Hour of Day	а	b	с	d	e	f	g	h	j	k
	a	b	ac+c1+	b2+c1+	c-d	(e1+e2)/2		fxg		h xj
	VEH	VEH	VPH	VEH	VEH	VEH	MIN	VEH.MIN	\$	\$
4 - 5 AM	556	3,146	556	3,146	0	0	60	0	\$0.25	\$0.00
5 - 6 AM	1,471	3,146	2,027	2,027	0	0	60	0	\$0.25	\$0.00
6 - 7 AM	3,992	3,146	6,019	5,173	846	423	60	25,380	\$0.25	\$6,287
7 - 8 AM	6,001	3,146	12,020	9,165	2,855	1,851	60	111,030	\$0.25	\$27,505
8 - 9 AM	6,512	3,146	18,532	15,166	3,366	3,111	60	186,630	\$0.25	\$46,233

Assumptions				
Average Effective Vehicl	le Le	25 Feet		
Truck %:		3.41%	(from 2012 Truck Data: h	http://traffic-counts.dot.ca.gov/docs/2012_aadt_truck.pdf)
Unit delay cost:	\$	0.25	[C=veh(1-T%)+trucks*(T	%)]
			(Based on \$0.24 for VEH	and \$0.48 for Trucks)
Veh	\$	0.24		
Trucks	\$	0.48		
PM 9.96				
AADT		189,000		
Trucks		6,445		
Trucks in Traffic		0.034		
Passenger Car Equiv.		2		
Delay Costs				
Average delay cost of fir	st 2 hours		\$0	
delay cost	for 1	0 min =	\$0 /12	\$0
Average delay cost of fir	st 5 hours		\$46,232.89	
delay cost	for 10	0 min =	\$46,233 /30	\$1,541.10

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - RICHMOND-SAN RAFAEL BRIDGE (WESTBOUND)

Day	Hours	Demand a	Capacity b b	Cum Demand c	d	Cum Queue e	Average Queue f	Average Queue Distance g	Average Queue Delay h
		a VEH	VEH	a2+c1 VPH	b2+c1+ VEH	c-d VEH	(e1+e2)/2 VEH	f/(Vplm*Lanes MILES	(e1+(a2-b2))/b HOURS
	0-1	1.560	3,146	1.560	3.146	0	0	0.0	0.0
	1-2	805	3,146	2,365	4,706	0	0	0.0	0.0
	2-3	632	3,146	2,997	5,511	0	0	0.0	0.0
	3-4	387	3,146	3.384	6,143	0	0	0.0	0.0
	4-5	456	3,146	3,840	6,530	0	0	0.0	0.0
	5-6	881	3,146	4,721	6,986	0	0	0.0	0.0
	6-7	1,635	3,146	6,356	7,867	0	0	0.0	0.0
	7-8	2,960	3,146	9,316	9,502	0	0	0.0	0.0
	8-9	4,480	3,146	13,796	12,462	1,334	667	3.3	0.4
	9-10	5,840	3,146	19,636	16,942	2,694	2,014	10.1	1.3
	10-11	7,036	3,146	26,672	22,782	3,890	3,292	16.5	2.1
Saturday	11-12	6,933	3,146	33,605	29,818	3,787	3,839	19.2	2.4
Gaturday	12-13	6,774	3,146	40,379	36,751	3,628	3,708	18.5	2.4
	13-14	6,548	3,146	46,927	43,525	3,402	3,515	17.6	2.2
	14-15	6,272	3,146	53,199	50,073	3,126	3,264	16.3	2.1
	15-16	5,750	3,146	58,949	56,345	2,604	2,865	14.3	1.8
	16-17	5,604	3,146	64,553	62,095	2,458	2,531	12.7	1.6
	17-18	6,596	3,146	71,149	67,699	3,450	2,954	14.8	1.9
	18-19	7,506	3,146	78,655	74,295	4,360	3,905	19.5	2.5
	19-20	4,547	3,146	83,202	81,801	1,401	2,881	14.4	1.8
	20-21 21-22	3,310 3,256	3,146 3,146	86,512 89,768	86,348 89,658	164 110	783	3.9 0.7	0.5
	21-22	3,250	3,146	93,409	92,914	495	303	1.5	0.1
	23-24	2,274	3,146	95,683	92,914 96,555	495	248	1.5	0.2
			3,146		98,829	0	0		
	0-1	1,486 935	3,146	97,169 98,104	100,315	0	0	0.0	0.0
	2-3	671	3,146	98,775	100,315	0	0	0.0	0.0
	3-4	394	3,146	99,169	101,921	0	0	0.0	0.0
	4-5	375	3,146	99,544	102,315	0	0	0.0	0.0
_	5-6	549	3,146	100,093	102,690	0	0	0.0	0.0
	6-7	1,047	3,146	101,140	103,239	0	Ő	0.0	0.0
	7-8	1,838	3,146	102,978	104,286	0	0	0.0	0.0
	8-9	2,990	3,146	105,968	106,124	0	0	0.0	0.0
	9-10	4,637	3,146	110,605	109,114	1,491	746	3.7	0.5
	10-11	6,011	3,146	116,616	113,751	2,865	2,178	10.9	1.4
Course direct	11-12	6,567	3,146	123,183	119,762	3,421	3,143	15.7	2.0
Sunday	12-13	5,919	3,146	129,102	126,329	2,773	3,097	15.5	2.0
	13-14	5,880	3,146	134,982	132,248	2,734	2,754	13.8	1.8
	14-15	5,255	3,146	140,237	138,128	2,109	2,422	12.1	1.5
	15-16	5,054	3,146	145,291	143,383	1,908	2,009	10.0	1.3
	16-17	4,979	3,146	150,270	148,437	1,833	1,871	9.4	1.2
	17-18	6,259	3,146	156,529	153,416	3,113	2,473	12.4	1.6
	18-19	7,508	3,146	164,037	159,675	4,362	3,738	18.7	2.4
	19-20	4,687	3,146	168,724	167,183	1,541	2,952	14.8	1.9
	20-21	3,744	3,146	172,468	171,870	598	1,070	5.3	0.7
	21-22	3,652	3,146	176,120	175,614	506	552	2.8	0.4
	22-23	2,881	3,146	179,001	179,266	0	253	1.3	0.1
	23-24	1,655	3,146	180,656	182,147	0	0	0.0	0.0
	0-1	924	3,146	181,580	183,802	0	0	0.0	0.0
	2-3	541 292	3,146 3,146	182,121 182,413	184,726	0	0	0.0	0.0
	3-4	292 308	3,146	182,413	185,267	0	0	0.0	0.0
	3-4 4-5	556	3,146	182,721	185,867	0	0	0.0	0.0
	4-5 5-6	1,085	3,146	183,277	185,867	0	0	0.0	0.0
	5-6 6-7	2,933	3,146	184,362	186,423	0	0	0.0	0.0
	7-8	3,653	3,146	190,948	190,441	507	254	1.3	0.0
	8-9	3,417	3,146	190,948	190,441	271	389	1.9	0.2
	9-10	2,818	3,146	194,303	194,094	0	136	0.7	0.0
	10-11	2,010	3,146	199,345	200,329	0	0	0.0	0.0
	11-12	2,097	3,146	201,442	202,491	0	0	0.0	0.0
Monday	12-13	1,992	3,146	203,434	204,588	0	0	0.0	0.0
	13-14	2,080	3,146	205,514	206,580	0	0	0.0	0.0
	14-15	1,810	3,146	207,324	208,660	0	0	0.0	0.0
	15-16	1,938	3,146	209,262	210,470	0	0	0.0	0.0
	16-17	2,110	3,146	211,372	212,408	0	0	0.0	0.0
	17-18	2,252	3,146	213,624	214,518	0	0	0.0	0.0
	18-19	2,090	3,146	215,714	216,770	0	0	0.0	0.0
	19-20	1,425	3,146	217,139	218,860	0	0	0.0	0.0
	20-21	1,001	3,146	218,140	220,285	0	0	0.0	0.0
	21-22	929	3,146	219,069	221,286	0	0	0.0	0.0
	22-23	716	3,146	219,785	222,215	0	0	0.0	0.0
	23-24	476	3,146	220,261	222,931	0	0	0.0	0.0

Notes:

Queue

Freeway	Pea	k Capacity (pc	/h) ⁽¹⁾
Fieeway	Saturday	Sunday	Monday
Interstate 80	8,352	8,352	8,352

			Existing Tr	affic Volume			D	etour Traffic Vo	lumes	Total ClosureTraffic Volume		
Hours	Golden G	Golden Gate Bridge (Northbound)			San Francisco idge (Eastbou	-Oakland Bay nd)	Golden Gate Bridge (Northbound)			Interstate 80 San Francisco-Oakland Bay Bridge (Eastbound)		
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0-1	1070	999	619	3881	3897	2516	1070	999	619	4951	4896	3135
1-2	583	612	346	3002	3231	1348	583	612	346	3585	3843	1694
2-3	437	470	173	2940	3463	982	437	470	173	3377	3933	1155
3-4	243	259	129	1482	1875	731	243	259	129	1725	2134	860
4-5	179	172	163	1012	1043	853	179	172	163	1191	1215	1016
5-6	373	217	386	1361	1065	1730	373	217	386	1734	1282	2116
6-7	603	426	1059	2127	1644	3785	603	426	1059	2730	2070	4844
7-8	1223	814	2348	3429	2587	6180	1223	814	2348	4652	3401	8528
8-9	2100	1562	3095	4777	3537	6753	2100	1562	3095	6877	5099	9848
9-10	3044	2565	2815	5709	4673	5859	3044	2565	2815	8753	7238	8674
10-11	3829	3441	2971	6669	5693	5575	3829	3441	2971	10498	9134	8546
11-12	3727	3633	3183	6814	6125	5577	3727	3633	3183	10541	9758	8760
12-13	3486	3027	3275	6573	6474	6010	3486	3027	3275	10059	9501	9285
13-14	3266	2955	3259	6513	6773	6510	3266	2955	3259	9779	9728	9769
14-15	3000	2624	3812	7202	6917	7893	3000	2624	3812	10202	9541	11705
15-16	2883	2368	4423	7574	6993	8608	2883	2368	4423	10457	9361	13031
16-17	3071	2460	4621	7171	7571	8292	3071	2460	4621	10242	10031	12913
17-18	4223	3863	4953	7554	7417	7818	4223	3863	4953	11777	11280	12771
18-19	5622	5643	4195	7853	7692	6819	5622	5643	4195	13475	13335	11014
19-20	3136	3109	2737	7459	7460	5831	3136	3109	2737	10595	10569	8568
20-21	2029	2309	1961	7461	7342	4968	2029	2309	1961	9490	9651	6929
21-22	1882	2433	1635	6344	7226	4493	1882	2433	1635	8226	9659	6128
22-23	2306	1932	1233	6303	7276	3988	2306	1932	1233	8609	9208	5221
23-24	1539	1067	795	5035	4387	2881	1539	1067	795	6574	5454	3676

#### Notes:

	(1)pc/h passenger cars per hour						
	xxxx All lanes on GGB open to traffic						
xxxx Vo	e exceeds capacity						
Assumptions							
Speed Limit	65 mph Speed limit						
Base Capacity	1850 VPH per Lane						
Lanes	5						
Volume Distribution	0% of GGB traffic will not drive and/or use public transit and 100% of GGB detour traffic will use Interstate 80	other modes of tranpsortation.					
Adjustment for Heavy Vehicles	0.97						
Volume / Capacity	0.93						
Peak Hour Factor	0.95						
Adjustment for Driver Pop.	0.975						
Average Rate of Vehicle Storage	100 vehicles / lane / mile						

#### DAMAGE CALCULATIONS FOR LATE LANE CLOSURE PICK UP

Route	Interstate 80 Eastbound
Traffic Date	Detour Conditions Weekend Closure of GGB
Condition	Two lanes open to through traffic
Closure	52 hour weekend closure

		Demand	Capacity	Cum Demand	Cum Output	Cum Queue	Average Queue	Time Interval	Cum Delay	Unit Delay Cost	Total Cost Delay
	Hour of Day	а	b	С	d	e	f	g	h	i	k
		а	b	ac+c1+	b2+c1+	c-d	(e1+e2)/2		fxg		h xj
		VEH	VEH	VPH	VEH	VEH	VEH	MIN	VEH.MIN	\$	\$
4 - 5 AM		1,016	8,352	1,016	8,352	0	0	60	0	\$0.25	\$0.00
5 - 6 AM		2,116	8,352	3,132	9,368	0	0	60	0	\$0.25	\$0.00
6 - 7 AM		4,844	8,352	7,976	11,484	0	0	60	0	\$0.25	\$0.00
8 - 9 AM		8,528	8,352	16,504	16,328	176	88	60	5,271	\$0.25	\$1,295.20
9 - 10 AN	1	9,848	8,352	26,352	24,856	1,496	836	60	50,141	\$0.25	\$12,321.83

\$0 \$0 /12

\$12,322 \$12,322 /30

#### Assumptions

Average delay cost of first 5 hours

delay cost

Unit delay cost:         \$         0.25           Veh         \$         0.24           Trucks         \$         0.48           PM 1.989         AADT         241,000           Trucks         6218         7           Trucks         6218         0.26           Passenger Car Equiv.         2         2           Delay Costs         Average delay cost of first 2 hours         2	Average Effective Vehicle Length (AVL) Truck %		25 Feet 2.58%	(
Trucks         \$         0.48           PM 1:989	Unit delay cost:	\$		È
PM 1.989         241,000           AADT         241,000           Trucks         6218           Trucks in Traffic         0.926           Passenger Car Equiv.         2           Delay Costs         Average delay cost of first 2 hours	Veh	\$	0.24	(
ADT         241,000           Trucks in Traffic         6218           Trucks in Traffic         0.026           Passenger Car Equiv.         2           Delay Costs         Average delay cost of first 2 hours	Trucks	\$	0.48	
Tucks         6218           Trucks in Tradiic         0.026           Passenger Car Equiv.         2           Delay Costs         Average delay cost of first 2 hours	PM 1.989			
Trucks in Traffic 0.026 Passenger Car Equiv. 2 Delay Costs Average delay cost of first 2 hours	AADT		241,000	
Passenger Car Equiv. 2 Delay Costs Average delay cost of first 2 hours	Trucks		6218	
Delay Costs Average delay cost of first 2 hours	Trucks in Traffic		0.026	
Average delay cost of first 2 hours	Passenger Car Equiv.		2	
	delay cost	for 1	0 min =	

for 10 min =

# (from 2012 Truck Data: http://traffic-counts.dot.ca.gov/docs/2012_aadt_truck.pdf) [C=veh(1-T%)+trucks*(T%)] (Based on \$0.24 for VEH and \$0.48 for truck)

\$0

\$410.73

### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - SAN FRANCISCO-OAKLAND BAY BRIDGE (EASTBOUND)

Day	Hours	Demand	Capacity	Cum Demand		Cum Queue	Average Queue	Average Queue Distance	Average Queue Delay
		a a VEH	b b VEH	с a2+c1 VPH	d b2+c1+ VEH	e c-d VEH	f (e1+e2)/2 VEH	g f/(Vplm*Lanes) MILES	h (e1+(a2-b2))/b2 HOURS
	0-1	4,951	8,352	4,951	8,352	0	0	0.0	0.0
	1-2	3,585	8,352	8,536	13,303	0	0	0.0	0.0
	2-3	3,377	8,352	11,913	16,888	0	0	0.0	0.0
	3-4	1,725	8,352	13,638	20,265	0	0	0.0	0.0
	4-5	1,191	8,352	14,829	21,990	0	0	0.0	0.0
	5-6	1,734	8,352	16,563	23,181	0	0	0.0	0.0
	6-7	2,730	8,352	19,293	24,915	0	0	0.0	0.0
		4,652	8,352	23,945	27,645	0	0	0.0	0.0
	8-9 9-10	6,877 8,753	8,352 8,352	30,822 39,575	32,297 39,174	401	200	0.0	0.0
	10-11	10.498	8,352	50.073	47.927	2,146	1.273	2.5	0.3
	11-12	10,498	8,352	60,614	58,425	2,140	2,167	4.3	0.5
Saturday	12-13	10,059	8,352	70,673	68,966	1,707	1,948	3.9	0.5
	13-14	9,779	8,352	80,452	79,025	1,427	1,567	3.5	0.5
	14-15	10,202	8,352	90,654	88,804	1,850	1,638	3.3	0.4
	15-16	10,457	8,352	101,111	99,006	2,105	1,977	4.0	0.5
	16-17	10,437	8,352	111,353	109.463	1.890	1,997	4.0	0.5
	17-18	11,777	8,352	123,130	119,705	3,425	2.657	5.3	0.6
	18-19	13,475	8,352	136,605	131,482	5,123	4,274	8.5	1.0
	19-20	10,595	8,352	147,200	144,957	2,243	3,683	7.4	0.9
	20-21	9,490	8,352	156,690	155,552	1,138	1,690	3.4	0.4
	21-22	8,226	8,352	164,916	165,042	0	569	1.1	0.1
	22-23	8,609	8.352	173,525	173,268	257	128	0.3	0.0
	23-24	6,574	8,352	180,099	181,877	0	128	0.3	0.0
	0-1	4,896	8,352	184,995	188,451	0	0	0.0	0.0
	1-2	3,843	8,352	188,838	193,347	0	0	0.0	0.0
	2-3	3,933	8,352	192,771	197,190	0	0	0.0	0.0
	3-4	2,134	8,352	194,905	201,123	0	0	0.0	0.0
	4-5	1,215	8,352	196,120	203,257	0	0	0.0	0.0
	5-6	1,282	8.352	197,402	204,472	0	0	0.0	0.0
	6-7	2,070	8,352	199,472	205,754	0	0	0.0	0.0
	7-8	3,401	8,352	202,873	205,754	0	0	0.0	0.0
	8-9	5,099	8,352	207,972	211,225	0	0	0.0	0.0
	9-10	7,238	8,352	215,210	216,324	0	0	0.0	0.0
	10-11	9,134	8,352	224,344	223,562	782	391	0.8	0.1
	11-12	9,758	8,352	234,102	232,696	1,406	1.094	2.2	0.1
Sunday	12-13	9,501	8,352	243,603	242,454	1,140	1,034	2.6	0.3
	13-14	9,728	8,352	253,331	251,955	1,376	1,262	2.5	0.3
	14-15	9,541	8,352	262,872	261,683	1,189	1,282	2.6	0.3
	15-16	9,361	8,352	272,233	271,224	1,009	1,099	2.2	0.3
	16-17	10,031	8,352	282,264	280,585	1,679	1,344	2.7	0.3
	17-18	11,280	8.352	293.544	290,616	2,928	2.303	4.6	0.6
	18-19	13,335	8,352	306,879	301,896	4,983	3,955	7.9	0.9
	19-20	10,569	8,352	317,448	315,231	2,217	3,600	7.2	0.9
	20-21	9,651	8,352	317,448	315,231 325,800	1,299	1,758	3.5	0.9
	21-22	9,659	8,352	327,099	325,800	1,299	1,758	2.6	0.4
	22-23	9,009	8,352	345,966	345,110	856	1,081	2.0	0.3
	23-24	5,454	8,352	351,420	354,318	0	428	0.9	0.0
	0-1	3,135	8.352	354,555	359,772	0	0	0.0	0.0
	1-2	1,694	8,352	356,249	362,907	0	0	0.0	0.0
	2-3	1,155	8,352	357,404	364,601	0	0	0.0	0.0
	3-4	860	8,352	358,264	365,756	0	0	0.0	0.0
	4-5	1,016	8,352	359,280	366,616	0	0	0.0	0.0
	5-6	1,730	8,352	361,010	367,632	0	0	0.0	0.0
	6-7	3,785	8,352	364,795	369,362	0	0	0.0	0.0
	7-8	6,180	8,352	364,795	309,302	0	0	0.0	0.0
	8-9	6,753	8,352	377,728	379,327	0	0	0.0	0.0
	9-10	5,859	8,352	383,587	379,327 386,080	0	0	0.0	0.0
	10-11	5,575	8,352	389,162	391,939	0	0	0.0	0.0
	11-12	5,575	8,352	394,739	397,514	0	0	0.0	0.0
Monday	12-13	6,010	8,352	400,749	403,091	0	0	0.0	0.0
	13-14	6,510	8,352	407,259	409,101	0	0	0.0	0.0
	14-15	7,893	8,352	407,259	405,101	0	0	0.0	0.0
	15-16	8,608	8,352	413,152	423,504	256	128	0.3	0.0
	16-17	8,008	8,352	423,760	423,504 432,112	256	128	0.3	0.0
	17-18	7,818	8,352	432,052	432,112	0	0	0.0	0.0
	18-19	6,819	8,352	439,870	440,404	0	0	0.0	0.0
	18-19	5,831	8,352	446,689 452,520	448,222 455,041	0	0	0.0	0.0
	20-21	4,968	8,352	452,520	455,041 460,872	0	0	0.0	0.0
	20-21 21-22	4,968				0		0.0	0.0
	21-22 22-23		8,352	461,981	465,840	0	0	0.0	0.0
	22-23	3,988 2,881	8,352 8,352	465,969 468,850	470,333 474,321	0	0	0.0	0.0

Freeway	Peal	k Capacity (po	:/h) ⁽¹⁾
Fleeway	Saturday	Sunday	Monday
Interstate 80	8,352	8,352	8,352

			Existing Tr	affic Volume			Detour Traffic Volumes			Total ClosureTraffic Volume		
Hours	Golden Gate Bridge (Southbound)				Interstate 80 San Francisco-Oakland Bay Bridge (Westbound)			Golden Gate Bridge (Southbound)			San Francisco idge (Westbou	o-Oakland Bay Ind)
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0-1	358	486	244	2032	2447	1492	358	486	244	2390	2933	1736
1-2	200	212	139	1351	1903	859	200	212	139	1551	2115	998
2-3	119	138	107	1118	1081	812	119	138	107	1237	1219	919
3-4	124	130	157	1168	966	1342	124	130	157	1292	1096	1499
4-5	174	170	510	1791	1391	3531	174	170	510	1965	1561	4041
5-6	406	335	1312	3333	2176	8412	406	335	1312	3739	2511	9724
6-7	839	690	2875	4350	3114	9144	839	690	2875	5189	3804	12019
7-8	1491	963	4377	4721	3568	8453	1491	963	4377	6212	4531	12830
8-9	2197	1564	4844	6034	4975	7688	2197	1564	4844	8231	6539	12532
9-10	2861	2442	3665	7234	6529	8099	2861	2442	3665	10095	8971	11764
10-11	3054	3417	3040	7954	8090	7228	3054	3417	3040	11008	11507	10268
11-12	3485	3796	2925	8051	7909	7249	3485	3796	2925	11536	11705	10174
12-13	3727	4403	2758	6861	8171	6654	3727	4403	2758	10588	12574	9412
13-14	3775	4139	2663	7575	6911	6153	3775	4139	2663	11350	11050	8816
14-15	3626	3337	2878	7876	7273	6467	3626	3337	2878	11502	10610	9345
15-16	3098	2988	3004	7947	7260	6032	3098	2988	3004	11045	10248	9036
16-17	2927	3549	3322	7731	7392	7017	2927	3549	3322	10658	10941	10339
17-18	3384	3238	3473	7740	7502	6777	3384	3238	3473	11124	10740	10250
18-19	2788	2620	2812	6972	7227	5627	2788	2620	2812	9760	9847	8439
19-20	2294	2257	1865	6154	6538	4841	2294	2257	1865	8448	8795	6706
20-21	2087	2013	1439	5900	6238	4056	2087	2013	1439	7987	8251	5495
21-22	1721	1649	1118	6548	5640	3828	1721	1649	1118	8269	7289	4946
22-23	1517	1083	665	6058	5045	3362	1517	1083	665	7575	6128	4027
23-24	1010	519	344	4502	2792	2052	1010	519	344	5512	3311	2396

#### Notes:

5.	
(1)pc/h passeng	er cars per hour
xxxx All lanes	on GGB open to traffic
xxxx Volume	exceeds capacity
Assumptions	
Speed Limit 65	mph Speed limit
Base Capacity	1850 pc/h/lane
Lanes	5
Volume Distribution	0% of GGB traffic will not drive and/or use public transit and other modes of transportation.
Volume Distribution	100% of GGB detour traffic will use Interstate 80
Adjustment for Heavy Vehicles	0.97
Volume / Capacity	0.99
Peak Hour Factor	0.95
Adjustment for Driver Pop.	0.975
Average Rate of Vehicle Storage	100 vehicles / lane / mile

#### DAMAGE CALCULATIONS FOR LATE LANE CLOSURE PICK UP

Route	Interstate 80 Westbound
Traffic Date	Detour Conditions Weekend Closure of GGB
Condition	Two lanes open to through traffic
Closure	52 hour weekend closure

	Demand	Capacity	Cum Demand	Cum Output	Cum Queue	Average Queue	Time Interval	Cum Delay	Unit Delay Cost	Total Cost Delay
Hour of Day	а	b	с	d	e	f	g	h	i	k
	a	b	ac+c1+	b2+c1+	c-d	(e1+e2)/2		fxg		hxj
	VEH	VEH	VPH	VEH	VEH	VEH	MIN	VEH.MIN	\$	\$
4 - 5 AM	4,041	8,352	4,041	8,352	0	0	60	0	\$0.25	\$0
5 - 6 AM	9,724	8,352	13,765	12,393	1,372	1,372	60	82,301	\$0.25	\$20,225
6 - 7 AM	12,019	8,352	25,784	22,117	3,667	2,519	60	151,151	\$0.25	\$37,144
8 - 9 AM	12,830	8,352	38,614	34,136	4,478	2,715	60	162,887	\$0.25	\$40,028
9 - 10 AM	12,532	8,352	51,146	46,966	4,180	2,164	60	129,861	\$0.25	\$31,912

#### Assumptions

Average Effective Vehicle Length (AVL)	25 Feet	
Truck %:	2.58%	(from 2012 Truck Data: http://traffic-counts.dot.ca.gov/docs/2012_aadt_truck.pdf)
Unit delay cost:	\$ 0.25	[C=veh(1-T%)+trucks*(T%)]
		(Based on \$0.24 for VEH and \$0.48 for truck)
veh	\$ 0.24	
trucks	\$ 0.48	
PM 1.989		
AADT	241,000	
Trucks	6218	
Trucks in Traffic	0.026	
Passenger Car Equiv.	2	

Delay Costs			
Average delay cost of first 2 hours		\$20,225	
delay cost	for 10 min =	\$20,225 /12	\$1,685
Average delay cost of first 5 hours		\$31,912.35	
delay cost	for 10 min =	\$31,912 /30	\$1,063.75

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - SAN FRANCISCO-OAKLAND BAY BRIDGE (WESTBOUND)

Day	Hours	Demand a a	Capacity b b	Cum Demand c a2+c1	Cum Output d b2+c1+	Cum Queue e c-d	Average Queue f (e1+e2)/2	Average Queue Distance g f/(Vplm*Lanes)	Average Queue Delay h ((e1+(a2-b2))/b
		VEH	VĚH	VPH	VEH	VEH	VEH	MILES	HOURS
	0-1	2,390	8,352	2,390	8,352	0	0	0.0	0.0
	1-2	1,551	8,352	3,941	10,742	0	0	0.0	0.0
	2-3	1,237	8,352	5,178	12,293	0	0	0.0	0.0
	3-4	1,292	8,352	6,470	13,530	0	0	0.0	0.0
	4-5	1,965	8,352	8,435	14,822	0	0	0.0	0.0
	5-6 6-7	3,739 5,189	8,352 8,352	12,174 17,363	16,787 20,526	0	0	0.0	0.0
	7-8	6,212	8,352	23,575	25,715	0	0	0.0	0.0
	8-9	8,231	8.352	31,806	31,927	0	0	0.0	0.0
	9-10	10,095	8,352	41,901	40,158	1,743	871	1.7	0.2
	10-11	11,008	8,352	52,909	50,253	2,656	2,199	4.4	0.5
Saturday	11-12	11,536	8,352	64,445	61,261	3,184	2,920	5.8	0.7
Gularday	12-13	10,588	8,352	75,033	72,797	2,236	2,710	5.4	0.6
	13-14	11,350	8,352	86,383	83,385	2,998	2,617	5.2	0.6
	14-15	11,502	8,352	97,885	94,735	3,150	3,074	6.1	0.7
	15-16 16-17	11,045 10,658	8,352 8,352	108,930	106,237	2,693	2,921	5.8	0.7
	17-18	11,124	8,352	130,712	127,940	2,300	2,499	5.1	0.6
	18-19	9,760	8,352	140,472	139.064	1,408	2,090	4.2	0.5
	19-20	8,448	8,352	148,920	148,824	96	752	1.5	0.2
	20-21	7,987	8,352	156,907	157,272	0	48	0.1	0.0
	21-22	8,269	8,352	165,176	165,259	0	0	0.0	0.0
	22-23	7,575	8,352	172,751	173,528	0	0	0.0	0.0
	23-24	5,512	8,352	178,263	181,103	0	0	0.0	0.0
	0-1	2,933	8,352	181,196	186,615	0	0	0.0	0.0
	1-2	2,115	8,352	183,311	189,548	0	0	0.0	0.0
	2-3	1,219	8,352	184,530	191,663	0	0	0.0	0.0
	3-4	1,096	8,352	185,626 187,187	192,882	0	0	0.0	0.0
	4-5 5-6	1,561 2,511	8,352 8,352	189,698	193,978 195,539	0	0	0.0	0.0
	6-7	3,804	8,352	193,502	198,050	0	0	0.0	0.0
	7-8	4,531	8,352	198,033	201,854	0	0	0.0	0.0
	8-9	6,539	8,352	204,572	206,385	0	0	0.0	0.0
	9-10	8,971	8,352	213,543	212,924	619	309	0.6	0.1
	10-11	11,507	8,352	225,050	221,895	3,155	1,887	3.8	0.5
Sunday	11-12	11,705	8,352	236,755	233,402	3,353	3,254	6.5	0.8
Sunday	12-13	12,574	8,352	249,329	245,107	4,222	3,787	7.6	0.9
	13-14	11,050	8,352	260,379	257,681	2,698	3,460	6.9	0.8
	14-15	10,610	8,352	270,989	268,731	2,258	2,478	5.0 4.2	0.6
	15-16	10,248 10,941	8,352 8,352	281,237 292,178	279,341 289,589	1,896 2,589	2,077 2,242	4.2	0.5
	17-18	10,941	8,352	302,918	300,530	2,389	2,242	5.0	0.6
	18-19	9,847	8,352	312,765	311,270	1,495	1,941	3.9	0.5
	19-20	8,795	8,352	321,560	321,117	443	969	1.9	0.2
	20-21	8,251	8,352	329,811	329,912	0	221	0.4	0.0
	21-22	7,289	8,352	337,100	338,163	0	0	0.0	0.0
	22-23	6,128	8,352	343,228	345,452	0	0	0.0	0.0
	23-24	3,311	8,352	346,539	351,580	0	0	0.0	0.0
	0-1	1,736	8,352	348,275	354,891	0	0	0.0	0.0
	1-2	998	8,352	349,273	356,627	0	0	0.0	0.0
	2-3	919	8,352	350,192	357,625	0	0	0.0	0.0
	3-4 4-5	1,499	8,352	351,691	358,544 360,043	0	0	0.0	0.0
	4-5	3,531 8,412	8,352	363,634	363,574	60	30	0.0	0.0
	6-7	9,144	8,352	363,634	363,574 371,986	792	30 426	0.1	0.0
	7-8	8,453	8,352	381,231	381,130	101	446	0.9	0.1
	8-9	7,688	8,352	388,919	389,583	0	50	0.5	0.0
	9-10	8,099	8,352	397,018	397,271	0	0	0.0	0.0
	10-11	7,228	8,352	404,246	405,370	0	0	0.0	0.0
Monday	11-12	7,249	8,352	411,495	412,598	0	0	0.0	0.0
incidady	12-13	6,654	8,352	418,149	419,847	0	0	0.0	0.0
	13-14	6,153	8,352	424,302	426,501	0	0	0.0	0.0
	14-15	6,467	8,352	430,769	432,654	0	0	0.0	0.0
	15-16	6,032	8,352	436,801	439,121	0	0	0.0	0.0
	16-17	7,017	8,352	443,818	445,153	0	0	0.0	0.0
	17-18 18-19	6,777 5.627	8,352 8,352	450,595 456,222	452,170 458,947	0	0	0.0	0.0
	18-19	5,627 4,841	8,352	456,222 461,063	458,947 464,574	0	0	0.0	0.0
	20-21	4,041	8,352	465,119	469,415	0	0	0.0	0.0
	21-22	3,828	8,352	468,947	473,471	0	0	0.0	0.0
					477,299	0	0		0.0
	22-23	3,362	8,352	472,309				0.0	
		3,362 2,052	8,352 8,352	472,309 474,361	477,299 480,661	0	0	0.0	0.0

Freeway	Peak Capacity (pc/h) ⁽¹⁾						
Fleeway	Saturday	Sunday	Monday				
Interstate 580	3,146	3,146	3,146				

			Existing Tr	affic Volume			Det	tour Traffic Vol	umes	Total C	ClosureTraffic	Volume
Hours	Golden G	ate Bridge (So	uthbound)		580 Richmond idge (Eastbou		Golden	Gate Bridge (So	outhbound)		580 Richmond idge (Eastbou	
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0-1	358	486	244	361	489	236	322	437	220	683	926	456
1-2	200	212	139	184	267	150	180	191	125	364	458	275
2-3	119	138	107	125	153	133	107	124	96	232	277	229
3-4	124	130	157	116	93	112	112	117	141	228	210	253
4-5	174	170	510	171	124	355	157	153	459	328	277	814
5-6	406	335	1312	328	214	904	365	302	1181	693	516	2085
6-7	839	690	2875	591	455	1544	755	621	2588	1346	1076	4132
7-8	1491	963	4377	1064	718	2043	1342	867	3939	2406	1585	5982
8-9	2197	1564	4844	1403	1066	2128	1977	1408	4360	3380	2474	6488
9-10	2861	2442	3665	1872	1580	1840	2575	2198	3299	4447	3778	5139
10-11	3054	3417	3040	2282	2131	1842	2749	3075	2736	5031	5206	4578
11-12	3485	3796	2925	2311	2271	1913	3137	3416	2633	5448	5687	4546
12-13	3727	4403	2758	2036	2200	1893	3354	3963	2482	5390	6163	4375
13-14	3775	4139	2663	2055	2159	1952	3398	3725	2397	5453	5884	4349
14-15	3626	3337	2878	2316	2459	2388	3263	3003	2590	5579	5462	4978
15-16	3098	2988	3004	2256	2473	2697	2788	2689	2704	5044	5162	5401
16-17	2927	3549	3322	2726	2739	3213	2634	3194	2990	5360	5933	6203
17-18	3384	3238	3473	2730	2994	3481	3046	2914	3126	5776	5908	6607
18-19	2788	2620	2812	2608	2797	2371	2509	2358	2531	5117	5155	4902
19-20	2294	2257	1865	2108	2260	1680	2065	2031	1679	4173	4291	3359
20-21	2087	2013	1439	1604	1646	1231	1878	1812	1295	3482	3458	2526
21-22	1721	1649	1118	1481	1476	1039	1549	1484	1006	3030	2960	2045
22-23	1517	1083	665	1357	1001	697	1365	975	599	2722	1976	1296
23-24	1010	519	344	848	531	399	909	467	310	1757	998	709

#### Notes:

⁽¹⁾ pc/h passenger cars per hour
xxxx All lanes on GGB open to traffic
XXXX Volume exceeds capacity

Assumptions

Speed Limit Base Capacity Lanes

65 mph Speed limit 1550 pc/h/lane 2 10% of GCB traffic will not drive and/or use public transit and other modes of tranpsortation. 100% of GCB detour traffic will use Interstate 580 0.97 0.94 0.95 100 vehicles / lane / mile

Volume Distribution

Adjustment for Heavy Vehicles Volume / Capacity Peak Hour Factor Adjustment for Driver Pop. Average Rate of Vehicle Storage

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - RICHMOND-SAN RAFAEL BRIDGE (EASTBOUND)

Day	Hours	Demand a a	Capacity b b	Cum Demand c a2+c1	d b2+c1+	Cum Queue e c-d	Average Queue f (e1+e2)/2	Average Queue Distance g f/(Vplm*Lanes)	Average Queue Delay h (e1+(a2-b2))/b2
		VEH	VEH	VPH	VEH	VEH	VEH	MILES	HOURS
	0-1	683	3,146	683	3,146	0	0	0.0	0.0
	1-2 2-3	364 232	3,146 3,146	1,047	3,829 4,193	0	0	0.0	0.0
	3-4	232	3,146	1,507	4,193	0	0	0.0	0.0
	4-5	328	3,146	1,835	4,653	0	0	0.0	0.0
	5-6	693	3,146	2,528	4,981	0	0	0.0	0.0
	6-7	1,346	3,146	3,874	5,674	0	0	0.0	0.0
	7-8	2,406	3,146	6,280	7,020	0	0	0.0	0.0
	8-9 9-10	3,380 4,447	3,146 3,146	9,660 14,107	9,426 12,806	234 1,301	117 768	0.6	0.1
	10-11	5,031	3,146	19,138	12,806	1,885	1,593	8.0	1.0
	11-12	5,448	3,146	24,585	22,284	2,302	2,093	10.5	1.3
Saturday	12-13	5,390	3,146	29,976	27,731	2,244	2,273	11.4	1.4
	13-14	5,453	3,146	35,428	33,122	2,307	2,275	11.4	1.4
	14-15	5,579	3,146	41,007	38,574	2,433	2,370	11.8	1.5
	15-16	5,044	3,146	46,052	44,153	1,898	2,166	10.8	1.4
	16-17	5,360	3,146	51,412	49,198	2,214	2,056	10.3	1.3
	17-18	5,776	3,146 3,146	57,188 62,305	54,558 60,334	2,630	2,422	12.1	1.5
	19-20	4,173	3,146	66,477	65,451	1,971	2,300	7.5	1.5
	20-21	3,482	3,140	69,960	69,623	336	681	3.4	0.4
	21-22	3,030	3,146	72,990	73,106	0	168	0.8	0.1
	22-23	2,722	3,146	75,712	76,136	0	0	0.0	0.0
	23-24	1,757	3,146	77,469	78,858	0	0	0.0	0.0
	0-1	926	3,146	78,395	80,615	0	0	0.0	0.0
	1-2	458	3,146	78,853	81,541	0	0	0.0	0.0
	2-3	277	3,146	79,130	81,999	0	0	0.0	0.0
	3-4	210	3,146 3,146	79,340 79,617	82,276 82,486	0	0	0.0	0.0
	5-6	516	3,146	80,133	82,763	0	0	0.0	0.0
	6-7	1,076	3,146	81,209	83,279	0	0	0.0	0.0
	7-8	1,585	3,146	82,793	84,355	0	0	0.0	0.0
	8-9	2,474	3,146	85,267	85,939	0	0	0.0	0.0
	9-10	3,778	3,146	89,045	88,413	632	316	1.6	0.2
	10-11	5,206	3,146	94,251	92,191	2,060	1,346	6.7	0.9
Sunday	11-12 12-13	5,687	3,146	99,939	97,397	2,541	2,301	11.5	1.5 1.8
	12-13	6,163 5,884	3,146 3,146	106,101 111,985	103,085 109,247	3,017	2,779	13.9 14.4	1.8
	14-15	5,462	3,146	117,448	115,131	2,316	2,527	12.6	1.6
	15-16	5,162	3,146	122,610	120,594	2,016	2,166	10.8	1.4
	16-17	5,933	3,146	128,543	125,756	2,787	2,402	12.0	1.5
	17-18	5,908	3,146	134,451	131,689	2,762	2,775	13.9	1.8
	18-19	5,155	3,146	139,606	137,597	2,009	2,386	11.9	1.5
	19-20	4,291	3,146	143,897	142,752	1,145	1,577	7.9	1.0
	20-21	3,458	3,146	147,355	147,043	312 0	729	3.6	0.5
	21-22 22-23	2,960	3,146 3,146	150,315 152,291	150,501 153,461	0	156	0.8	0.0
	23-24	998	3,146	152,291	155,461	0	0	0.0	0.0
	0-1	456	3,146	153,745	156,435	0	0	0.0	0.0
	1-2	275	3,146	154,020	156,891	0	0	0.0	0.0
	2-3	229	3,146	154,249	157,166	0	0	0.0	0.0
	3-4	253	3,146	154,502	157,395	0	0	0.0	0.0
	4-5	814	3,146	155,316	157,648	0	0	0.0	0.0
	5-6	904	3,146	156,220	158,462	0	0	0.0	0.0
	6-7 7-8	1,544 2,043	3,146 3,146	157,764 159,807	159,366 160,910	0	0	0.0	0.0
	8-9	2,043	3,146	161,935	162,953	0	0	0.0	0.0
	9-10	1.840	3,146	163,775	165.081	0	0	0.0	0.0
	10-11	1,842	3,146	165,617	166,921	0	Ő	0.0	0.0
	11-12	1,913	3,146	167,530	168,763	0	0	0.0	0.0
Monday	12-13	1,893	3,146	169,423	170,676	0	0	0.0	0.0
Monday		1,952	3,146	171,375	172,569	0	0	0.0	0.0
Monday	13-14			173,763	174,521	0	0	0.0	0.0
Monday	14-15	2,388	3,146						
Monday	14-15 15-16	2,388 2,697	3,146	176,460	176,909	0	0	0.0	0.0
Monday	14-15 15-16 16-17	2,388 2,697 3,213	3,146 3,146	176,460 179,673	179,606	67	34	0.2	0.0
Monday	14-15 15-16	2,388 2,697	3,146	176,460					
Monday	14-15 15-16 16-17 17-18	2,388 2,697 3,213 3,481	3,146 3,146 3,146 3,146 3,146 3,146	176,460 179,673 183,154	179,606 182,819	67 335	34 201	0.2 1.0	0.0 0.1 0.0 0.0
Monday	14-15 15-16 16-17 17-18 18-19 19-20 20-21	2,388 2,697 3,213 3,481 2,371 1,680 1,231	3,146 3,146 3,146 3,146 3,146 3,146 3,146	176,460 179,673 183,154 185,525 187,205 188,436	179,606 182,819 186,300 188,671 190,351	67 335 0 0 0	34 201 168 0 0	0.2 1.0 0.8 0.0 0.0	0.0 0.1 0.0 0.0 0.0
Monday	14-15 15-16 16-17 17-18 18-19 19-20	2,388 2,697 3,213 3,481 2,371 1,680	3,146 3,146 3,146 3,146 3,146 3,146	176,460 179,673 183,154 185,525 187,205	179,606 182,819 186,300 188,671	67 335 0 0	34 201 168 0	0.2 1.0 0.8 0.0	0.0 0.1 0.0 0.0

Notes:

Freeway	Peak Capacity (pc/h) ⁽¹⁾							
Fleeway	Saturday	Sunday	Monday					
Interstate 580	3,146	3,146	3,146					

			Existing Tra	affic Volume			Dete	our Traffic Volu	imes	Total C	losureTraffic	Volume
Hours	Golden G	ate Bridge (No	orthbound)		580 Richmond dge (Westbou		Golden G	ate Bridge (No	rthbound)		580 Richmond dge (Westbou	
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0-1	1070	999	619	490	487	305	963	899	557	1453	1386	862
1-2	583	612	346	222	323	195	525	551	311	747	874	506
2-3	437	470	173	195	201	119	393	423	156	588	624	275
3-4	243	259	129	144	135	179	219	233	116	363	368	295
4-5	179	172	163	277	203	393	161	155	147	438	358	540
5-6	373	217	386	508	332	1085	336	195	347	844	527	1432
6-7	603	426	1059	1032	621	2933	543	383	953	1575	1004	3886
7-8	1223	814	2348	1737	1024	3653	1101	733	2113	2838	1757	5766
8-9	2100	1562	3095	2380	1428	3417	1890	1406	2786	4270	2834	6203
9-10	3044	2565	2815	2796	2072	2818	2740	2309	2534	5536	4381	5352
10-11	3829	3441	2971	3207	2570	2162	3446	3097	2674	6653	5667	4836
11-12	3727	3633	3183	3206	2934	2097	3354	3270	2865	6560	6204	4962
12-13	3486	3027	3275	3288	2892	1992	3137	2724	2948	6425	5616	4940
13-14	3266	2955	3259	3282	2925	2080	2939	2660	2933	6221	5585	5013
14-15	3000	2624	3812	3272	2631	1810	2700	2362	3431	5972	4993	5241
15-16	2883	2368	4423	2867	2686	1938	2595	2131	3981	5462	4817	5919
16-17	3071	2460	4621	2533	2519	2110	2764	2214	4159	5297	4733	6269
17-18	4223	3863	4953	2373	2396	2252	3801	3477	4458	6174	5873	6710
18-19	5622	5643	4195	1884	1865	2090	5060	5079	3776	6944	6944	5866
19-20	3136	3109	2737	1411	1578	1425	2822	2798	2463	4233	4376	3888
20-21	2029	2309	1961	1281	1435	1001	1826	2078	1765	3107	3513	2766
21-22	1882	2433	1635	1374	1219	929	1694	2190	1472	3068	3409	2401
22-23	2306	1932	1233	1335	949	716	2075	1739	1110	3410	2688	1826
23-24	1539	1067	795	735	588	476	1385	960	716	2120	1548	1192

#### Notes:

	ssenger cars per hour
	lanes on GGB open to traffic
XXXXX Vo	lume exceeds capacity
Assumptions	
Speed Limit	65 mph Speed limit
Base Capacity	1850 VPH per Lane
Lanes	2
Volume Distribution	10% of GGB traffic will not drive and/or use public transit and other modes of tranpsortation.
Volume Distribution	100% of GGB detour traffic will use Interstate 580
djustment for Heavy Vehicles	0.97
Volume / Capacity	0.99
Peak Hour Factor	0.95
Adjustment for Driver Pop.	0.975
Average Rate of Storage	100 vehicles / lane / mile

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - RICHMOND-SAN RAFAEL BRIDGE (WESTBOUND)

Day	Hours	Demand a a VEH	Capacity b b VEH	Cum Demand c a2+c1 VPH	Cum Output d b2+c1+ VEH	Cum Queue e c-d VEH	Average Queue f (e1+e2)/2 VEH	Average Queue Distance g f/(Vplm*Lanes) MILES	Average Queue Delay h (e1+(a2-b2))/b HOURS
	0-1	1,453	3,146	1,453	3,146	0	0	0.0	0.0
	1-2	747	3,146	2,200	4,599	0	0	0.0	0.0
	2-3	588	3,146	2,200	5,346	0	0	0.0	0.0
	3-4	363	3,146	3,151	5,934	0	0	0.0	0.0
	4-5	438	3,146	3,589	6,297	0	0	0.0	0.0
	5-6	844	3,146	4,433	6,735	0	0	0.0	0.0
	6-7	1,575	3,146	6,007	7,579	0	0	0.0	0.0
	7-8	2,838	3,146	8,845	9,153	0	0	0.0	0.0
	8-9	4,270	3,146	13,115	11,991	1,124	562	2.8	0.4
	9-10	5,536	3,146	18,651	16,261	2,390	1,757	8.8	1.1
	10-11	6,653	3,146	25,304	21,797	3,507	2,948	14.7	1.9
	11-12	6,560	3,146	31,864	28,450	3.414	3.461	17.3	2.2
Saturday	12-13	6,425	3,146	38,289	35,010	3,279	3.347	16.7	2.1
	13-14	6,221	3,146	44,511	41,435	3,075	3,177	15.9	2.0
	14-15	5,972	3,146	50,483	47,657	2,826	2,951	14.8	1.9
	15-16	5,462	3,146	55,944	53,629	2,316	2,571	12.9	1.6
	16-17	5,297	3,146	61,241	59,090	2,151	2,233	11.2	1.4
	17-18	6,174	3,146	67,415	64,387	3.028	2,233	12.9	1.6
	18-19	6,944	3,146	74,359	70,561	3,798	3,413	17.1	2.2
	19-20	4,233	3,146	78,592	77,505	1,087	2,443	12.2	1.6
	20-21	3,107	3,146	81,699	81,738	0	544	2.7	0.3
	21-22	3,068	3,146	84,767	84,845	0	0	0.0	0.0
	22-23	3,410	3,146	88,178	87,913	264	132	0.7	0.1
	23-24	2,120	3,146	90,298	91,324	0	132	0.7	0.0
	0-1	1.386	3,146	91,684	93,444	0	0	0.0	0.0
	1-2	874	3,146	92,558	94,830	0	0	0.0	0.0
	2-3	624	3,146	93,182	95,704	0	0	0.0	0.0
	3-4	368	3,146	93,550	96,328	0	0	0.0	0.0
	4-5	358	3,146	93,907	96,696	0	0	0.0	0.0
	5-6	527	3,146	94,435	97,053	0	0	0.0	0.0
	6-7	1,004	3,146	95,439	97,581	0	0	0.0	0.0
	7-8	1,757	3,146	97,196	98,585	0	0	0.0	0.0
	8-9	2,834	3,146	100,030	100,342	0	0	0.0	0.0
	9-10	4,381	3,146	104,410	103,176	1,235	617	3.1	0.4
	10-11	5,667	3,146	110,077	107,556	2,521	1,878	9.4	1.2
	11-12	6,204	3,146	116,281	113,223	3,058	2,789	13.9	1.8
Sunday	12-13	5,616	3,146	121,897	119,427	2,470	2,764	13.8	1.8
	13-14	5,585	3,146	127,481	125.043	2,439	2,454	12.3	1.6
	14-15	4,993	3,146	132,474	130,627	1,847	2,143	10.7	1.4
	15-16	4,817	3,146	137,291	135,620	1,671	1,759	8.8	1.1
	16-17	4,733	3,146	142,024	140,437	1,587	1,629	8.1	1.0
	17-18	5,873	3,146	147,897	145,170	2,727	2,157	10.8	1.4
	18-19	6,944	3,146	154,841	151,043	3,798	3,262	16.3	2.1
	19-20	4,376	3,146	159,217	157,987	1,230	2,514	12.6	1.6
	20-21	3,513	3,146	162,730	162,363	367	799	4.0	0.5
	21-22	3,409	3,146	166,139	165,876	263	315	1.6	0.2
	22-23	2,688	3,146	168,826	169,285	0	131	0.7	0.0
	23-24	1,548	3,146	170,375	171,972	0	0	0.0	0.0
	0-1	862	3,146	171,237	173,521	0	0	0.0	0.0
	1-2	506	3,146	171,743	174,383	0	0	0.0	0.0
	2-3	275	3,146	172,018	174,889	0	0	0.0	0.0
	3-4	295	3,146	172,313	175,164	0	0	0.0	0.0
	4-5	540	3,146	172,853	175,459	0	0	0.0	0.0
	5-6	1,085	3.146	173,938	175,999	0	0	0.0	0.0
	6-7	2,933	3,146	176,871	177,084	0	0	0.0	0.0
	7-8	3,653	3,146	180,524	180,017	507	254	1.3	0.2
	8-9	3,417	3,146	183,941	183,670	271	389	1.9	0.2
	9-10	2,818	3,146	186,759	187,087	0	136	0.7	0.0
	10-11	2,162	3,146	188,921	189,905	0	0	0.0	0.0
Mandau	11-12	2,097	3,146	191,018	192,067	0	0	0.0	0.0
Monday	12-13	1,992	3,146	193,010	194,164	0	0	0.0	0.0
	13-14	2,080	3,146	195,090	196,156	0	0	0.0	0.0
	14-15	1,810	3,146	196,900	198,236	0	0	0.0	0.0
	15-16	1,938	3,146	198,838	200,046	0	0	0.0	0.0
	16-17	2,110	3,146	200,948	201,984	0	0	0.0	0.0
	17-18	2,252	3,146	203,200	204,094	0	0	0.0	0.0
	18-19	2,090	3,146	205,200	206,346	0	0	0.0	0.0
	19-20	1,425	3,146	205,230	208,436	0	0	0.0	0.0
	20-21	1,425	3,146	200,715	208,430	0	0	0.0	0.0
	21-22	929	3,146	208,645	210,862	0	0	0.0	0.0
	22-23	716	3,146	208,645	210,862	0	0	0.0	0.0

Notes:

Queue

Freeway	Peak Capacity (pc/h) ⁽¹⁾							
Fleeway	Saturday	Sunday	Monday					
Interstate 80	8,352	8,352	8,352					

			Existing Tr	affic Volume			D	etour Traffic Vo	lumes	Total C	losureTraffic	Volume
Hours	Golden G	ate Bridge (No	orthbound)		San Francisco idge (Eastbou	o-Oakland Bay nd)	Golder	n Gate Bridge (N	lorthbound)		San Francisco idge (Eastbou	o-Oakland Bay ind)
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0-1	1070	999	619	3881	3897	2516	963	899	557	4844	4796	3073
1-2	583	612	346	3002	3231	1348	525	551	311	3527	3782	1659
2-3	437	470	173	2940	3463	982	393	423	156	3333	3886	1138
3-4	243	259	129	1482	1875	731	219	233	116	1701	2108	847
4-5	179	172	163	1012	1043	853	161	155	147	1173	1198	1000
5-6	373	217	386	1361	1065	1730	336	195	347	1697	1260	2077
6-7	603	426	1059	2127	1644	3785	543	383	953	2670	2027	4738
7-8	1223	814	2348	3429	2587	6180	1101	733	2113	4530	3320	8293
8-9	2100	1562	3095	4777	3537	6753	1890	1406	2786	6667	4943	9539
9-10	3044	2565	2815	5709	4673	5859	2740	2309	2534	8449	6982	8393
10-11	3829	3441	2971	6669	5693	5575	3446	3097	2674	10115	8790	8249
11-12	3727	3633	3183	6814	6125	5577	3354	3270	2865	10168	9395	8442
12-13	3486	3027	3275	6573	6474	6010	3137	2724	2948	9710	9198	8958
13-14	3266	2955	3259	6513	6773	6510	2939	2660	2933	9452	9433	9443
14-15	3000	2624	3812	7202	6917	7893	2700	2362	3431	9902	9279	11324
15-16	2883	2368	4423	7574	6993	8608	2595	2131	3981	10169	9124	12589
16-17	3071	2460	4621	7171	7571	8292	2764	2214	4159	9935	9785	12451
17-18	4223	3863	4953	7554	7417	7818	3801	3477	4458	11355	10894	12276
18-19	5622	5643	4195	7853	7692	6819	5060	5079	3776	12913	12771	10595
19-20	3136	3109	2737	7459	7460	5831	2822	2798	2463	10281	10258	8294
20-21	2029	2309	1961	7461	7342	4968	1826	2078	1765	9287	9420	6733
21-22	1882	2433	1635	6344	7226	4493	1694	2190	1472	8038	9416	5965
22-23	2306	1932	1233	6303	7276	3988	2075	1739	1110	8378	9015	5098
23-24	1539	1067	795	5035	4387	2881	1385	960	716	6420	5347	3597

#### Notes:

⁽¹⁾ pc/h pa	ssenger cars per hour
XXXX All	lanes on GGB open to traffic
xxxx Vo	lume exceeds capacity
Assumptions	
Speed Limit	65 mph Speed limit
Base Capacity	1850 VPH per Lane
Lanes	5
Volume Distribution	10% of GGB traffic will not drive and/or use public transit and other modes of tranpsortation
Volume Distribution	100% of GGB detour traffic will use Interstate 80
Adjustment for Heavy Vehicles	0.97
Volume / Capacity	0.93
Peak Hour Factor	0.95
Adjustment for Driver Pop.	0.975
Average Rate of Vehicle Storage	100 vehicles / lane / mile

### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - SAN FRANCISCO-OAKLAND BAY BRIDGE (EASTBOUND)

Day	Hours	Demand	Capacity	Cum Demand	Cum Output		Average Queue	Average Queue Distance	Average Queue Delay
		a a VEH	b b VEH	с a2+c1 VPH	d b2+c1+ VEH	e c-d VEH	f (e1+e2)/2 VEH	g f/(Vplm*Lanes) MILES	h (e1+(a2-b2))/b2 HOURS
	0-1	4,844	8,352	4,844	8,352	0	0	0.0	0.0
	1-2	3,527	8,352	8,371	13,196	0	0	0.0	0.0
	2-3	3,333	8,352	11,704	16,723	0	0	0.0	0.0
	3-4	1,701	8,352	13,405	20,056	0	0	0.0	0.0
	4-5	1,173	8,352	14,578	21,757	0	0	0.0	0.0
	5-6 6-7	1,697 2,670	8,352	16,275 18,944	22,930	0	0	0.0	0.0
	7-8	4,530	8,352 8,352	23,474	24,627 27,297	0	0	0.0	0.0
	8-9	4,530	8,352	30,141	31.826	0	0	0.0	0.0
	9-10	8,449	8,352	38,590	38,493	96	48	0.0	0.0
	10-11	10,115	8,352	48,705	46,942	1,763	930	1.9	0.0
	11-12	10,168	8,352	58,873	57,057	1,816	1,789	3.6	0.4
Saturday	12-13	9,710	8,352	68,583	67,225	1,358	1,587	3.2	0.4
	13-14	9,452	8,352	78,036	76,936	1,100	1,229	2.5	0.3
	14-15	9,902	8,352	87,938	86,388	1,550	1,325	2.6	0.3
	15-16	10,169	8,352	98,106	96,290	1,816	1,683	3.4	0.4
	16-17	9.935	8.352	108.041	106.459	1.583	1.699	3.4	0.4
	17-18	11,355	8,352	119,396	116,394	3,002	2,292	4.6	0.5
	18-19	12,913	8,352	132,309	127,748	4,560	3,781	7.6	0.9
	19-20	10,281	8,352	142,590	140,661	1,929	3,245	6.5	0.8
	20-21	9,287	8,352	151,877	150,943	935	1,432	2.9	0.3
	21-22	8,038	8,352	159,915	160,230	0	467	0.9	0.1
	22-23	8,378	8,352	168,294	168,267	26	13	0.0	0.0
	23-24	6,420	8,352	174,714	176,646	0	13	0.0	0.0
	0-1	4,796	8,352	179,510	183,066	0	0	0.0	0.0
	1-2	3,782	8,352	183,292	187,862	0	0	0.0	0.0
	2-3	3,886	8,352	187,178	191,644	0	0	0.0	0.0
	3-4	2,108	8,352	189,286	195,530	0	0	0.0	0.0
	4-5	1,198	8,352	190,483	197,638	0	0	0.0	0.0
	5-6	1,260	8,352	191,744	198,836	0	0	0.0	0.0
	6-7	2,027	8,352	193,771	200,096	0	0	0.0	0.0
	7-8	3,320	8,352	197,091	202,123	0	0	0.0	0.0
	8-9	4,943	8,352	202,034	205,443	0	0	0.0	0.0
	9-10 10-11	6,982 8,790	8,352 8,352	209,015 217,805	210,386 217,367	438	219	0.0	0.0
	11-12	9,395	8,352	217,803	226,157	1,042	740	1.5	0.1
Sunday	12-13	9,393	8,352	236,398	235,552	846	944	1.9	0.2
	13-14	9,433	8,352	245,830	244,750	1.080	963	1.9	0.2
	14-15	9,279	8,352	255,109	254,183	926	1,003	2.0	0.2
	15-16	9,124	8,352	264,233	263,461	772	849	1.7	0.2
	16-17	9,785	8.352	274.018	272,586	1.433	1,102	2.2	0.3
	17-18	10,894	8,352	284,912	282,371	2.541	1,987	4.0	0.5
	18-19	12,771	8,352	297,683	293,264	4,418	3,480	7.0	0.8
	19-20	10,258	8,352	307,941	306,035	1,906	3,162	6.3	0.8
	20-21	9,420	8,352	317,361	316,293	1,068	1,487	3.0	0.4
	21-22	9,416	8,352	326,777	325,713	1,063	1,066	2.1	0.3
	22-23	9,015	8,352	335,791	335,129	662	863	1.7	0.2
	23-24	5,347	8,352	341,139	344,144	0	331	0.7	0.0
	0-1	3,073	8,352	344,212	349,491	0	0	0.0	0.0
	1-2	1,659	8,352	345,871	352,564	0	0	0.0	0.0
	2-3	1,138	8,352	347,009	354,223	0	0	0.0	0.0
	3-4	847	8,352	347,856	355,361	0	0	0.0	0.0
	4-5	1,000	8,352	348,856	356,208	0	0	0.0	0.0
	5-6	1,730	8,352	350,586	357,208	0	0	0.0	0.0
	6-7	3,785	8,352	354,371	358,938	0	0	0.0	0.0
	7-8	6,180	8,352	360,551	362,723	0	0	0.0	0.0
	8-9	6,753	8,352	367,304	368,903	0	0	0.0	0.0
	9-10	5,859	8,352	373,163	375,656	0	0	0.0	0.0
	10-11	5,575	8,352	378,738	381,515	0	0	0.0	0.0
Monday	11-12	5,577	8,352	384,315	387,090	0	0	0.0	0.0
-	12-13 13-14	6,010 6,510	8,352 8,352	390,325	392,667	0	0	0.0	0.0
				396,835	398,677	0	0	0.0	0.0
	14-15	7,893	8,352 8,352	404,728 413,336	405,187 413,080	256	128	0.0	0.0
	15-16	8,608	8,352	413,336 421,628	413,080 421,688	256	128	0.3	0.0
	16-17	7,818	8,352	421,628 429,446	421,688 429,980	0	128	0.3	0.0
	17-18	6.819	8,352	429,446	429,980	0	0	0.0	0.0
	19-20	5,831	8,352	436,265	437,798	0	0	0.0	0.0
	20-21	4,968	8,352	442,096	444,617 450,448	0	0	0.0	0.0
	21-22	4,908	8,352	447,064	450,448	0	0	0.0	0.0
	22-23	3,988	8,352	455,545	459,909	0	0	0.0	0.0
			8,352	458,426	463,897	0	0	0.0	0.0

Freeway	Peak Capacity (pc/h) ⁽¹⁾							
rieeway	Saturday	Sunday	Monday					
Interstate 80	8,352	8,352	8,352					

	Existing Tra		affic Volume			Det	tour Traffic Vol	umes	Total C	ClosureTraffic	Volume	
Hours	Golden G	ate Bridge (So	uthbound)		San Francisco dge (Westbou	o-Oakland Bay ind)	Golden (	Gate Bridge (So	outhbound)		San Francisco idge (Westbou	o-Oakland Bay Ind)
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0-1	358	486	244	2032	2447	1492	322	437	220	2354	2884	1712
1-2	200	212	139	1351	1903	859	180	191	125	1531	2094	984
2-3	119	138	107	1118	1081	812	107	124	96	1225	1205	908
3-4	124	130	157	1168	966	1342	112	117	141	1280	1083	1483
4-5	174	170	510	1791	1391	3531	157	153	459	1948	1544	3990
5-6	406	335	1312	3333	2176	8412	365	302	1181	3698	2478	9593
6-7	839	690	2875	4350	3114	9144	755	621	2588	5105	3735	11732
7-8	1491	963	4377	4721	3568	8453	1342	867	3939	6063	4435	12392
8-9	2197	1564	4844	6034	4975	7688	1977	1408	4360	8011	6383	12048
9-10	2861	2442	3665	7234	6529	8099	2575	2198	3299	9809	8727	11398
10-11	3054	3417	3040	7954	8090	7228	2749	3075	2736	10703	11165	9964
11-12	3485	3796	2925	8051	7909	7249	3137	3416	2633	11188	11325	9882
12-13	3727	4403	2758	6861	8171	6654	3354	3963	2482	10215	12134	9136
13-14	3775	4139	2663	7575	6911	6153	3398	3725	2397	10973	10636	8550
14-15	3626	3337	2878	7876	7273	6467	3263	3003	2590	11139	10276	9057
15-16	3098	2988	3004	7947	7260	6032	2788	2689	2704	10735	9949	8736
16-17	2927	3549	3322	7731	7392	7017	2634	3194	2990	10365	10586	10007
17-18	3384	3238	3473	7740	7502	6777	3046	2914	3126	10786	10416	9903
18-19	2788	2620	2812	6972	7227	5627	2509	2358	2531	9481	9585	8158
19-20	2294	2257	1865	6154	6538	4841	2065	2031	1679	8219	8569	6520
20-21	2087	2013	1439	5900	6238	4056	1878	1812	1295	7778	8050	5351
21-22	1721	1649	1118	6548	5640	3828	1549	1484	1006	8097	7124	4834
22-23	1517	1083	665	6058	5045	3362	1365	975	599	7423	6020	3961
23-24	1010	519	344	4502	2792	2052	909	467	310	5411	3259	2362

#### Notes:

⁽¹⁾ pc/h	passenger cars per hour
XXXX	All lanes on GGB open to traffic
XXXX	Volume exceeds capacity
Assumptions	

Speed Limit Base Capacity Lanes

65 mph Speed limit 1850 pc/h/lane 5

5 10% of GGB traffic will not drive and/or use public transit and other modes of transportation. 100% of GGB detour traffic will use Interstate 80 0.97 0.95 0.955 100 vehicles / Iane / mile

Volume Distribution

Adjustment for Heavy Vehicles Volume / Capacity Peak Hour Factor Adjustment for Driver Pop. Average Rate of Vehicle Storage

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - SAN FRANCISCO-OAKLAND BAY BRIDGE (WESTBOUND)

Day	Hours	Demand a a VEH	Capacity b b VEH	Cum Demand c a2+c1 VPH	Cum Output d b2+c1+ VEH	Cum Queue e c-d VEH	Average Queue f (e1+e2)/2 VEH	Average Queue Distance g f/(Vplm*Lanes) MILES	Average Queue Delay h (e1+(a2-b2))/b HOURS
	0-1	2,354	8,352	2,354	8,352	0	0	0.0	0.0
	1-2	1,531	8,352	3,885	10,707	0	0	0.0	0.0
	2-3	1,225	8,352	5,110	12,238	0	0	0.0	0.0
	3-4	1,280	8,352	6,390	13,463	0	0	0.0	0.0
	4-5 5-6	1,948 3,698	8,352 8,352	8,338 12,036	14,742 16,690	0	0	0.0	0.0
	6-7	5,105	8,352	17,141	20,388	0	0	0.0	0.0
	7-8	6,063	8,352	23.204	25,493	0	ő	0.0	0.0
	8-9	8,011	8,352	31,215	31,556	0	0	0.0	0.0
	9-10	9,809	8,352	41,024	39,568	1,457	728	1.5	0.2
	10-11	10,703	8,352	51,727	49,376	2,350	1,903	3.8	0.5
Saturday	11-12	11,188	8,352	62,914	60,079	2,835	2,593	5.2	0.6
	12-13	10,215	8,352	73,130	71,267	1,863	2,349	4.7	0.6
	13-14 14-15	10,973 11,139	8,352 8,352	84,102 95,241	81,482 92,454	2,620	2,242	4.5 5.4	0.5
	15-16	10,735	8,352	105,977	103,594	2,383	2,585	5.2	0.6
	16-17	10,365	8,352	116,342	114,329	2,013	2,198	4.4	0.5
	17-18	10,786	8,352	127,128	124,694	2,433	2,223	4.4	0.5
	18-19	9,481	8,352	136,609	135,480	1,129	1,781	3.6	0.4
	19-20	8,219	8,352	144,827	144,961	0	564	1.1	0.1
	20-21	7,778	8,352	152,606	153,180	0	0	0.0	0.0
	21-22	8,097	8,352	160,703	160,958	0	0	0.0	0.0
	22-23	7,423	8,352	168,126	169,055	0	0	0.0	0.0
	23-24	5,411 2,884	8,352 8,352	173,537 176,421	176,478	0	0	0.0	0.0
	1-2	2,084	8,352	178,515	181,889	0	0	0.0	0.0
	2-3	1.205	8,352	179,720	186,867	0	0	0.0	0.0
	3-4	1,083	8,352	180,803	188.073	0	ő	0.0	0.0
	4-5	1,544	8,352	182,347	189,156	0	0	0.0	0.0
	5-6	2,478	8,352	184,825	190,700	0	0	0.0	0.0
	6-7	3,735	8,352	188,560	193,177	0	0	0.0	0.0
	7-8	4,435	8,352	192,994	196,912	0	0	0.0	0.0
	8-9	6,383	8,352	199,377	201,347	0	0	0.0	0.0
	9-10	8,727	8,352	208,104	207,729	374	187	0.4	0.0
	10-11	11,165 11.325	8,352 8,352	219,269 230,595	216,456 227,621	2,813 2,973	1,594	3.2	0.4
Sunday	12-13	12 134	8,352	242 728	238 947	3,781	3 377	6.8	0.8
	13-14	10,636	8,352	253,364	251,081	2,284	3,033	6.1	0.7
	14-15	10,276	8,352	263,641	261,717	1,924	2,104	4.2	0.5
	15-16	9,949	8,352	273,590	271,993	1,597	1,760	3.5	0.4
	16-17	10,586	8,352	284,176	281,942	2,234	1,915	3.8	0.5
	17-18	10,416	8,352	294,592	292,528	2,064	2,149	4.3	0.5
	18-19	9,585	8,352	304,177	302,944	1,233	1,648	3.3	0.4
	19-20	8,569	8,352	312,746	312,529	217	725	1.4	0.2
	20-21	8,050	8,352	320,796	321,099	0	108	0.2	0.0
	21-22 22-23	7,124 6,020	8,352 8,352	327,920 333,940	329,148 336,273	0	0	0.0	0.0
	22-23	3,259	8,352	333,940	342.292	0	0	0.0	0.0
	0-1	1,712	8,352	338,911	345,551	0	0	0.0	0.0
	1-2	984	8,352	339,895	347,263	0	0	0.0	0.0
	2-3	908	8,352	340,803	348,247	0	0	0.0	0.0
	3-4	1,483	8,352	342,286	349,155	0	0	0.0	0.0
	4-5	3,531	8,352	345,817	350,639	0	0	0.0	0.0
	5-6	8,412	8,352	354,229	354,170	60	30	0.1	0.0
	6-7	9,144	8,352	363,373	362,582	792	426	0.9	0.1
	7-8	8,453	8,352	371,826	371,726	101	446	0.9	0.1
	9-10	7,688 8,099	8,352 8,352	379,514 387,613	380,179 387,867	0	50	0.0	0.0
	10-11	7,228	8,352	394,841	395,966	0	0	0.0	0.0
Monday	11-12	7,249	8,352	402,090	403,194	0	0	0.0	0.0
Monday	12-13	6,654	8,352	408,744	410,443	0	0	0.0	0.0
	13-14	6,153	8,352	414,897	417,097	0	0	0.0	0.0
	14-15	6,467	8,352	421,364	423,250	0	0	0.0	0.0
	15-16	6,032	8,352	427,396	429,717	0	0	0.0	0.0
	16-17	7,017	8,352	434,413	435,749	0	0	0.0	0.0
	17-18	6,777	8,352	441,190	442,766	0	0	0.0	0.0
	18-19	5,627	8,352	446,817	449,543	0	0	0.0	0.0
	19-20 20-21	4,841 4,056	8,352 8,352	451,658 455,714	455,170 460,011	0	0	0.0	0.0
	21-22	3,828	8,352	459,542	464,067	0	0	0.0	0.0
	22-23	3,362	8,352	462,904	467,895	0	0	0.0	0.0
					471,257	0	0	0.0	0.0
	23-24	2,052	8,352	464,956				0.0	

Freeway	Peak Capacity (pc/h) ⁽¹⁾							
rieeway	Saturday	Sunday	Monday					
Interstate 580	3,146	3,146	3,146					

		Existing Tra		affic Volume			De	tour Traffic Vol	umes	Total ClosureTraffic Volume				
Hours	Golden G	ate Bridge (So	uthbound)		580 Richmond idge (Eastbou		Golden	Gate Bridge (So	outhbound)		580 Richmond idge (Eastbou			
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday		
0-1	358	486	244	361	489	236	286	389	195	647	878	431		
1-2	200	212	139	184	267	150	160	170	111	344	437	261		
2-3	119	138	107	125	153	133	95	110	86	220	263	219		
3-4	124	130	157	116	93	112	99	104	126	215	197	238		
4-5	174	170	510	171	124	355	139	136	408	310	260	763		
5-6	406	335	1312	328	214	904	325	268	1050	653	482	1954		
6-7	839	690	2875	591	455	1544	671	552	2300	1262	1007	3844		
7-8	1491	963	4377	1064	718	2043	1193	770	3502	2257	1488	5545		
8-9	2197	1564	4844	1403	1066	2128	1758	1251	3875	3161	2317	6003		
9-10	2861	2442	3665	1872	1580	1840	2289	1954	2932	4161	3534	4772		
10-11	3054	3417	3040	2282	2131	1842	2443	2734	2432	4725	4865	4274		
11-12	3485	3796	2925	2311	2271	1913	2788	3037	2340	5099	5308	4253		
12-13	3727	4403	2758	2036	2200	1893	2982	3522	2206	5018	5722	4099		
13-14	3775	4139	2663	2055	2159	1952	3020	3311	2130	5075	5470	4082		
14-15	3626	3337	2878	2316	2459	2388	2901	2670	2302	5217	5129	4690		
15-16	3098	2988	3004	2256	2473	2697	2478	2390	2403	4734	4863	5100		
16-17	2927	3549	3322	2726	2739	3213	2342	2839	2658	5068	5578	5871		
17-18	3384	3238	3473	2730	2994	3481	2707	2590	2778	5437	5584	6259		
18-19	2788	2620	2812	2608	2797	2371	2230	2096	2250	4838	4893	4621		
19-20	2294	2257	1865	2108	2260	1680	1835	1806	1492	3943	4066	3172		
20-21	2087	2013	1439	1604	1646	1231	1670	1610	1151	3274	3256	2382		
21-22	1721	1649	1118	1481	1476	1039	1377	1319	894	2858	2795	1933		
22-23	1517	1083	665	1357	1001	697	1214	866	532	2571	1867	1229		
23-24	1010	519	344	848	531	399	808	415	275	1656	946	674		

#### Notes:

⁽¹⁾ pc/h passenger cars per hour
xxxx All lanes on GGB open to traffic
XXXX Volume exceeds capacity

Assumptions

Speed Limit Base Capacity Lanes

65 mph Speed limit 1550 pc/h/lane 2 20% of GGB traffic will not drive and/or use public transit and other modes of tranpsortation. 100% of GGB detour traffic will use Interstate 580 0.97 0.94 0.95 100 vehicles / lane / mile

Volume Distribution

Adjustment for Heavy Vehicles Volume / Capacity Peak Hour Factor Adjustment for Driver Pop. Average Rate of Vehicle Storage

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - RICHMOND-SAN RAFAEL BRIDGE (EASTBOUND)

Day	Hours	Demand a a	Capacity b b	Cum Demand c a2+c1	d b2+c1+	Cum Queue e c-d	Average Queue f (e1+e2)/2	Average Queue Distance g f/(Vplm*Lanes)	Average Queue Delay h (e1+(a2-b2))/b2
		VEH	VEH	VPH	VEH	VEH	VEH	MILES	HOURS
	0-1	647 344	3,146 3,146	647 991	3,146 3,793	0	0	0.0	0.0
	2-3	220	3,146	1,212	4,137	0	0	0.0	0.0
	3-4	215	3,146	1,427	4,358	0	0	0.0	0.0
	4-5	310	3,146	1,737	4,573	0	0	0.0	0.0
	5-6	653	3,146	2,390	4,883	0	0	0.0	0.0
	6-7	1,262	3,146	3,652	5,536	0	0	0.0	0.0
	7-8	2,257	3,146	5,909	6,798	0	0	0.0	0.0
	8-9 9-10	3,161 4,161	3,146 3,146	9,069 13,230	9,055 12,215	15 1,015	7 515	0.0 2.6	0.0
	10-11	4,161	3,146	17,955	12,215	1,015	1,297	6.5	0.3
	11-12	5,099	3,146	23,054	21,101	1,953	1,766	8.8	1.1
Saturday	12-13	5,018	3,146	28,072	26,200	1,872	1,912	9.6	1.2
	13-14	5,075	3,146	33,147	31,218	1,929	1,900	9.5	1.2
	14-15	5,217	3,146	38,364	36,293	2,071	2,000	10.0	1.3
	15-16	4,734	3,146	43,098	41,510	1,588	1,830	9.1	1.2
	16-17	5,068	3,146	48,166	46,244	1,922	1,755	8.8	1.1
	17-18	5,437	3,146	53,603	51,312	2,291	2,106	10.5	1.3
	18-19 19-20	4,838 3,943	3,146 3,146	58,441 62,385	56,749 61,587	1,692 797	1,992 1,245	10.0 6.2	1.3 0.8
	20-21	3,943	3,146	65,658	65,531	128	462	2.3	0.8
	20-21	2,858	3,146	68,516	68,804	0	64	0.3	0.0
	22-23	2,571	3,146	71,087	71,662	0	0	0.0	0.0
	23-24	1,656	3,146	72,743	74,233	0	0	0.0	0.0
	0-1	878	3,146	73,620	75,889	0	0	0.0	0.0
	1-2	437	3,146	74,057	76,766	0	0	0.0	0.0
	2-3	263	3,146	74,320	77,203	0	0	0.0	0.0
	3-4	197	3,146	74,517	77,466	0	0	0.0	0.0
	4-5 5-6	260 482	3,146 3,146	74,777 75,259	77,663 77,923	0	0	0.0	0.0
	6-7	1,007	3,146	76,266	78,405	0	0	0.0	0.0
	7-8	1,488	3,146	77,755	79,412	0	0	0.0	0.0
	8-9	2,317	3,146	80,072	80,901	0	0	0.0	0.0
	9-10	3,534	3,146	83,606	83,218	388	194	1.0	0.1
	10-11	4,865	3,146	88,470	86,752	1,719	1,053	5.3	0.7
Sunday	11-12	5,308	3,146	93,778	91,616	2,162	1,940	9.7	1.2
	12-13	5,722	3,146	99,500	96,924	2,576	2,369	11.8	1.5
	13-14 14-15	5,470 5,129	3,146 3,146	104,971 110,099	102,646 108,117	2,324 1,983	2,450 2,153	12.3 10.8	1.6 1.4
	15-16	4,863	3,146	114,963	113,245	1,965	1,850	9.3	1.4
	16-17	5,578	3,140	120,541	118,109	2,432	2,075	10.4	1.3
	17-18	5,584	3,146	126,125	123,687	2,438	2,435	12.2	1.5
	18-19	4,893	3,146	131,018	129,271	1,747	2,093	10.5	1.3
	19-20	4,066	3,146	135,084	134,164	920	1,333	6.7	0.8
	20-21	3,256	3,146	138,340	138,230	110	515	2.6	0.3
	21-22	2,795	3,146	141,135	141,486	0	55	0.3	0.0
	22-23	1,867	3,146	143,003	144,281	0	0	0.0	0.0
	23-24 0-1	946 431	3,146 3,146	143,949 144,380	146,149 147,095	0	0	0.0	0.0
	1-2	261	3,146	144,380	147,095	0	0	0.0	0.0
	2-3	201	3,146	144,860	147,520	0	0	0.0	0.0
	3-4	238	3,146	145,098	148,006	0	0	0.0	0.0
	4-5	763	3,146	145,861	148,244	0	Ō	0.0	0.0
	5-6	904	3,146	146,765	149,007	0	0	0.0	0.0
	6-7	1,544	3,146	148,309	149,911	0	0	0.0	0.0
	7-8	2,043	3,146	150,352	151,455	0	0	0.0	0.0
	8-9	2,128	3,146	152,480	153,498	0	0	0.0	0.0
	9-10 10-11	1,840	3,146	154,320	155,626	0	0	0.0	0.0
	11-12	1,842	3,146 3,146	156,162 158,075	157,466 159,308	0	0	0.0	0.0
Monday	12-13	1,813	3,146	159,968	161,221	0	0	0.0	0.0
	13-14	1,952	3,146	161,920	163,114	0	0	0.0	0.0
	14-15	2,388	3,146	164,308	165,066	0	0	0.0	0.0
	15-16	2,697	3,146	167,005	167,454	0	0	0.0	0.0
	16-17	3,213	3,146	170,218	170,151	67	34	0.2	0.0
	17-18	3,481	3,146	173,699	173,364	335	201	1.0	0.1
	18-19	2,371	3,146	176,070	176,845	0	168	0.8	0.0
	19-20 20-21	1,680	3,146 3,146	177,750 178,981	179,216 180,896	0	0	0.0	0.0
	21-22	1,231	3,146	180,020	182,127	0	0	0.0	0.0
	22-23	697	3,146	180,020	183,166	0	0	0.0	0.0
		399	3,146	181,116	183,863	0	0	0.0	0.0

Notes:

Freeway	Peak Capacity (pc/h) ⁽¹⁾						
Fleeway	Saturday	Sunday	Monday				
Interstate 580	3,146	3,146	3,146				

	Existing Tr			affic Volume			Dete	our Traffic Volu	imes	Total C	losureTraffic	Volume	
Hours	Golden G	Golden Gate Bridge (Northbound)			Interstate 580 Richmond-San Rafael Bridge (Westbound)			Golden Gate Bridge (Northbound)			Interstate 580 Richmond-San Rafael Bridge (Westbound)		
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	
0-1	1070	999	619	490	487	305	856	799	495	1346	1286	800	
1-2	583	612	346	222	323	195	466	490	277	688	813	472	
2-3	437	470	173	195	201	119	350	376	138	545	577	257	
3-4	243	259	129	144	135	179	194	207	103	338	342	282	
4-5	179	172	163	277	203	393	143	138	130	420	341	523	
5-6	373	217	386	508	332	1085	298	174	309	806	506	1394	
6-7	603	426	1059	1032	621	2933	482	341	847	1514	962	3780	
7-8	1223	814	2348	1737	1024	3653	978	651	1878	2715	1675	5531	
8-9	2100	1562	3095	2380	1428	3417	1680	1250	2476	4060	2678	5893	
9-10	3044	2565	2815	2796	2072	2818	2435	2052	2252	5231	4124	5070	
10-11	3829	3441	2971	3207	2570	2162	3063	2753	2377	6270	5323	4539	
11-12	3727	3633	3183	3206	2934	2097	2982	2906	2546	6188	5840	4643	
12-13	3486	3027	3275	3288	2892	1992	2789	2422	2620	6077	5314	4612	
13-14	3266	2955	3259	3282	2925	2080	2613	2364	2607	5895	5289	4687	
14-15	3000	2624	3812	3272	2631	1810	2400	2099	3050	5672	4730	4860	
15-16	2883	2368	4423	2867	2686	1938	2306	1894	3538	5173	4580	5476	
16-17	3071	2460	4621	2533	2519	2110	2457	1968	3697	4990	4487	5807	
17-18	4223	3863	4953	2373	2396	2252	3378	3090	3962	5751	5486	6214	
18-19	5622	5643	4195	1884	1865	2090	4498	4514	3356	6382	6379	5446	
19-20	3136	3109	2737	1411	1578	1425	2509	2487	2190	3920	4065	3615	
20-21	2029	2309	1961	1281	1435	1001	1623	1847	1569	2904	3282	2570	
21-22	1882	2433	1635	1374	1219	929	1506	1946	1308	2880	3165	2237	
22-23	2306	1932	1233	1335	949	716	1845	1546	986	3180	2495	1702	
23-24	1539	1067	795	735	588	476	1231	854	636	1966	1442	1112	

#### Notes:

(1)pc/h pa	issenger cars per hour
XXXX AI	I lanes on GGB open to traffic
xxxx Vo	olume exceeds capacity
Assumptions	
Speed Limit	65 mph Speed limit
Base Capacity	1850 VPH per Lane
Lanes	2
Volume Distribution	20% of GGB traffic will not drive and/or use public transit and other modes of tranpsortation.
Volume Distribution	100% of GGB detour traffic will use Interstate 580
djustment for Heavy Vehicles	0.97
Volume / Capacity	0.99
Peak Hour Factor	0.95
Adjustment for Driver Pop.	0.975
Average Rate of Storage	100 vehicles / lane / mile

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - RICHMOND-SAN RAFAEL BRIDGE (WESTBOUND)

Day	Hours	Demand a a VEH	Capacity b b VEH	Cum Demand c a2+c1 VPH	Cum Output d b2+c1+ VEH	Cum Queue e c-d VEH	Average Queue f (e1+e2)/2 VEH	Average Queue Distance g f/(Vplm*Lanes) MILES	Average Queue Delay h (e1+(a2-b2))/b: HOURS
	0-1	1,346	3.146	1.346	3.146	0	0	0.0	0.0
	1-2	688	3,146	2,034	4,492	0	0	0.0	0.0
	2-3	545	3,146	2,579	5,180	0	0	0.0	0.0
	3-4	338	3,146	2,917	5,725	0	0	0.0	0.0
	4-5	420	3,146	3,338	6,063	0	0	0.0	0.0
	5-6	806	3,146	4,144	6,484	0	0	0.0	0.0
	6-7	1,514	3,146	5,658	7,290	0	0	0.0	0.0
	7-8	2,715	3,146	8,374	8,804	0	0	0.0	0.0
	8-9	4,060	3,146	12,434	11,520	914	457	2.3	0.3
	9-10	5,231	3,146	17,665	15,580	2,085	1,500	7.5	1.0
	10-11	6,270	3,146	23,935	20,811	3,124	2.605	13.0	1.7
	11-12	6,188	3,146	30,123	27,081	3,042	3,083	15.4	2.0
Saturday	12-13	6,077	3,146	36,200	33,269	2,931	2,986	14.9	1.9
	13-14	5,895	3,146	42,094	39,346	2,749	2,840	14.2	1.8
	14-15	5,672	3,146	47,766	45,240	2,526	2,637	13.2	1.7
	15-16	5,173	3,146	52,940	50,912	2,027	2,277	11.4	1.4
	16-17	4,990	3,146	57,930	56,086	1,844	1,936	9.7	1.2
	17-18	5,751	3,146	63,681	61,076	2,605	2,225	11.1	1.4
	18-19	6,382	3,146	70,063	66,827	3,236	2,921	14.6	1.9
	19-20	3,920	3,146	73,982	73,209	774	2,005	10.0	1.3
	20-21	2,904	3,146	76,887	77,128	0	387	1.9	0.2
	21-22	2,880	3,146	79,766	80,033	0	0	0.0	0.0
	22-23	3,180	3,146	82,946	82,912	34	17	0.1	0.0
	23-24	1,966	3,146	84,912	86,092	0	17	0.1	0.0
	0-1	1,286	3,146	86,198	88,058	0	0	0.0	0.0
	1-2	813	3,146	87,011	89,344	0	0	0.0	0.0
	2-3	577	3,146	87,588	90,157	0	Ő	0.0	0.0
	3-4	342	3,146	87,930	90,734	0	0	0.0	0.0
	4-5	341	3,146	88,271	91,076	0	0	0.0	0.0
	5-6	506	3,146	88,776	91,417	0	0	0.0	0.0
	6-7	962	3,146	89,738	91,922	0	0	0.0	0.0
	7-8	1,675	3,146	91,413	92,884	0	0	0.0	0.0
	8-9	2,678	3,146	94,091	94,559	0	0	0.0	0.0
	9-10	4,124	3,146	98.215	97.237	978	489	2.4	0.3
	10-11	5,323	3,146	103,538	101,361	2,177	1,577	7.9	1.0
	11-12	5,840	3,146	109,378	106,684	2,694	2,436	12.2	1.5
Sunday	12-13	5,314	3,146	114,692	112,524	2,168	2,431	12.2	1.5
	13-14	5,289	3,146	119,981	117,838	2,143	2,155	10.8	1.4
	14-15	4,730	3,146	124,711	123,127	1,584	1,864	9.3	1.2
	15-16	4,580	3,146	129,291	127,857	1,434	1,509	7.5	1.0
	16-17	4,487	3,146	133,778	132,437	1,341	1,388	6.9	0.9
	17-18	5,486	3,146	139,265	136,924	2,340	1,841	9.2	1.2
	18-19	6,379	3,146	145,644	142,411	3,233	2,787	13.9	1.8
	19-20	4,065	3,146	149,709	148,790	919	2,076	10.4	1.3
	20-21	3,282	3,146	152,992	152,855	136	528	2.6	0.3
	21-22	3,165	3,146	156,157	156,138	19	78	0.4	0.0
	22-23	2,495	3,146	158,652	159,303	0	10	0.0	0.0
	23-24	1,442	3,146	160,093	161,798	0	0	0.0	0.0
	0-1	800	3,146	160,893	163,239	0	0	0.0	0.0
	1-2	472	3,146	161,365	164,039	0	0	0.0	0.0
	2-3	257	3,146	161,623	164,511	0	0	0.0	0.0
	3-4	282	3,146	161,905	164,769	0	0	0.0	0.0
	4-5	523	3,146	162,428	165,051	0	0	0.0	0.0
	5-6	1,085	3,146	163,513	165,574	0	0	0.0	0.0
	6-7	2,933	3,146	166,446	166,659	0	0	0.0	0.0
	7-8	3,653	3,146	170,099	169,592	507	254	1.3	0.2
	8-9	3,417	3,146	173,516	173,245	271	389	1.9	0.2
	9-10	2,818	3,146	176,334	176,662	0	136	0.7	0.0
	10-11	2,162	3,146	178,496	179,480	0	0	0.0	0.0
Monday	11-12	2,097	3,146	180,593	181,642	0	0	0.0	0.0
monday	12-13	1,992	3,146	182,585	183,739	0	0	0.0	0.0
	13-14	2,080	3,146	184,665	185,731	0	0	0.0	0.0
	14-15	1,810	3,146	186,475	187,811	0	0	0.0	0.0
	15-16	1,938	3,146	188,413	189,621	0	0	0.0	0.0
	16-17	2,110	3,146	190,523	191,559	0	0	0.0	0.0
	17-18	2,252	3,146	192,775	193,669	0	0	0.0	0.0
	18-19	2,090	3,146	194,865	195,921	0	0	0.0	0.0
	19-20	1,425	3,146	196,290	198,011	0	0	0.0	0.0
	20-21	1,001	3,146	197,291	199,436	0	0	0.0	0.0
	21-22	929	3,146	198,220	200,437	0	0	0.0	0.0
	22-23	716	3,146	198,936	201,366	0	0	0.0	0.0

Notes:

Freeway	Peak Capacity (pc/h) ⁽¹⁾							
Fleeway	Saturday	Sunday	Monday					
Interstate 80	8,352	8,352	8,352					

			Existing Tr	affic Volume			D	etour Traffic Vo	lumes	Total C	ClosureTraffic	Volume
Hours	Golden G	ate Bridge (No	orthbound)		San Francisco idge (Eastbou	o-Oakland Bay nd)	Golder	n Gate Bridge (N	lorthbound)		San Francisco idge (Eastbou	o-Oakland Bay nd)
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0-1	1070	999	619	3881	3897	2516	856	799	495	4737	4696	3011
1-2	583	612	346	3002	3231	1348	466	490	277	3468	3721	1625
2-3	437	470	173	2940	3463	982	350	376	138	3290	3839	1120
3-4	243	259	129	1482	1875	731	194	207	103	1676	2082	834
4-5	179	172	163	1012	1043	853	143	138	130	1155	1181	983
5-6	373	217	386	1361	1065	1730	298	174	309	1659	1239	2039
6-7	603	426	1059	2127	1644	3785	482	341	847	2609	1985	4632
7-8	1223	814	2348	3429	2587	6180	978	651	1878	4407	3238	8058
8-9	2100	1562	3095	4777	3537	6753	1680	1250	2476	6457	4787	9229
9-10	3044	2565	2815	5709	4673	5859	2435	2052	2252	8144	6725	8111
10-11	3829	3441	2971	6669	5693	5575	3063	2753	2377	9732	8446	7952
11-12	3727	3633	3183	6814	6125	5577	2982	2906	2546	9796	9031	8123
12-13	3486	3027	3275	6573	6474	6010	2789	2422	2620	9362	8896	8630
13-14	3266	2955	3259	6513	6773	6510	2613	2364	2607	9126	9137	9117
14-15	3000	2624	3812	7202	6917	7893	2400	2099	3050	9602	9016	10943
15-16	2883	2368	4423	7574	6993	8608	2306	1894	3538	9880	8887	12146
16-17	3071	2460	4621	7171	7571	8292	2457	1968	3697	9628	9539	11989
17-18	4223	3863	4953	7554	7417	7818	3378	3090	3962	10932	10507	11780
18-19	5622	5643	4195	7853	7692	6819	4498	4514	3356	12351	12206	10175
19-20	3136	3109	2737	7459	7460	5831	2509	2487	2190	9968	9947	8021
20-21	2029	2309	1961	7461	7342	4968	1623	1847	1569	9084	9189	6537
21-22	1882	2433	1635	6344	7226	4493	1506	1946	1308	7850	9172	5801
22-23	2306	1932	1233	6303	7276	3988	1845	1546	986	8148	8822	4974
23-24	1539	1067	795	5035	4387	2881	1231	854	636	6266	5241	3517

#### Notes:

	ssenger cars per hour
	lanes on GGB open to traffic
xxxx Vo	lume exceeds capacity
Assumptions	
Speed Limit	65 mph Speed limit
Base Capacity	1850 VPH per Lane
Lanes	5
Volume Distribution	20% of GGB traffic will not drive and/or use public transit and other modes of tranpsortation
Volume Distribution	100% of GGB detour traffic will use Interstate 80
Adjustment for Heavy Vehicles	0.97
Volume / Capacity	0.93
Peak Hour Factor	0.95
Adjustment for Driver Pop.	0.975
Average Rate of Vehicle Storage	100 vehicles / lane / mile

### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - SAN FRANCISCO-OAKLAND BAY BRIDGE (EASTBOUND)

Day	Hours	Demand	Capacity	Cum Demand	Cum Output		Average Queue	Average Queue Distance	Average Queue Delay
		a a VEH	b b VEH	с a2+c1 VPH	d b2+c1+ VEH	e c-d VEH	f (e1+e2)/2 VEH	g f/(Vplm*Lanes) MILES	h (e1+(a2-b2))/b2 HOURS
	0-1	4,737	8,352	4,737	8,352	0	0	0.0	0.0
	1-2	3,468	8,352	8,205	13,089	0	0	0.0	0.0
	2-3	3,290	8,352	11,495	16,558	0	0	0.0	0.0
	3-4	1,676	8,352	13,171	19,847	0	0	0.0	0.0
	4-5	1,155	8,352	14,327	21,524	0	0	0.0	0.0
	5-6 6-7	1,659 2,609	8,352	15,986	22,679	0	0	0.0	0.0
	7-8	2,609	8,352 8,352	18,595 23,003	24,338 26,948	0	0	0.0	0.0
	7-8	4,407	8,352	23,003 29,460	26,948	0	0	0.0	0.0
	9-10	8,144	8,352	37,604	37,812	0	0	0.0	0.0
	10-11	9,732	8,352	47,336	45,956	1,380	690	1.4	0.0
	11-12	9,732	8,352	57,132	45,950	1,443	1,412	2.8	0.2
Saturday	12-13	9,362	8,352	66,494	65,484	1,009	1,412	2.5	0.3
	13-14	9,126	8,352	75,619	74,846	773	891	1.8	0.3
	14-15	9,602	8,352	85,221	83,972	1,250	1,012	2.0	0.2
	15-16	9,880	8,352	95,102	93,574	1,528	1,389	2.8	0.3
	16-17	9.628	8.352	104,730	103.454	1.275	1,402	2.8	0.3
	17-18	10.932	8,352	115,662	113,082	2,580	1,928	3.9	0.5
	18-19	12,351	8,352	128,013	124,014	3,998	3,289	6.6	0.8
	19-20	9,968	8,352	137,980	136,365	1,615	2,807	5.6	0.7
	20-21	9,084	8,352	147,065	146,333	732	1,174	2.3	0.3
	21-22	7,850	8,352	154,914	155,417	0	366	0.7	0.0
	22-23	8,148	8,352	163,062	163,267	0	0	0.0	0.0
	23-24	6,266	8,352	169,328	171,414	0	0	0.0	0.0
	0-1	4,696	8,352	174,024	177,681	0	0	0.0	0.0
	1-2	3,721	8,352	177,745	182,377	0	0	0.0	0.0
	2-3	3,839	8,352	181,584	186,097	0	0	0.0	0.0
	3-4	2,082	8,352	183,666	189,936	0	0	0.0	0.0
	4-5	1,181	8,352	184,847	192,019	0	0	0.0	0.0
	5-6	1,239	8,352	186,085	193,199	0	0	0.0	0.0
	6-7	1,985	8,352	188,070	194,438	0	0	0.0	0.0
	7-8	3,238	8,352	191,308	196,423	0	0	0.0	0.0
	8-9	4,787	8,352	196,095	199,661	0	0	0.0	0.0
	9-10	6,725	8,352	202,820	204,447	0	0	0.0	0.0
	10-11	8,446	8,352	211,266	211,172	93	47	0.1	0.0
Sunday	11-12	9,031	8,352	220,297	219,618	679	386 611	0.8	0.1
	12-13	8,896 9,137	8,352 8,352	229,193 238,330	228,650	543 785	664	1.2	0.1
	14-15	9,016	8,352	238,330	246,682	664	724	1.3	0.2
	15-16	8,887	8,352	256,233	255,698	535	599	1.4	0.2
	16-17	9,539	8,352	265.772	264,586	1,187	861	1.2	0.1
	17-18	10,507	8,352	276,280	274,125	2,155	1,671	3.3	0.4
	18-19	12,206	8,352	288,486	284,632	3,854	3,005	6.0	0.7
	19-20	9,947	8,352	298,433	296,839	1,595	2,724	5.4	0.7
	20-21	9,189	8,352	307,623	306,786	837	1,216	2.4	0.3
	21-22	9,172	8,352	316,795	315,975	820	828	1.7	0.2
	22-23	8,822	8,352	325,617	325,147	469	645	1.3	0.2
	23-24	5,241	8,352	330,857	333,969	0	235	0.5	0.0
	0-1	3,011	8,352	333,868	339,210	0	0	0.0	0.0
	1-2	1,625	8,352	335,493	342,221	0	0	0.0	0.0
	2-3	1,120	8,352	336,614	343,846	0	0	0.0	0.0
	3-4	834	8,352	337,448	344,966	0	0	0.0	0.0
	4-5	983	8,352	338,431	345,800	0	0	0.0	0.0
	5-6	1,730	8,352	340,161	346,784	0	0	0.0	0.0
	6-7	3,785	8,352	343,946	348,514	0	0	0.0	0.0
	7-8	6,180	8,352	350,126	352,299	0	0	0.0	0.0
	8-9	6,753	8,352	356,879	358,479	0	0	0.0	0.0
	9-10	5,859	8,352	362,738	365,232	0	0	0.0	0.0
	10-11	5,575	8,352	368,313	371,091	0	0	0.0	0.0
Monday	11-12	5,577	8,352	373,890	376,666	0	0	0.0	0.0
,	12-13	6,010	8,352	379,900	382,243	0	0	0.0	0.0
	13-14	6,510	8,352	386,410	388,253	0	0	0.0	0.0
	14-15	7,893	8,352	394,303	394,763	0	0	0.0	0.0
	15-16	8,608	8,352	402,911	402,656	256	128	0.3	0.0
	16-17	8,292	8,352	411,203	411,264	0	128	0.3	0.0
	17-18	7,818	8,352	419,021	419,556	0	0	0.0	0.0
	18-19	6,819	8,352	425,840	427,374	0	0	0.0	0.0
	19-20	5,831	8,352	431,671	434,193	0	0	0.0	0.0
	20-21	4,968	8,352	436,639	440,024	0	0	0.0	0.0
	21-22	4,493	8,352	441,132	444,992	0	0	0.0	0.0
	22-23 23-24	3,988	8,352 8,352	445,120 448,001	449,485 453,473	0	0	0.0	0.0

Freeway	Peak Capacity (pc/h) ⁽¹⁾						
rieeway	Saturday	Sunday	Monday				
Interstate 80	8,352	8,352	8,352				

		Existing Trat		affic Volume			Det	tour Traffic Vol	umes	Total ClosureTraffic Volume		
Hours	Golden G	Golden Gate Bridge (Southbound) Interstate 80 San Francisco-Oakland Bay Bridge (Westbound) Golden Gate Bridge (Sou		(Southbound) Interstate 80 San Francisco-Oakl Bridge (Westbound)								
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0-1	358	486	244	2032	2447	1492	286	389	195	2318	2836	1687
1-2	200	212	139	1351	1903	859	160	170	111	1511	2073	970
2-3	119	138	107	1118	1081	812	95	110	86	1213	1191	898
3-4	124	130	157	1168	966	1342	99	104	126	1267	1070	1468
4-5	174	170	510	1791	1391	3531	139	136	408	1930	1527	3939
5-6	406	335	1312	3333	2176	8412	325	268	1050	3658	2444	9462
6-7	839	690	2875	4350	3114	9144	671	552	2300	5021	3666	11444
7-8	1491	963	4377	4721	3568	8453	1193	770	3502	5914	4338	11955
8-9	2197	1564	4844	6034	4975	7688	1758	1251	3875	7792	6226	11563
9-10	2861	2442	3665	7234	6529	8099	2289	1954	2932	9523	8483	11031
10-11	3054	3417	3040	7954	8090	7228	2443	2734	2432	10397	10824	9660
11-12	3485	3796	2925	8051	7909	7249	2788	3037	2340	10839	10946	9589
12-13	3727	4403	2758	6861	8171	6654	2982	3522	2206	9843	11693	8860
13-14	3775	4139	2663	7575	6911	6153	3020	3311	2130	10595	10222	8283
14-15	3626	3337	2878	7876	7273	6467	2901	2670	2302	10777	9943	8769
15-16	3098	2988	3004	7947	7260	6032	2478	2390	2403	10425	9650	8435
16-17	2927	3549	3322	7731	7392	7017	2342	2839	2658	10073	10231	9675
17-18	3384	3238	3473	7740	7502	6777	2707	2590	2778	10447	10092	9555
18-19	2788	2620	2812	6972	7227	5627	2230	2096	2250	9202	9323	7877
19-20	2294	2257	1865	6154	6538	4841	1835	1806	1492	7989	8344	6333
20-21	2087	2013	1439	5900	6238	4056	1670	1610	1151	7570	7848	5207
21-22	1721	1649	1118	6548	5640	3828	1377	1319	894	7925	6959	4722
22-23	1517	1083	665	6058	5045	3362	1214	866	532	7272	5911	3894
23-24	1010	519	344	4502	2792	2052	808	415	275	5310	3207	2327

#### Notes:

	⁽¹⁾ pc/h	passenger car	s per hour
	хххх	All lanes on G	GB open to traffic
	XXXX	Volume excee	ds capacity
Assumptions	Second Limit	65 mph	Spood limit

Speed Limit Base Capacity Lanes

65 mph Speed limit 1850 pc/h/lane 5

Volume Distribution

Adjustment for Heavy Vehicles Volume / Capacity Peak Hour Factor Adjustment for Driver Pop. Average Rate of Vehicle Storage

5 20% of GGB traffic will not drive and/or use public transit and other modes of transportation. 100% of GGB detour traffic will use Interstate 80 0.97 0.95 0.955 100 vehicles / Iane / mile

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - SAN FRANCISCO-OAKLAND BAY BRIDGE (WESTBOUND)

Day	Hours	Demand a a VEH	Capacity b b VEH	Cum Demand c a2+c1 VPH	Cum Output d b2+c1+ VEH	Cum Queue e c-d VEH	Average Queue f (e1+e2)/2 VEH	Average Queue Distance g f/(Vplm*Lanes) MILES	Average Queue Delay h (e1+(a2-b2))/t HOURS
	0-1	2,318	8,352	2,318	8,352	0	0	0.0	0.0
	1-2	1,511	8,352	3,829	10,671	0	0	0.0	0.0
	2-3	1,213	8,352	5,043	12,182	0	0	0.0	0.0
	3-4	1,267	8,352	6,310	13,395	0	0	0.0	0.0
	4-5	1,930	8,352	8,240	14,662	0	0	0.0	0.0
	5-6	3,658	8,352	11,898	16,592	0	0	0.0	0.0
	6-7	5,021	8,352	16,919	20,250	0	0	0.0	0.0
	7-8	5,914	8,352	22,833	25,271	0	0	0.0	0.0
	8-9	7,792	8,352	30,624	31,185	0	0	0.0	0.0
	9-10	9,523	8,352	40,147	38,977	1,170	585	1.2	0.1
	10-11	10,397	8,352	50,544	48,500	2,045	1,608	3.2	0.4
Saturday	11-12	10,839	8,352	61,383	58,897	2,487	2,266	4.5	0.5
Galarady	12-13	9,843	8,352	71,226	69,736	1,490	1,988	4.0	0.5
	13-14	10,595	8,352	81,821	79,578	2,243	1,866	3.7	0.4
	14-15	10,777	8,352	92,598	90,173	2,424	2,334	4.7	0.6
	15-16	10,425	8,352	103,023	100,950	2,073	2,249	4.5	0.5
	16-17	10,073	8,352	113,096	111,376	1,720	1,897	3.8	0.5
	17-18	10,447	8,352	123,543	121,448	2,095	1,908	3.8	0.5
	18-19	9,202	8,352	132,745	131,895	850	1,472	2.9	0.4
	19-20	7,989	8,352	140,735	141,098	0	425	0.9	0.1
	20-21	7,570	8,352	148,304	149,087	0	0	0.0	0.0
	21-22	7,925	8,352	156,229	156,657	0	0	0.0	0.0
	22-23	7,272	8,352	163,501	164,581	0	0	0.0	0.0
	23-24	5,310	8,352	168,811	171,853	0	0	0.0	
	0-1	2,836	8,352	171,646	177,163				0.0
	1-2	2,073	8,352	173,719	179,999	0	0	0.0	0.0
	2-3	1,191 1,070	8,352 8,352	174,910 175,980	182,071 183,263	0	0	0.0	0.0
						0	0	0.0	
	4-5	1,527	8,352	177,507	184,333				0.0
	5-6	2,444	8,352	179,951	185,860	0	0	0.0	0.0
	6-7	3,666	8,352 8,352	183,617 187,956	188,304 191,970	0	0	0.0	0.0
	7-8	4,338 6,226				0	0		0.0
			8,352	194,182	196,308			0.0	
	9-10	8,483	8,352	202,665	202,534	130	65	0.1	0.0
	10-11	10,824 10,946	8,352 8,352	213,488 224,434	211,017 221,841	2,471 2,593	1,301 2.532	2.6	0.3
Sunday	11-12	10,946	8,352	224,434	221,841	2,593	2,532	5.9	0.6
	12-13	11,693	0,352	236,127	232,766	3,341	2,967	5.9	
	13-14 14-15	10,222 9,943	8,352	246,350	244,480	1,870	2,605	3.5	0.6
	15-16	9,943	8,352 8,352	256,292 265,943	254,702 264,645	1,590 1,298	1,730	2.9	0.4
	16-17	10.231	8,352	276,174	274,295	1,298	1,444	3.2	0.3
	17-18	10,231	8,352	286,266	284,526	1,740	1,809	3.6	0.4
	18-19	9,323	8,352	295,589	294,619	971	1,355	2.7	0.4
	19-20	9,323	8,352	295,589	303.942	0	485	1.0	0.3
	20-21	7,848	8,352	311,781	312,285	0	485	0.0	0.0
	21-22	6,959	8,352	318,740	320,134	0	0	0.0	0.0
						0	0		
	22-23 23-24	5,911 3,207	8,352 8,352	324,652 327,859	327,093 333.004	0	0	0.0	0.0
						0			
	0-1	1,687 970	8,352 8,352	329,546 330,516	336,211 337,899	0	0	0.0	0.0
	2-3	970 898	8,352	330,516	337,899	0	0	0.0	0.0
	3-4	1,468	8,352	331,414	338,869	0	0	0.0	0.0
	4-5	3.531	8,352	336,413	341,234	0	0	0.0	0.0
	5-6	8,412	8,352	344,825	344,765	60	30	0.0	0.0
	6-7	9,144	8,352	344,825	344,765	792	30 426	0.1	0.0
								0.9	
	7-8	8,453 7,688	8,352 8,352	362,422 370,110	362,321 370,774	101	446 50	0.9	0.1 0.0
	9-10					0	0	0.0	0.0
	10-11	8,099 7,228	8,352 8,352	378,209 385,437	378,462 386,561	0	0	0.0	0.0
	10-11 11-12	7,228	8,352	385,437 392,686	386,561 393,789	0	0	0.0	0.0
Monday	11-12	6,654	8,352	392,686	401,038	0	0	0.0	0.0
	12-13	6,153	8,352	405,493	401,038	0	0	0.0	0.0
	13-14	6,467	8,352	405,493 411,960	407,692	0	0	0.0	0.0
						0			
	15-16 16-17	6,032 7,017	8,352 8,352	417,992 425,009	420,312 426,344	0	0	0.0	0.0
	17-18					0	0		
	18-19	6,777 5,627	8,352 8,352	431,786 437,413	433,361 440,138	0	0	0.0	0.0
						0	0		
	19-20 20-21	4,841 4,056	8,352 8,352	442,254 446,310	445,765 450,606	0	0	0.0	0.0
						0	0		
	21-22	3,828	8,352 8,352	450,138 453,500	454,662 458,490	0	0	0.0	0.0
	22-23 23-24	2,052	8,352	455,552	461,852	0	0	0.0	0.0

Freeway	Peak Capacity (pc/h) ⁽¹⁾						
Fleeway	Saturday	Sunday	Monday				
Interstate 580	3,146	3,146	3,146				

		Existing Tra		affic Volume			De	tour Traffic Vol	umes	Total ClosureTraffic Volume		
Hours	Golden G	Golden Gate Bridge (Southbound) Interstate 580 Richmond-San Rafael Bridge (Eastbound) Golden Gate Bridge (Southbound		outhbound)	Interstate 580 Richmond-San Rafael Bridge (Eastbound)							
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0-1	358	486	244	361	489	236	251	340	171	612	829	407
1-2	200	212	139	184	267	150	140	148	97	324	415	247
2-3	119	138	107	125	153	133	83	97	75	208	250	208
3-4	124	130	157	116	93	112	87	91	110	203	184	222
4-5	174	170	510	171	124	355	122	119	357	293	243	712
5-6	406	335	1312	328	214	904	284	235	918	612	449	1822
6-7	839	690	2875	591	455	1544	587	483	2013	1178	938	3557
7-8	1491	963	4377	1064	718	2043	1044	674	3064	2108	1392	5107
8-9	2197	1564	4844	1403	1066	2128	1538	1095	3391	2941	2161	5519
9-10	2861	2442	3665	1872	1580	1840	2003	1709	2566	3875	3289	4406
10-11	3054	3417	3040	2282	2131	1842	2138	2392	2128	4420	4523	3970
11-12	3485	3796	2925	2311	2271	1913	2440	2657	2048	4751	4928	3961
12-13	3727	4403	2758	2036	2200	1893	2609	3082	1931	4645	5282	3824
13-14	3775	4139	2663	2055	2159	1952	2643	2897	1864	4698	5056	3816
14-15	3626	3337	2878	2316	2459	2388	2538	2336	2015	4854	4795	4403
15-16	3098	2988	3004	2256	2473	2697	2169	2092	2103	4425	4565	4800
16-17	2927	3549	3322	2726	2739	3213	2049	2484	2325	4775	5223	5538
17-18	3384	3238	3473	2730	2994	3481	2369	2267	2431	5099	5261	5912
18-19	2788	2620	2812	2608	2797	2371	1952	1834	1968	4560	4631	4339
19-20	2294	2257	1865	2108	2260	1680	1606	1580	1306	3714	3840	2986
20-21	2087	2013	1439	1604	1646	1231	1461	1409	1007	3065	3055	2238
21-22	1721	1649	1118	1481	1476	1039	1205	1154	783	2686	2630	1822
22-23	1517	1083	665	1357	1001	697	1062	758	466	2419	1759	1163
23-24	1010	519	344	848	531	399	707	363	241	1555	894	640

#### Notes:

⁽¹⁾ pc/h passenger cars per hour
xxxx All lanes on GGB open to traffic
XXXX Volume exceeds capacity

Assumptions

Speed Limit Base Capacity Lanes

Volume Distribution

Adjustment for Heavy Vehicles Volume / Capacity Peak Hour Factor Adjustment for Driver Pop. Average Rate of Vehicle Storage

65 mph Speed limit 1550 pc/h/lane 2 30% of GCB traffic will not drive and/or use public transit and other modes of tranpsortation. 100% of GCB detour traffic will use Interstate 580 0.97 0.94 0.95 100 vehicles / lane / mile

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - RICHMOND-SAN RAFAEL BRIDGE (EASTBOUND)

Day	Hours	Demand a a	Capacity b b	Cum Demand c a2+c1	d b2+c1+	Cum Queue e c-d	Average Queue f (e1+e2)/2		Average Queue Delay h (e1+(a2-b2))/b2
	0-1	612	3.146	612	3.146	0 VEH	0 0	MILES 0.0	HOURS
	1-2	324	3,146	936	3,140	0	0	0.0	0.0
	2-3	208	3,146	1,144	4,082	0	0	0.0	0.0
	3-4	203	3,146	1,347	4,290	0	0	0.0	0.0
	4-5	293	3,146	1,640	4,493	0	0	0.0	0.0
	5-6	612	3,146	2,252	4,786	0	0	0.0	0.0
	6-7	1,178 2,108	3,146 3,146	3,430 5,538	5,398 6,576	0	0	0.0	0.0
	8-9	2,108	3,146	5,538	8,684	0	0	0.0	0.0
	9-10	3,875	3,146	12,353	11,625	729	364	1.8	0.2
	10-11	4,420	3,146	16,773	15,499	1,274	1,001	5.0	0.6
Saturday	11-12	4,751	3,146	21,524	19,919	1,605	1,439	7.2	0.9
outurday	12-13	4,645	3,146	26,169	24,670	1,499	1,552	7.8	1.0
	13-14	4,698	3,146	30,866	29,315	1,552	1,525	7.6	1.0
	14-15	4,854 4,425	3,146 3,146	35,720 40.145	34,012 38,866	1,708	1,630	8.1	0.9
	16-17	4,425	3,146	44,920	43,291	1,629	1,493	7.3	0.9
	17-18	5,099	3,146	50,019	48,066	1,953	1,791	9.0	1.1
	18-19	4,560	3,146	54,578	53,165	1,414	1,683	8.4	1.1
	19-20	3,714	3,146	58,292	57,724	568	991	5.0	0.6
	20-21	3,065	3,146	61,357	61,438	0	284	1.4	0.2
	21-22 22-23	2,686 2,419	3,146 3,146	64,043 66,461	64,503 67,189	0	0	0.0	0.0
	23-24	1,555	3,146	68,016	69,607	0	0	0.0	0.0
	0-1	829	3,146	68,846	71,162	0	0	0.0	0.0
	1-2	415	3,146	69,261	71,992	0	Ō	0.0	0.0
	2-3	250	3,146	69,511	72,407	0	0	0.0	0.0
	3-4	184	3,146	69,695	72,657	0	0	0.0	0.0
	4-5 5-6	243 449	3,146 3,146	69,938 70,386	72,841 73,084	0	0	0.0	0.0
	6-7	938	3,146	70,386	73,532	0	0	0.0	0.0
	7-8	1.392	3,146	72,716	74,470	0	0	0.0	0.0
	8-9	2,161	3,146	74,877	75,862	0	0	0.0	0.0
	9-10	3,289	3,146	78,166	78,023	143	72	0.4	0.0
	10-11	4,523	3,146	82,689	81,312	1,377	760	3.8	0.5
Sunday	11-12	4,928	3,146	87,618	85,835	1,782	1,580	7.9	1.0
	12-13 13-14	5,282 5,056	3,146 3,146	92,900 97,956	90,764 96,046	2,136 1,910	1,959 2,023	9.8 10.1	1.2
	14-15	4,795	3,146	102,751	101,102	1,649	1,780	8.9	1.1
	15-16	4,565	3,146	107,315	105,897	1,419	1,534	7.7	1.0
	16-17	5,223	3,146	112,539	110,461	2,077	1,748	8.7	1.1
	17-18	5,261	3,146	117,799	115,685	2,115	2,096	10.5	1.3
	18-19	4,631	3,146	122,430	120,945	1,485	1,800	9.0	1.1
	19-20 20-21	3,840 3,055	3,146 3,146	126,270 129,325	125,576 129,416	694 0	1,089	5.4	0.7
	20-21	2,630	3,146	131,956	132,471	0	0	0.0	0.0
	22-23	1,759	3,146	133,715	135,102	0	0	0.0	0.0
	23-24	894	3,146	134,609	136,861	0	0	0.0	0.0
	0-1	407	3,146	135,016	137,755	0	0	0.0	0.0
	1-2	247	3,146	135,263	138,162	0	0	0.0	0.0
	2-3 3-4	208 222	3,146 3,146	135,471 135,693	138,409 138,617	0	0	0.0	0.0
	4-5	712	3,146	135,693	138,839	0	0	0.0	0.0
	5-6	904	3,146	137,309	139,551	0	0	0.0	0.0
	6-7	1,544	3,146	138,853	140,455	0	0	0.0	0.0
	7-8	2,043	3,146	140,896	141,999	0	0	0.0	0.0
	8-9	2,128	3,146	143,024	144,042	0	0	0.0	0.0
	9-10 10-11	1,840 1,842	3,146 3,146	144,864 146,706	146,170 148,010	0	0	0.0	0.0
	11-12	1,842	3,146	146,706	148,010	0	0	0.0	0.0
Monday	12-13	1,893	3,146	150,512	151,765	0	0	0.0	0.0
	13-14	1,952	3,146	152,464	153,658	0	0	0.0	0.0
	14-15	2,388	3,146	154,852	155,610	0	0	0.0	0.0
	15-16	2,697	3,146	157,549	157,998	0	0	0.0	0.0
	16-17	3,213	3,146	160,762	160,695	67	34	0.2	0.0
	17-18 18-19	3,481 2,371	3,146 3,146	164,243 166,614	163,908 167,389	335 0	201	1.0 0.8	0.1
	19-20	1,680	3,146	168,294	169,760	0	0	0.0	0.0
	20-21	1,231	3,146	169,525	171,440	0	0	0.0	0.0
	21-22	1,039	3,146	170,564	172,671	0	0	0.0	0.0
	22-23 23-24	697 399	3,146	171,261	173,710	0	0	0.0	0.0
			3,146	171,660	174,407	0	0	0.0	0.0

Notes:

Freeway	Peak Capacity (pc/h) ⁽¹⁾						
Fleeway	Saturday	Sunday	Monday				
Interstate 580	3,146	3,146	3,146				

			Existing Tra	affic Volume			Det	our Traffic Volu	imes	Total C	losureTraffic	Volume
Hours	Golden G	Golden Gate Bridge (Northbound)			Interstate 580 Richmond-San Rafael Bridge (Westbound)			Golden Gate Bridge (Northbound)			580 Richmond dge (Westbou	
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday
0-1	1070	999	619	490	487	305	749	699	433	1239	1186	738
1-2	583	612	346	222	323	195	408	428	242	630	751	437
2-3	437	470	173	195	201	119	306	329	121	501	530	240
3-4	243	259	129	144	135	179	170	181	90	314	316	269
4-5	179	172	163	277	203	393	125	120	114	402	323	507
5-6	373	217	386	508	332	1085	261	152	270	769	484	1355
6-7	603	426	1059	1032	621	2933	422	298	741	1454	919	3674
7-8	1223	814	2348	1737	1024	3653	856	570	1644	2593	1594	5297
8-9	2100	1562	3095	2380	1428	3417	1470	1093	2167	3850	2521	5584
9-10	3044	2565	2815	2796	2072	2818	2131	1796	1971	4927	3868	4789
10-11	3829	3441	2971	3207	2570	2162	2680	2409	2080	5887	4979	4242
11-12	3727	3633	3183	3206	2934	2097	2609	2543	2228	5815	5477	4325
12-13	3486	3027	3275	3288	2892	1992	2440	2119	2293	5728	5011	4285
13-14	3266	2955	3259	3282	2925	2080	2286	2069	2281	5568	4994	4361
14-15	3000	2624	3812	3272	2631	1810	2100	1837	2668	5372	4468	4478
15-16	2883	2368	4423	2867	2686	1938	2018	1658	3096	4885	4344	5034
16-17	3071	2460	4621	2533	2519	2110	2150	1722	3235	4683	4241	5345
17-18	4223	3863	4953	2373	2396	2252	2956	2704	3467	5329	5100	5719
18-19	5622	5643	4195	1884	1865	2090	3935	3950	2937	5819	5815	5027
19-20	3136	3109	2737	1411	1578	1425	2195	2176	1916	3606	3754	3341
20-21	2029	2309	1961	1281	1435	1001	1420	1616	1373	2701	3051	2374
21-22	1882	2433	1635	1374	1219	929	1317	1703	1145	2691	2922	2074
22-23	2306	1932	1233	1335	949	716	1614	1352	863	2949	2301	1579
23-24	1539	1067	795	735	588	476	1077	747	557	1812	1335	1033

#### Notes:

(1)pc/h pa	assenger cars per hour
XXXX AI	I lanes on GGB open to traffic
XXXX Ve	plume exceeds capacity
Assumptions	
Speed Limit	65 mph Speed limit
Base Capacity	1850 VPH per Lane
Lanes	2
Volume Distribution	30% of GGB traffic will not drive and/or use public transit and other modes of tranpsortation.
Volume Distribution	100% of GGB detour traffic will use Interstate 580
djustment for Heavy Vehicles	0.97
Volume / Capacity	0.99
Peak Hour Factor	0.95
Adjustment for Driver Pop.	0.975
Average Rate of Storage	100 vehicles / lane / mile

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - RICHMOND-SAN RAFAEL BRIDGE (WESTBOUND)

Day	Hours	Demand a VEH	Capacity b b VEH	Cum Demand c a2+c1 VPH	Cum Output d b2+c1+ VEH	Cum Queue e c-d VEH	Average Queue f (e1+e2)/2 VEH	Average Queue Distance g f/(VpIm*Lanes) MILES	Average Queue Delay h (e1+(a2-b2))/b: HOURS
	0-1	1,239	3.146	1.239	3.146	0	0	0.0	0.0
	1-2	630	3,146	1,869	4,385	0	0	0.0	0.0
	2-3	501	3,146	2,370	5,015	0	0	0.0	0.0
	3-4	314	3,146	2.684	5,516	0	0	0.0	0.0
	4-5	402	3,146	3,086	5,830	0	0	0.0	0.0
	5-6	769	3,146	3,856	6,232	0	0	0.0	0.0
	6-7	1,454	3,146	5,310	7,002	0	0	0.0	0.0
	7-8	2,593	3,146	7,903	8,456	0	0	0.0	0.0
	8-9	3,850	3,146	11,753	11,049	704	352	1.8	0.2
	9-10	4,927	3,146	16,680	14,899	1,781	1,242	6.2	0.8
	10-11	5,887	3,146	22,567	19,826	2,741	2,261	11.3	1.4
	11-12	5.815	3.146	28,382	25.713	2.669	2.705	13.5	1.7
Saturday	12-13	5,728	3,146	34,110	31,528	2,582	2,626	13.1	1.7
	13-14	5,568	3,146	39,678	37,256	2,422	2,502	12.5	1.6
	14-15	5,372	3,146	45,050	42,824	2,226	2,324	11.6	1.5
	15-16	4,885	3,146	49,935	48,196	1,739	1,983	9.9	1.3
	16-17	4,683	3,146	54,618	53,081	1,537	1,638	8.2	1.0
	17-18	5,329	3,146	59,947	57,764	2,183	1,860	9.3	1.2
	18-19	5,819	3,146	65,766	63,093	2,673	2,428	12.1	1.5
	19-20	3,606	3,146	69.373	68,912	460	1.567	7.8	1.0
	20-21	2,701	3,146	72,074	72,519	400	230	1.2	0.0
	21-22	2,691	3,146	74,765	75,220	0	0	0.0	0.0
		2,949				0	0		
	22-23	1,812	3,146 3,146	77,715	77,911 80,861	0	0	0.0	0.0
	0-1	1,186	3,146	80,713	82,673	0	0	0.0	0.0
	1-2 2-3	751 530	3,146 3,146	81,465 81,995	83,859 84,611	0	0	0.0	0.0
	2-3								
		316	3,146	82,311	85,141	0	0	0.0	0.0
	4-5	323	3,146	82,634	85,457	0	0	0.0	0.0
	5-6	484	3,146	83,118	85,780	0	0	0.0	0.0
	6-7	919	3,146	84,037	86,264	0	0	0.0	0.0
	7-8	1,594	3,146	85,631	87,183	0	0	0.0	0.0
	8-9	2,521	3,146	88,153	88,777	0	0	0.0	0.0
	9-10	3,868	3,146	92,020	91,299	722	361	1.8	0.2
	10-11	4,979	3,146	96,999	95,166	1,833	1,277	6.4	0.8
Sunday	11-12	5,477	3,146	102,476	100,145	2,331	2,082	10.4	1.3
	12-13	5,011	3,146	107,487	105,622	1,865	2,098	10.5	1.3
	13-14	4,994	3,146	112,480	110,633	1,848	1,856	9.3	1.2
	14-15	4,468	3,146	116,948	115,626	1,322	1,585	7.9	1.0
	15-16	4,344	3,146	121,292	120,094	1,198	1,260	6.3	0.8
	16-17	4,241	3,146	125,533	124,438	1,095	1,146	5.7	0.7
	17-18	5,100	3,146	130,633	128,679	1,954	1,525	7.6	1.0
	18-19	5,815	3,146	136,448	133,779	2,669	2,312	11.6	1.5
	19-20	3,754	3,146	140,202	139,594	608	1,639	8.2	1.0
	20-21	3,051	3,146	143,253	143,348	0	304	1.5	0.2
	21-22	2,922	3,146	146,176	146,399	0	0	0.0	0.0
	22-23	2,301	3,146	148,477	149,322	0	0	0.0	0.0
	23-24	1,335	3,146	149,812	151,623	0	0	0.0	0.0
	0-1	738	3,146	150,550	152,958	0	0	0.0	0.0
	1-2	437	3,146	150,987	153,696	0	0	0.0	0.0
	2-3	240	3,146	151,227	154,133	0	0	0.0	0.0
	3-4	269	3,146	151,497	154,373	0	0	0.0	0.0
	4-5	507	3,146	152,004	154,643	0	0	0.0	0.0
	5-6	1,085	3,146	153,089	155,150	0	0	0.0	0.0
	6-7	2,933	3,146	156,022	156,235	0	0	0.0	0.0
	7-8	3,653	3,146	159,675	159,168	507	254	1.3	0.2
	8-9	3,417	3,146	163,092	162,821	271	389	1.9	0.2
	9-10	2,818	3,146	165,910	166,238	0	136	0.7	0.0
	10-11	2,162	3,146	168,072	169,056	0	0	0.0	0.0
Monday	11-12	2,097	3,146	170,169	171,218	0	0	0.0	0.0
monuay	12-13	1,992	3,146	172,161	173,315	0	0	0.0	0.0
	13-14	2,080	3,146	174,241	175,307	0	0	0.0	0.0
	14-15	1,810	3,146	176,051	177,387	0	0	0.0	0.0
	15-16	1,938	3,146	177,989	179,197	0	0	0.0	0.0
	16-17	2,110	3,146	180,099	181,135	0	0	0.0	0.0
	17-18	2,252	3,146	182,351	183,245	0	0	0.0	0.0
	18-19	2,090	3,146	184,441	185,497	0	0	0.0	0.0
	19-20	1,425	3,146	185,866	187,587	0	0	0.0	0.0
	20-21	1,001	3,146	186,867	189,012	0	0	0.0	0.0
	21-22	929	3,146	187,796	190,013	0	0	0.0	0.0
	2022								
	22-23	716	3,146	188,512	190,942	0	0	0.0	0.0

Notes:

Freeway	Peak Capacity (pc/h) ⁽¹⁾							
Fleeway	Saturday	Sunday	Monday					
Interstate 80	8,352	8,352	8,352					

			Existing Tr	affic Volume			D	etour Traffic Vo	lumes	Total C	ClosureTraffic	Volume	
Hours	Golden G	Golden Gate Bridge (Northbound)			Interstate 80 San Francisco-Oakland Bay Bridge (Eastbound)			Golden Gate Bridge (Northbound)			Interstate 80 San Francisco-Oakland Bay Bridge (Eastbound)		
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	
0-1	1070	999	619	3881	3897	2516	749	699	433	4630	4596	2949	
1-2	583	612	346	3002	3231	1348	408	428	242	3410	3659	1590	
2-3	437	470	173	2940	3463	982	306	329	121	3246	3792	1103	
3-4	243	259	129	1482	1875	731	170	181	90	1652	2056	821	
4-5	179	172	163	1012	1043	853	125	120	114	1137	1163	967	
5-6	373	217	386	1361	1065	1730	261	152	270	1622	1217	2000	
6-7	603	426	1059	2127	1644	3785	422	298	741	2549	1942	4526	
7-8	1223	814	2348	3429	2587	6180	856	570	1644	4285	3157	7824	
8-9	2100	1562	3095	4777	3537	6753	1470	1093	2167	6247	4630	8920	
9-10	3044	2565	2815	5709	4673	5859	2131	1796	1971	7840	6469	7830	
10-11	3829	3441	2971	6669	5693	5575	2680	2409	2080	9349	8102	7655	
11-12	3727	3633	3183	6814	6125	5577	2609	2543	2228	9423	8668	7805	
12-13	3486	3027	3275	6573	6474	6010	2440	2119	2293	9013	8593	8303	
13-14	3266	2955	3259	6513	6773	6510	2286	2069	2281	8799	8842	8791	
14-15	3000	2624	3812	7202	6917	7893	2100	1837	2668	9302	8754	10561	
15-16	2883	2368	4423	7574	6993	8608	2018	1658	3096	9592	8651	11704	
16-17	3071	2460	4621	7171	7571	8292	2150	1722	3235	9321	9293	11527	
17-18	4223	3863	4953	7554	7417	7818	2956	2704	3467	10510	10121	11285	
18-19	5622	5643	4195	7853	7692	6819	3935	3950	2937	11788	11642	9756	
19-20	3136	3109	2737	7459	7460	5831	2195	2176	1916	9654	9636	7747	
20-21	2029	2309	1961	7461	7342	4968	1420	1616	1373	8881	8958	6341	
21-22	1882	2433	1635	6344	7226	4493	1317	1703	1145	7661	8929	5638	
22-23	2306	1932	1233	6303	7276	3988	1614	1352	863	7917	8628	4851	
23-24	1539	1067	795	5035	4387	2881	1077	747	557	6112	5134	3438	

#### Notes:

	ssenger cars per hour
	lanes on GGB open to traffic
xxxx Vo	lume exceeds capacity
Assumptions	
Speed Limit	65 mph Speed limit
Base Capacity	1850 VPH per Lane
Lanes	5
Volume Distribution	30% of GGB traffic will not drive and/or use public transit and other modes of tranpsortation.
Volume Distribution	100% of GGB detour traffic will use Interstate 80
Adjustment for Heavy Vehicles	0.97
Volume / Capacity	0.93
Peak Hour Factor	0.95
Adjustment for Driver Pop.	0.975
Average Rate of Vehicle Storage	100 vehicles / lane / mile

### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - SAN FRANCISCO-OAKLAND BAY BRIDGE (EASTBOUND)

Day	Hours	Demand	Capacity	Cum Demand		Cum Queue	Average Queue	Average Queue Distance	Average Queue Delay
-		a a VEH	b b VEH	с a2+c1 VPH	d b2+c1+ VEH	e c-d VEH	f (e1+e2)/2 VEH	g f/(Vplm*Lanes) MILES	h (e1+(a2-b2))/b2 HOURS
	0-1	4,630	8,352	4,630	8,352	0	0	0.0	0.0
	1-2	3,410	8,352	8,040	12,982	0	0	0.0	0.0
	2-3	3,246	8,352	11,286	16,392	0	0	0.0	0.0
	3-4	1,652	8,352	12,938	19,638	0	0	0.0	0.0
	4-5	1,137	8,352	14,075	21,290	0	0	0.0	0.0
	5-6	1,622	8,352	15,698	22,428	0	0	0.0	0.0
	6-7 7-8	2,549	8,352	18,247	24,050	0	0	0.0	0.0
		4,285	8,352	22,532		0	0		
	8-9 9-10	6,247 7,840	8,352 8,352	28,779 36,619	30,884 37,131	0	0	0.0	0.0
	10-11	9,349	8,352	45.968	44.971	997	498	1.0	0.0
	11-12	9,349	8,352	45,908	54,320	1.071	1.034	2.1	0.1
Saturday	12-13	9,423	8,352	64,404	63,743	661	866	1.7	0.2
	13-14	8,799	8,352	73,203	72,756	447	554	1.1	0.2
	14-15	9,302	8,352	82,505	81,555	950	698	1.4	0.1
	15-16	9,592	8,352	92,097	90,857	1,240	1,095	2.2	0.3
	16-17	9.321	8,352	101.418	100,450	968	1,104	2.2	0.3
	17-18	10,510	8,352	111.928	109,770	2,158	1,104	3.1	0.3
	18-19	11,788	8,352	123,716	120,280	3,436	2,797	5.6	0.7
	19-20	9,654	8,352	133,371	132,069	1,302	2,369	4.7	0.6
	20-21	8,881	8,352	142,252	141,723	529	915	1.8	0.2
	21-22	7,661	8,352	149,913	150,604	0	264	0.5	0.0
	22-23	7,917	8,352	157,831	158,266	0	0	0.0	0.0
	23-24	6,112	8,352	163,943	166,183	0	0	0.0	0.0
	0-1	4,596	8,352	168,539	172,295	0	0	0.0	0.0
	1-2	3,659	8,352	172,199	176,891	0	0	0.0	0.0
	2-3	3,792	8,352	175,991	180.551	0	0	0.0	0.0
	3-4	2,056	8,352	178,047	184,343	0	0	0.0	0.0
	4-5	1,163	8,352	179,210	186,399	0	0	0.0	0.0
	5-6	1,217	8,352	180,427	187.563	0	0	0.0	0.0
	6-7	1,942	8,352	182,369	188,779	0	0	0.0	0.0
	7-8	3,157	8,352	185,526	190,722	0	0	0.0	0.0
	8-9	4,630	8,352	190,157	193,878	0	ő	0.0	0.0
	9-10	6,469	8,352	196,625	198,509	0	0	0.0	0.0
	10-11	8,102	8,352	204,727	204,977	0	0	0.0	0.0
	11-12	8,668	8,352	213,395	213,079	316	158	0.3	0.0
Sunday	12-13	8,593	8,352	221,988	221,747	241	278	0.6	0.1
	13-14	8,842	8,352	230,829	230,340	489	365	0.7	0.1
	14-15	8,754	8,352	239,583	239,182	401	445	0.9	0.1
	15-16	8,651	8,352	248,234	247,935	298	350	0.7	0.1
	16-17	9,293	8,352	257,527	256,586	941	619	1.2	0.1
	17-18	10.121	8,352	267,648	265,879	1.769	1,355	2.7	0.3
	18-19	11,642	8,352	279,290	276,000	3,290	2,529	5.1	0.6
	19-20	9,636	8,352	288,926	287,642	1,284	2,287	4.6	0.5
	20-21	8,958	8,352	297,884	297,278	606	945	1.9	0.2
	21-22	8,929	8,352	306,814	306,237	577	591	1.2	0.1
	22-23	8,628	8,352	315,442	315,166	276	426	0.9	0.1
	23-24	5,134	8,352	320,576	323,794	0	138	0.3	0.0
	0-1	2,949	8,352	323,525	328,928	0	0	0.0	0.0
	1-2	1,590	8,352	325,115	331,877	0	0	0.0	0.0
	2-3	1,103	8,352	326,218	333,468	0	0	0.0	0.0
	3-4	821	8,352	327,040	334,571	0	Ō	0.0	0.0
	4-5	967	8,352	328,007	335,392	0	0	0.0	0.0
	5-6	1,730	8,352	329,737	336,359	0	0	0.0	0.0
	6-7	3,785	8,352	333,522	338,089	0	0	0.0	0.0
	7-8	6,180	8,352	339,702	341,874	0	0	0.0	0.0
	8-9	6,753	8,352	346,455	348,054	0	0	0.0	0.0
	9-10	5,859	8,352	352,314	354,807	0	Ő	0.0	0.0
	10-11	5,575	8,352	357,889	360,666	0	0	0.0	0.0
Monday	11-12	5,577	8,352	363,466	366,241	0	0	0.0	0.0
Monday	12-13	6,010	8,352	369,476	371,818	0	0	0.0	0.0
	13-14	6,510	8,352	375,986	377,828	0	Ō	0.0	0.0
	14-15	7,893	8,352	383,879	384,338	0	0	0.0	0.0
	15-16	8,608	8,352	392,487	392,231	256	128	0.3	0.0
	16-17	8,292	8,352	400,779	400,839	0	128	0.3	0.0
	17-18	7,818	8,352	408,597	409,131	0	0	0.0	0.0
	18-19	6,819	8,352	415,416	416,949	0	0	0.0	0.0
	19-20	5,831	8,352	421,247	423,768	0	0	0.0	0.0
	20-21	4,968	8,352	426,215	429,599	0	0	0.0	0.0
	21-22	4,493	8,352	430,708	434,567	0	0	0.0	0.0
	22-23	3,988	8,352	434,696	439,060	0	0	0.0	0.0

Queue length is greater than 0 miles Maximum Expected Queue / Delay

AECOM

Freeway	Peal	Peak Capacity (pc/h) ⁽¹⁾						
Fleeway	Saturday	Sunday	Monday					
Interstate 80	8,352	8,352	8,352					

			Existing Tr	affic Volume			Det	tour Traffic Vol	umes	Total C	ClosureTraffic	Volume	
Hours	Golden G	ate Bridge (So	uthbound)	Interstate 80 Bri	San Francisco dge (Westbou		Golden (	Gate Bridge (Sc	outhbound)		Interstate 80 San Francisco-Oakland Bay Bridge (Westbound)		
	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	Saturday	Sunday	Monday	
0-1	358	486	244	2032	2447	1492	251	340	171	2283	2787	1663	
1-2	200	212	139	1351	1903	859	140	148	97	1491	2051	956	
2-3	119	138	107	1118	1081	812	83	97	75	1201	1178	887	
3-4	124	130	157	1168	966	1342	87	91	110	1255	1057	1452	
4-5	174	170	510	1791	1391	3531	122	119	357	1913	1510	3888	
5-6	406	335	1312	3333	2176	8412	284	235	918	3617	2411	9330	
6-7	839	690	2875	4350	3114	9144	587	483	2013	4937	3597	11157	
7-8	1491	963	4377	4721	3568	8453	1044	674	3064	5765	4242	11517	
8-9	2197	1564	4844	6034	4975	7688	1538	1095	3391	7572	6070	11079	
9-10	2861	2442	3665	7234	6529	8099	2003	1709	2566	9237	8238	10665	
10-11	3054	3417	3040	7954	8090	7228	2138	2392	2128	10092	10482	9356	
11-12	3485	3796	2925	8051	7909	7249	2440	2657	2048	10491	10566	9297	
12-13	3727	4403	2758	6861	8171	6654	2609	3082	1931	9470	11253	8585	
13-14	3775	4139	2663	7575	6911	6153	2643	2897	1864	10218	9808	8017	
14-15	3626	3337	2878	7876	7273	6467	2538	2336	2015	10414	9609	8482	
15-16	3098	2988	3004	7947	7260	6032	2169	2092	2103	10116	9352	8135	
16-17	2927	3549	3322	7731	7392	7017	2049	2484	2325	9780	9876	9342	
17-18	3384	3238	3473	7740	7502	6777	2369	2267	2431	10109	9769	9208	
18-19	2788	2620	2812	6972	7227	5627	1952	1834	1968	8924	9061	7595	
19-20	2294	2257	1865	6154	6538	4841	1606	1580	1306	7760	8118	6147	
20-21	2087	2013	1439	5900	6238	4056	1461	1409	1007	7361	7647	5063	
21-22	1721	1649	1118	6548	5640	3828	1205	1154	783	7753	6794	4611	
22-23	1517	1083	665	6058	5045	3362	1062	758	466	7120	5803	3828	
23-24	1010	519	344	4502	2792	2052	707	363	241	5209	3155	2293	

#### Notes:

	⁽¹⁾ pc/h	passenger car	s per hour	
	хххх	All lanes on G	GB open to traffic	;
	XXXX	Volume excee	ds capacity	
Assumptions	Speed Limit	65 mph	Speed limit	

Base Capacity Lanes

65 mph Speed limit 1850 pch/lane 5 30% of GGB traffic will not drive and/or use public transit and other modes of tranpsortation. 100% of GGB detour traffic will use Interstate 80 0.97 0.95 100 vehicles / lane / mile

Volume Distribution

Adjustment for Heavy Vehicles Volume / Capacity Peak Hour Factor Adjustment for Driver Pop. Average Rate of Vehicle Storage

#### VEHICLE QUEUE CALCULATIONS DURING FULL WEEKEND CLOSURE - SAN FRANCISCO-OAKLAND BAY BRIDGE (WESTBOUND)

Day	Hours	Demand a a	Capacity b b	Cum Demand c a2+c1	Cum Output d b2+c1+	Cum Queue e c-d	Average Queue f (e1+e2)/2	Average Queue Distance g f/(Vplm*Lanes)	Average Queue Delay h ((e1+(a2-b2))/b
		VEH	VEH	VPH	VEH	VEH	VEH	MILES	HOURS
	0-1	2,283	8,352	2,283	8,352	0	0	0.0	0.0
	1-2	1,491	8,352	3,774	10,635	0	0	0.0	0.0
	2-3	1,201	8,352	4,975	12,126	0	0	0.0	0.0
	3-4	1,255	8,352	6,230	13,327	0	0	0.0	0.0
	4-5	1,913	8,352	8,143	14,582	0	0	0.0	0.0
	5-6	3,617 4,937	8,352 8,352	11,760 16,697	16,495 20,112	0	0	0.0	0.0
	7-8	5,765	8,352	22,462	25,049	0	0	0.0	0.0
	8-9	7,572	8,352	30,034	30,814	0	0	0.0	0.0
	9-10	9,237	8,352	39,270	38,386	884	442	0.9	0.1
	10-11	10,092	8,352	49,362	47,623	1,739	1,312	2.6	0.3
Saturday	11-12	10,491	8,352	59,853	57,714	2,138	1,939	3.9	0.5
,	12-13	9,470	8,352	69,323	68,205	1,118	1,628	3.3	0.4
	13-14 14-15	10,218 10,414	8,352	79,540 89,954	77,675	1,865	1,491	3.0	0.4
	14-15	10,414	8,352 8,352	100,070	87,892 98,307	2,062 1,763	1,964	3.9	0.5
	16-17	9,780	8,352	109,850	108.422	1,703	1,913	3.2	0.5
	17-18	10,109	8,352	119,959	118,202	1,756	1,592	3.2	0.4
	18-19	8,924	8,352	128,882	128,311	571	1,164	2.3	0.3
	19-20	7,760	8,352	136,642	137,234	0	286	0.6	0.0
	20-21	7,361	8,352	144,003	144,994	0	0	0.0	0.0
	21-22	7,753	8,352	151,756	152,355	0	0	0.0	0.0
	22-23	7,120	8,352	158,875	160,108	0	0	0.0	0.0
	23-24	5,209	8,352	164,084	167,228	0	0	0.0	0.0
	1-2	2,787 2,051	8,352 8,352	166,872 168,923	172,437 175,224	0	0	0.0	0.0
	2-3	1,178	8,352	170,101	175,224	0	0	0.0	0.0
	3-4	1,057	8,352	171,158	178,453	0	0	0.0	0.0
	4-5	1,510	8,352	172,668	179,510	0	0	0.0	0.0
	5-6	2,411	8,352	175,078	181,020	0	0	0.0	0.0
	6-7	3,597	8,352	178,675	183,430	0	0	0.0	0.0
	7-8	4,242	8,352	182,917	187,027	0	0	0.0	0.0
	8-9	6,070	8,352	188,987	191,270	0	0	0.0	0.0
	9-10	8,238	8,352	197,225	197,339	0	0	0.0	0.0
	10-11	10,482 10,566	8,352 8,352	207,707 218,274	205,578 216,060	2,130 2,214	1,065	2.1 4.3	0.3
Sunday	12-13	11,253	8.352	229.527	226,626	2.901	2.557	5.1	0.6
	13-14	9,808	8,352	239,335	237,879	1,456	2,178	4.4	0.5
	14-15	9,609	8,352	248,944	247,687	1,257	1,356	2.7	0.3
	15-16	9,352	8,352	258,295	257,296	999	1,128	2.3	0.3
	16-17	9,876	8,352	268,172	266,648	1,524	1,262	2.5	0.3
	17-18	9,769	8,352	277,940	276,524	1,416	1,470	2.9	0.4
	18-19 19-20	9,061 8,118	8,352 8,352	287,001 295,119	286,293 295,354	709 0	1,062 354	2.1 0.7	0.3
	20-21	7,647	8,352	302,766	303,472	0	334	0.0	0.0
	21-22	6,794	8,352	302,766	311,119	0	0	0.0	0.0
	22-23	5,803	8,352	315,364	317,913	0	Ő	0.0	0.0
	23-24	3,155	8,352	318,519	323,716	0	Ō	0.0	0.0
	0-1	1,663	8,352	320,182	326,871	0	0	0.0	0.0
	1-2	956	8,352	321,138	328,534	0	0	0.0	0.0
	2-3	887	8,352	322,025	329,490	0	0	0.0	0.0
	3-4	1,452	8,352 8,352	323,477	330,377	0	0	0.0	0.0
	4-5	3,531 8,412		327,008	331,829	60	30	0.0	0.0
	5-6 6-7	8,412 9,144	8,352 8,352	335,420 344,564	335,360 343,772	60 792	30 426	0.1	0.0
	7-8	9,144 8,453	8,352	353,017	343,772	101	426	0.9	0.1
	8-9	7,688	8,352	360,705	361,369	0	50	0.5	0.0
	9-10	8,099	8,352	368,804	369,057	0	0	0.0	0.0
	10-11	7,228	8,352	376,032	377,156	0	0	0.0	0.0
Monday	11-12	7,249	8,352	383,281	384,384	0	0	0.0	0.0
monuay	12-13	6,654	8,352	389,935	391,633	0	0	0.0	0.0
	13-14	6,153	8,352	396,088	398,287	0	0	0.0	0.0
	14-15	6,467	8,352	402,555	404,440	0	0	0.0	0.0
	15-16 16-17	6,032 7,017	8,352 8,352	408,587 415,604	410,907 416,939	0	0	0.0	0.0
	16-17	6,777	8,352 8,352	415,604 422,381	416,939 423,956	0	0	0.0	0.0
	18-19	5.627	8,352	422,381 428.008	423,956	0	0	0.0	0.0
	19-20	4,841	8,352	432,849	436,360	0	0	0.0	0.0
	20-21	4,056	8,352	436,905	441,201	0	0	0.0	0.0
	21-22	3,828	8,352	440,733	445,257	0	0	0.0	0.0
	22-23	3,362	8,352	444,095	449,085	0	0	0.0	0.0
	23-24	2,052	8,352	446,147	452,447	0	0	0.0	0.0
tes:		is greater than							

#### Golden Gate Bridge Lane Closure Charts

Lanes Open	Fwy Capacity
1	1,170
2	2,960
3	4,560
4	6,080

### Chart 1: Northbound Golden Gate Bridge

	Frid	Friday		Saturday		Sunday		Monday	
Hours	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lanes Open	
0-1	602	3	1,070	0	999	0	619	0	
1-2	317	3	583	0	612	0	346	0	
2-3	212	3	437	0	470	0	173	0	
3-4	135	3	243	0	259	0	129	0	
4-5	138	3	179	0	172	0	163	3	
5-6	379	3	373	0	217	0	386	3	
6-7	930	3	603	0	426	0	1,059	3	
7-8	2,468	3	1,223	0	814	0	2,348	3	
8-9	3,307	3	2,100	0	1,562	0	3,095	3	
9-10	3,130	3	3,044	0	2,565	0	2,815	3	
10-11	3,244	3	3,829	0	3,441	0	2,971	3	
11-12	3,517	3	3,727	0	3,633	0	3,183	3	
12-13	3,785	3	3,486	0	3,027	0	3,275	3	
13-14	4,051	3	3,266	0	2,955	0	3,259	3	
14-15	4,407	3	3,000	0	2,624	0	3,812	3	
15-16	5,113	3	2,883	0	2,368	0	4,423	3	
16-17	5,438	3	3,071	0	2,460	0	4,621	3	
17-18	5,005	3	4,223	0	3,863	0	4,953	3	
18-19	5,210	3	5,622	0	5,643	0	4,195	3	
19-20	3,961	3	3,136	0	3,109	0	2,737	3	
20-21	2,501	3	2,029	0	2,309	0	1,961	3	
21-22	2,058	3	1,882	0	2,433	0	1,635	3	
22-23	2,356	2	2,306	0	1,932	0	1,233	3	
23-24	3,085	1	1,539	0	1,067	0	795	3	

## Notes:

Golden Gate Bridge traffic volumes observed in May 2012. Weekday and weekend volumes represent typical conditions

1 = Provide at least one through freeway lane open in direction of travel

2 = Provide at least two through freeway lanes open in direction of travel

3 = Provide at least three through freeway lanes open in direction of travel

4 = Provide at least four through freeway lanes open in direction of travel

# Assumptions

2,960 VPH per Lane
25 feet
100 vehicles / lane / mile

# DELAY CALCULATIONS FOR GGB LANE CLOSURE - FRIDAY

Route	US 101 NB, Golden Gate Bridge						
Locations	Chart 1: Northbound Golden Gate Bridge						
Capacity	2,960 VPH per Lane						
Hour of Dov	Demand	Capacity	Cum Demand	Cum Output	Cum Queue	Average Queue	Average Queue Distance (Miles)

Hour of Day							
-	а	b	С	d	е	f	g
	а	b	a2+c1+	b2+c1+	c-d	(e1+e2)/2	f/(Vplm*Lanes)
	VEH	VEH	VPH	VEH	VEH	VEH	MILES
21:00 - 22:00	2,058	4,560	2,058	4,560	0	0	0.0
22:00 - 23:00	2,356	2,960	4,414	5,018	0	0	0.0
23:00 - 24:00	3,085	1,170	7,499	5,584	1,915	1,915	19.2

#### Golden Gate Bridge Lane Closure Charts

Lanes Open	Fwy Capacity
1	1,170
2	2,960
3	4,560
4	6,080

### Chart 2: Southbound Golden Gate Bridge

Hours	Frid	Friday		Saturday		Sunday		Monday	
	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lanes Open	Mainline	Lanes Open	
0-1	217	3	358	0	486	0	244	0	
1-2	140	3	200	0	212	0	139	0	
2-3	95	3	119	0	138	0	107	0	
3-4	188	3	124	0	130	0	157	0	
4-5	424	3	174	0	170	0	510	3	
5-6	1,258	3	406	0	335	0	1,312	3	
6-7	2,738	3	839	0	690	0	2,875	3	
7-8	4,744	3	1,491	0	963	0	4,377	3	
8-9	5,255	3	2,197	0	1,564	0	4,844	3	
9-10	3,983	3	2,861	0	2,442	0	3,665	3	
10-11	3,429	3	3,054	0	3,417	0	3,040	3	
11-12	3,301	3	3,485	0	3,796	0	2,925	3	
12-13	2,997	3	3,727	0	4,403	0	2,758	3	
13-14	3,136	3	3,775	0	4,139	0	2,663	3	
14-15	3,437	3	3,626	0	3,337	0	2,878	3	
15-16	2,991	3	3,098	0	2,988	0	3,004	3	
16-17	2,856	3	2,927	0	3,549	0	3,322	3	
17-18	3,506	3	3,384	0	3,238	0	3,473	3	
18-19	3,510	3	2,788	0	2,620	0	2,812	3	
19-20	2,163	3	2,294	0	2,257	0	1,865	3	
20-21	1,550	3	2,087	0	2,013	0	1,439	3	
21-22	1,193	2	1,721	0	1,649	0	1,118	3	
22-23	1,062	1	1,517	0	1,083	0	665	3	
23-24	640	1	1,010	0	519	0	344	3	

Notes:

Golden Gate Bridge traffic volumes observed in May 2012. Weekday and weekend volumes represent typical conditions

1 = Provide at least one through freeway lane open in direction of travel

2 = Provide at least two through freeway lanes open in direction of travel

3 = Provide at least two through freeway lanes open in direction of travel

4 = Provide at least four through freeway lanes open in direction of travel

# Assumptions

 Speed Limit
 2,960 VPH per Lane

 Average Vehicle Length (AVL)
 25 fer

Average Rate of Vehicle Storage

25 feet

100 vehicles / lane / mile

# DELAY CALCULATIONS FOR GGB LANE CLOSURE - FRIDAY

Route US 101 NB, Golden Gate Bridge

Locations Chart 2: Southbound Golden Gate Bridge Capacity 2,960 VPH per Lane

Hour of Day	Demand	Capacity	Cum Demand	Cum Output	Cum Queue	Average Queue	Average Queue Distance (Miles)
	а	b	С	d	е	f	g
	а	b	a2+c1+	b2+c1+	c-d	(e1+e2)/2	f/(Vplm*Lanes)
	VEH	VEH	VPH	VEH	VEH	VEH	MILES
21:00 - 22:00	1,193	2,960	1,193	2,960	0	0	0.0
22:00 - 23:00	1,062	1,170	2,255	2,363	0	0	0.0
23:00 - 24:00	640	1,170	2.895	3.425	0	0	0.0

# Revise Special Provisions Section 8-1.10 as marked:

# 8-1.10 LIQUIDATED DAMAGES

# Replace section 8-1.10A with:

# 8-1.10A PROSECUTION OF WORK AND LIQUIDATED DAMAGE AMOUNT

The Contractor shall begin work within no later than 15 days of the effective date of the Notice to Proceed and shall thereafter diligently and continuously prosecute the work to full and final completion.

The entire work shall be fully and finally completed to the satisfaction of the Engineer before the expiration of

# 240-290 calendar days

of the effective date of the Notice to Proceed.

The Contractor shall be subject to liquidated damages in the event that its work is completed late. It is hereby agreed that in case all of the work called for under the Contract in all parts and requirements is not fully and finally completed within the number of days as set forth above, damage will be sustained by the District. Moreover, it is further agreed that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage that the District will sustain in the event of and by reason of such delay. Therefore, it is agreed that the Contractor will pay to the District the following liquidated damage amount:

# THREE THOUSAND DOLLARS (\$3,000) PER CALENDAR DAY

for each and every day that the Contractor delays the full and final completion of the work beyond the number of days specified above and the number of additional or deductive days, if any, authorized by Contract Change Order. Contractor shall pay said liquidated damages as herein provided and further agrees that the District may deduct the amount thereof from any moneys due or that may become due the Contractor under the Contract.

Liquidated Damages due herein shall be in addition to any amounts that may be due under Sections 8-1.10B and 8-1.10C of these Special Provisions and elsewhere in the Contract.

# Replace section 8-1.10B with:

# 8-1.10B FAILURE TO COMPLETE WORK PARTS WITHIN SPECIFIED TIMES

Attention is directed to Sections 12-4.04, 12-4.05B, 12-4.05C and 12-4.05E of these Special Provisions for the traffic lane closure charts.

EXCEPT FOR THE 52-HOUR WEEKEND BRIDGE CLOSURE, LIQUIDATED DAMAGES FOR FAILING TO OPEN THE REQUIRED BRIDGE OR EXPRESSWAY TRAFFIC LANES TO PUBLIC TRAFFIC BY THE TIMES SPECIFIED SHALL BE FIVE THOUSAND DOLLARS (\$5,000) FOR EACH FULL TEN MINUTE PERIOD OR PART THEREOF AFTER THE FIRST TEN MINUTE PERIOD. THE TOTAL LIQUIDATED DAMAGES FOR EACH TWELVE (12) HOURS OF SUCH DELAY SHALL NOT EXCEED ONE HUNDRED FIFTY THOUSAND DOLLARS (\$150,000). Contractor shall pay said liquidated

> Contract No. 2014-B-1, Addendum No. 3, April 18, 2014 Addendum No. 3 to Special Provisions, Page 4 of 40

damages as herein provided and further agrees that the District may deduct the amount thereof from any moneys due or that may become due the Contractor under the Contract.

LIQUIDATED DAMAGES FOR FAILING TO COMPLETE ALL THE WORK FOR STAGES 4S AND 5N IN ALL PARTS AND REQUIREMENTS <u>BY THE TIMES SPECIFIED</u> SHALL BE TEN THOUSAND DOLLARS (\$10,000) FOR EACH FULL TEN MINUTE PERIOD OR PART THEREOF AFTER THE FIRST TEN MINUTE PERIOD FOR THE INITIAL FIRST HOUR. LIQUIDATED DAMAGES FOR EACH ADDITIONAL 10 MINUTE PERIOD OR PART THEREOF AFTER THE INITIAL FIRST HOUR IS TWENTY-FIVE THOUSAND DOLLARS (\$25,000). THE TOTAL LIQUIDATED DAMAGES FOR EACH TWELVE (12) HOURS OF SUCH DELAY SHALL NOT EXCEED THREE HUNDRED THOUSAND DOLLARS (\$300,000). Contractor shall pay said liquidated damages as herein provided and further agrees that the District may deduct the amount thereof from any moneys due or that may become due the Contractor under the Contract.

In addition to the liquidated damages specified above, Contractor shall indemnify and hold harmless the District and its representatives from and against all claims, suits, or actions of every name, kind and description, brought for or on account of traffic delays, monetary losses or other consequential damages which resulted from, or were alleged to have resulted from, in whole or in part, Contractor's (and its subcontractors') failure to maintain bridge traffic lanes open for use by the public as required by the terms of the Contract. The duty of the Contractor to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code. This indemnification shall survive termination of the Contract. All terms and conditions in Section 3-1.07, 7-1.05 and 7-1.06 of these specifications are hereby incorporated into this section.

#### Replace section 8-1.10C with:

#### 8-1.10C FAILURE TO COMPLETE WORK PARTS BY SPECIFIED DATES.

LIQUIDATED DAMAGES FOR FAILING TO COMPLETE ALL THE WORK FOR STAGES 1S, 2S, 3S, 1B, 1N, 2N, 3N, AND 4N IN ALL PARTS AND REQUIREMENTS BY THE DATE SPECIFIED IN SECTION 5-1.04, "ORDER OF WORK," SHALL BE THREE HUNDRED THOUSAND DOLLARS (\$300,000). Contractor shall pay said liquidated damages as herein provided and further agrees that the District may deduct the amount thereof from any moneys due or that may become due the Contractor under the Contract.

Contract No. 2014-B-1, Addendum No. 3, April 18, 2014 Addendum No. 3 to Special Provisions, Page 5 of 40 Attachment D: Typical District Daily Lane Arrangement Schedule

#### District Daily Lane Arrangement Schedule

The typical District daily lane arrangement schedule is as follows:

#### Monday through Thursday

Time of Start of Lane Change [*]	No. of NB Lanes	No. of SB Lanes	No. of Center (Buffer) Lanes		
4:30 AM	2	4	0		
10:00 AM	3	3	0		
8:00 PM	2	2	2		

#### Friday

Time of Start of Lane Change [*]	No. of NB Lanes	No. of SB Lanes	No. of Center (Buffer) Lanes
4:30 AM	2	4	0
10:00 AM	3	3	0
8:00 PM	3	2	1

#### Saturday

Time of Start of Lane Change [*]	No. of NB Lanes	No. of SB Lanes	No. of Center (Buffer) Lanes
8:00 AM	3	3	0
8:00 PM	3	2	1

#### Sunday

Time of Start of Lane Change [*]	No. of NB Lanes	No. of SB Lanes	No. of Center (Buffer) Lanes
8:00 AM	3	3	0
8:00 PM	2	3	1

#### *Notes

The times listed reflect when District forces typically begin to implement the lane changes. It typically takes approximately 45 minutes to achieve the final configuration shown in the tables. This information does not affect the time allowed for overnight lane closures listed in the lane closure charts in Section 10-1.10, "Maintaining Traffic," of the Special Provisions.

During heavy traffic on weekday afternoons, the District may change the lane arrangement to 4 northbound lanes and 2 southbound lanes with no buffer lanes. The 8:00 PM lane change will still occur.

During heavy traffic on Saturday and Sunday afternoons, the District may change the lane arrangement to 2 northbound lanes and 4 southbound lanes with no buffer lanes. The 8:00 PM lane change will still occur.

Times listed in the table are subject to adjustments based on weather and traffic conditions.

### Attachment E: TMP Cost Data Sheet

TMP COST DATA SHEET	<b>F SUM</b>	MARY	
1 Public Information	NO	YES MAYBE	\$ COST 200,000.00
2 Motorist Information Strategies	NO	YES MAYBE	\$ 285,000.00
3 Incident Management	NO	YES MAYBE	\$ 1,693,800.00
4 Construction Strategies	NO	YES MAYBE	\$ 200,000.00
5 Demand Management (DM)	NO	YES MAYBE	\$ 200,000.00
		TMP TOTAL	\$ 2,578,800.00

Prepared by: Joy Villafranca, AECOM Date: 6/17/2014

TMP Cost	Dat	a Sheet							
An X in the	e che	eck box means	the item is	included ir	n the projec	ct unless st	aging, mate	erial, o	r work
		eliminate the ne							
check. A l	blanl	box means the	e item is no	ot needed a	at this time	based on	the informat	ion re	ceived.
1	Pub	lic Information	Public Av	wareness	Campaign	(PAC)			COST
					1' (C '				
1.1		Include Ridesha				material to			
1.0		encourage vehi		tion in wor	k area				
1.2	V	Brochures and						•	50.000
	X	Media Releases		ty media s	ources)			\$	50,000
1.4		Paid Advertising	0	// <b>/</b> :					
1.5		Public Informat			. D				
1.6		Public Meetings			s Bureau				
1.7		Hand deliver no		cinity					
1.8	V	Broadcast fax s						•	50.000
	Х	Telephone Hotl						\$	50,000
1.10	V	Visual Informat		s, slide sho	ws, etc)			•	
	Х	Local Cable TV		(1.1				\$	50,000
1.12	V	Traveler InforM	Ation Syst	ems (Interr	net)				05.000
	Х	Internet, Email	<u> </u>					\$	25,000
1.14		Notification to T						\$	25,000
		X Revised T			DS				
			organizati	ons					
		schools							
		organizatio			ple with dis	sabilities			
–		X bicycle org							
1.15		Commercial tra		ers/teeds -	e.g. brief T	rattic			
		information peo	ple						
1.16		Insert SSP							
					ctor, at Su				
		<b>.</b> .			mmit the C				
					olic Awaren		•		
		•			or the meet	ings(s) var	ies from		
4 4 7			r hours per	month."					
1.17		Others							000 000
							SUBTOT	AL \$	200,000

2 Tı	aveler Information Strategies	COST
2.1	Existing Electronic Message Signs (Stationary) - list locations.	
	New Installation (Stationary) CHANGEABLE MESSAGE SIGN SYSTEM	
	- list locations.	
2.2 X	Portable Changeable Message Signs (PCMS).	\$ 285,000
2.3	Extinguishable Signs	
2.0		
2.4	Ground Mounted Signs/ Fabric Signs	
2.4	X SC3 (CA) and/or M4-9 Detour with Arrow	
	Regulatory Speed Signs	
	X M4-8 End Detour	
	X R11-2 Road Closed	
	X Spec 1 Special with message "GOLDEN GATE BRIDGE CLOSED	
	USE ALTERNATE ROUTE"	
2.5 X	Highway Advisory Radio (HAR) - Fixed. List locations here. They can be	
	obtained from the TMC Manager.	
	Highway Advisory Radio - mobile signs alerting motorists to the HAR will	
	also be needed.)	
	Contact TMC Manager for assistance with specifications to include portable HARs	
	as bid item in the contract.	
	To avoice FCC fines, CT Portable HAR cannot be used except for	
	emergencies. Seldom used.	
	List proposed locations here:	
2.6	Lane Closure Website	
2.7	Caltrans Highway Information Network (CHIN)	
2.8	Radar Speed Message Sign (Specter sign) BEES ##### (approx. EA @ \$30,000)	
2.9	Bicycle and pedestrian information, BEES ##### e.g. Detour maps	
2.10	Others	
	SUBTO'	TAL \$ 285,000

3	Incident Man	agemer	nt						COST			
3.1	CHP's Cor	nstruction	n or Mainte	nance Zone E	Inhanced Er	forcement Prog	gram					
	COZEEP o	or MAZE	EP. Show	under "State	or Agency fu	urnished"						
	in the Cost	Estimat	e.									
1	Consider the				me to/form t	heir office						
			vertime load									
	COZEEP -	to prote	ct active clo	osures (other								
				170	8			\$	300,000			
	# of days	hours	# of officers	nights	hours	# of officers						
			1 per car			(remember -						
						nights require						
						2 per car)						
		T		es (52 hour we								
	2	16	20	3	8	40		\$	823,000			
	# of days	hours	# of officers	nights	hours	see above						
	(add weeke	nds days	as needed)									
		CHP or Local PD TRAFFIC HANDLING - reduce delay by keeping traffic										
		flowing and/or to enforce closures - total facility/structure/major traffic										
		shifts/ramps/connectors/local road/extended closures. Freeway										
		closures with local road detour may require <b>2 officers per intersection</b>										
	to direct tra	affic.										
	SFPD (52	hour we	ekend closi	ure)								
								\$	250,000			
	# of days	hours	# of officers	nights	hours	see above						
				_								
	GGNRA P	ark Polic	e (52 hour	weekend clos	sure)							
					,			\$	150,000			
	# of days	hours	# of officers	nights	hours	see above		Ŧ	,			
	(add weeke			ingite	nouro							
		lius uays	as needed)									
	Sausalito 8	& Marin (	County She	riff (52 hour w	veekend clos	sure)						
						Surc)		\$	150,000			
	# of dovo	haurra	# of officers	niahta	houro			φ	130,000			
	# of days	hours	# of officers	nights	hours	see above						
		·										
	CHP Office	er in TM(	<ul> <li>auring ma</li> </ul>	ajor constructi	ion closures							
	# of days	hours	# of officers									
	CHP office	er for Co	mmand Pos	st during regio	onal impact o	construction clo	sures					
								-				
						3.1 SUB	TOTAL	\$ '	1,673,000			

		NAGEMER	<b>NI (</b> (		(כ				C	OST
2 BL							<b>•</b> // // /	<b>•</b> • • • • •		
					Construction		\$/hr/truck	\$ 100		
					hed" in the Co					
					usually is bid					
eni	nancei	ment of pro	grar	n FSP feasil	ole, CFSP cou	d tie into the	e lower long	-term FSP r	ates	
FO	RSE	RVICE WIT	HIN	REGULAR	FSP HOURS:					
_									<u>^</u>	
Α	# of t	rucks:		4	days & hrs	3	52		\$	20,8
FO					R FSP HOURS	5:				
_			sure	e hour cover						
В	# of t	rucks:			days & hrs					
			<u> </u>					-		
_			uring	structure fr	eeway closure	es and majo	or traffic shif	ts		
С	# of t	rucks:			days & hrs					
		kend suppo	ort				1			
D	# of t	rucks:			days & hrs					
			<u> </u>							
	Loca	l agency (S	AFF	) support		% of truck	cost			
	0.000									
	CFS	P CHP Sup	port			% of truck	cost			
			<u> </u>							
	Equi	oment supp								
		% of truck	cost	unless mor	e detail availat	ble				
		HOD 1	<u> </u>			<u> </u>				
	CES	P CHP Sup	port			% of truck	cost			
	or									
	CFS	P Dispatche	er @	\$ 45.00	per hr					
		days/nights	S	hours	dispatcher(s)					
	050									
	CFS		cers	(See COZE	EP rate)					
				-			-			
		day		hours	# of officers	nights	hours			
_			<u> </u>							
			<u>e A</u>	preement or	Task Order wi	th SAFE				
		for								
		Task Orde	r wit	h CHP (Stat	ewide Master	Agreement	for FSP sup	port).		
		for								
		Contact Di	stric	t FSP Coord	linator for task	orders.				
		Service Co	ontra	ct						
					CFSO with SA	FE				
		•			CCFSP admin		CHP			
			· • , •		· · · · · · · · · · · · · · · · · ·			3.3 TOTAL		0,800

3 INCID	DENT MANAG	BEMENT (CO	ONTINUED)						COST		
3.4	CHP Helic	opter/Airplan	е								
3.5	Traffic Sur	veillance Sta	tions for co	nstruction ir	npact mitiga	ition (loop d	etectors and	CCTV)			
	Keep exis	ting operati	onal during	g construct	ion						
	New CCT	V									
	New loops										
3.6	Call Boxes	6									
	TEMPORA	TEMPORARY INSTALLATION to mitigate impact (\$4000/box/move from project funds to									
	SAFE). Design PE: Discuss with D4 Call Box coordinator if it is feasible to keep this										
	motorist aid available during construction. If it is not, please notify TMP, then other										
	mitigatin n	eeds to be c	onsidered.								
3.7	911 Cellula										
3.8	Project ne	eds to provid	e resources	to Transpo	ortation Man	agement Co	enter Unit 37	'0 for			
	additional	staff during h	ligh impact o	closures							
3.9	On-Site Traffic Advisor										
3.10	Others										
						3	.4-3.10 SUB	TOTAL	\$0		

4	CON	ISTR	UCTION ST	RATEGIES							COST
4.1			presumes								
	The		Project Eng	gineer is res	ponsible to	include all a	ppropriate c	closure char	ts.		
		Х	Off peak								
		Х	Night								
		Х	Weekend								
4.2											
		Х	Flagging		at local stre	eets					
		Х	Shoulder								
		Х	Lane								
			Street								
		Х	Ramp								
			Connector*			* Consult w	OZEEP				
				Veekend Cl		& other cos	st. Show yo	ur detour an	ld		
		Х	Total Facilit	y Closures	*	traffic diversion plans.					
			I: If the Lane						th		
			on a highw					ber of			
	allow	able	days ,the P	S&E cannot	be certified	by the DTM	//TMP.			_	
										_	
4.3	Х		ect Phasing								
4.4			ra Flow (put		opposing ro	adbed)					
4.5			ersible Lane	S							
4.6	Х	K-Ra	ail							\$	100,000
			<b>_</b>							_	
				Traffic Scre	ens		Miles	Duration (y	r)	_	
4.7			able Barrier								
4.8			k Traffic Re								
4.9		Coor	dinate with	adjacent co	nstruction a	nd planned	projects - al	so on detou	r routes		
4.10		Ince	ntives/Disind	centives							
4.11	Х	Othe	ers								100000
		,						4 :	SUBTOTA	L	\$200,000

5 D	emand Management						COST				
Ti	affic diversion may increase a	available wor	k hours.								
5.1	A cooperation will be executed - mentioned in the PSR or PR										
	Instead of a cooperation, 15% is added to the cost of DM elements since the payment to										
	the local agency will be rou										
	Instead of a cooperation, the	ne local ager	ncy will make	e their own a	arrangemen	its					
	PA/CL or local agency nee	d to inform c	commuters tl	hrough MTC	/BATA. Fu	inds part of					
	PA/CL.										
5.2	HOV Lanes/Ramps (New o	or Convert)									
5.3	Park and Ride Lots										
	Leased Spaces (sponsore										
	and print coverage)										
5.4		Parking Management/Pricing (Coordination with local agency required)									
5.5	Rideshare Promotion										
5.6 R	ideshare Incentives										
	As far as D4 DTM/TMP kn										
	however, State can pay for	Local Trans	portation ag	ency staff ti	me, postag	e, cost of					
	extra buses, etc.										
	Carpool/vanpool										
	Transit										
	Train										
	Light-Rail										
5.7											
	Public Transit Suppor		nts/Shuttle S	Service							
	School Shuttle Service	e									
5.8	Variable Work Hours	Variable Work Hours									
5.9	Telecommute	Telecommute									
5.10		Ramp Metering (Modify or new)									
5.11	Blue and white Rideshare	•	d - unless ali	ready signe	d. See 2.4						
5.12	C Others Added Bus and Fe	rry Service					\$200,000				
					5	SUBTOTAL	\$200,000				

Attachment F: TMP Contact List

#### Golden Gate Bridge Transportatin Management Plan Contact List Associations & Clubs-Community

							Alternative	Address	Address				Entry/Edit
Affiliation	First name	Last name	Title	Email	Website	Phone	Phone	Line 1	Line 2	City	St	Zip	Date
Marin													
American Legion, Twin Cities, CA Post 313				americanlegion313@gmail.com	www.americanlegion313.org	415-924-6283		500 Magnolia Avenue		Larkspur	CA	94939	10/17/2012
Baywood Artists				baywoodartists@gmail.com	www.baywoodartists.org	754-229-9663		5800 Northgate Mall	Suite 250	San Rafael	CA	94903	10/17/2012
Boy Scouts of America - Marin Council				staff@boyscouts-marin.org	www.boyscouts-marin.org	415-454-1087		225 West End Avenue		San Rafael	CA	94901	10/17/2012
Center for Volunteer and Nonprofit Leadership of Marin				info@cvnl.org	www.cvnl.or	415-479-5710		555 Northgate Drive		San Rafael	CA	94903	10/17/2012
Downtown Novato Business Association				info@ downtownnovato.com	www.DowntownNovato.com			PO Box 312		Novato	CA	94948	10/17/2012
Downtown San Rafael Business Improvement District				director@downtownsanrafael.org	www.downtownsanrafael.org/	415-720-5591		PO Box 151050		San Rafael	CA	94915	10/17/2012
Golden Gate Better Business Bureau				info@goldengate.bbb.org	www.Oakland.bbb.org	866-411-2221							10/17/2012
Golden Gate Computer Society				editor@ggcs.org	www.ggcs.org	415-454-5556		PO Box 151696		San Rafael	CA	94915	10/17/2012
Marin Amateur Radio Society				n1zkw@arrl.net	www.w6sg.net			PO Box 6423		San Rafael	CA	94903	10/17/2012
Marin Association of Realtors				info@marincountyrealtors.com	www.marincountyrealtors.com	415-507-1000		40 Mitchell Boulevard		San Rafael	CA	94903	10/17/2012
Marin Builders Association				mba@marinba.org	www.marinba.org	415-462-1220		660 Las Gallinas		San Rafael	CA	94903	10/17/2012
Marin County Bar Association				info@marinbar.org	www.marinbar.org	415-499-1314		30 North San Pedro	Suite 140	San Rafael	CA	94903	10/17/2012
Marin County Legal Professionals Association				info@mclpa.org	www.mclpa.org	415-459-2000	Ext. 11	1000 Fourth Street	Suite 875	San Rafael	CA	94901	10/17/2012
Marin Professionals				marin pro@hotmail.com	www.marinprofessionals.org	415-507-2140		120 North Redwood		San Rafael	CA	94903	10/17/2012
Marin County Bicycle Coalition				bob@marinbike.org	www.marinbike.org	415-456-3469	Ext. 3	PO Box 1115		Fairfax	CA	94978	10/17/2012
Marin County Motorcycle Association				MCMA.Changes@gmail.com	www.mcmadirt.com	415-455-5418				Novato	CA	94940-	10/17/2012
Marin Golden Gate Barbershop Chorus				information@ marinbarbershopchorus.org	marinbarbershopchorus.org	510-297-2684		1010 Lootens Place	Studio 9	San Rafael	CA	94901	10/24/2012
Marin Photography Club	Bruce	Kocen	President	brucekocen@comcast.net	www.marinphotoclub.org	415-717-9078				San Rafael	CA	94903	10/24/2012
Marin Rose Society	Don	Chapman	President	gail@marinrose.org	www.marinrose.org	415-383-9177							10/24/2012
Marin County Grassroots Leadership Network	John	Young, Jr.	Executive Director	info@maringrassroots.org	www.maringrassroots.org	415-451-4350		30 North San Pedro Road	Suite 290	San Rafael	CA	94903	10/24/2012
NAHREP of Marin County - National Association	1								1		1		
of Hispanic Real Estate Professionals North Bay Coaches -	Marti	Guerra	President	marti@bradleyrealestate.com	www.nahrep.org/home	415-209-1000		1701 Novato Boulevard	Suite 100	Novato	CA	94947	10/24/2012
Marin, Napa, and Sonoma Counties				info@NorthBayCoaches.org	www.northbaycoaches.org								10/24/2012
North Bay Multimedia Association	Randy	Stemmer	President	info@nbma.com	www.nbma.com			4460-16 Redwood Highway	#301	San Rafael	CA	94903	10/24/2012
North Bay Piano Club				charles@westwindkayaking.com		571-451-4851		34 Woodoaks Drive		San Rafael	CA	94903	10/26/2012
Novato Horseman	Art	Yee	President	novatohorsemen@gmail.com	www.novatohorsemen.com	415-897-0794		600 Bugeia Lane		Novato	CA	94945	10/26/2012
Outdoor Art Club				rental@outdoorartclub.org	www.outdoorartclub.org	415-388-9886		One West Blithedale Avenue		Mill Valley	CA	94941	10/26/2012
Premier Networking Group				info@pngnovato.com	www.pngnovato.com	415-370-5454		411 Bloom Lane	Suite A	Novato	CA	94947	10/26/2012
Sausalito Woman's Club	Paula	Fancher	President	rentals@sausalitowomansclub.org	www.sausalitowomansclub.org	415-332-2700		PO Box 733		Sausalito	CA	94965	10/26/2012
SofTech, North Bay Software & Information Technology Association	John Robert	Melendez	President	<u>john@jorome.com</u>	www.softech.org	415-472-7490		PO Box 5636		Novato	CA	94948	10/26/2012
Spectrum Lesbian, Gay, Bisexual, and Transgender Center	Paula	Pilecki	Executive Director	info@SpectrumLGBTCenter.org	www.spectrumlgbtcenter.org	415-457-1115		30 North San Pedro Road	#160	San Rafael	CA	94903	10/26/2012
Tam Twirlers	Gen	Sheppard	President	brad@bradchristie.com	www.tamtwirlers.org	415-389-9622		2675 East Francisco Boulevard		San Rafael	CA	94941	10/26/2012
The Marin Needle Arts Guild	Laura	Fraser	President	lwf.quilts@gmail.com	www.mnag.org	415-479-3175		PO Box 6015		San Rafael	CA	94903	10/26/2012
Sonoma													
Alpabet Soup Thrift Store	Ron	Baysman		Ron@pefinfo.com	http://pefinfo.com/alpha.asp	707-776-4620		217 Western Avenue		Petaluma	CA	94952	1/8/2013
American Cancer Society	Julie	Van Dooren		julie.vandooren@cancer.org	http://www.cancer.org/	707-545-6720		1451 Guerneville Road	Suite 220	Santa Rosa	CA	95403	1/8/2013
Benevolent & Protective Order of Elks	Gary	Corda	Manager	secretary@elks901.org	http://www.elks.org/lodges/ contactus.cfm?LodgeNumber=0901	707-763-0901		2105 S. McDowell Boulevard		Petaluma	CA	94954	1/8/2013
Better Business Bureau, Inc.	Jumana	Dajani		info@bbbemail.org	http://goldengate.bbb.org/	866-411-2221		1000 Broadway	Suite 625	Oakland	CA	94607	1/8/2013
BNI - Rivertown Business Builders	Ken	Schrier	President	kenschrier@aol.com	http://www.rivertownbni.com/	707-781-6705		111 Lynch Creek Way		Petaluma	CA	94954	1/8/2013
Boys & Girls Clubs of Marin -	David	Solo	President	dsolo@petalumabgc.org	http://www.petaluma-marinbgc.org/	707-769-2301		203 Maria Drive		Petaluma	CA	94954	1/8/2013
Southern Sonoma Counties California Mentor	Stephanie	Glick		Stephanie.Glick@	http://www.camentorfha.com/	707-545-6261		131A Stony Circle	Suite 450	Santa Rosa	CA	95401	1/8/2013
Carousel Fund	Arnie	Cohen	President	TheMentorNetwork.com arnie@carouselfund.org	http://www.carouselfund.org/	707-762-9136		17 Buckeye Court	ounce noo	Petaluma	CA	94952	1/8/2013
Charles M. Schulz Museum and Research Center	Toma	Day		toma@schulzmuseum.org	http://schulzmuseum.org/	707-579-4452		2301 Hardies Lane		Santa Rosa	CA	94952	1/8/2013
COTS - Committee on the Shelterless	Kristin	Nelson	Director of Leadership	kristin@cots-homeless.org	http://www.cots-homeless.org/	707-765-6530		900 Hopper Street		Petaluma	CA	94952	1/8/2013
Cruisin' the Boulevard, Inc.	Pennylee	Christensen	Giving and Events President	info@americangraffiti.net	http://www.americangraffiti.net/	707-762-3394		P.O. Box 4412		Petaluma	СА	94955	1/8/2013
Salute to American Graffiti Healthy Community Consortium	Denise	Di Pasqua	Coordinator	info@healthycommunity.info	http://healthycommunity.info/	707-778-4951		200 Douglas Street		Petaluma	CA	94952	1/8/2013
Heritage Homes of Petaluma	Terry	Kosewic		terry@kozyhomes.com	http://www.heritagepetaluma.com/	707-762-3456	1	P.O. Box 2152	1	Petaluma	CA	94903-	1/8/2013
	,	1	1	<u>, e locynomotionn</u>		, , , , , , , , , , , , , , , , , ,	1		1	. otatamu	54	2152	

#### Golden Gate Bridge Transportatin Management Plan Contact List Associations & Clubs-Community

							Alternative	Address	Address				Entry/Edit
Affiliation	First name	Last name	Title	Email	Website	Phone	Phone	Line 1	Line 2	City	St	Zip	Date
Hermann Sons Hall Association	Astrid	Schardt		hermannsons@gmail.com		707-762-9962		860 Western Avenue		Petaluma	CA	94952	1/8/2013
Mentor Me Petaluma	Darlene	Barrett-Garrahan	Program Director	info@mentormepetaluma.org	http://www.mentormepetaluma.org/	707-778-4798		14 Keller Street		Petaluma	CA	94952	1/8/2013
North Bay Association of Realtors	Kathy	Hayes	Executive VP	kathyh@norbarrealtor.com	http://www.norbarrealtor.com/	707-542-1579		131 B Stony Circle	Suite 1700	Santa Rosa	CA	95401	1/8/2013
North Bay Leadership Council	Cynthia	Murray	President & CEO	info@northbaycouncil.org	http://www.northbayleadership.org/	707-283-0028		775 Baywood Drive	Suite 101	Petaluma	CA	94954	1/8/2013
North Coast Builders Exchange	Keith	Woods	CEO	keith@ncbeonline.com	http://www.ncbeonline.com/	707-542-9502		1030 Apollo Way		Santa Rosa	CA	95407	1/8/2013
North Coast Score Chapter 450	Lynn	Reiter		ljreit@ix.netcom.com	http://northcoast.score.org/	707-571-8342		777 Sonoma Avenue	Suite 115D	Santa Rosa	CA	95404	1/8/2013
Old Adobe Developmental Services (O.A.D.S.)	Elizabeth	Clary	Executive Director	Elizabeth@oadsinc.org	http://www.oadsinc.org/ Oads Home.html	707-763-9807		1301 A Rand Street		Petaluma	CA	94954	1/8/2013
Peace Officers Assoc. of Petaluma	Tamara	Shoemaker		tshoemaker@ci.petaluma.ca.us	http://petalumapoap.org	707-778-4372		969 Petaluma Boulevard North		Petaluma	CA	94952	1/8/2013
Petaluma Community Foundation	Marilyn K.	Segal	Executive Director	info@petalumacf.org	http://petalumacf.org/	707-773-3863		159 Kentucky Street	Suite 10	Petaluma	CA	94952	1/8/2013
Petaluma Downtown Association	Marie	McCusker	Executive Director	info@petalumadowntown.com	http://www.petalumadowntown.com/ welcome.html	707-762-9348		210 Lakeville		Petaluma	CA	94952	1/8/2013
Petaluma Educational Foundation	Janet	Ramatici	Executive Director	janet@PEFinfo.com	http://www.pefinfo.com/	707-778-4632		200 Douglas Street		Petaluma	CA	94952	1/8/2013
Petaluma Firefighters Local #1415	Ken	Dick	Union President		http://petalumaff.com/ index.cfm?section=1	707-364-4465		P.O. Box 750065		Petaluma	CA	94978	1/8/2013
Petaluma-Hamilton Lodge #180 Masonic Lodge	Guy	Chalmers		jmc329@aol.com		707-762-6513		9 Western Avenue		Petaluma	CA	94952	1/16/2013
Petaluma Host Lions	Mary	Mansi	Treasurer	dbaggenstos@fishmansupply.com	http://www.petalumahostlionsclubca. lionwap.org/	707-762-3518		P.O. Box 946		Petaluma	CA	94953	1/8/2013
Petaluma Kiwanis Club	William	Sullivan		petalumabear@gmail.com		707-778-9200		P.O. Box 162		Petaluma	CA	94953	1/8/2013
Petaluma Museum Association	Joe	Noriel	President	mary@petalumamuseum.com	http://www.petalumamuseum.com/	707-778-4398		20 Fourth Street		Petaluma	CA	94952	1/8/2013
Petaluma People Services Center	Elece	Hempel	Executive Director	admin@petalumapeople.org	http://www.petalumapeople.org/	707-765-8488		1500 Petaluma Boulevard South	Suite A	Petaluma	CA	94952-	1/8/2013
Petaluma Regional Library	Doug	Cisney	Branch Manager	dcisney@sonoma.lib.ca.us	http://www.sonomalibrary.org/	707-763-9801		100 Fairgrounds Drive		Petaluma	CA	94952	1/8/2013
Petaluma Small Craft Center/ Petaluma Water Ways	Susan	Starbird	c/o Clavey Paddlesports	info@susanstarbird.com	www.sites.google.com/site/ petalumasmallcraftcenter/directory	707-778-7277		409 Petaluma Blvd South		Petaluma	CA	94952	1/8/2013
Petaluma Trolley	Christopher	Stevick	Managing Director	livingart@comcast.net	www.petalumatrolley.org	707-778-7878		110 Bayliss Street		Petaluma	CA	94952	1/8/2013
Petaluma Visitors Program	Colleen	Rustad		colleen@visitpetaluma.com	www.visitpetaluma.com	707-769-0429		210 Lakeville		Petaluma	CA	94952	1/8/2013
Petaluma Woman's Club II	Leslie	McNicol	Editor	lmmcnicol@hotmail.com	www.petalumawomansclub.com	707-762-4271		518 B Street		Petaluma	CA	94952	1/16/2013
Petaluma Yacht Club	David	Quist	Secretary	dsquist@earthlink.net	www.petalumayachtclub.com	707-765-9725		10 "C" Street		Petaluma	CA	94952	1/16/2013
Polly Klass Foundation	Gary	Judd	President	service@pollyklaas.org	www.pollyklaas.org	707-763-1334		312 Western Avenue		Petaluma	CA	94952	1/16/2013
United Cerebral Palsy of the North Bay	Margaret	Farman	Executive Director	mfarman@ucpnb.org	www.ucpnb.ucplabs.org/about-us/ leadership-team	707-766-9990		3835 Cypress Drive	#103	Petaluma	CA	94954	1/16/2013
Vietnam Veterans of CA	Peter	Cameron	Executive Director	nbvrc@vietvets.org	www.vietvets.org	707-578-8387		2455 Bennett Valley Road		Santa Rosa	CA	95404	1/16/2013
San Francisco													
Marina Merchants Association	Kelly	Keiser	President	kelly@kellykeiserdesign.com	(415) 567-8818			2269 Chestnut Street, #235		San Francisco	CA	94123	10/6/2009
San Francisco Council of	Jim	Maxwell	President	info@sfcdma.org	415-441-0848			3444 Broderick		San Francisco	CA	94123	10/6/2009
District Merchants Associations	Tam	Druhelsen	Mambas Candiana Disaatas	Arch2info@mindspring.com	(15.000.0000115			222 Canadana Chroat Oth Flags			<b>C</b> A	0/10/	2/20/2011
Building Owners and Managers of San Francisco California Alliance for Jobs	Tory Jim	Brubaker	Member Services Director Executive Director	toryb@boma.com	415-362-2662 x115 925-521-9719			233 Sansome Street, 8th Floor 928 Second Street	0	San Francisco	CA CA	94104 95814	3/30/2011 10/6/2009
	JIM	Earp		jearp@rebuildca.org karen@eastbayeda.org;					Suite 200	Sacramento			
East Bay Economic Development Alliance	Karen	Engel	Executive Director	info@eastbayeda.org	(510) 272-3874	510-272-3885		1221 Oak Street	Suite 555	Oakland	CA	94612	12/21/2010
Northern California Concierge Association San Mateo County	Ric	Lee	President	nccapres@gmail.com				588 Sutter St. #22		San Francisco	CA	94102	10/6/2009
Economic Development Association				info@samceda.org	(650) 413-5600			1301 Shoreway Road	Suite 150	Belmont	CA	94002	3/4/2011
Small Business Advisory Council	Marian	Costello	Co-Chair	mcostello@scomas.com									10/6/2009
Chinese Real Estate Association of America	Albert	Tam	President	albert.tam@gmail.com	650-740-9928			945 Taraval Street	Suite 328	San Francisco	CA	94116	1/10/2013
Coalition for Better Housing	Brook	Turner	Executive Director	battime@sbcglobal.net	415-474-6987			1388 Sutter Street	#800	San Francisco	CA	94109	1/10/2013
Golden Gate Business Association	Pat	Mayfield	Executive Director	pat@ggba.com	865-5545			1800 Market Street, Suite Q32		San Francisco	CA	94114	1/10/2013
Golden Gate Restaurant Association	Rob	Black	Executive Director	ggra@ggra.org	781-5348 x 1			100 Montgomery Street	Suite 1280	San Francisco	CA	94104	1/10/2013
National Associaton of Women Business Owners	Wendi	Moradian	Administrator	info@nawbo-sfba.org	333-2130	586-6606		985 Darien Way		San Francisco	CA	94127	1/10/2013
San Francisco Small Business Network	Pat	Christensen	Public Affairs Director	patdchris@yahoo.com	731-2859			2261 Market St., #288		San Francisco	CA	94114	1/10/2013
San Francisco Council of District Merchants Association	Jim	Maxwell		mma_prez@mindspring.com	974-9000	564-7879		P.O. Box 225024		San Francisco	CA	94122	1/10/2013
	Randy	Harris		sffi@dnai.com	621-6100	621-6384		1000 Brannan St.		San Francisco	CA	94103	1/10/2013
San Francisco Locally-Owned Merchant Alliance	Neil Sofman			info@sfloma.org	561-7687	561-7685	1	P.O. Box 29169	1	San Francisco	CA	94129	1/10/2013
Bay Area Council	Jim	Wunderman	President & CEO	Jim@bayareacouncil.org	415-981-8702	0017000		201 California Street	Suite 1450		CA	94111	1/15/2013
bay Area Council	VIII	wanuerman	I TESIDEIIL & CEU	onnegoayareacouncit.org	410-001-0702	1	I	201 Galifornia Street	Suite 1450	San Francisco	UA	34111	1/13/2013

Associations - Neighborhood

						1	Alternative	Address	Address			
Affiliation	First name	Last name	Title	Email	Website	Phone	Phone	Line 1	Line 2	City	St	Zip
SF Cow Hollow Residents												
Cow Hollow Association	Jennifer	Gridley		cowhollowassociation@yahoo.com	http://www.cowhollowassociation.org/			2611 Filbert Street		San Francisco	CA	94123
Cow Hollow Association	Tony	Imhof		imhof3@sbcglobal.net_	http://www.cowhollowassociation.org/	415-921-4657		2409 Green Street		San Francisco	CA	94123
Cow Hollow Association	Lori	Brooke	President	<u>lbrooke@lmi.net</u>	http://www.cowhollowassociation.org/							
Cow Hollow Neighbors in Action	Max	DelleSedie		mdellesedi@aol.com		415-922-9906	415-921-0181	3160 Lyon Street		San Francisco	CA	94123
Cow Hollow Neighbors in Action	Patricia	Vaughey		info@cowhollowassociation.org		415-776-3191		2742 Baker Street		San Francisco	CA	94123
Cow Hollow Associations - President & Board				chaboard@cowhollowassociation.org								
Cow Hollow Associations - Block Captains				blocks@cowhollowassociation.org								
SF Marina Residents												
Golden Gate Valley Neighborhood Association	Robert	Bardell	President	BBardell@comcast.net		415-931-3438		2634 Franklin Street		San Francisco	CA	94123
Marina Civic Improvement & Property Owners Association	Joan Marie	Girardot		CSFN_SF@yahoo.com		415-346-5525	415-282-5014	349 Marina Boulevard		San Francisco	CA	94123
Marina Merchants Association	James	Maxwell		Arch2info@mindspring.com		415-441-0848		3444 Broderick Street		San Francisco	CA	94123
Marina Merchants Association	Peter	Singh		crownsigh@aol.com		928-7852				San Francisco	CA	94123
Marina Merchants Association	Nick	Pertrulakis		npetrulakis@booksinc.net		931-3633		2251 Chestnut St.		San Francisco	CA	94123
Marina Merchants Association	Alex	Feldman	President	alexf@sfoptics.com	http://themarinasf.com/	415-614-0259		2248 Chestnut St		San Francisco	CA	94123
Marina Merchants Association				president@themarinasf.com		415-922-7500						
Russian Hill Neighbors	Francisco	Centurion		sfrhn@rhn.org		415-267-0575		2750 Polk St., Apt. 3	† – – – – – – – – – – – – – – – – – – –	San Francisco	CA	94109
Pacific Heights Resident Association	Greg	Scott	President	info@phra-sf.org		415-922-3572		2585 Pacific Ave.		San Francisco	CA	94115
Marina Community Association	Ronald	Mulcare		info@sfmca.org		110 022 0072		1517 North Point St	Box #531	San Francisco	CA	94123
Marina Neighborhood Association	Gloria	Fontanello		No Answer, No Voicemail Available		415-771-8662		1435 Bay Street	Box in our	San Francisco	CA	94123
SFPresidio Residents	atona	1 ontanetto		No Answer, No Volceman Available		410 771 0002		1400 Day Otreet		Gainthancisco		54125
Neighborhood Association for Presidio Planning	Michael	Marston		marstonmichael@yahoo.com		415-922-3375		3375 Jackson Street		San Francisco	CA	94118
Presidio Heights Association of Neighbors	Carol	Solfannelli	President	info@phansf.org		410 322 0070		P.O. Box 29503		San Francisco	CA	94129
Presidio Residents & Tenants	Lindy	Beasley	Tresident	lindylb@earthlink.net		415-389-5961		131 Barbaree Way		Tiburon	CA	94920
West Presidio Neighborhood Association	Melanie	Marks		2mrmarks@comcast.net		413-303-3301		110 El Camino Del Mar		San Francisco	CA	94121
Richmond Residents	Wetanie	Marks		Zinimarks@conicast.net				TTO EL CATILITO DEL MAT		Sannancisco	UA	34121
Richmond Presidio Neighbors Association	Andrea	Lewin		ajlewin@gmail.com		415 386-9075				San Francisco	CA	
				president@sfpar.org		(415) 668-					-	
Planning Association for the Richmond	Raymond	Holland	President	raymondsnf@aol.com		8914		747 23rd Avenue		San Francisco	CA	94121
Planning Association for the Richmond	Paul	Epstein		paulsfo@gmail.com		415-751-6657		116 - 11th Avenue		San Francisco	CA	94118
Other SF Neighborhood Associations												
301 Gough Homeowners Association				No Answer, No Voicemail Available		415-701-8451		301 Gough Street		San Francisco	CA	94102
Asian Business Association	Basilio	Chen		Aaba.inc@att.net		284-6765		41 Sutter St. Mail Stop 1080		San Francisco	CA	94104
Asian Business League of San Francisco				info@ablsf.org	http://www.ablsf.org/	415-670-9022		PO Box 191345		San Francisco	CA	94119-1345
Barbary Coast Neighborhood Association	Bill	Sauro	President	williamsauro@yahoo.com	www.barbaryneighbors.org			640 Davis St	Unit #28	San Francisco	CA	94111
BayCrest Residential Association	Ed	Walsh	Resident	edwalsh94105@yahoo.com	http://www.baycrestview.com/	415-543-1135		201 Harrison Street	#120	San Francisco	CA	94105
	1		Residential Service			110 010 1100			#120		CA	
BayCrest Residential Association	James	Pounders	Manager	JPounders@pacbell.net	http://www.baycrestview.com/			201 Harrison Street	#120	San Francisco	CA	94105
Bayview Hunters Point Coordinating Council	Francisco	Da Costa		frandacosta@att.net		415-822-9602						
Bayview Merchants' Association	Al	Norman	President	info@bayviewmerchants association.com	http://bayviewmerchants.org/	415-647-3728		3801 3rd Street	Suite 1068	San Francisco	CA	94124
Buena Vista Neighborhood Association				info@bynasf.com	http://www.bvnasf.com/	415-431-2359						
Cathedral Hill Neighbors Association	Marlayne	Morgan	President	cathedralhillneighbors@gmail.com	http://sfchna.org/			1450 Sutter Street	PMB 309	San Francisco	CA	94109-9801
Castro/Eureka Valley Neighborhood Association	Alan	Beach-Nelson		info@evpa.org	http://evna.org/							
Cayuga Improvement Association	Christine	Dillon	President	nabby@comcast.net	http://li257-123.members.linode.com/	415-337-0472		314 Foote Avenue	1	San Francisco	CA	94112
Chinatown Merchants Association	Eva	Lee		elee@moonfestival.org	http://www.moonfestival.org/	982-6306	982-6306		1	San Francisco	CA	94108
Chinatown Merchants Association	1	1		info@moonfestival.org	http://www.moonfestival.org/				1			1
Clement Street Merchants Association	Jessie	Fink	President	toymanj@aol.com	www.clementmerchants.org/	415-751-7505		Clement@ 5th Avenue	Toy Boat	San Francisco	CA	94118
					-				Dessert Café			
Coalition for San Francisco Neighborhoods	David	C	Dessident	CSFN_SF@yahoo.com	www.csfn.net/	415-262-0440		PO Box 320098		San Francisco	CA	94132
Cole Valley Improvement Association	David	Crommie	President	cviasf@aol.com	www.cviasf.org/	415-431-1414		P.O. Box 170611		San Francisco	CA	94117
Cortland Merchants Association	Darcy	Lee		info@heartfeltsf.com	unuu dalaasahaishta uus	415-648-1380		436 Cortland Avenue		San Francisco	CA	94110
Dolores Heights Improvement Club	D.1	<b>T</b>	Duraldant	dhic123@gmail.com	www.doloresheights.org						_	
Duboce Triangle Neighborhood Association	Pat	Tura	President	info@dtna.org	http://www.dtna.org/							

#### Golden Gate Bridge Transportatin Management Plan Contact List Associations - Neighborhood

							Alternative	Address	Address			
Affiliation	First name	Last name	Title	Email	Website	Phone	Phone	Line 1	Line 2	City	St	Zip
East Mission Improvement Association	Cathy	Ramacciotti	President	lilcheckers@aol.com	http://www.csfn.net/							
					memberpages/EMIA.html http://www.csfn.net/							
East Mission Improvement Association	John	Wilson	Vice President	jwilson153@aol.com	memberpages/EMIA.html							
East Mission Improvement Association	Judith	Berkowitz	Recording Secretary	sfjberk@mac.com	http://www.csfn.net/							
			Corresponding	.,	memberpages/EMIA.html http://www.csfn.net/						_	
East Mission Improvement Association	Sheryl	Connell	Secretary	connellsa@aol.com	memberpages/EMIA.html							
Ewing Terrace Neighborhood Association	John	Munz	President	johnmunz@pacbell.net	inombol pagoo, Enny antena	415-346-3447						
Excelsior Action Group/EnCore	Cristy	Johnston	Operations Manager	cristy@eagsf.org	http://eagsf.org/	415-585-0110		4702 Mission		San Francisco	CA	94112
Excelsior Business Association	Min	Suen		msuen@msn.com		587-1231	587-1231	4477 Misstion St.		San Francisco	CA	94112
Excelsior Business Association	Rebecca	Silverberg		sfrebecca@aol.com		584-0535	584-4680	154 Lisbon St.		San Francisco	CA	94112
Excelsior District Improvement Association	May	Wong	President	ediasf-info@yahoo.com	http://excelsiorsf.org/	415-294-0503		PO Box 12005		San Francisco	CA	94112-0005
Fairmount Heights Neighborhood Association	Gregg	Brooks		sflyric@yahoo.com		110 201 0000		1 0 BOX 12000		Gainthanoioco	0,1	01112 0000
Fair Oaks Community Coalition	Andy	Segal	President	focc.neighbors@gmail.com	http://www.fairoaks-sf.org/							
Fair Oaks Community Coalition	Anuy	Segai	Fresident	Tocc.neighbors@gmait.com	http://www.sanfranciscomerchants.com/		-			-		-
Fillmore Merchants & Imp. Association	Thomas	Reynolds		trr@thomasreynolds.com	merchant_associations/	441-4093		2291 Pine St.		San Francisco	CA	94115
		1			fillmore merchants association htm http://www.fishermanswharf.org/		-			-		-
Fisherman's Wharf Merchants Association				fishermanswharf@sbcglobal.net	default.aspx	202-0436		5 Jefferson Street		San Francisco	CA	94133
Forest Knolls Neighborhood Organization				whcaplan@comcast.net	http://www.forestknolls.org/							
Francisco Heights Improvement Association	David	Weiss	Co-President	davidhomesf@comcast.net		415-379-3620		76 Rossi Avenue		San Francisco	CA	94118
Glen Park Association				news@glenparkassociation.org	http://glenparkassociation.org/	585-5761		PO Box 31292		San Francisco	CA	94131
Greater Geary	David	Heller		david@beautynetwork.com		387-1477	387-2291	5748 Geary Blvd.		San Francisco	CA	94121
Greater West Portal Neighborhood Association	Emeric	Kalman		info@gwpna.org	http://www.gwpna.org/			P.O. Box 27116		San Francisco	CA	94127
Haight Ashbury Improvement Association	2			haia_sf@yahoo.com	https://sites.google.com/site/sfhaiasf/			P.O. Box 170098		San Francisco	CA	94117
Haight Ashbury Merchants Association	Dave	McLean		dave@magnoliapub.com	https://orteo.googte.com/orte/orhuldon/			1.0. Dox 170000		Gainthancisco		34117
Hayes Valley Merchants Association	Russell	Pritchard			http://www.hevenuellev.eem	415-255-9307	206 2/02	EEE Llavian Chront		San Francisco	CA	94102
Inner Sunset Action Committee	John			zonalhayes@earthlink.net	http://www.hayesvalley.com	415-255-9307	380-2492	555 Hayes Street		San Francisco	CA	94102
	Jonn Rolf	Bardis		jbardis@xdm.com		704 0004	704 07/0			0.5.		
Inner Sunset Mechants Association		Mueller		rmueller@rjmsystems.com		731-2884	/31-3/40	917 Irving St. Suite 4		San Francisco	CA	94112
Inner Sunset Merchants Association	David	Zimmerman	President	blackthornsf@gmail.com	www.innersunsetmerchants.org			1032 Irving St, Suite 711		San Francisco	CA	94112
Inner Sunset Merchants Association				innersunsetmerchants@gmail.com								
Japantown Merchants Association	Richard	Hashimoto	President	rmhashimoto@aol.com	http://www.sfjapantown.org	415-567-4573		1610 Geary Blvd.		San Francisco	CA	94115
Japantown Taskforce	Linda	Jofuku		heiwa@jtowntaskforce.org		346-1239	346-6703	1765 Sutter Street		San Francisco	CA	94115
Jetrosf	Naoyuki	Haraoka		sfwebmaster@jetro.go.jp.org		392-1333	788-6927	235 Pine St. Suite 1700		San Francisco	CA	94104
Jordan Park Neighborhood Association	Larry	Costello	President	larryoracleoak@me.com	http://jpia.echapters.com/home.php	415-314-5833						
Judah Merchants Association	Buffy	Maguire	President	buffy@javabeachcafe.com		415-606-1884		1396 La Playa Street		San Francisco	CA	94122
Laurel Village Merchants Association	Jeff	Leopold		leopold@standard5n10.com	http://www.neighborhoodlink.com/	751-5767				San Francisco	CA	
					sanfran/laurel-village-merchants/ http://www.neighborhoodlink.com/						-	
Laurel Village Merchants Association	Tricia	Tong	Merchant Coordinator	lvma.triciatong@gmail.com	sanfran/laurel-village-merchants/	415-308-7482						
Liberty Hill Neighborhood Association	John	Barbey		libertyhillneighborhood@gmail.com	http://libertyhillsf.org/							
Lower 24th Street Merchants Association	Erick	Arguello	President	erik@lower24thstreet.org,	http://lower24thstreet.org/	415-902-5893	415-323-8939					
	ETICK	Arguetto	Fresident	eriq94110@aol.com	<u>english/about.html</u>	415-902-5895	415-323-6939					
Lower height Merchant & Neighbor Association—LoHaMNA	Thea	Selby	Contact	thea@nextstepsmarketing.com		415-773-1841						
Lower Polk Neighbors and Merchants	Recia	Young	Chairperson	Reciaannyoung@yahoo.com								
Market Street Association	Carolyn	Diamond	onanporoon	msadv@pacbell.net		362-2500	362-6128	870 Market Street	Suite 456	San Francisco	CA	94102
Merchants of Upper Market & Castro (MUMC)	Richard	Magary	Operations Manager	Mumc-sf@earthlink.net	http://castromerchants.com/index.html	415-431-2359	002 0120	450 Castro Street	Suito 100	San Francisco	CA	94114
Merchants of Upper Market & Castro (MUMC)	Terry	Asten Bennett		info@castromerchants.com	http://castromerchants.com/index.html	861-5787		100 04010 011001		San Francisco	CA	
Merchants of Upper Market & Castro (MUMC) Merchants of Upper Market & Castro (MUMC)	Herb	Cohn	rissident	mumcprez@aol.com	http://castromerchants.com/index.html	621-1188	621-0343	584 Castro Street, #333		San Francisco	CA	94114
Mid Divisadero Merchants Association	Remy	Nelson	President	rem@mojobicyclecafe.com	http://castromerchants.com/index.html	415-440-2338	415-515-3558	304 Gastro Street, #333		San Francisco	UA	04114
	nelliy	NEISUII	rieauent			410-440-2338	410-010-0008				_	
Miraloma Park Improvement Club				miralomapark@gmail.com	http://www.miralomapark.org/	200,0000	200 4000	2272 20th Ct		Can Francisco	<b>C A</b>	0/110
Mission Chinese Bus. Improvement Group	0	O	Provident	maiswong@aol.com		206-9326		3372 20th St.		San Francisco	CA	94110
Mission Creek Merchant Association	Candace	Combs	President	ccombs@insymmetry.com	www.mcma-sf.com	415.531.8232	cell					
Mission Economic Development Association			Government/	Info@medasf.org	www.medasf.org	415-282-3334		3505 - 20th Street		San Francisco	CA	l
Mission Merchant Association	Phillip	Lesser	Media Relation	phnsan@msn.com		650-347-6014		555 Laurel Ave Suite		San Mateo	CA	94401
			VP		l			501				

#### Golden Gate Bridge Transportatin Management Plan Contact List Associations - Neighborhood

Affiliation	First name	Last name	Title	Email	Website	Phone	Alternative Phone	Address Line 1	Address Line 2	City	St	Zip
Mission Merchant Association	Don	Allan	President	sfmissionmerchants@gmail.com /	http://www.missionmerchants.com/	415.552.7835		P.O. Box 41420		San Francisco	CA	94120
Mission Neighborhood Centers, Inc.	-			hemanova@earthlink.net Barbara.Walden@mncsf.org	http://www.mncsf.org/index.php	415-206-7752		362 Capp Street		San Francisco		94110
Mission Terrace Neighborhood		-		Mtbeautify@aol.com	http://www.mincsi.org/index.php http://www.missionterrace.org/index.html	413-200-7732		302 Capp Street		Sali Flancisco	CA	94110
New Mission Terrace Improvement Assn.				Mideadiny@aot.com	http://newmissionterrace.wordpress.com/	415-584-7444		P.O. Box 12111		San Francisco	CA	94112
Nob Hill Association				info@nobhillassociation.org	www.nobhillassociation.org	415-346-8720		235 Montgomery Street	Suite 870	San Francisco	CA	94104
Nob Hill Urban Neighbors		1		nobhillurbansf@aol.com	http://nobhillurbanneighbors.com/	415-928-8904		P.O. Box 640024		San Francisco	CA	94164
Noe Valley Merchants Association	Robert T.	Roddick	President	info@noevalleymerchants.com	http://www.noevalleymerchants.com/	415-641-8687		PO Box 460574		San Francisco	CA	94146
Noriega-Lawton Merchants Association	Don	Schmidt	President	dmschmid@pacbell.net		415-665-6291		1811 21st Ave		San Francisco	CA	94122
North Beach Business Association	Shell	Thomas	President	info@northbeachbusiness association.com	http://www.northbeach businessassociation.com	415-215-8091		P.O. Box 330022		San Francisco	CA	94133
North Beach Neighbors				info@northbeachneighbors.org	http://www.northbeachneighbors.org/			P.O. Box 330115		San Francisco	CA	94133
Northeast Mission Merchants and	Gwen	Kaplan	President	acemailing@aol.com	http://www.sfmission.com/merchants/	415-863-4223		2757 16th Street		San Francisco	CA	94103
Biz Association OMI Business League	Royce	Vaughn		roycejudy@acninc.net	96awards/96awards.htm	826-7419	848-4555	459 Valley St.		San Francisco	CA	94114
Outer Mission Merchants and				1		1	040-4000					
Residents Association	Steven R.	Currier	President	steven.currier@sfdistricts.org	www.sfdistricts.org	415.587.9150		P.O. Box 34099		San Francisco	CA	94134
Outer Sunset Merchants & Professionals Association				irvingstreetmerchants@gmail.com	http://www.irvingstreetmerchants.com/ index.html			2000 Judah St.		San Francisco	CA	94122
Outer Sunset Merchants Association	Del	Singh		<u>darsingh@aol.com</u>	http://www.irvingstreetmerchants.com/ index.html	564-8269	731-0701	1221 23rd Ave.		San Francisco	CA	94122
Outer Sunset Merchants Association	Angela	Tickler		angela@hardwearsf.com	http://www.irvingstreetmerchants.com/ index.html	415-682-9565		1825 Irving Street		San Francisco	CA	94122
Park Merced Resident's Organization	Robert	Pender		admin@parkmercedresidents.org		415-267-3961		#5 Josephia Ave.		Park Merced	CA	94132
Parkside Taraval Merchants Association	Scott Hauge			shauge@cal-insure.com		661-6500	661-2254	2311 Taraval St.		San Francisco	CA	94116
Parkside Taraval Merchants Association	Barbara	Udovch		sfosm@aol.com		753-8925	681-1761	2331 Taraval St.		San Francisco	CA	94116
Polk Street Merchants Association	Stephen	Cornell		brownies@acehardware.com		673-8900	753-2669	1563 Polk St.		San Francisco	CA	94109
Polk Street Merchants Association	Stephen	Cornell		Stephen@brownieshardware.com	http://www.sanfranciscomerchants.com/ associations/polk_district_merchants.ht	415-673-8900		1620 Polk Street		San Francisco	CA	94109
Polk Street Merchants Association	Jennifer	Farris		Info@PolkDistrictMerchants.com	Jennifer.Farris@sbcglobal.net	415.845.8814						ļ
Portola Neighborhood Association	Robert	Ramirez	Program Manager	Robert.R.PNA@gmail.com	http://portolasf.org	415-574-9170		9 Silliman Street, Suite B		San Francisco	CA	94134
Potrero Boosters Neighborhood Association				evan.goldin@gmail.com	http://www.potreroboosters.org/							
Potrero Hill Association of	Gwen	Cooke	Operations	gwen@allpointe-is.com	http://www.sanfranciscomerchants.com/	(415) 305-4268		1459 – 18th Street #105		San Francisco	CA	94107
Merchants and Businesses Potrero Hill Association of	Describert		Mar Develdent		associations/potrero_hill_merchants.htm			4/50 4011 01		0	CA	0/407
Merchants and Businesses	Bradley	Vaccaro	Vice President	sbn@potrerohill.biz	www.potrerohill.biz	888-992-2244		1459 – 18th Street #105		San Francisco		94107
Potrero Merchants Association	Philip	DeAndrade		philip@goathill.com		641-1440	641-7262	300 Connecticut Street		San Francisco	CA	94107
Richmond Community Association	Hiroshi	Fukuda		NINERSAM@aol.com							+	
Rincon Center Tenants Association		-		rcta1@rinconneighbors.com	http://www.rinconneighbors.com/					-	+	
Rincon Point Neighbors Association				rpna1@rinconneighbors.com	embarc.html							ļ
Russian Hill Improvement Association				info@franciscoreservoir.org	http://franciscoreservoir.org/ Francisco_Reservoir/Home.html							
Russian Hill Neighbors	Tina	Moylan	President	sfrhn2@rhn.org	http://www.rhn.org/			1819 Polk Street, #221		San Francisco	CA	94109
SF Residents First				first@rinconneighbors.com	http://www.rinconneighbors.com/							
Sacramento Street Merchants Association	Rachel	Lopez Metzger	President	thedeskset@pacbell.net	embarc.html	415-921-9575			1		+	
Salvadorean American Chamber of Commerce				info@elsalvadorsanfrancisco.com		510/472-5138		870 Market Street	Suite 512	San Francisco	CA	94102
San Bruno/Ocean Avenue Merchants Association	Ling	Liang	Operations Manager	Ling.pnsc@gmail.com		415-574-9170						
San Francisco Council of District Merchants Association	Henry	Karnilowicz	President	info@sfcdma.org	http://www.samranciscomerchants.com/ merchant_associations/san_francisco_ council_of_district_merchant_	415-621-6637		3444 Broderick St		San Francisco	СА	94123
Singapore American Business Association	1	1		sabausa@aol.com	loopooistiona htm	252-1150	252-1160	333 Twin Dolphin Dr.	Suite 112	San Francisco	CA	94065
South Beach Mission Bay Business Association	Katherine	Webster	President	kwebster@storytellingmedia.com	http://www.southbeachmissionbay.com/ local_business/business_association.php	415-348-8377	650-888-8377	88 King Street, Suite 703		San Francisco	CA	
South of Market Business Association	Henry Karnilowicz			occexp@aol.com	10042_04011000/04011000_4000140011.011	621-7533	621-7583	1019 Howard		San Francisco	CA	94103
South of Market Business Association	Henry	Kamilowicz	President	info@sfsomba.org	http://www.sfsomba.org/	415.553.4433	x115	C/O Urban Solutions		San Francisco	CA	94103
South of Market Business Association				occexp@aol.com		/ c-420-8113		1083 Mission St. 2nd Floor			+	
Sunset Heights Association of	1	1		information Onknow for an				21011001	1	1	+	
Responsible People / SHARP				information@sharpsf.com	http://www.sharpsf.com/							

		r					Alternative	Address	Address		1	
Affiliation	First name	Last name	Title	Email	Website	Phone	Phone	Line 1	Line 2	City	St	Zip
Taraval Parkside Merchants Association	Dallas	Udovch	President	sfosm@aol.com	http://taravalmerchants.org	415-753-8925		2331 Taraval Street		San Francisco	CA	94116
Taraval Parkside Merchants Association				Streetfair@taravalmerchants.org		415-572-3461						
Telegraph Hill Dwellers	Jon	Golinger	President	President@thd.org	http://www.thd.org/							
Tenderloin Merchants Association	Jimmy	Shamieh		jimmyshamieh@comcast.net		415-724-1300		123 Eddy Street				
The Beacon Homeowners Association				lobby@beaconroa.org	http://thebeaconsf.org/Library9443/	(415) 957-		250 King Street		San Francisco	CA	
The Union Street Association	Lesley	Leonhardt	Director	LL@imagesnorth.com				2036 Union Street	Suite 214	San Francisco	CA	94123
Twin Peaks Improvement Association	Dona	Crowder	President	info@tpiasf.org.	http://www.tpiasf.org/	415-929-1900						
Union Square Business Improvement District	Linda	Mjellem	Exec Director	mjellem@msn.com	www.unionsquarebid.com	415-781-7880		323 Geary St, #401		San Francisco	CA	94102
Union Street Association	Lesley	Leonhardt	Director	LL@imagesnorth.com	http://www.unionstreetsf.com/	415-673-1273	415-441-7055	1868 Union St, Suite 214		San Francisco	CA	94123
Upper Fillmore Merchants Association	Teresa	Rodriguez		teresa@jetsetextra.com								
Valencia Street Merchants	Deana	Davenport	President	deenadragqueena@me.com		415-861-4526						
West Portal Merchants Association	Elliot	Wagner	Vice-President	elliotwagner@hotmail.com	http://www.sanfranciscomerchants.com/ associations/west_portal_merchants.htm	415-731-8080						
West Presidio Neighborhood Association	Mary	Russo		russomcafee@aol.com								
Yerba Buena Alliance	Peter	Lee	Interim Director	info@yerbabuena.org	www.yerbabuena.org	415-541-0312		735 Market Street		San Francisco	CA	94103
Marin County Neighborhood Associations												
Bennett Valley Homeowners Association	Craig	Harrison	President	charrison@hunton.com		(707) 573-9990		POB 2666		Santa Rosa	CA	95405
Bret Harte Community Association	Nigel	Faulkner	Co-President	info@bretharte.org	www.bretharte.org					San Rafael	CA	
Channing Arms Homeowners Association				No Answer, No Voicemail Available		(415) 472-3433		270 Channing Way		San Rafael	CA	
Contempo Marin Homeowners Association	Keith	Meloney	President	president@contempomarin.org		415-300-0270		25 Yosemite Rd		San Rafael		94903
Cote D'Azur Homeowners Association	Reith	Wetoney	Fresident	No Answer, No Voicemail Available		(415) 331-		100 South Street		Sausalito	CA	94965-2528
						((1E) 007 20E7					0/1	94905-2528
DeLong Owners Association				No Answer, No Voicemail Available		(415) 897-3057		701 DeLong Ave		Novato	CA	
Dominican/ Black Canyon Neighborhood Association				feedback@dominican-area-news.org	www.dominicanareanews.org							
Federation of San Rafael Neighborhoods				stephenpatterson.1@comcast.net	www.fsrn.info	415.453.6541		PO Box 151485		San Rafael	CA	94915
Floating Homes Association				info@floatinghomes.org		415.332.1916		P O Box 3054		Sausalito	CA	94966
Gerstle Park Neighborhood Association (GPNA)				info@GerstlePark.com	www.gerstlepark.com	(415) 401-		P.O. Box 150644		San Rafael	CA	94915
Greenbrae Property Owners Association (GPOA)	Jack	Valinoti	President	info@greenbrae.org	www.greenbrae.org	7000		POB 383		Kentfield	CA	94904
Homestead Valley Community Association				info@homesteadvalley.org	www.homesteadvalley.org	415.388.0137	415.388.0150	315 Montford Avenue		Mill Valley	CA	94941
Ignacio Creek Homeowners Association				contact@ignaciocreek.com		(415) 883-7641		300 Indian Way		Novato	CA	
Indian Valley Associates	Rodney	Bosche	President	rbosche@comcast.net	indianvalleyhome.org			PO Box 251		Novato	CA	94948
ISOJI				info@isoji.net	www.isoji.net	415.883.1757				Marin City	CA	94965
Kent Woodlands Property Owners	Josh	Rafner	President	jrafner@kwpoa.com; info@kwpoa.com	ו 	(415) 721-7429		800 College Ave	POB 414	Kentfield	CA	94914
Lincoln-San Rafael Hill Neighborhood Association	Kay	Karchevski	President	LincolnHillAsscn@gmail.com	www.lsrhna.com	453-1047		P.O. Box 150983		San Rafael	CA	94915
Lucas Valley Homeowners Association				lvha@lvha.net		(415) 472-3202	415-472-7512	1201 Idylberry Road		San Rafael	CA	
Miller Creek Homeowners Association				info@sharpproperty.net	www.millercreek.org							
Miller Court Villas Homeowners Association				No Answer, No Voicemail Available				250 Miller Ave		Mill Valley	CA	94941-2829
Mont Marin/San Rafael Park Neighborhood Assoc.				raylorber@yahoo.com	www.montmarin.org	479-9229		5 Upper Oak Drive		San Rafael	CA	94903
Muir Woods Park Community Association				webmaster@mounttam.org	www.mounttam.org	415.381.3119		40 Ridge Avenue		Mill Valley	CA	94931
Oceana Marin Homeowners Association				OMHOA@yahoo.com		(707) 878-2262		460 Oceana Drive	POB 85	Dillon Beach	CA	
Pt. San Pedro Road Coalition				webadmin@sprcoalition.org	sprcoalition.org			Box 449 369 "B" Third Street		San Rafael	CA	94901
Santa Margarita Neighborhood Association	Carolyn	Lenert	President	web@smna-online.com	www.smna-online.com			P.O. Box 6449		San Rafael	CA	94903
Santa Venetia Neighborhood Association	Robert	Dobrin	President	info@thesvna.org	thesvna.org			P.O. Box 4047		San Rafael	CA	94913
Seadrift Homeowners Association	Heidi	Smith	Office Manager	seadrift.office@att.net		(415) 868-9043		184 Calle Del Arroyo		Stinson Beach	CA	94970
Shelter Ridge Homeowners Association c/o EBMC	Trudy	Morrison	District Manager	trudymorrison@ebmc.com		(415) 382-1514	707-584-5123	384 Bel Marin Keys Blvd	#210	Novato	CA	
Sleepy Hollow Homeowners Association				jgrubb@bayareacouncil.org	www.shha.org	(415) 258-0911		1317 Butterfield Road		San Anselmo	CA	94960
Smith Ranch Homeowners Association	David B.	Williams	General Manager	dwilliams@smithranchhomes.org	http://www.smithranchhomes.org/home.a	(415) 492-		500 Deer Valley Road		San Rafael	CA	1
Sobre Vista HOA of Sonoma County	Martin	Cohn	-	nachas20@earthlink.net		(415) 681-5631		1524 Willard Street		San Francisco	CA	94117
Sun Valley Neighborhood Association	George	Mills		ggmills@pacbell.net				P.O. Box 151132		San Rafael	CA	94915
Tamalpais Valley Improvement Club	Curry	Eckelhoff	President	president@tamvalley.org	ww.tamvalley.org	415.383.3691		Box 1446		Mill Valley	CA	94942
Terra Linda Homeowners Association	-	1	1	<u>1hero1@terralindahoa.com</u>	www.terralindahoa.com				İ	-	1	1
Tiburon Hills Homeowners Association	Larry	Rothstein	President	lrothsteinthe@aol.com		(415) 381-		21 Andrew Drive	İ	Belvedere Tiburon	CA	94920-2182
Timmers Landing Homeowners Association	Harry	Blake	Administrator	No Answer, No Voicemail Available		(415) 455-		68 Trinidad Drive		Belvedere Tiburon	_	94920-1036
Vista Del Lago	Cathy	Stevenson		cathystevnsn@aol.com	http://www.vistadellagosantarosa.com/	707-527-8397		3150 Lakeview Drive		Santa Rosa	CA	95405
Whiskey Springs Homeowners Association	Julia	Laue	President	No Answer, No Voicemail Available		(415) 332-3412		136 Cypress Place		Sausalito	CA	94965-1540

#### Golden Gate Bridge Transportatin Management Plan Contact List Car-Truck Dealers

	1	1					Alternative		Address			
Affiliation	First name	Last name	Title	Email	Website	Phone	Phone	Address Line 1	Line 2	City	St	Zip
Marin												
Toyota Scion Marin	Mike	Christian	General Manager	sales@infinitimarin.com	www.toyotamarin.com	1-877-337-2124		445 Francisco Blvd East		San Rafael	CA	94901
Infiniti Marin	Mike	Christian	General Manager	sales@infinitimarin.com	www.infinitimarin.com	1-888-365-9147		475 San Francisco Blvd		San Rafael	CA	94901
Lexus of Marin	Bill	Lamphere	General Manager	bill.lamphere@lexusofmarin.com	www.lexusmarin.com	1-888-574-7643		513 Francisco Blvd East		San Rafael	CA	94901
RAB Motors	Frank	Sheets	General Manager	info@rabmotors.com	www.rabmotors.com	1-888-348-1126		540 Francisco Blvd West		San Rafael	CA	94901
Marin Mazda-Subaru	Ed	Rossi	Dealer-Owner	erossi@marinmazdasubaru.com	www.marinmazdasubaru	415-755-2141		595 Francisco Blvd East		San Rafael	CA	94901
Sonnen Audi/VW	Amir	Bakhtiari	General Manager	amir.bakhtiari@sonnen.com	www.sonnen.com	1-877-450-0202		740 Francisco Blvd West		San Rafael	CA	94901
San Rafael Mitsubishi	Snorre	Grunnan	CEO	Snorre@sanrafaelmitsubishi.com	www.sonnen.com			807 Francisco Blvd East		San Rafael	CA	94901
Sonnen BMW	Andy	Costello	General Manager	andy@sonnenbmw.com	www.sonnenbmw.com	1-877-207-6722	415-482-2000	1599 Francisco Blvd East		San Rafael	CA	94901
Marin Honda	Dave	Bachman	General Manager	marinhonda@penskeautomotive.com	www.marinhonda.com	1-888-862-1606		2 Shoreline Parkway		San Rafael	CA	94901
Novato Toyota Scion	Randy	Lakritz	General Manager	randtoy@aol.com	www.novatotoyota.com	1-877-203-7713		115 Vintage Way		Novato	CA	94945
Jaguar Marin and Land Rover Marin	Fred	Cziska	General Manager	cziska@marinluxurycars.com	www.jaguarmarin.com	1-800-749-4434		195 Casa Buena Drive		Corte Madera	CA	94925
Marin Acura	Debi	Stevens-Byrnes	General Manager	dstevens-byrnes@marinacura.com	www.marinacura.com	1-877-381-7016		5860 Paradise Drive		Corte Madera	CA	94925
Sonnen Porsche	Eddie	Rahimi	General Manager	eddie.rahimi@sonnenporsche.com	www.sonnenporsche	1-800-781-1730		5860 Paradise Drive		Corte Madera	CA	94925
Ferrari Maserati of San Francisco	Greg	Minor	General Manager	gminor@ferrarisf.com	www.ferrarisanfrancisco.com			595 Redwood Highway	Frontage Rd	Mill Valley	CA	94941
Spyker Dawydiak of Marin				jtanner67@hotmail.com	www.carsauto.com	415-924-3800		5830 Paradise Drive		Corte Madera	CA	94925
Journey Ford Lincoln	Ali	Omoomy	General Manager	ali@iournevford.com	http://iournevford.com/	1-877-317-3290		6995 Redwood Blvd		Novato	CA	94945
Sonoma		,	Ŭ									
Manly Honda Santa Rosa	Brian	Manly	CEO	bmanly@manlyauto.com	http://www.manlvhonda.com	707-542-5377		2750 Corby Avenue		Santa Rosa	CA	95407
ZAP Jonway	Wang "Alex"	Gang	CEO	investor@zapworld.com	www.zapworld.com	707-525-8658		501 4th Street		Santa Rosa	CA	95401
Freeman Toyota Santa Rosa	Steve	Freeman	CEO	sfreeman@freemanmotors.com	http://freeman-toyota.com	1-800-225-3055		2875 Corby Avenue		Santa Rosa	CA	95407
Nissan of Santa Rosa	Jim	Boine	General Manager	bonesr@nsn.com	http://www.nissansr.com	1-800-559-8062		1275 Santa Rosa Avenue		Santa Rosa	CA	95404
McConnell Chevrolet Chrysler Dodge Jeep	Christopher	McConnell	General Manager	mcconnelljeep@aol.com	http://www.mcconnellchevrolet.com	707-433-3384		1395 Healdsburg Avenue		Healdsburg	CA	95448
Petaluma Northbay Nissan	Greg	Dexter	General Manager	gdexter@northbavnissan.com	http://www.northbavnissan.com	1-877-818-6866		1250 Auto Center Drive		Petaluma	CA	94952
Hansel Ford Lincoln	Justin	Hansel	General Manager	jhansel@henrycurtisford.com	http://www.henrycurtisford.com	1-888-637-9578		1120 Auto Center Drive		Petaluma	CA	94952
Hansel Prestige Imports				info@hanselauto.com	http://www.hanselauto.com	1-866-698-8486		2800 Corby Avenue		Santa Rosa	CA	94952
Hansel Honda	Ryan	Seaman	General Manager	rseaman@hanselauto.com	http://www.hanselhonda.com	1-877-398-1909		1310 Auto Center Drive		Petaluma	CA	94952
Lithia Chrysler Jeep Dodge Ram of Santa Rosa	Jeffrey	Paz	General Manager	info@lithiadodgesantarosa.com	http://www.lithiadodgesantarosa.com	1-888-767-6005		2727 Dowd Drive		Santa Rosa	CA	95407
Manly Hyundai Mitsubishi	Robert	Trompeter	General Manager	rtrompeter@manlyauto.com	http://www.manlyhyundai.com	1-888-861-8673		2755 Corby Avenue		Santa Rosa	CA	95407
				rtrompotor ginantjäätörööni	http://wcsandersonford.			,				
WC Sanderson Ford	Trevor	Sanderson	General Manager		dealerconnection.com	707-433-3318		453 Healdsburg Avenue		Healdsburg	CA	95448
Napa												
Zumwalt Ford	Ron	Clark	General Manager	ron@zumwaltford.com	http://zumwaltford.dealerconnection.com	1-888-857-7852		21 South Main Street		Sant Helena	CA	94574
Napa Ford Lincoln	Kevin	Massie	General Manager	kmassie@napaford.com	http://www.napaford.com	707-255-2580		300 Soscol Avenue		Napa	CA	94559
Hanlees Napa Volkswagon	Jim	Totah	General Manager		http://www.hanleesnapavolkswagen.com	1-800-559-8104		495 Soscol Avenue		Napa	CA	94559
Jimmy Vasser Toyota	Jacki	Haven	CFO/Assistant GM	jacki@jvasser.com	http://www.jimmyvassertoyota.com	1-888-745-7679		466 Soscol Avenue		Napa	CA	94559
Napa Nissan	Vince	Compango	General Manager	vince@napanissan.com	http://www.napanissan.com	1-800-647-7260		510 Soscol Avenue		Napa	CA	94559
Napa Chrysler Jeep Dodge Ram Volvo Kia	Patrick	Smorra	General Manager	patrick@napaautodealer.com	http://www.napachryslerjeepdodge.com	1-866-297-7060		333 Soscol Avenue		Napa	CA	94559
Kastner Honda	William	Kastner	General Manager	william@kastnerhonda.com	http://www.kastnerhonda.com	707-252-4011		282 Soscol Avenue		Napa	CA	94559
San Francisco												
Ellis Brooks	Genice	Noland	Business Manager		http://www.ellisbrooks.com/	415-776-2400		1565 Bush Street		San Francisco	CA	
San Francisco Honda	AJ	Patterson	General Manager	ajpatterson@sfhonda.com	http://www.sfhonda.com/	415-441-2000		10 South Van Ness Ave		San Francisco	CA	
San Francisco Toyota & Scion	David	Donnellan	Vice-President and	DougD@sftoyota.com	http://www.sftoyota.com/default.aspx	415-592-0889		4099 Geary Boulevard		San Francisco	<b>C</b> A	
San Francisco Toyota & Scion	Doug	Donnettan	General Manager	DougD@sitoyota.com	http://www.sitoyota.com/default.aspx	415-592-0889		4099 Geary Boulevard		San Francisco	CA	
BMW of San Francisco	Patrick	Day	Service Manager	pday@bmwsf.com	http://www.bmwsf.com/	415-863-9000		1675 Howard Street		San Francisco	CA	
Mercedes-Benz of San Francisco	Mike	Twelvetrees	Sales Director	mike.twelvetrees@sfbenz.com	http://www.sfbenz.com/index.htm	415-673-2000		500 8th Street		San Francisco	CA	
Royal Automotive Group	Andy	Hansen	Chief Operating Officer	andyhansen@sbcglobal.net	http://www.gotoroyalsf.com/index.htm	415-241-8100		1525 Howard Street		San Francisco	CA	
Golden Gate Jeep				info@goldengatejeep.com	http://www.goldengatejeep.com	415-567-6500		1101 Sutter Street		San Francisco	CA	94109
Nissan Infiniti San Francisco	Keith	Rey	General Manager	krey@penskeautomotive	http://www.nissaninfinitisf.com	415-500-8000		1395 Van Ness Avenue		San Francisco	CA	94109
British Motor Car Distributors	Vincent	Golde	General Manager	vgolde@bmcd.com	http://bmcd.com/	415-776-7700		901 Van Ness Ave		San Francisco	CA	94109
San Francisco Hyundai					http://www.hyundai-hyundai.com/	415-525-8180		475 S. Van Ness Avenue		San Francisco	CA	94103
Smart Center San Francisco	Michael	Newcomb	Brand Specialist	michael@sfsmartcar.com	http://www.sfsmartcar.com	415-447-9183		500 8th Street		San Francisco	CA	94103

Chambers of Commerce

	1					1	Atternative		Address	1	T	
Affiliation	First name	Last name	Title	Email	Website	Phone	Phone	Address Line 1	Line 2	City	St	Zip
Visitor and Convention Bureau												
Napa Valley Conference and Visitors Bureau				info@napavalley.org	www.napavalley.com/	(707) 226-5813	x106	1310 Napa Town Center		Napa	CA	94559
Oakland Convention & Visitors Bureau	Manette	Belliveau	Executive Director	Manette@oaklandcvb.com	VISITORSINTO/CVD_COTC/NVCVD/	(510) 208-0526		463 11th Street		Oakland	CA	94607
San Francisco Travel	Angela	Jackson	Director of Public Relations	ajackson@sanfrancisco.travel		(415) 227-2603		900 Market Street		San Francisco	-	94102
San Jose Convention and Visitors Bureau	Michael	Mulhern	Visitor Services Manager	mmulhern@saniose.org		(408)792-4170		408 Almaden Blvd.		San Jose	-	95110
San Francisco Travel	Matt	Stiker	EVP & Chief Marketing Officer	mstiker@sanfrancisco.travel	415-227-2680	(400)/ 32 41/0		400 Atmaden Bird.		Gan Bose		50110
NapaValley.com	matt	Otikei	Evi a oniel Marketing officer	Editor@WineCountry.com	410 227 2000						+	
Napa Valley Tourist Bureau				nvtb@i-cafe.net	707-944-1558			Washington Street		Yountville	CA	
Sonoma County Tourism Bureau	Tim	Zahner	Director, Public Relations	publicrelations@sonomacounty.com	707-522-5810			420 Aviation Boulevard	Suite 106	Santa Rosa	-	95403
Sonoma County Tourism Bureau		Zanner	Director, rublic Relations		707-522-5800	1		3637 Westwind Boulevard	Suite 100	Santa Rosa	-	95403
Sonoma Valley Visitors Bureau				info@sonomacounty.com info@sonomavalley.com	707-996-1090	-	-	5057 Westwind Boulevard		Salita Rusa	CA	90403
Healdsburg Tourism Bureau	-			info@healdsburg.com	707-990-1090			-			+	i
Santa Rosa Tourism Bureau											+	
				bradc@visitsantarosa.com		050 00/ 5007					+	<b> </b>
Go-California						650-324-5637					┶┷┙	L
Chamber Of Commerce - California All	1	1				I			r	I		
Arcata Chamber of Commerce	Sandy	Scott	Executive Director	execdir@arcatachamber.com	www.arcatachamber.com	707-822-3619		1635 Heindon Road		Arcata	_	95521-4573
Arroyo Grande Valley Chamber of Commerce	Judith	Bean	President/CE0	judith@agchamber.com	www.agchamber.com	805-489-1488		800 W. Branch Street	Apt. A	Arroyo Grande		93420-1901
Auburn Chamber of Commerce	Bruce	Cosgrove	CEO	bruce@auburnchamber.net	www.auburnchamber.net	530-885-5616		601 Lincoln Way		Auburn		95603-4803
Belmont Chamber of Commerce	Lenore	Griffin	Executive Director	execdirector@belmontchamber.org	www.belmontchamber.org	650-595-8696		1059A Alameda de las Pulgas		Belmont		94002-3507
Benecia Chamber of Commerce	Stephanie	Christiansen	President/CE0	slc4benicia@aol.com	www.beniciachamber.com	707-745-2120		601 1st Street	Suite 100	Benecia		94510-3277
Berkeley Chamber of Commerce	Polly	Armstrong	CEO	pollyarmstrong@berkeleychamber.com	www.berkeleychamber.com	510-549-7000		1834 University Ave.		Berkeley	CA	94703-1516
Brawley Chamber of Commerce	Kathryn	Figari	Executive Director	katie@brawleychamber.com	www.brawleychamber.com	760-344-3160		PO Box 218		Brawley	CA	92227-0218
Brea Chamber of Commerce	Sharon	Wagner	CEO	Sharon@breachamber.com	www.breachamber.com	714-529-4938		1 Civic Center Circle		Brea	CA	92821-5792
Brisbane Chamber of Commerce	Mitchell	Bull	President/CE0	mitch.bull@brisbanechamber.com	www.brisbanechamber.com	415-467-7283		50 Park Place		Brisbane	CA	94005-1310
Burlingame Chamber of Commerce	Georgette	Naylor	President/CE0	gnaylor@burlingamechamber.org	www.burlingamechamber.org/	650-344-1735		417 California Drive		Burlingame	CA	94010-4008
Calabasas Chamber of Commerce	Bridget	Karl	President/CE0	bkarl@calabasaschamber.com	www.calabasaschamber.com	818-222-5680		23564 Calabasas Road	Suite 101	Calabasas	CA	91302-1336
Campbell Chamber of Commerce	Neil	Collins	Executive Director	neil@campbellchamber.net	www.campbellchamber.net	408-378-6252		1628 W. Campbell Avenue		Campbell	CA	95008-1535
Carlsbad Chamber of Commerece	Ted	Owen	President/CE0	towen@carlsbad.org	www.carlsbad.org	760-931-8400		5934 Priestly Drive		Carlsbad	CA	92008-8812
Carpinteria Valley Chamber of Commerce	Lynda	Lang	President/CE0	lvnda@carpinteriachamber.org	www.carpinteriachamber.org	805-684-5479		PO Box 956		Carpinteria	CA	93014-0956
Carson Chamber of Commerce	John	Wogan	Executive Director	wogan@carsonchamber.com	www.carsonchamber.com	310-217-4590		230 E Del Amo Boulevard		Carson		90746-3312
Chico Chamber of Commerce	Katie	Simmons	President/CE0	katie@chicochamber.com	www.chicochamber.com	530-891-5556		PO Box 3300		Chico	_	95927-3300
Chinese Chamber of Commerce	Walter	Wong		ccc-sf1852@yahoo.com		982-3000	982-4720	730 Sacramento Street		San Francisco	_	94108
				chamberofcommerce@	www.ci.chowchilla.ca.us/		002 1720					
Chowchilla District Chamber of Commerce	Jacki	Flanagan	Chamber Manager	ci.chowchilla.ca.us	chamber/chamber_main.htm	559-665-5603		PO Box 638		Chowchilla	CA	93610-0638
Clovis Chamber of Commerce	Mark	Blackney	President/CE0	marck@clovischamber.com	www.clovischamber.com	559-299-7363		325 Pollasky Avenue		Clovis	CA	93612-1139
Commerce Industrial Council	Eddie	Tafoya	Executive Director	Eddie@IndustrialCouncil.org	www.industrialcouncil.org	323-728-7222		PO Box 911039		Commerce	CA	90091-1039
Corona Valley (Gtr.) Chamber of Commerce	Robert	Spiegel	President/CE0	bobby@mychamber.org	www.mychamber.org	951-737-3350		904 E 6th Street		Corona	CA	92879-1612
Corte Madera Chamber of Commerce	Julie	Kritzberger	Executive Director	chamber@cortemadera.org	www.cortemadera.org	415-924-0441		129 Corte Madera Town Ctr		Corte Madera	CA	94925-1209
Costa Mesa Chamber of Commerce	Edgar	Fawcett	President/CE0	efawcett@costamesachamber.com	www.costamesachamber.com	714-885-9090		1700 Adams Avenue	Suite 101	Costa Mesa	CA	92626-4865
Culver City of Chamber of Commerce	Steven	Rose	President/CE0	ssssteve@culvercitvchamber.com	www.culvercitchamber.com	310-287-3855		6000 Sepulveda Boulevard	Suite 1260	Culver City	CA	90230-6425
Cupertino Chamber of Commerce	Alice	Jacob	Manager	alice@cupertino-chamber.org	www.cupertino-chamber.org	408-252-7054		20455 Silverado Avenue		Cupertino		95014-4439
					www.dalycity-colma			1				
Daly City-Colma Chamber of Commerce	Georgette	Sarles	President/CE0	gsarles@dalycity-colmachamber.org	chamber.org/	650-755-3900		355 Gellert Boulevard	Suite 138	Daly City	CA	94015-2619
Duarte Chamber of Commerce	Jim	Kirchner	President/CE0	Jim@DuarteChamber.com	www.duartechamber.com	626-357-3333		PO Box 1438		Duarte	CA	91009-4438
El Centro Chamber of Commerce	Darletta	Willis	CEO	darletta@elcentrochamber.com	www.elcentrochamber.com	760-352-3681		PO Box 3006		El Centro	CA	92244-3006
El Dorado County Chamber of Commerce	Laurel	Brent-Bumb	CEO	chamber@eldoradocounty.org	www.eldoradocounty.org	530-621-5885		542 Main Street		Placerville	CA	95667-5651
El Dorado Hills Chamber of Commerce	Debbie	Manning	President/CE0	debbie@eldoradohillschamber.org	www.eldoradohillschamber.org	916-933-1335		2085 Vine Street	Suite 105	El Dorado Hills	CA	95762-7123
El Monte/South El Monte Chamber of Commerce	Ken	Rausch	Executive Director	ken@emsem.biz	www.emsem.biz	626-443-0180		PO Box 5866		El Monte	CA	91734-1866
Emeryville Chamber of Commerce	Bob	Canter	President/CE0	bob@emeryvillechamber.com	www.emeryvillechamber.com	510-652-5223		3980 Harlan Street	1	Emeryville		94608-3771
Encino Chamber of Commerce	Diana	Donovan	CEO	diana@encinochamber.org	www.encinochamber.org	818-789-4711		4933 Balboa Boulevard		Encino	_	91316-3437
Escondido Chamber of Commerce	Katherine	Zimmer	CEO	katherine@escondidochamber.org	www.escondidochamber.org	760-745-2125		720 N Broadway	t	Escondido		92025-1870
Exeter Chamber of Commerce	Sandy	Blankenship	Executive Director	sandy@exeterchamber.com	www.exeterchamber.com	559-592-2919		101 W Pine Street		Exeter	_	93221-1612
Fairfax Chamber of Commerce	Wendy	Baker	Director	wendy.fairfaxchamber@gmail.com	www.fairfaxcoc.com/	415-459-6232		PO Box 1111		Fairfax	_	94930
Fairfield-Suisun Chamber of Commerce	Leslie	Fay	President/CE0	leslie@ffsc-chamber.com	www.ffsc-chamber.com	707-425-4625		1111 Webster Street	<u> </u>	Fairfield	-	94930 94533-4841
	Michael	-	FIGSIGEIIL/GEU		www.msc-champer.com		207 0205				-	
Filipino American Chamber of Commerce		Acabado	CEO	info@acabado.com	www.diacovorthorodwooda.com	387-8250	387-8295	P.O. 29367		San Francisco		94127 95540-0797
Fortuna Chamber of Commerce	Erin	Dunn	CEO	chamber@sunnyfortuna.com	www.discovertheredwoods.com	707-725-3959		PO Box 797	Outre F	Fortuna		
Foster City Chamber of Commerce	Joanne	Bohigian	President/CE0	info@fostercitychamber.com	www.fostercitychamber.com	650-573-7600	L	1031 E. Hillsdale Blvd	Suite F	Foster City	CA	94404
Fountain Valley Chamber of Commerce	Beverly	White	Executive Director	bwhite@fvchamber.com	www.fvchamber.com	714-962-3822		10055 Slater Avenue	Suite 250	Fountain Valley		92708-4722
Fremont Chamber of Commerce	Cindy	Bonior	President/CE0	cbonior@fremontbusiness.com	www.fremontbusiness.com	510-795-2244		39488 Stevenson Place	Suite 100	Fremont	CA	94539-3085

#### Golden Gate Bridge Transportatin Management Plan Contact List Chambers of Commerce

Г	1	1			T	Alternative		Address		<u>т</u>	
Affiliation	First name	Last name	Title	Email	Website	Phone Phone	Address Line 1	Line 2	City	St	Zip
Fresno Area Chamber of Commerce	Al	Smith	President/CE0	alsmith@fresnochamber.com	www.fresnochamber.com	559-495-4800	2331 Fresno Street		Fresno	CA	93721-1801
Fullerton Chamber of Commerce	Theresa	Harvey	Executive Director	tharvey@fullertonchamber.com	www.fullertonchamber.com	714-871-3100	PO Box 529		Fullerton	CA	92836-0529
Garden Grove Chamber of Commerce	Jeremy	Harris	President/CE0	jeremy@gardengrovechamber.com	www.gardengrovechamber.org	714-638-7950	12866 Main Street	Suite 102	Garden Grove	CA	92840-5198
Gilroy Chamber of Commerce	Susan	Valenta	President/CE0	svalenta@gilroy.org	www.gilroy.org	408-842-6437	7471 Monterey Street		Gilroy	CA	95020-5823
Glendale Chamber of Commerce	Judith	Kendall	Executive Vice President/CE0	ikendall@glendalechamber.com	www.glendalechamber.com	818-240-7870	701 N. Brand Boulevard		Glendale	CA	91203-1295
Goleta Valley Chamber of Commerce	Kristen	Miller	President/CE0	kristen@goletavalley.com	www.goletavalley.com	805-967-2500	PO Box 781		Goleta	CA	93116-0781
Grass Valley/Nevada County Chamber of Commerce	Mary Ann	Mueller	President/CE0	maryannmueller@msn.com	www.grassvalleychamber.com	530-273-1479	P0 Box 1107		Grass Valley	CA	95945-1107
Greater Bakersfield Chamber of Commerce	Cynthia	Pollard	President/CE0	cpollard@bakersfieldchamber.org	www.bakersfieldchamber.org/	661-327-4421	P0 Box 1947		Bakersfield	_	93303-1947
Greater Concord Chamber of Commerce	Marilyn	Fowler	Chief Operations Officer	mfowler@concordchamber.com	www.concordchamber.com	925-685-1181	2280 Diamond Boulevard	Suite 200	Concord	CA	94520-5745
Greater Conejo Valley Chamber of Commerce	Jill	Lederer	President/CE0	ilederer@conejochamber.org	www.coneiochamber.org	805-370-0035	600 Hampshire Road	Suite 200	Westlake Village	CA	
Greater Riverside Chambers of Commerce	Cindy	Roth	President/CEO	croth@riverside-chamber.com	www.riverside-chamber.com	951-683-7100	3985 University Avenue		Riverside	_	
Greater Stockton Chamber of Commerce	Douglass	Wilhoit	Chief Executive Officer	doug@stocktonchamber.org	www.stocktonchamber.org	209-547-2770	445 W. Weber Avenue	#220	Stockton	_	
Greater Tehachapi Chamber of Commerce	Ida	Perkins	President	idaperkins@tehachapi.com	www.tehachapi.com	661-822-4180	PO Box 401		Tehachapi	_	
Hayward Chamber of Commerce	Kim	Huggett	President/CE0	kimh@hayward.org	www.hayward.org	510-537-2424	22561 Main Street		Hayward	CA	94541-4101
Hispanic Chamber of Commerce of Alameda County	Jose	Duenas	Chief Executive Officer	jduenas@hccac.net	www.hccac.net	510-536-4477	1840 Embarcadero	Suite 128	Oakland	CA	94606-5220
Hispanic Chamber of Commerce of Marine	Cecilia	Zamora	Board President	info@hccmarin.com	www.hccmarin.com	415-721-9686	P.O. Box 4423	Suite 120	San Rafael	_	
Hispanic Chamber of Commerce of San Francisco	Richard	Ventura	Board Fresident	sfhcc@aol.com		413-721-9080	F.0. B0x 4423		Sali Raidel	CA	94913-4423
	-		Dural dark (050		http://www.sfhcc.com/	000 (00 0011	7040 11-11		I to the survey of	-	
Hollywood Chamber of Commerce	Leron John	Gubler	President/CE0	leron@hollywoodchamber.net iohn@lakewoodchamber.com	www.hollywoodchamber.net	323-469-8311 562-531-9733	7018 Hollywood Boulevard		Hollywood	_	90028-6000 90712-2418
Lakewood Chamber of Commerce		Kelsall	President/CE0				24 Lakewood Center Mall		Lakewood	-	
Larkspur Chamber of Commerce	Donna	Craft	Executive Director	lcc07@comcast.net	www.larkspurchamber.org	415-686-2062	P.O. Box 998	#010	Larkspur	_	94977-0998
LAX Coastal Area Chamber of Commerce	Christina	Davis	President/CE0	christina@laxcoastal.com	www.laxcoastal.com	310-645-5151	9100 S. Sepulveda Boulevard	#210	Westchester	CA	90045-4850
Livermore Chamber of Commerce	Nichole	Christoffersen	Director of Membership & Communication	NicholeC@livermorechamber.org	www.livermorechamber.org	925-447-1606	2157 1st Street		Livermore	CA	94550-4543
Lodi Chamber of Commerce	Pat	Patrick	Chief Executive Officer	ppatrick@lodichamber.com	www.lodichamber.com	209-367-7840	35 S School Street		Lodi	CA	95240-2114
Lompoc Valley Chamber of Commerce & Visitors Bureau	Ken	Ostini	President/CE0	<u>chamber@lompoc.com</u>	www.lompoc.com	805-736-4567	PO Box 626		Lompoc	CA	93438-0626
Los Altos Chamber of Commerce	Julie	Rose	President	julie@losaltoschamber.org	www.losaltoschamber.org	650-948-1455	321 University Avenue		Los Altos	CA	94022-3517
Los Banos Chamber of Commerce	John	Whala	Executive Director	ibcofc@pacbell.net	www.losbanos.com	209-826-2495	503 J Street		Los Banos	CA	93635-4212
Los Gatos Chamber of Commerce	Ronee	Nassi	Executive Director	chamber@losgatoschamber.com	www.losgatoschamber.com	408-354-9300	10 Station Way		Los Gatos	_	
Madera District Chamber of Commerce	Debi	Bray	President/CE0	dbray@maderachamber.com	www.maderachamber.com	559-673-3563	120 N E Street		Madera	CA	93638-3215
Malibu Chamber of Commerce	Mark	Persson	Interim President/CE0	mark.persson@malibu.org	www.malibu.org	310-456-9025	23805 Stuart Ranch Road	Suite 105	Malibu	CA	90265-4897
Martinez Chamber of Commerce	John	Stevens	CEO	John@martinezchamber.com	www.martinezchamber.com	925-228-2345	603 Marina Vista Road		Martinez	_	
Mill Valley Chamber of Commerce	Daniel	Escalzo	Executive Director	daniel@millvalley.org	www.millvalley.org	415-388-9700	85 Throckmorton Avenue		Mill Valley		
Millbrae Chamber of Commerce	Ed	Banayat	President/CE0	ed@millbrae.com	www.millbrae.com	650-697-7324	50 Victoria Avenue	Suite 103	Millbrae	CA	94030-2623
Modesto Chamber of Commerce	Cecil	Russell	CEO	crussell@modchamber.org	www.modchamber.org	209-577-5757	1114 J Street		Modesto	_	
Monrovia Chamber of Commerce	Karin	Crehan	Executive Director	kc@monroviacc.com	www.monroviacc.com	626-358-1159	620 S Myrtle Avenue		Monrovia		91016-3406
Montclair Chamber of Commerce	Darleen	Curley	President/CE0	exec@montclairchamber.com	www.montclairchamber.com	909-624-4569	5220 Benito Street		Montclair	_	
Montebello Chamber of Commerce &	Danteen	Curtey	r resident/CEO						Montelan		
Resource Center	Andrea	Wagg	President/CE0	andrea@montebellochamber.org	www.montebellochamber.org	323-721-1153	109 N 19th Street		Montebello	CA	90640-4022
Morgan Hill Chamber of Commerce	Christine	Giusiana	President/CE0	chiusiana@morganhill.org	www.morganhill.org	408-779-9444	PO Box 786		Morgan Hill	-	
Mountain View Chamber of Commerce	Oscar	Garcia	President/CE0	ogarcia@chambermv.org	www.mountainviewchamber.org	650-968-8378	580 Castro Street		Mountainview	_	
Napa Chamber of Commerce	Chris	Messina	President/CE0	chris@napachamber.com	www.napachamber.com	707-254-1146	PO Box 636		Napa		
National City Chamber of Commerce	Jacqueline	Reynoso	President/CE0	reynoso@nationalcitychamber.org	www.nationalcitychamber.org	619-477-9339	901 National City Boulevard		National City	CA	
Newport Beach Chamber of Commerce	Richard	Luehrs	President/CE0	rluehrs@newportbeach.com	www.newportbeach.com	949-729-4400	1470 Jamboree Road		Newport Beach	CA	92660-6203
Norwalk Chamber of Commerce	Vivian	Hansen	Executive Director	ceo@norwalkchamber.com	www.norwalkchamber.com	562-864-7785	12040 Foster Road		Norwalk	CA	90650-4218
Novato Chamber of Commerce	Соу	Smith	CEO	Coy@NovatoChamber.com	www.novatochamber.com	415-897-1164 415.898.9097	807 De Long Avenue		Novato	CA	94945
Oakdale Chamber of Commerce	Mary	Guardiola	CEO	ceo@oakdalechamber.com	www.oakdalechamber.com	209-847-2244	590 N Yosemite Avenue		Oakdale	CA	95361-2777
Oakland Metropolitan Chamber of Commerce	Joe	Haraburda	President/CE0	iharaburda@oaklandchamber.com	www.oaklandchamber.com	510-874-4800	475 14th Street		Oakland	CA	94612-1928
Oceanside Chamber of Commerce	David	Nydegger	President/CE0	david@oceansidechamber.com	www.oceansidechamber.com	760-722-1534	928 N Coast Highway		Oceanside	CA	92054-2136
Orange Chamber of Commerce	Heidi	Larkin-Reed	President/CE0	hlarkin-reed@orangechamber.com	www.orangechamber.com	714-538-3581	307 E Chapman Avenue		Orange	CA	92866-1507
Oxnard Chamber of Commerce	Nancy	Lindholm	President & CEO	n.lindholm@oxnardchamber.org	www.oxnardchamber.org	805-983-6118	400 E Esplanade Drive	Suite 302	Oxnard	CA	93036-2140
Pacifica Chamber of Commerce	Courtney	Conlon	CEO	<u>courtney@pacificachamber.com</u>	www.pacificachamber.com	650-355-4122	225 Rockaway Beach	Suite 1	Pacifica	CA	94044
Palm Desert Area Chamber of Commerce	Barbara	de Boom	President & CEO	barbara@pdacc.org	www.palmdesert.org	760-346-6111	72559 Highway 111		Palm Desert	-	92260-3306
Palmdale Chamber of Commerce	Jeff	McElfresh	Chief Executive Officer	imcelfresh@palmdalechamber.org	www.palmdalechamber.org	661-273-3232	817 E Avenue Q9	1	Palmdale	_	
Palo Alto Chamber of Commerce	David	MacKenzie	Interim President/CE0	david@paloaltochamber.com	www.paloaltochamber.com	650-324-3121	400 Mitchell Lane	1	Palo Alto	_	
Paso Robles Chamber of Commerce	Michael	Gibson	President/CE0	mgibson@pasorobleschamber.com	www.pasorobleschamber.com	805-238-0506	1225 Park Street		Paso Robles		
Petaluma Area Chamber of Commerce	Onita	Pellegrini	Chief Executive Officer	onitap@petalumachamber.com	www.petalumachamber.com	707-762-2785	6 Petaluma Boulevard N	#A-2	Petaluma	CA	94952-3050
Pittsburg Chamber of Commerce	Harry	York	CFO	chamber@pittsburgchamber.org	www.pittsburgchamber.org	925-432-7301	985 Railroad Avenue		Pittsburg	CA	94565
r ittaburg onditiber of commerce	-		020						0	-	
Bloosanton Chamber of Commerce	Coott										
Pleasanton Chamber of Commerce Pomona Chamber of Commerce	Scott Frank	Raty Garcia	President & CEO Executive Director	scott@pleasanton.org garcianet@yahoo.com	www.pleasanton.org www.pomonachamber.org	925-846-5858 909-622-1256	777 Peters Avenue PO Box 1457		Pleasanton Pomona	-	94566-6500

#### Golden Gate Bridge Transportatin Management Plan Contact List Chambers of Commerce

						Atternative		Address		1	1 1
Affiliation	First name	Last name	Title	Email	Website	Phone Phone	Address Line 1	Line 2	City	St	Zip
Porterville Chamber of Commerce	Donnette	Silva	President/CE0	donnette@portervillechamber.org	www.portervillechamber.org	559-784-7502	93 N Main Street	Suite A	Porterville	CA	93257-3717
Poway Chamber of Commerce	A. Dolores	Canizales	President & CEO	chamber@poway.com	www.poway.com	858-748-0016	13381 Poway Road		Poway	CA	92064-4625
Rancho Cordova Chamber of Commerce	Diann	Rogers	Interim President/CEO	dhrogers@ranchocordova.org	www.ranchocordova.org	916-273-5706	2729 Prospect Park Drive	Suite 117	Rancho Cordova	CA	95670-6291
Rancho Mirage Chamber of Commerce	Stuart	Ackley	President & CEO	stuart@ranchomirage.org	www.ranchomirage.org	760-568-9351	42520 Bob Hope Drive	#B	Rancho Mirage	CA	92270-4471
Red Bluff-Tehama County Chamber of Commerce	Dave	Gowan	CEO	dave@redbluffchamber.com	www.redbluffchamber.com	530-527-6220	PO Box 850		Red Bluff	CA	96080-0850
Redding Chamber of Commerce	Frank	Strazzarino	President	frank@reddingchamber.com	www.reddingchamber.com	530-225-4433	747 Auditorium Drive		Redding	CA	
Redwood City/San Mateo County	1	Development	Development & OFO		and the second strength and the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second strength of the second streng	050 00/ 1700		0.11.405	Bud and Other	CA	0/000 0040
Chamber of Commerce	Laurence	Buckmaster	President & CEO	larry@redwoodcitychamber.com	www.redwoodcitychamber.com	650-364-1722	1450 Veterans Blvd	Suite 125	Redwood City	CA	94063-2618
Richmond Chamber of Commerce	Judith	Morgan	President & CEO	judy@rcoc.com	www.rcoc.com	510 234-3512	3925 Macdonald Avenue		Richmond	CA	94805
Sacramento Metro Chamber of Commerce	Roger	Niello	President/CE0	rniello@metrochamber.org	www.metrochamber.org	916-552-6800	1 Capitol Mall	Suite 300	Sacramento	CA	95814-3296
Salinas Valley Chamber of Commerce	Paul	Farmer	President/CE0	president@salinaschamber.com	www.salinaschamber.com	831-585-1282	PO Box 1170		Salinas	CA	93902-1170
San Anselmo Chamber of Commerce	Connie	Rodgers	President/CE0	info@sananselmochamber.org	www.sananselmochamber.org	415-454-2510	P.O. Box 2844		San Anselmo	CA	94979-2844
San Benito County Chamber of Commerce	Debbie	Taylor	President & CEO	debbie@sanbenitocountychamber.com	www.sanbenito	831-637-5315	243 6th Street		Hollister	СА	95023-3970
-		-		-	countychamber.com						
San Bruno Chamber of Commerce	Jamie	Monozon	CEO	office@sanbrunochamber.com	www.sanbrunochamber.com	650-588-0180	618 San Mateo Avenue		San Bruno	CA	
San Carlos Chamber of Commerce	Dave	Bouchard	CEO	dbouchard@sancarloschamber.org	www.sancarloschamber.org	650-593-1068	1500 Laurel Street	Suite B	San Carlos	_	
San Diego East County Chamber of Commerce	Scott	Alevy	President & CEO	CEO@eastcountychamber.org	www.eastcountychamber.org	619-440-6161	201 S. Magnolia Avenue		El Cajon	CA	
San Diego North Chamber of Commerce	Debra	Rosen	President & CEO	drosen@sdncc.com	www.sdncc.com	858-487-1767	10875 Rancho Bernardo Rd	Suite 104	San Diego	CA	92127-2115
San Fernando Valley (Gtr.) Chamber of Commerce	Nancy	Hoffman Vanyek	Chief Executive Officer	nancy@sanfernandovalleychamber.com	www.sanfernandovalley	818-989-0300	7120 Hayvenhurst Avenue	Suite 114	Van Nuys	CA	91406-3813
-					chamber.com		-		-		
San Francisco Black Chamber of Commerce				admin@sfaacc.com	http://www.sfaacc.org/	415-749-6400	1006 Webster Street		San Francisco	CA	
San Francisco Chamber of Commerce	Steve	Falk	President & CEO	sfalk@sfchamber.com	www.sfchamber.com	415-392-4520 415-352-8816	235 Montgomery Street	12th Floor	San Francisco	CA	
San Jose Silicon Valley Chamber of Commerce	Matthew	Mahood	President & CEO	hals@sjchamber.com	www.sjchamber.com	408-291-5250	101 West Santa Clara St		San Jose	CA	
San Leandro Chamber of Commerce	Dave	Johnson	CEO	CEO@sanleandrochamber.com	www.sanleandrochamber.com	510-351-1481	15555 E 14th Street	Suite 100	San Leandro	CA	
San Luis Obispo Chamber of Commerce	Ermina	Karim	President/CE0	ermina@slochamber.org	www.slochamber.org	805-781-2777	1039 Chorro Street		San Luis Obispo	CA	
San Mateo Area Chamber of Commerce	Linda	Asbury	President & CEO	linda@sanmateochamber.org	www.sanmateochamber.org	650-401-2440	1700 S El Camino Real	Suite 108	San Mateo		
San Rafael Chamber of Commerce	Rick	Wells	President/CE0	rwells@srchamber.com	www.srchamber.com	415-454-4163	817 Mission Avenue		San Rafael	CA	
San Ramon Chamber of Commerce Bishop Ranch 6	Stewart	Bambino	President/CE0	stewart.bambino@sanramon.org	www.sanramon.org	925-242-0600	2410 Camino Ramon	Suite 125	San Ramon	CA	94583-4331
Santa Clara Chamber of Commerce &	Steve	Van Dorn	President	steve.vandorn@santaclara.org	www.santaclarachamber.org	408-244-8244	1850 Warburton Avenue		Santa Clara	CA	95050-4111
Convention-Visitor's Bureau Santa Fe Springs Chamber of Commerce	Kathie	Fink	Chief Executive Officer	fink@sfschamber.com	www.sfschamber.com	562-944-1616	12016 Telegraph Road	Suite 100	Santa Fe Springs	CA	90670-6090
Santa Paula Chamber of Commerce	Ken	Brookes	Manager	info@santapaulachamber.com	www.santapaulachamber.com	805-525-5561	PO Box 1	ounce noe	Santa Paula	CA	
Santee Chamber of Commerce	John	Olsen	Executive Director	john@santeechamber.com	www.santee-chamber.org	619-449-6572	10315 Mission Gorge Road		Santee	CA	92071-3031
Saratoga Chamber of Commerce	Sharmaine	Nunes	Office Manager	shar@saratogachamber.org	www.saratogachamber.org	408-867-0753	14460 Big Basin Way		Saratoga	CA	
Sausalito Chamber of Commerce	Oonagh	Kavanagh	CE0	chamber@sausalito.org	www.sausalito.org	15-331-7262x10 415-332-0323	· ·		Sausalito	CA	
Sebastopol Area Chamber of	oonagn	Ravanagn	020	Ĩ.					ouusuitto	-	
Commerce & Visitors Center	Teresa	Ramondo	Exec. Director/CEO	chamber@sebastopol.org	www.sebastopol.org	707-823-3032	PO Box 178		Sebastopol	CA	95473-0178
Simi Valley Chamber of Commerce	Leigh	Nixon	President/CE0	Inixon@simichamber.org	www.simivalleychamber.org	805-526-3900	40 W Cochran Street	Suite 100	Simi Valley	CA	93065-6245
Sonoma Valley Chamber of Commerce	Jennifer	Yankovich	CEO	info@sonomachamber.com	www.sonomachamber.org	707-996-1033	651-A Broadway		Sonoma	CA	95476
South San Francisco Chamber of Commerce	Maria	Martinucci	CEO	maria@ssfchamber.com	www.ssfchamber.com	650-588-4798	213 Linden Avenue		So San Francisco	CA	94080-3711
Stinson Beach Chamber of Commerce				info@stinson-beach.org	www.stinson-beach.org	415-868-1034	1 Belvedere	P0 Box 404	Stinson Beach	CA	
Sunnyvale Chamber of Commerce	Don	Eagleston	President/CE0	deagleston@svcoc.org	www.svcoc.org	408-736-4971	260 S. Sunnyvale Ave	Suite 4	Sunnyvale	CA	
Temecula Valley Chamber of Commerce	Alice	Sullivan	President/CE0	asullivan@temecula.org	www.temecula.org	866-676-5090	PO Box 1676		Temecula	CA	
Tiburon Peninsula Chamber of Commerce	Christine	Koehler	Executive Manager	tibcc@sbcglobal.net	www.tiburonchamber.org/	415-435-5633 415-435-1132	96B Main Street		Tiburon	CA	
Torrance Area Chamber of Commerce	Donna	Duperron	President & CEO	donna@torrancechamber.org	www.torrancechamber.org	310-540-5858	3400 Torrance Blvd	Suite 100	Torrance	CA	90503-5803
Tulare Chamber of Commerce	Nina	Akin	President & CEO	nakin@tularechamber.org	www.tularechamber.org	559-686-1547	PO Box 1435		Tulare	CA	
Tuolumne County Chamber of Commerce	George	Segarini	President/CE0	george@tcchamber.com	www.tcchamber.com	209-532-4212	222 S Shepherd Street	1	Sonora	CA	
Turlock Chamber of Commerce	Sharon	Silva	President/CE0	sharonsilva@turlockchamber.com	www.turlockchamber.com	209-632-2221	115 S Golden State Blvd		Turlock	CA	
Universal City/North Hollywood Chamber of Commerce		Gilstrap	Executive Director	info@noho.org	www.noho.org	818-508-5155	6369 Bellingham Avenu		North Hollywood	CA	
Vallejo Chamber of Commerce	Rich	Curtola	President & CEO	rich@vallejochamber.com	www.vallejochamber.com	707-644-5551	427 York Street		Vallejo	CA	
Visalia Chamber of Commerce	Glenn	Morris	President/CE0	Glenn@visaliachamber.org	www.visaliachamber.org	559-734-5876	220 N Santa Fe Street	1	Visalia	CA	
Vista Chamber of Commerce	Bret	Schanzenbach	Chief Executive Officer	bret@vistachamber.org	www.vistachamber.org	760-726-1122	127 Main Street	<u> </u>	Vista	CA	
Walnut Creek Chamber of Commerce	Jay	Hoyer	President/CE0	jhoyer@walnut-creek.com	www.walnut-creek.com	925-934-2007	1777 Botelho Drive	Suite 103	Walnut Creek	CA	
West Marin Chamber of Commerce	ouy	i loyei	T TOSIGETIL/OLO		mmmallut-cicek.com	(415) 663-9232	P.O. Box 1045	Saite 103	Point Reyes Station		94956
	Connie	Pedenko	President/CE0	info@pointreyes.org connie@buenaparkchamber.org	www.buopoporkohombor.com	714-484-1420	8081 Stanton Avenie	#306	Buena Park	CA	
West Orange County Regional Chamber of Commerce					www.buenaparkchamber.org			#300		_	-
Whittier Area Chamber of Commerce	Carol	Crosby	Executive Director	carol@whittierchamber.com	www.whittierchamber.com	562-698-9554	8158 Painter Avenue		Whittier	CA	
Windsor Chamber of Commerce	Christine	Tevini	President/CEO	christine@windsorchamber.com	www.windsorchamber.com	707-838-7285	PO Box 367		Windsor	CA	
Woodland Chamber of Commerce	Kristy	Wright	Chief Executive Officer	kristyw@woodlandchamber.org	www.woodlandchamber.org	530-662-7327	307 1st Street		Woodland	CA	
Yorba Linda Chamber of Commerce	Phyllis	Coleman	Executive Director	phyllisylcc@sbcglobal.net	www.yorbalindachamber.org	714-993-9537	17670 Yorba Linda Blvd	<u> </u>	Yorba Linda	CA	
Yountville Chamber of Commerce	Cynthia	Saucerman	Executive Director	<u>clsaucerman@sbcglobal.net</u>	www.yountville.com	707-944-0904	PO Box 2064		Yountville	CA	
Yuba-Sutter Chamber of Commerce	Kristy	Santucci	Chief Executive Officer	ksantucci@yubasutterchamber.com	www.yubasutterchamber.com	530-743-6501	1300 Franklin Road	1	Yuba City	CA	95993-4604

# Golden Gate Bridge Transportatin Management Plan Contact List Transit - Hotels - Colleges

Affiliation	First Name	Last Name	Title	Email	Phone	Alternative Phone	Address Line 1	City	State	Zip
North Bay Public Transit					-					
Marin Transit (MT)					(415) 226-0855	(415) 226-0856		San Rafael	CA	94901
Napa Valley Transportation & Planning Agency				contact@nctpa.net	707 259 8631		707 Randolph St, Ste. 100	Napa	CA	94559
Transportation Alternatives of Marin	Patrick	Seidler		pseidler@wtb.com	415.389.5040 x24				CA	
Transportation Authority of Marin (TAM)	Diane	Steinhauser	Executive Director		(415) 226-0820		781 Lincoln Avenue, Suite 160	San Rafael	CA	
SantaRosa City Bus	Anita	Winkler	Deputy Director	awinkler@srcity.org	707-543-3333	100 Santa Rosa Ave	Santa Rosa City Hall	Santa Rosa	CA	95404
Sausalito Ferry Information Kiosk	Dick	Seashore		dicksea@pacbell.net	(415) 332-2698			Sausalito	CA	
SolanoExpress				commuterinfo@sta-snci.com	707.424.6075	(707) 424-6074	One Harbor Center, Ste. 130	Suisin City		94585
Sonoma County Transit	Bryan	Albee	Transit Manager	bkalbee@sctransit.com	707-585-7516		355 W. Robles Avenue	Santa Rosa		95407
Whistlestop Wheels	Terry	Scussel	General Manager	tscussel@thewhistlestop.org	(415) 456-9062 x151			San Rafael		
BART Public Affairs	Alicia	Trost	Public Affairs					Oakland		
Caltrans Public Affairs								Oakland		
AC Transit	Clarence Johnson		Public Affairs			510-891-4745		Oakland		
AC Transit	James	Pachan	Chief Oeprating Officer							
Santa Clara Valley Trans (VTA)	Brandi	Childress	Media Relations	Brandi.childress@vta.org		408-952-4297				
SamTrans Public Affairs	Jayme	Ackerman	Media Relations		650-508-7934					

Hotels										
Holiday Inn San Francisco Golden Gateway	Charles	Cloutier	Director of Sales and Marketing	ccloutier@sfhigg.com	415-441-4000 ext. 7301	(415) 441-8346	1500 Van Ness Avenue	San Francisco	CA	94109
San Francisco Fisherman's Wharf Hostel	Jon	Dockery	Facilites Manager	fwinfo@sfhostels.com	(415) 771-7277		Fort Mason, Building 240	San Francisco	CA	94123

Colleges						
College	Address	City	County	Point of Contact	Contact Phone	E-mail
Ali Akbar College of Music	215 West End Ave	San Rafael	Marin	N/A	415-454-6372	office@aacm.org
Christian Life International Bible College	1370 S Novato Blvd	Novato	Marin	Caleb Klinge	415-892-0714	cklinge@nlcci.org
College of Marin	835 College Ave	Kentfield	Marin	Cathy Summa-Wolfe	(415) 485-9528	cathy.summawolfe@marin.edu
College of Marin, Indian Valley Campus	1800 Ignacio Blvd	Novato	Marin	Cathy Summa-Wolfe	(415) 485-9528	cathy.summawolfe@marin.edu
Dominican University of California	50 Acacia Ave	San Rafael	Marin	John Baworowsky	415-257-1334	john.baworowsky@dominican.edu
Meridian University	47 6th St	Petaluma	Marin	N/A	(707) 765-1836	info@meridianuniversity.edu
Romberg Tiburon Center for Environmental Studies	3150 Paradise Dr	Belvedere Tibrn	Marin	Adria O'Dea	(303) 253-2740	adria@sfsu.edu
San Francisco Art Institute	800 Chestnut St	San Francisco	San Francisco	N/A	N/A	announce@artists.sfai.edu
San Francisco State Downtown Campus	835 Market Street	San Francisco	San Francisco		(415) 817-4400	dtcrent@sfsu.edu
San Francisco State University	1600 Holloway Ave	San Francisco	San Francisco	N/A	(415) 338-1665	pubcom@sfsu.edu
Santa Rosa Junior College	1501 Mendocino Ave	Santa Rosa	Sonoma	N/A	(707) 527-4266	jparmer@santarosa.edu
Saybrook University	747 Front St #3	San Francisco	San Francisco	Cyndy Fitzgerald, PhD	425-968-3409	cfitzgerald@saybrook.edu

#### Golden Gate Bridge Transportatin Management Plan Contact List Community Centers

	1	1					Alternative		Address			
Affiliation	First name	Last name	Title	Email	Website	Phone	Phone	Address Line 1	Line 2	City	St	Zip
Marin						(45 (05 (055	(45 (05 0457 (6)	1505 TH D I I	0.11.1			0/100
Belvedere-Tiburon Recreation				officeadmin@btrecreation.org recreation_dept@	www.btrecreation.org	415-435-4355	415-435-8157 (f)	1505 Tiburon Boulevard	Suite A	Tiburon	CA	94123
Corte Madera Parks & Recreation				ci.corte-madera.ca.us		415-927-5072		498 Tamalpais Drive		Corte Madera	CA	94925
The Dance Palace Community Center				dance@horizoncable.com	www.dancepalace.org	415-663-1075		PO Box 217		Point Reyes Staion	CA	94956
Marin Grassroots	Ericka	Erikson		info@maringrassroots.org	www.maringrassroots.org	415.491.4366		30 N. San Pedro Road	Suite 290	San Rafael	CA	94903
Homestead Valley Community Association				info@homesteadvalley.org	www.homesteadvalley.org	415-388-0137	415-388-0150 (f)	315 Montford Avenue		Mill Valley	CA	94941
Larkspur Recreation Department				<u>lk_recreation@</u> <u>ci.larkspur.ca.us</u>		415-927-6746		240 Doherty Drive		Larkspur	CA	94939
Marinwood Community Services District				csd@marinwood.org	www.marinwood.org	415-479-0775	415-479-7759 (f)	775 Miller Creek Road		San Rafael	CA	94903-1323
Mill Valley Parks & Recreation				parks@cityofmillvalley.org	www.cityofmillvalley.org	415-383-1370		180 Camino Alto		Mill Valley	CA	94941
NatureBridge	Jeanelle	Steiner	Outreach and Reservations Coordinator	jsteiner@naturebridge.org	http://www.naturebridge.org/ conference-facilities-golden-gate	415-332-5771 x28	415-332-5784	1033 Fort Cronkhite		Sausalito	CA	94965
Senator Noreen Evans Office	Carole	Simon Mills	District Representative	carole.mills@sen.ca.gov		415-479-6612		3501 civic Center Drive	Suite 425	San Rafael	CA	94903
Headlands Center for the Arts	Brian	Karl	Program Director	bkarl@headlands.org	http://www.headlands.org/ headlands-information/contact/	415-331-2787		944 Fort Barry		Sausalito	CA	94965
City of Novato Parks, Recreation, & Community Services				prcs@ci.novato.ca.us	www.cityofnovato.org/prcs	415-899-8200	415-899-8219 (f)	75 Rowland Way	#200	Novato	CA	94945
Picklewood Park Community Center & Library				Debbie.Younkin@ cityofsanrafael.org	www.cityofsanrafael.org	415-485-3077	415-485-3185 (f)	50 Canal Street		San Rafael	CA	94901
San Rafael Recreation				Community.services@ cityofsanrafael.org	www.cityofsanrafael.org	415-485-3077	415-485-3185 (f)	618 B Street		San Rafael	CA	94901
Ross Recreation Department				rossrec@rossrecreation.org	www.rossrecreation.org	415-453-6020	415-453-2014 (f)	PO Box 117		Ross	CA	94957
San Anselmo Recreation Department				ddonery@ townofsananselmo.org	www.townofsananselmo.org	415-258-4640		1000 Sir Francis Drake Blvd	Office 14	San Anselmo	CA	94960
San Geronimo Valley Community Center	Dave	Cort	Executive Director	director@sgvcc.org	http://sgvcc.org/about/staff.html	415-488-8888		6350 Sir Francis Drake Blvd		San Geronimo	CA	94963
Sausalito Parks & Recreation	Jeff	Dybdal	Recreation Supervisor	jdybdal@ci.sausalito.ca.us	www.ci.sausalito.ca.us	415-289-4152		420 Litho		Sausalito	CA	94965
Stinson Beach Community Center				info@stinsonbeach communitycenter.org		415-868-1444		32 Belvedere Street		Stinson Beach	СА	94970
Strawberry Recreation District				admin@strawberryrec.org	www.strawberryrec.org	415-383-6494	415-383-6635 (f)	118 E. Strawberry Drive		Mill Valley	CA	94941
Terra Linda Community Center	Dianne	Mitchell		Dianne.Mitchell@ cityofsanrafael.org	www.cityofsanrafael.org	415-485-3344	415-485-3345	670 Del Ganado Road		Terra Linda	CA	94903
The Osher Marin Jewish Community Center				info@marinjcc.org	www.marinjcc.org	415-444-8000		200 N San Pedro Road		San Rafael	CA	94903
San Francisco												
African American Art and Culture Complex	Michelle	Parker	Press/Media	info@aaacc.org	www.aaacc.org	415-922-2049		762 Fulton Street		San Francisco	CA	94102
Bernal Heights Rec Center	Linda	Barnard	Recreation Manager	linda.barnard@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/							
Betty Ong Rec Center	Lorraine	Banford	Recreation Manager	lorraine.banford@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/							
Cameron House	Mary	Wong Leong	Office Manager	cameronhouse@ cameronhouse.org	http://www.cameronhouse.org/	415-781-0408		920 Sacramento St		San Francisco	СА	94108
Chinese Culture Center of San Francisco	Gharrity	McNett	Executive Assistant and Facilities Manager	gharrity@c-c-c.org	http://www.c-c-c.org/	415-986-1822 x31		750 Kearny Street	Third Floor	San Francisco	CA	94108-1809
City Hall & Civic Center Campus	Robert	Reiter	Building Manager	rob.reiter@sfgov.org	sfgov.org	415-554-4939	415-554-4936	1 Dr. Carlton B. Goodlett Pl	Room 8	San Francisco	CA	94102
Eureka Valley Rec Center	Adela	Dominguez	Recreation Coordinator	Adela.Dominguez@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/							
Gene Friend Rec Center	Tim	Figueras	Recreation Coordinator	Tim.Figueras@sfgov.org	http://sfrecpark.org/recreation-						t	
Glen Park Rec Center	Oskar	Rosas	Recreation Coordinator	Oskar.Rosas@sfgov.org	community-services/rec-facilities/ http://sfrecpark.org/recreation-						1	
Golden Gate Park Senior Center	Victor	Lee	Recreation Coordinator	Victor.Lee@sfgov.org	community-services/rec-facilities/ http://sfrecpark.org/recreation-						1	
Hamilton Rec Center	Renee	Strong	Recreation Coordinator	Renee.Strong@sfgov.org	community-services/rec-facilities/ http://sfrecpark.org/recreation-						1	
Harvey Milk Arts Center	Robby	Roller	Recreation Coordinator	robby.roller@sfgov.org	community-services/rec-facilities/ http://sfrecpark.org/recreation-						1	
Janet Pomeroy Center	Alison	Beahan	Director of Human Resources	abeahan@prrcsf.org	community-services/rec-facilities/ http://www.prrcsf.org/	415-665-4100		207 Skyline Blvd.		San Francisco	C∆	94132
Japanese Community Youth Council		Sounan	S. Sotor of Human Resources	info@jcyc.org	www.jcyc.org	415-202-7900	415-921-1841	2012 Pine Street		San Francisco	CA	94132
Jewish Community Center		<u> </u>		info@jccsf.org	https://www.jccsf.org/	415-292-1200		3200 California Street		San Francisco	CA	94118
	Thomas	Maufield	Description Consultants		http://sfrecpark.org/recreation-						+	
Joseph Lee Rec Center	Thomas	Mayfield	Recreation Coordinator	Thomas.Mayfield@sfgov.org	community-services/rec-facilities/						1	

#### Golden Gate Bridge Transportatin Management Plan Contact List Community Centers

							Alternative		Address		1	
Affiliation	First name	Last name	Title	Email	Website	Phone	Phone	Address Line 1	Line 2	City	St	Zip
Koret Health and Recreation Center	Chuck	White	Director, Recreational Sports Department	white@usfca.edu	http://www.usfca.edu/virtualtour/koret/	415-422-2945		2130 Fulton Street		San Francisco	CA	94117-1080
Minnie and Lovie Ward Rec Center	Jacqueline	Battle	Recreation Coordinator	Jacqueline.Battle@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/							
Mission Bay Conference Center at UCSF				mbccsales@aramark.com	http://www.acc-missionbay conferencecenter.com/	866-431-8273		1675 Owens Street		San Francisco	CA	94143-3008
Mission Cultural Center for Latino Arts				info@missionculturalcenter.org	www.missionculturalcenter.org	415-821-1155		2868 Mission Street		San Francisco	CA	94110
Mission Rec Center	Mike	Bross	Recreation Coordinator	Mike.Bross@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/							
Moscone Rec Center	Veronica	O'Boyle	Recreation Coordinator	Veronica.O Boyle@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/							
Palega Rec Center	Dwayne	Watts	Recreation Coordinator	Dwayne.Watts@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/							
Potrero Hill Rec Center	Margaret	Perea	Recreation Coordinator	Margaret.Perea@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/							
Randall Museum	Nancy	Ellis	Recreation Coordinator	Nancy.Ellis@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/							
Richmond Rec Center	Mike	Xavier	Recreation Coordinator	mike.xavier@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/						1	
San Francisco Recreation & Parks Departmer	it			rpdinfo@sfgov.org	http://sfrecpark.org/						1	
St. Mary's Rec Center	Reginald	Gage	Recreation Coordinator	Reggiet.Gage@sfgov.org	http://sfrecpark.org/recreation-							
Sunset Neighborhood Beacon Center	Jennifer	Ho	Administrative Asst	iho@snbc.org	community-services/rec-facilities/ www.snbc.org	415-759-3690		3925 Noriega Street		San Francisco	CA	94122
-					http://sfrecpark.org/recreation-	413-733-3030		3323 Nonega Street		Sannancisco	UA.	34122
Sunset Rec Center	Thomas	Iglesias	Recreation Coordinator	Thomas.lglesias@sfgov.org	community-services/rec-facilities/							
Tenderloin Rec Center	Joe	Scott	Recreation Coordinator	Joe.Scott@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/							
Upper Noe Rec Center	Cheryl	GriffinWoltjen	Recreation Coordinator	cheryl.woltjen@sfgov.org	http://sfrecpark.org/recreation- community-services/rec-facilities/							
YMCA - Association Office	Andy	Vamis	Vice President of Human Resources and Organizational Effectiveness	Avamis@ymcasf.org	http://www.ymcasf.org/	415-777-8622		50 California Street	Suite 650	San Francisco	CA	94111
YMCA - Buchanan	Rodney	Chin	Branch Manager	rchin@ymcasf.org	http://www.ymcasf.org/buchanan/	415-292-3011		1530 Buchanan St.		San Francisco	CA	94115
YMCA - Richmond	Troy	Kasner	Director of Membership and Communications	tkasner@ymcasf.org	http://www.ymcasf.org/richmond/	415-666-9622		360 18th Avenue		San Francisco	CA	94121
Sonoma												
Filipino Community of Sonoma County	Noemi	Issel	President	communityfilipino@yahoo.com	http://filipinocommunityof sonomacounty.com/contact_us	707-546-2795		3361 Fulton Road		Fulton	CA	95439
Finley Community Center	Kelley	Magnuson	Deputy Director	kmagnuson@srcity.org	nttp://cl.santa- rosa.ca.us/departments/recreationandparks/ parks/communitycenters/finley/Pages/default.	707-543-3737		2060 West College Ave		Santa Rosa	CA	95401
Guerneville Veteran's Memorial Hall	David	Cameron	Program Manager	dcameron@rccservices.org	http://www.sonoma-county.org/ gs/forrent/guerneville.htm	707-604-7725		16300 First Street		Guerneville	CA	95446
Healdsburg Community Center	David	Mickaelian	Director	dmickaelian@ ci.healdsburg.ca.us	http://www.ci.healdsburg.ca.us/ index.aspx?page=122	707-431-3318		401 Grove Street		Healdsburg	CA	95448
Jenner Community Club	Kathleen	Haibach	President	katsmail@sonic.net	http://jenner-cc.org/index.html	707-568-4617		P.O. Box 173		Jenner	CA	95450
Jewish Community Center	Beth	Goodman	Executive Director	bethg@jccsoco.org	http://www.jccsoco.org/index.php?src=	707-528-4222		1301 Farmers Lane		Santa Rosa	CA	
Occidental Community Center					http://www.sonoma-county.org/	707-874-2242		3920 Bohemian Highway				
Petaluma Community Center	Jan	Mandrell	Supervisor	jmandrell@ci.petaluma.ca.us	http://cityofpetaluma.net/ parksnrec/index.html	707-778-4380		320 North McDowell Blvd		Petaluma	CA	94954
Ray Miller	Tamara	Taylor	Deputy City Clerk	ttaylor@ci.cotati.ca.us	http://www.ci.cotati.ca.us/	707-792-4600		216 East School Street		Cotati	CA	94931
Rohnert Park Community Center	Guy	Miller	Community Services Manager	gmiller@rpcity.org	http://www.rpcity.org/index.aspx?page=74	707-588-3456		5401 Snyder Lane		Rohnert Park	CA	94928
Russian River Recreation & Park District	Dana	Zimmerman	Chairman		http://www.russianriverparks.org/	707-869-9184		P.O. Box 195		Guerneville	CA	95446
Sebastopol Community Cultural Center	Diana	Rich	Executive Director	scc@seb.org	http://www.seb.org/	707-823-1511		390 Morris Street		Sebastopol	CA	
SGI USA Redwood Coast Community Center						707-546-7777		2455 Bennett Valley Road		Santa Rosa	CA	95404
Songbird Community Healing Center	Jasmine	Gold	Director	jasmine@songbirdcenter.org	http://songbirdcenter.org/	707-795-2398		8280 Old Redwood Hwy		Cotati	CA	94931
Sonoma Community Center	Toni	Castrone	Executive Director	toni@sonoma communitycenter.org	http://www.sonomacommunitycenter.org/ Sonoma_Community_Center/WELCOME.html	707-938-4626		276 East Napa Street		Sonoma	CA	95476
Steele Lane Community Center	Kelly	Magnuson	Deputy Director	kmagnuson@srcity.org	http://ci.santa-rosa.ca.us/departments/ recreationandparks/parks/ communitycenters/steele/Pages/default.aspx	707-543-3282		415 Steele Lane		Santa Rosa	CA	95403
Villa Chanticleer	Kelly	Black	Office Assistant	kblack@ci.healdsburg.ca.us	http://www.villachanticleer.com/	707-431-3303		1248 N. Fitch Mountain Rd		Healdsburg	_	95448
Voices Youth Center	Nancy	Clark	President		http://www.voicesyouthcenter.org/	707-579-4327		714 Mendocino Avenue		Santa Rosa	CA	95401

Environment & Special Interest

							Alternative		Address		1	T
Affiliation	First name	Last name	Title	Email	Website	Phone	Phone	Address Line 1	Line 2	City	St	Zip
Marin County - Environmental & Special Interest Orgs									-			
Agricultural Institute of Marin				brigitte@marinfarmersmarket.org	http://marinfarmersmarkets.org							
California State Parks, Diablo Vista District				dgoul@parks.ca.gov	http://www.calparks.org							
Community Clean Water Institute	Nels	Worden	President	info@ccwi.org	http://www.ccwi.org/index.html							
Community Land Trust Association of West Marin (CLAM)	Rae	Levine	Executive Director	rae@clam-ptreyes.org	http://www.clam-ptreyes.com		1					
Cool the Earth	Carleen	Cullen	Executive Director	ccullen@cooltheearth.org	http://www.cooltheearth.org							
Conservation Corps North Bay	Marilee	Eckert	Executive Director	meckert@conservationcorpsnorthba	http://www.conservationcorpsnorthbay	org						+
Earth Day Marin	Hannah	Doress	Executive Director	hannah@wordoutconsulting.com	http://www.earthdaymarin.org							<u>├</u> ───
EcoMom Alliance	Kimberly	Pinkerton	President	kimberly@ecomom.com	http://www.ecomomalliance.org							<u> </u>
Environmental Action Committee of West Marin	Frederick	Smith	Executive Director									'
				eac@svn.net	http://www.eacmarin.org							<u> </u> '
Environmental Forum of Marin	Dave	McConnell	President	mcdave2@comcast.net	http://www.marinefm.org							'
Friends of Corte Madera Creek	Sandra	Guldman	President	sandra.guldman@gmail.com	sandra.guldman@gmail.com							<u> </u>
Got Mercury?	Todd	Steiner	Director	tsteiner@tirn.net	http://www.gotmercury.org							'
Greenbelt Alliance, Marin	John	Chapman	President	jchapman@greenbelt.org	http://www.greenbelt.org/regions /sonomamarin/index.shtml							
Green Builders of Marin	John	Shurtz	President	john@greenbuildersofmarin.com	http://www.greenbuildersofmarin.com							<u> </u>
Green Coalition for Responsible Waste and			riesident									<u> </u>
Resource Management	Bruce	Baum		b-baum@comcast.net	http://greencoalitionmarin.org							'
Marin Agricultural Land Trust	Robert	Berner	Executive Director	rberner@malt.org	http://www.malt.org							
Marin Audubon Society	Barbara	Salzman		bsalzman@worldnet.att.net	http://www.marinaudubon.org							
Marin Conservation League	Susan	Stompe	President	nbdennis@sbcglobal.net	http://www.conservationleague.org							
Marin County Bicycle Coaliton	Kim	Baenisch	Executive Director	kim@marinbike.org	http://www.marinbike.org/Index.shtml							
Marin County Open Space District	Sharon	McNamee	General Manager	smcnamee@co.marin.ca.us	http://www.co.marin.ca.us/depts/							<u> </u>
Marin County Open Space District Marin County Hazardous and Solid Waste	Sharon	Wichamee	deneral manager	Smonanice@co.main.ca.us	PK/Main/mcosd/home.asp							<u> </u> '
Joint Powers Authority	George	Rodericks	Board Chair	grodericks@cityofbelvedere.org	http://www.marinrecycles.org							
Marin Municipal Water District			Executive Director		http://www.marinwater.org							1
Marin Native Plant Society				carnelian@pacbell.net			1					
Marin Open Space Trust	Bill	Long	Board Chair	wclo88@comcast.net	http://www.marinopenspacetrust.org							
Marin Organic	Helge	Hellberg	Executive Director	helge@marinorganic.org	http://www.marinorganic.org							
Marin Resource Conservation District	Nancy	Scolari	Executive Director	nancy@marinrcd.org	http://www.marinrcd.org							
Marin Sanitary Service	Patty	Garbarino	President	patty.garbarino@marinsanitary.com	http://www.marinsanitary.com							'
The Bay Institute				swanson@bay.org	http://www.bay.org							
The Marine Mammal Center	Jeff	Boehm, DVM	Executive Director	boehmj@tmmc.org	http://www.marinemammalcenter.org/							
Mill Valley StreamKeepers	Betsy	Bikle	President	betsywbikle@earthlink.net	http://www.millvalleystreamkeepers.org	2						
North Marin Water District	Chris	DeGabriele	General Manager	cdegabriele@nmwd.com	http://www.nmwd.com							'
PRBO Conservation Science	Ellie	Cohen	President	ecohen@prbo.org	http://www.prbo.org/cms/index.php							
Point Reyes National Seashore Association	Betty Anne	Carlin	Board Chair	bacarlin@ptreyes.org	http://www.ptreyes.org/index.shtml							'
Resource Renewal Institute-Defense of Place	Shannon	Meyer	Executive Director	smeyer@defenseofplace.org	http://www.rri.org/index.php							<u> </u>
Richardson Bay Audubon Center & Sanctuary	Brooke	Langston	Director	blangston@audubon.org	http://www.audubon.org							<u> </u>
Salmon Protection and Watershed Network (SPAWN)	Todd	Steiner	Executive Director	tsteiner@tirn.net	http://spawnusa.org/index.html							'
Sierra Club Marin Group	Louis	Nuyens	Executive Committee Chair	scmg@primavoce.org	http://sanfranciscobay.sierraclub.org/ marin/index.htm							
Solar Power Partners, Inc. (SPP)	David	Crane	President	dcrane@nrgenergy.com	http://www.nrgenergy.com							<u> </u>
Sonoma County Farm Bureau	Lex	McCorvey	Executive Director	lex@sonomafb.org	http://sonomafb.org/							+
Surfrider Foundation Marin County Chapter	Scott	Tye	Chairperson	tyeyaksb@yahoo.com	http://marin.surfrider.org/							+
Sustainable Fairfax	Chelsea	Donovan	Executive Director	sustainablechelsea@gmail.com	http://www.sustainablefairfax.org/							
Sustainable Marin	Kiki	La Porta	President	kiki@sustainablemarin.org	http://www.sustainablemarin.org/							+
Sustainable Mill Valley				sustainablemillvalley@yahoo.com	http://sustainablemillvalley.org							<u> </u>
Sustainable Novato	John	Schlag	President	jfs@sustainablenovato.org								1
Tamalpais Conservation Club	Larry	Minikes	President	administrator@tamalpais.org	http://www.tamalpais.org		1					t
The Away Station	Carrie	Bachelder	Founder	carrie@theawaystation.org	http://theawaystation.org/		1		1		1	1
Tiburon Salmon Institute	Brooke	Halsey	Executive Director	Brooke@tiburonsalmoninstitute.com	http://www.tiburonsalmoninstitute.com	n/					1	1
Tomales Bay Watershed Council	Carlos	Porrata		porrata@telescience.net	http://www.tomalesbaywatershed.org/				İ		1	1
Transportation Solutions Defense and Education Fund	David	Schonbrunn		david@schonbrunn.org	http://transdef.org							1
(TRANSDEF)				-							<u> </u>	───
Trout Unlimited, North Bay Chapter	George	Starn	President	info@nbtu.org	http://www.nbtu.org						<u> </u>	───
Turtle Island Restoration Network	Todd	Steiner	Director	<u>tsteiner@tirn.net</u>	http://www.seaturtles.org							
Water Planet Alliance	Michael	Dietrick	Executive Director	zena12@earthlink.net	http://www.marincommunityenergy.org							<b></b> '
WildCare	Karen	Wilson	Executive Director	karenwilson@wildcarebayarea.org	http://www.wildcarebayarea.org		1					1

#### Golden Gate Bridge Transportatin Management Plan Contact List Environment & Special Interest

							Alternative		Address		1	
Affiliation	First name	Last name	Title	Email	Website	Phone	Phone	Address Line 1	Line 2	City	St	Zip
San Francisco - Special Interest & Environmental Grps												
Alliance for a Clean Waterfront	Jennifer	Clary	Co-Chair	jclary@cleanwater.org	(415) 369-9160 x311							
California Heritage Council	William	Applegate	President	info@californiaheritagecouncil.org	(415) 699-0780			P.O. Box 475046		San Francisco	CA	94147
California Native Plant Society/Yerba Buena Chapter	Tom	Annese	President	tomannese@yahoo.com	415-297-1413							
Crissy Field Dog Group	Martha	Walters		rosewalt@aol.com	415-256-9085							
Golden Gate National Recreation Area, Dog Walking Contact	Shirwin	Smith	Management Assistant		(415) 561-4947	(415) 716-9999		Fort Mason	Bldg 201	San Francisco	CA	94123
San Francisco Dog Owners Group				info@sfdog.org	(415)339-7461			PO Box 31071		San Francisco	CA	94131
Dune Ecosystem Restoration Team	Emily	Walter	Restoration Manager	emily@friendsofthedunes.org	707.444.1397			PO Box 186		Arcata	CA	95518
Fort Point & Presidio Historical Assoc.	William	Alich		njalich@earthlink.net	415-922-4967	650-564-9397	415-922- 4067 415-788-	2190 Washington St	#1007	San Francisco	CA	94109
Golden Gate National Recreation Area Advisory Commission	Fred	Rodriguez		frodriguez@trlg.net	415-788-1450		473-788-	120 Montgomery St		San Francisco	CA	94104
Planning Associaton for Richmond & GGNRA Adv. Fort Point & Presidio Historical Association	Redmond	Kernan		RedmondKernan@yahoo.com	415-751-1126		415-751- 1416	35 Sixth Ave.		San Francisco	CA	94118
Golden Gate Audubon Society	Mark	Welther	Executive Director	mwelther@goldengateaudubon.org	510.843.2222		510.843.5351	2530 San Pablo Ave	Suite G	Berkeley	CA	94702
Golden Gate National Parks Conservancy				tellmemore@parksconservancy.org	(415) 561-3000		415-561-300	Building 201	Fort Mason	San Francisco	CA	94123
Leukemia & Lymphoma Society Team in Training	Barb	Smalley		SFTNTinfo@LLS.org	(415) 625-1100		415-625-115	1390 Market Street	Suite 1200	San Francisco	CA	94102
Natural Resources Defense Council				nrdcinfo@nrdc.org	415-875-6100			111 Sutter St.	20th Floor	San Francisco	CA	94104
Nature in the City	Eillie	Billings	Executive & Programs Assistant	steward@natureinthecity.org	415.564.4107			PO Box 170088		San Francisco	CA	94117
Presidio Environmental Council	+											
San Francisco Beautiful	Sheila	Kolenc	Interim Executive Director	kolenc@sfbeautiful.org	415-421-2608		415-421-403	100 Bush ST	Ste 1580	San Francisco	CA	94104
San Francisco Bicycle Coalition	Leah	Shahum	Executive Director	<u>leah@sfbike.org</u>	(415) 431-2453 x 306		415-431-246	995 Market St	Ste 1150	San Francisco	CA	94103
San Francisco League of Conservation Voters	Amandeep	Jawa	President		415.255.6257			937 Valencia St.		San Francisco	CA	94110
S.F. Planning & Urban Research Associates (SPUR)	Michael	Alexander	Member, Board of Directors	malexander@pobox.com	415-441-6700			1717 Mason Street		San Francisco		94133- 2736
S.F. Planning & Urban Research Associates (SPUR)	Jim	Chappell	President, Board of	jchappell@spur.org				312 Sutter Street	Suite 500	San Francisco	CA	94108
S.F. Planning & Urban Research Associates (SPUR)	Michael	Alexander		malexander@pobox.com	(415) 441-6700			1717 Mason St.		San Francisco	CA	94133-
S.F. Planning & Urban Research Associates (SPUR)	Chloe	Good		<u>chloe.good@gmail.com</u>				1531 17th Ave.		San Francisco	CA	94122
S.F. Planning & Urban Research Associates (SPUR)	Amanda	Hoenigman		amanda@hoenigman.com	(415) 577-3841			3053 Fillmore St.	#247	San Francisco	CA	94123
San Francisco Tomorrow	Norman	Rolfe		normrolfe@juno.com	415-775-9167		415-775- 0167	2233 Larkin Street	Suite 4	San Francisco	CA	94109
Sierra Club	Becky	Evans		Rebecae@earthlink.net	415-775-3309	510-873-6753		1474 Sacramento St	#305	San Francisco	CA	94019
Sierra Club Transportation Committee	John	Holtzclaw		john.holtzclaw@sierraclub.org_				1508 Taylor St.		San Francisco	CA	94133
Transportation for a Livable City	Tom	Radulovich	Executive Director	tom@livablecity.org	(415) 344-0489		415-431-246	995 Market Street	Suite 1550	San Francisco	CA	94103
Transportation Solutions Defense and Education Fund				info@transdef.org	415-460-5260			P.O. Box 151439		San Rafael	CA	91915
Urban Watershed Project	Doug	Kern		dkern@netcom.com	(415) 561-4857			Bldg. 204, Rm. 200C	PO Box 29096	San Francisco	CA	94129
San Francisco Bay Trail Project	Maureen	Gaffney	Bay Trail Planner	maureeng@abag.ca.gov	510/464-7909			101 Eighth Street		Oakland	CA	94604

Affiliation	First name	Last name	Title	Email	Website	Phone	Address Line 1	Address Line 2	City	St	Zip
Belvedere-Tiburon Community Library			Head Librarian	mailto:dmazzoli@bel-tib-lib.org	http://www.bel-tib-lib.org/	415-789-2665	1501 Tiburon Boulevard		Tiburon	CA	94920
Bolinas Public Library	Bonnie	White	Branch Manager	BNWhite@co.marin.ca.us	http://www.co.marin.ca.us/depts/lb/main/wmarin/Bolindex.cfm	415-868-1171	16 Wharf Road		Bolinas	CA	94924
Corte Madera Public Library	Nancy	Davis	Branch Manager	ndavis@marincounty.org	http://www.co.marin.ca.us/depts/LB/main/corte/index.cfm	415-924-4844	707 Meadowsweet Drive		Corte Madera	CA	94925
CSAA Information Center			AO3S				150 Van Ness Avenue	Ste 300	San Francisco	CA	94142-9
Del Norte County Library	Rebecca	Tipton	Library Manager	rebecca@delnortecountylibrary.org	http://www.delnortecountylibrary.org/home	707-464-9793	190 Prince Mall		Crescent City	CA	95531
Fairfax Public Library	Gail	Wiemann	Library Branch Manager	gwiemann@co.marin.ca.us	http://www.co.marin.ca.us/depts/lb/main/fairfax/index.cfm	415-453-8092	2097 Sir Francis Drake Blvd.		Fairfax	CA	94930
Healdsburg Public Library	Во	Simons	Director of Healdsburg Branch	bo@sonoma.lib.ca.us	http://www.sonomalibrary.org/branches/Healdsburg.html	707-433-3772	139 Piper Road		Healdsburg	CA	95448
Inverness Public Library			Head Librarian		http://www.co.marin.ca.us/depts/lb/main/wmarin/invindex.cfm	415-669-1288	15 Park Avenue		Inverness	CA	94937
Larkspur Public Library			Head Librarian	library@cityoflarkspur.org	http://www.ci.larkspur.ca.us/208.html	415-927-5005	400 Magnolia Avenue		Larkspur	CA	94939
Marin City Public Library	Nancy	Davis	Head Librarian	ndavis@marincounty.org	http://www.co.marin.ca.us/depts/lb/main/mcity/index.cfm	415-332-6159	164 Donahue Street		Marin City	CA	94965
Marin County Free Library	Gail	Haar	Director	library@co.marin.ca.us	http://www.co.marin.ca.us/depts/LB/main/index.cfm	415-473-3220	3501 Civic Center Drive	Suite 404	San Rafael	CA	94903
Ukiah Library	Eliza	Wingate	Branch Librarian	mendoref@co.mendocino.ca.us	http://www.co.mendocino.ca.us/library/branches.htm	707-463-4491	105 North Main Street		Ukiah	CA	95482
Mill Valley Public Library	Anji	Brenner	Head Librarian	citylibrarian@cityofmillvalley.org	http://www.millvalleylibrary.org/	415-389-4292	375 Throckmorton Avenue		Mill Valley	CA	94941
MTC-ABAG Library	Julie	Tunnell	Head Librarian	library@mtc.ca.gov	http://www.mtc.ca.gov/library/about.htm#staff	510-817-5836	Joseph P. Bort Metro Center	101 8th Street	Oakland	CA	94607
Muni Library	Jerry	McGovern	Librarian	<u>sfmtalibrary@sfmta.com</u>		415-701-4500	1 South Van Ness Avenue		San Francisco	CA	94102
Napa City-County Library	Danis	Kreimeier	Library Director	Library@countyofnapa.org	http://www.co.napa.ca.us/library/napa_main_library.htm	707-253-4241	580 Coombs Street		Napa	CA	94559
Northwest Information Center Sonoma State University	Nicole	Lawson	Coordinator	nicole.lawson@sonoma.edu	http://library.sonoma.edu/about/contactus.php	707-664-2397	1801 East Cotati Avenue		Rohnert Park	CA	94928
Novato Public Library	Janet	Doerge	Branch Manager	JDoerge@marincounty.org	http://www.co.marin.ca.us/depts/lb/main/novato/index.cfm	415-897-1141	1720 Novato Boulevard		Novato	CA	94947
Petaluma Regional Library	Doug	Cisney	Branch Manager	<u>peta-lab@info.sonoma.lib.ca.us</u>	http://www.sonomalibrary.org/branches/Petaluma.html	707-763-9801	100 Fairgrounds Drive		Petaluma	CA	94952
Presidio Trust Library	Barbara	Janis	Librarian	bjanis@presidiotrust.gov	http://www.presidio.gov/history/research.htm	415-561-5343	P.O. Box 29052		San Francisco	CA	94129-
Pt. Reyes Public Library	Bonny	White	Branch Manager	BNWhite@co.marin.ca.us	http://www.co.marin.ca.us/depts/lb/main/wmarin/PRSindex.cfm	415-663-8375	11431 State Route 1		Point Reyes Station	CA	94956
Rohnert Park/Cotati Regional Library	Nancy	Kleban	Head Librarian	nkleban@sonoma.lib.ca.us	http://sonomalibrary.org/branches/Rohnert.html	707-584-9121	6250 Lynne Conde Way		Rohnert Park	CA	94928
San Anselmo Public Library	Linda	Kenton	Town Librarian	lkenton@townofsananselmo.org	http://www.townofsananselmo.org/index.aspx?nid=133	415-258-4656	110 Tunstead		San Anselmo	CA	94960
San Francisco Main Public Library	Luis	Herrera	City Librarian	<u>citylibrarian@sfpl.org</u>	http://sfpl.lib.ca.us/	415-557-4400	100 Larkin Street		San Francisco	CA	94102-
San Geronimo Valley Public Library	Gail	Haar	Director	library@co.marin.ca.us	http://www.co.marin.ca.us/depts/lb/main/wmarin/sgindex.cfm	415-488-0430	7282 Sir Francis Drake		San Geronimo	CA	94963
San Rafael Public Library	Sarah	Houghton	Library Director	sarah.houghton@cityofsanrafael.org	http://marinet.lib.ca.us	415-485-3323	1100 E Street, at Fifth Avenue		San Rafael	CA	94901
Santa Rosa Central Library	Sandra M.	Cooper	Library Director	scooper@sonoma.1rb.ca.us	http://sonomalibrary.org/branches/Central.html	707-545-0831	211 E Street		Santa Rosa	CA	95404
Sausalito Public Library	Abbot	Chambers	City Librarian	achambers@ci.sausalito.ca.us	http://www.ci.sausalito.ca.us/library/default.htm	415-289-4121	420 Litho Street		Sausalito	CA	94965
Sebastopol Regional Library	Matthew	Rose	Branch Manager	seba-lab@info.sonoma.lib.ca.us	http://www.sonoma.lib.ca.us/branches/Sebastopol.html	707-823-7691	7140 Bodega Avenue		Sebastopol	CA	95472
Sonoma County Library	Sandra M.	Cooper	Library Director	scooper@sonoma.1rb.ca.us	http://www.sonoma.lib.ca.us/index.html	707-545-0831	Third and E Streets		Santa Rosa	CA	95404
Sonoma Valley Regional Library	Lisa	Musgrove	Branch Manager	Imusgrove@sonoma.lib.ca.us	http://www.sonoma.lib.ca.us/index.html	707-996-5217	755 West Napa Street		Sonoma	CA	95476
Stinson Beach Public Library	Gail	Haar	Director	library@co.marin.ca.us	http://www.co.marin.ca.us/depts/lb/main/wmarin/sbindex.cfm	415-868-0252	P.O. Box 578		Stinson Beach	CA	94970

# Golden Gate Bridge Transportatin Management Plan Contact List Major Destinations

	First					Alternative					1	[
Affiliation	name	Last name	Title	Email	Phone	Phone	Fax	Address Line 1	Address Line 2	City	St	Zip
Museums											1	
Aquarium By the Bay			Event Coordinator	meghan@bay.org							T	
Aquarium By the Bay			Public Relations Manager	kati@bay.org								
Aquarium By the Bay				mayra@bay.org								
California Academy of Sciences	Amy	Wong	Marketing Manager	awong@calacademy	415-379-5225			55 Music Concourse Dr.	Golden Gate Park	San Franciso	CA	94118
de Young Museum	Jill	Lynch	Assistant Director of Communications	jlynch@famsf.org	415-750-3553			50 Hagiwara Tea Garden Dr		San Franciso	CA	94118
Exploratorium	Laura	Zander	Chief Operating Offier	lzander@exploratorium.edu	(415) 561-0345			3601 Lyon Street		San Francisco	CA	94123-
Exploratorium	Jeff	Hamilton	Director of Community and Government Relations	jhamilton@exploratorium.edu	(415) 561-0353			3601 Lyon Street		San Francisco	CA	94123- 1099
Exploratorium	Jennifer	Fragomeni	Facilities Director	Jfrago@exploratorium.edu	(415) 561-0403			3601 Lyon Street		San Francisco	CA	34123-
Legion of Honor Museum				contact@famsf.org	(415) 750-3677			100 34th Ave		San Francisco	CA	
Japanese Tea Garden				info@japanesetea gardenssf.com	(415) 752-1171			75 Hagiwara Tea garden Dr		San Francisco	CA	94118
San Francisco Conservatory of Flowers	Lau	Hodges	Director of Operations & Exhibitions	lhodges@sfcof.org; info@sfcof.org	(415) 831-2090			100 John F. Kennedy Drive	Golden Gate Park	San Francisco	CA	94118
The Palace of Fine Arts				info@palaceoffinearts.org	(415) 563-6504		415-567-4062	3301 Lyon Street		San Francisco	CA	94123
Yerba Buena Center for the Arts	Kimberly	Harding	Public Relations Manager	kharding@ybca.org	415-321-1307			701 Mission St.		San Franciso	CA	94103
Yerba Buena Center for the Arts	Iris	Willow	Event Coordinator	iwillow@ybca.org								
Ripley's Believe It or Not				sanfran@ripleys.com								
San Francisco Museum of Modern Art	Libby	Garrison	Public Relations Manager	lgarrison@sfmoma.org	415.357.4170			151 Third Street		San Franciso	CA	94103
Recreation/Sightseeing/Sports/Entertainment												
Fort Mason/Herbst Pavilion	AL	Gonsalves	Manager Director	al@fortmason.org	415-345-7520			Fort Mason Center		San Francisco	CA	94123
Cow Palace	Diana	Colvin	Event Coordinator	events@cowpalace.com	415-404-4100			2600 Geneva Avenue		Daly City	_	94014
Infineon Raceway	Diana	Brennan	Director of Media Relations	dbrennan@infineonraceway.com						Sonoma		95476
Cavallo Point			mary has	info@cavallopoint.com	415-339-4700			601 Murray Circle	Fort Baker	Sausalito		94965
Environmental Traveling Companions				info@etctrips.org	(415) 474-7662			Fort Mason Center	Landmark Bldg. C	San Francisco	-	94123
Moscone Center	Naina	Аууа	Communications Manager	navva@moscone.com	(415) 292-2006			1800 Chestnut St.	Ŭ	San Francisco	CA	94123
				schang@coliseum.com;							+	
Oracle Arena & Oakland-Alameda County Coliseum	Ron	Little	Assistant General Manager	ron.little@coliseum.com; info@coliseumauthority.com	510-569-2121	510-383-4801		7000 Coliseum Way		Oakland	CA	94621
Oakland Raiders	Tom	Blanda	Senior Executive Finance & Technology	feedback@raiders.com	(510) 864-5000			1220 Harbor Bay Parkway		Alameda	CA	94502
Oakland Athletics	David	Rinetti	Vice President of Stadium Operations	renetti@oaklandathletics.com	(510) 638-4900			7000 Coliseum Way		Oakland	CA	94621
San Francisco Giants	Stacey	Slaughter	mary has		415-972-2017						+	
San Francisco Forty Niners	Jim	Mecurio	mary has						Room 400	San Francisco	CA	94124
Stanford University Dept of Athletics	Megan D.	Boone	Asst. Athletic Director of Compliance Svcs	mboone@stanford.edu	(650) 723-6150			Compliance Services Office	Arrillaga Family Sports Center	Stanford	CA	94305-615
Cal Bears Football	Andrew	Lempart	Strategic Communications Manager	alempart@berkeley.edu	510-642-2444						1	
San Francisco Zoo				mediarelations@sfzoo.org	(415) 753-7080			One Zoo Road		San Francisco	CA	
Oakland Zoo	Nicky	Mora	Sr. Marketing Manager	nmora@oaklandzoo.org	(510) 632-9525	x130		9777 Golf Links Road	POB 5238	Oakland	CA	94605
Theatres/Auditoriums			· · ·	· · · · · ·		·		·	·			
Orpheum		T		feedback@shnsf.com	415-551-2075						T	
San Francisco War Memorial and	Elizabeth	Murray	Managing Director	elizabeth.murray@sfgov.org	(415) 621-6600			401 Van Ness Ave, Room 110		San Francisco	CA	94102
Performing Arts Center Milton Marks	David	Glass		david.glass@jud.ca.go	1	1					$\vdash$	
Bill Graham Civic Auditorium	2414	5.000		A CONTRACTOR OF CONTRACTOR	(415) 713-3936						$\vdash$	<b> </b>
Curran Theatre		1		feedback@shnsf.com	415-551-2075	1	1		1	1	$\vdash$	<u> </u>
Golden Gate Theatre		1		feedback@shnsf.com	415-551-2075	1	1		1	1	$\vdash$	<u> </u>
Yoshis		1	General Manager	john@yoshis.com	1	1	1		1	1	$\mathbf{t}$	<u> </u>
Yoshis		1	Director Private Events	fiona@yoshis.com	1	1	1		1	1	$\vdash$	<u> </u>
Yoshis	Jana J	Jackson	Director of Marketing and Publicity	jana@yoshis.com	1		1				$\mathbf{t}$	
American Conservatory Theatre				hr@act-sf.org	415.834.3200	1	1	30 Grant Avenue	Sixth Floor	San Francisco	CA	94108
Other Venues	-					1			1			<u> </u>
Pier 39		1		sina@pier39.com							_	
Ghiradelli Square	+	+			+	1		1	1			<u> </u>
Gniradelli Square Grace Cathedral	Heidi	Zuhl		Brittany.Enos@cbre.com heidiz@gracecathedral.org	415-749-6364	1		1	1			<del> </del>
				richardn@wellsfargo	-	1			1		<u> </u>	05/65
Wells Fargo Center for the Arts	Richard	Nowlin	Executive Director	centerarts.org	707-527-7006			50 Mark Springs Road		Santa Rosa	CA	95403

Police-Fire-Ambulance-Hospitals

					Alternative	Alternative				Т	
First name	Last name	Title	Email	Phone	Phone	Phone	Address Line 1	Address Line 2	City	St	Zip
	Ļ	1	1	1		1	r	•	•	<u> </u>	
Robert	Sinnott	Fire Chief	rsinnott@larkspurfire.net		(415) 927-5017				Larkspur	CA	94939
Robert	Sinnott	Fire Chief	rsinnott@larkspurfire.net			(415) 927-5010	15 Barry Way		Greenbrae	CA	94904
Greg	Moore	Fire Chief	fire@cityof millvalley.org	(415) 389-4130			One Hamilton Drive		Mill Valley	CA	94941
Jason	Weber	Interim Fire Chief	jweber@marincounty.org	(415) 499-6717			POB 1238		Mill Valley	CA	94942
Chris	Martinelli	Senior Fire Captain	cmartinelli@marincounty.org	(415) 499-6717			POB 518		Woodacre	CA	94973
Robert	Sinnott	Executive Director	rsinnott@larkspurfire.net	(415) 927-5014			400 Magnolia Ave		Larkspur	CA	94939
Ken	Massucco	Fire Chief	firechief@novatofire.org	(415) 878-2690			95 Rowland Blvd		Novato	CA	94945
Christopher	Gray	Fire Chief	chrisgray@cityofsanrafael.org	(415) 485-3304			1039 C Street		San Rafael	CA	94901
Diana	Bishop	Chief	cops@srpd.org								
Phillip	Garcia	Fire Chief	philg@svfra.org	(707) 996-2102			630 Second Street		Sonoma	CA	95476
Ed	Hoener	Helicopter Operations	ed.haoener@sonoma-county.org	(707) 565-7195	(707) 565-7198	(707) 565-7194	2796 Ventura Ave		Santa Rosa	CA	95403
Steve	Freitas		wendy.hoffman@sonoma-county.org	(707) 565-2511	(707) 565-2781		2796 Ventura Ave		Santa Rosa	CA	95403
			landerson@ci.petaluma.ca.us	(707) 778-4390		(707) 762-4547			Petaluma	CA	94952
			kaaren.stasko@fire.ca.gov	(707) 967-1400			1199 Big Tree Road		St. Helena	CA	94574
			-				-	Suite 1		CA	94559
	-			-						CA	94559
-											1
James	Krider	Councilmember/NCTPA Chair	jkrider@cityofnapa.org	(707) 258-7876	(707) 259-8631		707 Randolph Street	Suite 100	Napa	CA	94559-2912
Robert T.	Doyle	Sheriff	rdoyle@co.marin.ca.us	(415) 499-7250			3501 Civic Center Drive	Suite 145	San Rafael	CA	94903
Eric	Hoffmann	Unit Chief	eric.hoffmann@fire.ca.gov	(707) 576-2586			2235 Airport Blvd		Santa Rosa	CA	95403-825
David	Reber	Captain	djreber@aol.com	(707) 545-7488			2243 Airport Blvd		Santa Rosa	CA	95403-825
Robert	Walker	Norbay Systems Support Manager	robert.a.walker@faa.gov	707-525-9356			2245 Airport Blvd		Santa Rosa	CA	95492
Robin K.	Hunt		robin.k.hunt@faa.gov	(650) 876-2778	x600	(650) 876-2733				CA	94010
Renee	Woolard	Administrative Assistant	rwoolard@novato.org	415-897-1122			909 Machin Avenue		Novato	CA	
Deborah	Ross	Administrative Assistant	dross@cityofmillvalley.org	415-389-4100			1 Hamilton Drive		Mill Valley	CA	
Rebecca	Nannini	Administrative Assistant	policeadmin@ci.petaluma.ca.us	707-778-4370			969 Petaluma Blvd		North	CA	
Susan	Barnes	Administrative Aide/Chief's Assistant	sbarnes@ci.sausalito.ca.us	415-289-4170			29 Caledonia Street		Sausalito	CA	
Dana	Unruh	Authority Clerk	dunruh@centeralmarinpolice.org	415-927-5150			250 Doherty Drive		Larkspur	CA	
Dana	Unruh	Authority Clerk	dunruh@centeralmarinpolice.org	415-258-4610			525 San Anselmo		San Anselmo	CA	
Cindy	Rodriguez	Administrative Assistant	crodriquez@ci.tiburon.ca.us	415-789-2801			1155 Tiburon Blvd.		Tiburon	CA	
Eric	Masterson	Chief		415-453-2727			33 Sir Francis Drake Blvd		Ross	CA	
Lylene	Phillips	Police Secretary	lphillips@cityofbelvedere.org	415-435-2611			450 San Rafael Avenue		Belvedere	CA	
Cynthia	Powell	Community Service Officer	cpowell@fairfaxpd.org	415-453-5330							
Darcy	Proctor	Administrative Assistant	darcy.proctor@sonoma-county.org	707-996-3601			175 1st Street West		Sonoma	CA	
Carrie	Behler	Administrative Secretary	cbehler@srcity.org	707-543-3600			965 Sonoma Avenue		Santa Rosa	CA	
James	Conner	Lieutenant	jconner@sebpd.com	707-829-4400			6850 Laguna Park Way		Sebastopol	CA	
Jeff	Taylor	Administrative Lieutenant	jtaylor@rpcity.org	707-584-2600			500 City Center Drive		Rohnert Park	CA	
Bill	French	Lieutenant	bfrench@ci.cotati.ca.us	707-792-4611			203 West Sierra Avenue		Cotati	CA	
Chris	Spallino	Chief	chrisspallino@sonoma-county.org	707-838-1234			9291 Old Redwood Highway		Windsor	CA	
Jonathan	Mills	Lieutenant	JMills@ci.calistoga.ca.us	707-942-2810			1234 Washington Street		Calistoga	CA	
of Emergency S	Services (OES)										
Dave	Ebarle	Support Services Manager	David.Ebarle@SFGOV.ORG	415-558-3882			1011 Turk Street		San Francisco	CA	94102
Joann	Hicks	-	joann.hicks@sfgov.org	415 558-3831	1		1011 Turk Street		San Francisco	CA	94102
Karrie	Groves, BSN	CQI Coordinator	ems@co.marin.ca.us;	(415) 473-3214			899 Northgate Dr	Suite 104	San Rafael	СА	
Tv	Cook	EMS Coordinator		(707) 253-4341			2344 Old Sonoma Road		Napa	CA	94559
-				,	1					CA	94559
-	-			(415) 565-6501	-			Suite 200		C^	
	SIGUIDI	Hobistiat Ellio Director	Sociation Goomonia-county.org	( * 10) 000-000T	1	1		00.00 200	Santa NUSa	U.A.	1
	Robert Robert Greg Jason Chris Christopher Diana Phillip Ed Steve Larry Tim John Greg James Robert T. Eric David Robert T. Eric David Robert T. Eric David Robert T. Eric David Robert T. Eric David Robert T. Eric David Robert T. Eric David Robert T. Eric David Robert T. Eric David Robert C. Renee Deborah Rebecca Susan Dana Cindy Eric Lylene Cynthia Darcy Carrie James Jeff Bill Chris Jonathan of Emergency S Dave Joave Joave Joave Susan	Robert     Sinnott       Robert     Sinnott       Greg     Moore       Jason     Weber       Chris     Martinelli       Robert     Sinnott       Ken     Massucco       Christopher     Gray       Diana     Bishop       Phillip     Garcia       Ed     Hoener       Steve     Freitas       Larry     Anderson       Tim     Streblow       John     Robertson       Greg     Pirie       James     Krider       Robert T.     Doyle       Eric     Hoffmann       David     Reber       Robert Walker       Robin K.     Hunt       Renee     Woolard       Deborah     Ross       Rebecca     Nannini       Susan     Barnes       Dana     Unruh       Dana     Unruh       Cindy     Rodriguez       Eric     Masterson       Lylene     Phillips       Cynthia     Powell       Darcy     Proctor       Carrie     Behler       James     Conner       Jeff     Taylor       Bill     French       Chris     <	RobertSinnottFire ChiefRobertSinnottFire ChiefGregMooreFire ChiefJasonWeberInterim Fire ChiefChrisMartinelliSenior Fire CaptainRobertSinnottExecutive DirectorKenMassuccoFire ChiefChristopherGrayFire ChiefDianaBishopChiefPhillipGarciaFire ChiefEdHoenerHelicopter OperationsSteveFreitasSheriffLarryAndersonSheriffJamesKriderCouncilmember/NCTPA ChairRobert T.DoyleSheriffEricHoffmannUnit ChiefJamesKriderCaptainRobert T.DoyleSheriffEricHoffmannUnit ChiefDavidReberCaptainRobert WalkerNorbay Systems Support ManagerRobin K.HuntAirports District ManagerRoberhRossAdministrative AssistantDeborahRossAdministrative AssistantSusanBarnesAdministrative AssistantDanaUnruhAuthority ClerkCindyRodriguezAdministrative AssistantCaptaiPowellCommunity Service OfficerDarcyProctorAdministrative AssistantCarrieBehlerAdministrative SecretaryJamesConnerLieutenantChrisSpallinoChiefJonthanMills <td>Robert         Sinnott         Fire Chief         rsinnott@larkspurfire.net           Greg         More         Fire Chief         triminott@larkspurfire.net           Greg         More         Fire Chief         trie@cityd militvalley.org           Jason         Weber         Interim Fire Captain         cmartinelli@marine.ounty.org           Chris         Martinelli         Senior Fire Captain         cmartinelli@marine.net           Ken         Massucco         Fire Chief         trisent@larkspurfire.net           Ken         Massucco         Fire Chief         chisgary@cityofsanfatel.org           Diana         Bishop         Chief         cpili@evtra.org           Ed         Hoener         Helicopter Operations         ed.haoener@sonma-county.org           Ed         Hoener         Helicopter Operations         ed.haoener@sonma-county.org           Tim         Streblow         Fire Chief         landreson.getra.org           Tim         Streblow         Fire Chief         kaaren.stasko@fire.ca.gov           Jahne         Robertson         Sheriff         kaaren.stasko@fire.ca.gov           James         Krider         Councilmember/NCTPA Chair         kider@cityofnapa.org           Bobor A.         Bodys@exomarin.ca.us         streic</td> <td>Robert         Sinnott         Fire Chief         rainott@larkspurfire.net         (415) 927-5014           Greg         Moore         Fire Chief         fire@aityof.milwaley.org         (415) 927-5041           Greg         Moore         Fire Chief         fire@aityof.milwaley.org         (415) 927-5041           Greg         Matinelii         Senior Fire Captain         mattinelimenut.org         (415) 927-5014           Robert         Sinnott         Executive Director         rainott@larkspurfire.net         (415) 927-5014           Kan         Massucco         Fire Chief         fires/mat/genyratire.net         (415) 927-5014           Kan         Massucco         Fire Chief         chi/genyr@chyratire.net         (415) 485-3304           Diana         Bishop         Chief         chi/genyr@chyratire.net         (415) 485-3304           Diana         Bishop         Chief         chi/genyr@chyratire.net         (707) 985-7195           Steve         Freitas         Sheriff         wendy.hoffman@anoma.county.org         (707) 785-7495           Tim         Streblow         Fire Chief         aaren.tasko@fire.ca.gov         (707) 985-74140           John         Robertan         Sheriff         chief@countyfonapa.org         (707) 238-4514           Johne<!--</td--><td>First and sourceFirst and the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the se</td><td>FlatRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealR</td><td>First and PictureJuncPinalPinalPinalPinalPinalPinal PinalRiseriaSinoriaFirst ColorSinorial Sinorial Sino</td><td>Pint of the sectorPint td><td>pictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictual</td><td>namenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamename</td></td>	Robert         Sinnott         Fire Chief         rsinnott@larkspurfire.net           Greg         More         Fire Chief         triminott@larkspurfire.net           Greg         More         Fire Chief         trie@cityd militvalley.org           Jason         Weber         Interim Fire Captain         cmartinelli@marine.ounty.org           Chris         Martinelli         Senior Fire Captain         cmartinelli@marine.net           Ken         Massucco         Fire Chief         trisent@larkspurfire.net           Ken         Massucco         Fire Chief         chisgary@cityofsanfatel.org           Diana         Bishop         Chief         cpili@evtra.org           Ed         Hoener         Helicopter Operations         ed.haoener@sonma-county.org           Ed         Hoener         Helicopter Operations         ed.haoener@sonma-county.org           Tim         Streblow         Fire Chief         landreson.getra.org           Tim         Streblow         Fire Chief         kaaren.stasko@fire.ca.gov           Jahne         Robertson         Sheriff         kaaren.stasko@fire.ca.gov           James         Krider         Councilmember/NCTPA Chair         kider@cityofnapa.org           Bobor A.         Bodys@exomarin.ca.us         streic	Robert         Sinnott         Fire Chief         rainott@larkspurfire.net         (415) 927-5014           Greg         Moore         Fire Chief         fire@aityof.milwaley.org         (415) 927-5041           Greg         Moore         Fire Chief         fire@aityof.milwaley.org         (415) 927-5041           Greg         Matinelii         Senior Fire Captain         mattinelimenut.org         (415) 927-5014           Robert         Sinnott         Executive Director         rainott@larkspurfire.net         (415) 927-5014           Kan         Massucco         Fire Chief         fires/mat/genyratire.net         (415) 927-5014           Kan         Massucco         Fire Chief         chi/genyr@chyratire.net         (415) 485-3304           Diana         Bishop         Chief         chi/genyr@chyratire.net         (415) 485-3304           Diana         Bishop         Chief         chi/genyr@chyratire.net         (707) 985-7195           Steve         Freitas         Sheriff         wendy.hoffman@anoma.county.org         (707) 785-7495           Tim         Streblow         Fire Chief         aaren.tasko@fire.ca.gov         (707) 985-74140           John         Robertan         Sheriff         chief@countyfonapa.org         (707) 238-4514           Johne </td <td>First and sourceFirst and the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the se</td> <td>FlatRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealR</td> <td>First and PictureJuncPinalPinalPinalPinalPinalPinal PinalRiseriaSinoriaFirst ColorSinorial Sinorial Sino</td> <td>Pint of the sectorPint td> <td>pictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictual</td> <td>namenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamename</td>	First and sourceFirst and the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the se	FlatRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealRealR	First and PictureJuncPinalPinalPinalPinalPinalPinal PinalRiseriaSinoriaFirst ColorSinorial Sinorial Sino	Pint of the sectorPint  pictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictualpictual	namenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamenamename	

Police-Fire-Ambulance-Hospitals

	1					Alternative	Alternative			1	1	
Affiliation	First name	Last name	Title	Email	Phone	Phone	Phone	Address Line 1	Address Line 2	City	St	Zip
Permitted (not sure what this means, MCC)												
AMR/San Francisco Ambulance				amr.sf@amr.net	(415) 922-9400			1300 Illinois Street		San Francisco	CA	94107
Bayshore Ambulance	William	Bockholt	President	info@bayshoreambulance.com	(650) 525-9700			370 Hatch Drive	P.O. Box 4622	Foster City	CA	94404
King American Ambulance Company	Josette	Mani	President	josettemani@yahoo.com	(415) 931-1400			2570 Bush Street		San Francisco	CA	94115
ProTransport-1	Elena	Whorton	President	elena@protransport-1.com	(707) 586-4041			PO Box 7260		Cotati	CA	94931
San Francisco Fire Department	Michie	Wong	Lieutenant	michie.wong@sfgov.org	(415) 558-3361			698 Second Street		San Francisco	CA	94107
St. Joseph's Ambulance	Richard	Angotti	President	richardangotti@hotmail.com	(415) 460-6020			1418 Lincoln Avenue		San Rafael	СА	94901
North Bay Emergency Providers												
American Medical Response - Marin County				amr.marin@amr.net	(415) 451-8263	x2		470 DuBois St		San Rafael	CA	94901
NorCal Ambulance	Barry	Sutherland	CEO	barry@norcalambulance.com	(510) 452-3400			2537 Willow St		Oakland	СА	94607-1723
Bell's Ambulance	Steve	Busher	Operations Manager	bellsambulance@aol.com	(707) 433-1408			POB 726	434 Powell Ave	Healdsburg	CA	95448
Piners Napa Ambulance	Jeremy	Piner	Operations Manager	jeremy@piners.net	9707) 224-3123			1820 Pueblo Ave		Napa	СА	94558-4751
AMR/Sonoma County	Dean	Anderson	Operations Manager	amr.sonoma@amr.net	(707) 536-0400	(707) 544-4911	dispatch	930 South A Street		Santa Rosa	СА	95404
REACH Helicopter	Sean	Russel	President	brenda_alvarez@reachair.com	(707) 575-6886			451 Aviation Boulevard	#201	Santa Rosa	СА	95403
VeriHealth, Inc.	Abraham	Martin	Operations Manager	abraham.martin@verihealth.com	(707) 766-2400			2190 S. McDowell Blvd		Petaluma	CA	94975
Hospitals	-	÷	•	•	•		-			-		
San Francisco General Hospital	Rachael	Kagan	Director of Communications	rachael.kagan@sfdph.org	(415) 206-3170			2460 Mission St		San Francisco	CA	94110
California Pacific Medical Center	Kevin	McCormack	Media Relations Manager	McCormKD@sutterhealth.org	(415) 600-7484			P.O. Box 7999		San Francisco	CA	94120-7999
Saint Francis Memorial Hospital	Linda	Gillespie	Director	linda.gillespie@chw.edu	(415)353-6547			900 Hyde St		San Francisco	CA	94109
UCSF Medical Center	Elizabeth	Fernandez	Senior Public Information Representative	efernandez@pubaff.ucsf.edu	415-514-1592			3333 California Street		San Francisco	CA	94118
Children's Hospital & Research Center Oakland	Erin	Goldsmith	Media Relations Manager	egoldsmith@mail.cho.org	510-428-3069			747 52nd Street		Oakland	CA	94609
Children's Hospital & Research Center Oakland	Diana	Yee	Director, Media Relations	dyee@mail.cho.org	(510) 428-3120			747 52nd Street		Oakland	СА	94609
Children's Hospital & Research Center Oakland	Donald	Mitchell	Director of Security, Parking & Transportation	dmitchell@mail.cho.org	(510) 428-3465	(510) 428-3000		747 52nd Street		Oakland	CA	94609
St. Mary's Medical Center	Frank	Austin	Director of Marketing and Communications	Frank.Austin@chw.edu	(415) 750-5831			450 Stanyan St		San Francisco	CA	94117
Kaiser Hospital San Rafael	Carol	Harris	Director of Public Relations	carol.a.kp.org				99 Montecillo Road		San Rafael	СА	94903
Sonoma Valley Hospital	Kelly	Mather	CEO	administration@svh.com	(707) 935-5005			347 Andrieux St		Sonoma	CA	95476
Marin General Hospital	Jamie	Maites	Director of Communications	maitesj@maringeneral.org	(415) 925-7000			250 Bon Air Road		Greenbrae	CA	94904-1702
Novato Community Hospital	Mary	Strebig	Manager, Public Relations		(415) 209-1300			180 Rowland Way		Novato	CA	94945
West Marin Medical Center	Michael C.	Whitt, M.D.	Director	mwhittmd@yahoo.com	(415) 663-1082			11150 California One		Point Reyes Sta	ACA	94956-9756
Queen of the Valley Hospital	Jaime	Penaherrera	Director of Marketing and Communications	jaime.penaherrera@stjoe.org	(707) 252-4411	ext. 2004		1000 Trancas St		Napa	CA	94558
Napa State Hospital	Dolly	Matteucci	Interim Director	nshcontact@dmhnsh.state.ca.us	(707) 253-5000			2100 Napa Vallejo Hwy		Napa	CA	94558-6293
St. Helena Hospital	Stan	Tempchin	Director of Facilities	shuhealth@shpo.ah.org	(707) 963-6495	(707) 963-3611		10 Woodland Road		St. Helena	CA	94574
Emergency Provider	·											
Golden State Donor Services	Tracy	Bryan	Manager, Public Relations	tbryan@dcids.org	916-567-1600			1760 Creekside Oaks Dr	Suite 220	Sacramento	CA	95833
California Transplant Donor Network	Heather	Dickinson	Ex. Asst. to COO and CEO	hdickinson@ctdn.org	510-273-6739			1000 Broadway	Suite 600	Oakland	СА	94607
American Medical Response National				0EP@amr.net	(877) 567-4466							
Office of Emergency Preparedness	1						L			L		1

# Golden Gate Bridge Transportatin Management Plan Contact List Presidio Tenants

							_					
Affiliation Presidio Tenants	First name	Last name	Title	Email	Phone	Alternative Phone	Fax	Address Line 1	Address Line 2	City	St	Zip
3Degrees Inc.		T		aucker@3degreesinc.com	415.561.6852		1	38 Keyes Ave	Suite 300	San Francisco	CA	94129
Arion Press				arionpress@arionpress.com	415-668-2542		415-668-2550	1802 Hays Street		San Francisco	CA	
Bay School of San Francisco	Timothy	Johnson	Head of School	tiohnson@bayschoolsf.org	415-561-5800		415-561-5808	35 Keyes Ave.		San Francisco	CA	
Benningfield Financial Advisors	Milo	Benningfield	nead of School	milo@benningfieldadvisors.com	415-561-6688		413-301-3866	1016 Lincoln Blvd #1		San Francisco	CA	
Consultative Group on Biological Diversity	Cynthia	Lyon		cgbd@cgbd.org	413-301-0000			1016 Lincoln Blvd		San Francisco	CA	
Crissy Field Center	Christy	Rocca		crocca@parksconservancy.org	415-561-7690		415-561-7695	603 Mason at Halleck		San Francisco	CA	
Disney Museum		Wolf	Director of Facilities & Operations	nwolf@wdfmuseum.org	(415) 345-6802		415-501-7095			San Francisco	CA	
Equity Community Builders	Nancy Ted	Leser	Director of Facilities & Operations	ted@ecbsf.com	(415) 272-3847			104 Montgomery Street 38 Keyes Ave		San Francisco	CA	
	Vaike			inbox@eucalyptusassoc.com	(415) 561-3346					+	CA	
Eucalyptus Associates Farallones National Marine Sanctuary	Mary Jane	Broderick Schramm		maryjane.schramm@noaa.gov	(415) 501-5540			567 Ruger Street 991 Marine Drive		San Francisco San Francisco	CA	
First Republic Bank	wary Jane	Schramm		drounsaville@firstrepublic.com	(415) 561-2988		(415) 561-3988	210 Lincoln Blvd		San Francisco San Francisco	CA	
The Garden Conservancy					415-441-4300		(415) 501-5988	38 Keyes Ave	Suite 106	+	CA	
The Grove Consultants	Neel	6		wcprog@gardenconservancy.org	415.561.2500				Suite 106	San Francisco	CA	_
	Noel	Snow		noel_snow@grove.com				1000 Oreilly Ave		San Francisco	CA	
Geographic Expeditions	Scott	Montgomery		scott@geoex.com	(415) 922-0448			1008 General Kennedy		San Francisco	_	
House of Air	Paul	McGeehan		pmcgeehan@yahoo.com				926 Mason Street		San Francisco	CA	
Interfaith Center	Paul	Chaffer		paul@interfaith-presidio.org	((45) 504 3050			130 Fisher Loop		San Francisco	CA	_
International Forum on Globalization	Anju	Palta		apalta@ifg.org	(415) 561-7650			1009 General Kennedy #2		San Francisco	CA	
Ken Lindsteadt Architects	Babac	Doane		babac@kenlinsteadt.com	((45) 547 0070			116 Sheridan Avenue	0.11.117	San Francisco	CA	
KW Hospitality Group	Kirke	Wrench		kirke@wrenchusa.com	(415) 517-0870			38 Keyes Avenue	Suite 117	San Francisco	CA	94129
La Petite Baleen	Christina	Loeffler		christina@swimlpb.com	-		-	933 Mason Street			<u> </u>	
Lawers for Clean Water Inc.	Meghan	Strauss		meghan@lawyersforcleanwater.com			-	1004 A O'Reilly Ave		San Francisco	CA	
LENS Ventures	Jennifer	Blevins		jennifer@lensventures.com	415-370-8264		-	5B Funston		San Francisco	CA	
Letterman Digital Arts Center	Cathy	Frazier		cathy.frazier@lucasfilm.com	-		-	One Letterman Drive		San Francisco	CA	94129
Neighborhood Association for Presidio Planning (NAPP)	Judith	Hulka	President	hulka@earthlink.net	(415) 474-2466							
Net Power and Light	Stephanie	Chew		stephanie@netpowerandlight.com	4155633350					San Francisco	CA	94129
Pacific Union	Mary	Craig		marycraig@pacificunionco.com	(415) 845-4002			C Letterman Drive	Suite 300	San Francisco	CA	94129
Planet Granite	Jeff	Ceccacci		jeff@planetgranite.com	415-692-3434			924 Mason Street		San Francisco	CA	94129
pMDsoft Inc.	Sbahrmi			support@pmdsoft.com				11 Funston Ave	Suite A	San Francisco	CA	94129
Presidio Chapel	Sandra	Pilon		sandi@interfaith-presidio.org	415 561 3930			130 Fisher Loop Dr		San Francisco	CA	94129
Presidio YMCA	Robert	Sindelar	Executive Director	rsindelar@ymcasf.org	(415) 447-9601			63 Funston Avenue		San Francisco	CA	94129
Presidio Sport & Medicine	Chris	Chorak	Owner	chris@presidiosport.com	415.561.6655			PO Box 470607	1162 B Gorgas Avenue	San Francisco	CA	94147
Presidio Fitness	Megan	Driscoll	Owner	megandriscoll@yahoo.com	(415) 563-1815			222 Halleck Street		San Francisco	CA	94129
Presidio Golf Course	Jamie	Miller	PGA General Manager	jmiller@palmergolf.com	(415) 561-4661 x206		(415) 561-4667	300 Finley Road @ Arguello Gate		San Francisco	CA	94129
RSF Social Finance	Caitlin	Peerson	-	caitlin.peerson@rsfsocialfinance.org	(415) 561-6163			1002 Oreilly		San Francisco	CA	94129
SF Green Clean	Bill	Alber		bill@wfalber.com	(415) 515-5700			222 Halleck Street		San Francisco	CA	94129
San Francisco Film Centre	Jessica	Moss		jessica@sffilmcentre.com	(415) 561-3456			39 Mesa Street, Suite 107		San Francisco	CA	
San Francisco National Cemetary	Kathy	McCall		Kathleen.mccall@va.gov	(650) 589-7737	(650) 222-2841	(650) 873- 6578	1 Lincoln Blvd.		San Francisco	CA	-
The Serra Preschool	Marybeth	Cody		marybeth@theserrapreschool.com	(415) 561-2200	(000) 222 2011	(415) 561-2201	#7 Building	Funston Ave	San Francisco	CA	
Sports Basement	David	Rumberg		drumberg@sportsbasement.com	(415) 286-3674		(410) 001 2201	610 Old Mason St	T dilotori Ave	San Francisco	CA	
Sports Basement	Andrew	Gregg	Consultant Representing	andrewTGregg@mac.com	415.577.4059			610 Old Mason St		San Francisco	CA	
Sports Basement	Jared	Ingraham	oonsattant hepresenting	jingraham@sportsbasement.com	415.437.0100 x 7168		415.561.4535	610 Old Mason St		San Francisco	CA	
	-	Vela				2	413.001.4035			-	_	
Tides Foundation	Pauline			pvela@tides.org	(415) 561-7351			1014 Torney Ave		San Francisco	CA	
Triporati, Inc.	Patrick	Middleton		pat@triporati.com	(415) 203-0944			106 Lincoln Blvd		San Francisco	CA	
Uban Watershed Project	Doug	Kern		dkern@kernsite.com	(415) 561-4857	l		Bldg. 204, Rm. 200C		San Francisco	CA	
Presidio Nursery	Betty	Young	Director of Facilities & Operations	Byoung@ParksConservancy.org	415-561-4860	415-497-5671		Building 201	Fort Mason	San Francisco	CA	94123

# Golden Gate Bridge Transportatin Management Plan Contact List Senior Services

	First						Alternative					[]
Affiliation	name	Last name	Title	Email	Website	Phone	Phone	Address Line 1	Address Line 2	City	St	Zip
Marin												
Acclaim Home Care				postoffice@acclaimhomecare.com	www.acclaimhomecare.com	415-479-5125	415-479-5196 (f)	4340 Redwood Highway A1	Formerly Marin Community Healthcare	San Rafael	CA	94903
Advocate Home Care				admin@advocatehomecare.net	www.advocatehomecare.net	415-332-3770	415-332-3780 (f)	80 Liberty Ship Way	Suite 23	Sausalito	CA	94965
Aegis of San Rafael				sanrafael@aegisliving.com	http://www.aegisliving.com/ aegis-living-of-san-rafael/	415-578-5611	415-472-3969 (f)	111 Merrydale Road		San Rafael	CA	94903
Aging/Older Adult Services in Marin County				divisionofaging@co.marin.ca.us							$\square$	I
Aldersly Garden Retirement Community				gigileh@aldersly.com	www.aldersly.com	415-453-9271		326 Mission Avenue		San Rafael	CA	94901
AlmaVia of San Rafael at Faith Center				info@almaviaofsanrafael.org	www.almaviaofsanrafael.org	415-491-1900	415-491-1910 (f)	515 Northgate Drive		San Rafael	CA	94903
Alzheimer's Association - Marin Chapter				info@alznorcal.org	www.alz.org/norcal	415-472-4340		4340 Redwood Highway	Suite D314	San Rafael	CA	94903
American Society on Agining				info@asaging.org	www.asaging.org			71 Stevenson Street	Suite 1450	San Francisco	CA	94105-2938
Atria Tamalpais Creek				Amy.Schuster@atriaseniorliving.com	http://www.atriaseniorliving.com/	415-892-0944		853 Tamalpais Avenue		Novato	CA	94947
Buck Institute for Age Research				info@buckinstitute.org	www.buckinstitute.org	415-209-2000	415-899-1810 (f)	8001 Redwood Boulevard		Novato	CA	94945
Care Giver Staffing				care@caregiverstaffing.com	www.caregiverstaffing.com	415-397-2727		140 Hidden Valley Lane		San Anselmo	CA	94960
Care Solutions for Elders				tina@caresolutionsforelders.com	www.caresolutionsforelders.com	415-456-3439	415-789-4373 (f)	524 San Anselmo Avenue	Suite 217	San Anselmo	CA	94960
Comfort Keepers				vincemaffeo@comfortkeepers.com	www.comfortkeepers.com	415-884-2286		4040 Civic Center Drive	Suite 220	San Rafael	CA	94901
Design Benefits/Medi-Cal Consultants				designbenefits@gmail.com	http://www.designbenefits.info/	800-728-6646	707-795-2292 (f)	2050 Vineyard Road		Novato	CA	94947
Drake Terrace Retirement Community				Cheri.Drees@kiscosl.com	www.kiscoseniorliving.com	415-491-1935	415-491-1703 (f)	275 Los Ranchitos Road		San Rafael	CA	94903
EAH Housing				info@eahousing.org	www.eahousing.org	415-258-1800	415-453-4927 (f)	2169 E. Franscico Bouleva	Suite B	San Rafael	CA	94901
Eldercare Specialists - Geriatric Care Managers				lynn@elderspecialists.com	www.elderspecialists.com	415-259-4864	415-259-6498 (f)	1300 South Eliseo	Suite 203	Greenbrae	CA	94904
Elder Financial Protection Network (EFPN)				info@bewiseonline.org	www.bewiseonline.org	415-956-5556		550 Montgomery Street	Suite 485	San Francisco	CA	94111
Engage As You Age				info@engageasyouage.com	www.engageasyouage.com	415-690-6944	415-541-8588 (f)	275 5th Street	Suite 201	San Francisco	CA	94103
Everyday Bills				craig@caregiver.org	www.everydaybillsonline.com	415-320-3394		633 Tamalpais Avenue		Novato	CA	94947
Family Caregiver Alliance				info@caregiver.org	www.caregiver.com	415-434-3388		690 Market Street	Suite 600	San Francisco	CA	94904
First Choice Home Care, LLC				info@firstchoicecal.com	www.firstchoicecal.com	415-295-1565	415-329-1616 (f)	369 B Third Street	#137	San Rafael	CA	94901
Hired Hands Homecare				info@HiredHandsHomecare.com	www.HiredHandsHomecare.com	415-884-4343	415-884-4334 (f)	10 Commercial Boulevard	Suite 102	Novato	CA	94949
Home Instead Senior Care				todd.vaughan@homeinstead.com	www.homeinstead.com/255	415-883-6260	415-883-0200 (f)	350 Ignacio Boulevard	Suite 101	Novato	CA	94949
HomeWell Senior Care				info@homewellnorthbay.com	www.homewellnorthbay.com	415-599-4333	415-948-2064 (f)	300 Professional Center Dr	Suite 324	Novato	CA	94947
Institute on Aging				info@ioaging.org	www.loaging.org	415-456-8692		1005 A Street	#207	San Rafael	CA	94901
Jewish Family & Children's Services				marin@jfcs.org	www.jfcs.org	415-491-7960	415-491-7958 (f)	600 Fifth Avenue		San Rafael	CA	94901
LITA (Love is the Answer)				litamarin@sbcglobal.net	www.litamarin.org	415-472-5482	415-472-4965	4340 Redwood Highway	#101	San Rafael		94903
Margarita C. Johnson Senior Center				marincitycsd@gmail.com	www.marin.org	415-332-9323	415-332-3914 (f)	640 Drake Avenue		Marin City	CA	94965
Marin County Commission on Aging				glara@marincounty.org		415-499-7396		10 North San Pedro Road	Suite 1012	San Rafael	CA	94903
Margaret Todd Senior Center				PRCS@novato.org	www.cityofnovato.org	415-899-8290		1560 Hill Road		Novato	CA	94947
Novato Human Needs Center				nhnc-info@nhnc.org	www.nhnc.org	415-897-4147	415-897-7171 (f)	1907 Novato Boulevard		Novato	CA	94947
Precious Home Companion		1		carol@precioushome.com	www.precioushome.com	415-459-0237	1-866-519-0045 (f)	4040 Civic Center Drive	Suite 200	San Rafael	-	94903
Ross Valley Ecumenical Housing Association				rveha@comcast.net	www.tamhouse.org	415-457-5633		34 Tamalpais Avenue	& 61 Woodland Ave	San Anselmo		94979
Senior At Home				Info@SeniorsAtHome.org	www.SeniorsAtHome.org	415-449-3777		600 Fifth Avenue		San Rafael	CA	94901
Geriatric Care Management and Consultation				Laureletheridge@verizon.net	¥	415-640-0236	415-737-1374 (f)			Novato	CA	94945
Health Care Connection LLC				contact@healthcareconnectionllc.com		415-457-2256	415-457-3256 (f)	1363 Lincoln Avenue	#4	San Rafael	CA	94901
Heart & Soul Care Management & Consulting				caremanager@vom.com	www.heartsoulcare.com	707-490-6576	707-523-1001 (f)	926A Diablo Avenue	#111	Novato		94947
Living Well - Assisted Living at Home		1		info@LivingWellALAH.com	www.LivingWellALAH.com	1-800-805-7104		202 Donahue Street		Sausalito	-	94965
North Bay Eldercare Options				info@NorthBavEldercare.com	www.NorthBavEldercare.com	415-460-6333	415-329-2101	145 Town Center	#414	Corte Madera		94925
The Redwoods				dbolton@theredwoods.org	www.theredwoods.org	415-383-2741	415-383-0115 (f)	40 Camino Alto		Mill Valley		94941
Senior Access				info@senioraccess.org	www.senioraccess.org	415-491-2500	415-491-2503 (f)	70 Skyview Terrace	Building B	San Rafael	CA	94903
Special Needs Companion Services		1		info@sncsllc.com		415-435-1262	415-435-0421 (f)	1120 Mar West	Suite C	Tiburon	· ·	94920
Special Needs Nursing, Inc.				infor@sncsllc.com	www.sncsllc.com	415-435-2482	415-435-0421 (f)	1120 Mar West	Suite C	Tiburon		94920
Smith Ranch Homes				sales@smithranchhomes.com	www.smithranchhomes.com	415-491-4918	415-491-0254 (f)	400 Deer Valley Road		San Rafael	CA	94903
Respecting Our Elders, Inc.				info@respectingourelders.org	http://respectingourelders.org/	415-483-4025	415-883-4773 (f)	PO Box 244		Novato		94948-0244
Village Oduduwa				villageoduduwa@gmail.com		415-332-2100	415-332-2385 (f)	2 Park Circle		Marin City		94965
Villa Marin	Robert	Stivers	Independent On-site Broker	rstiversvilla-marin@gmail.com	www.villa-marin.com	415-492-2408	415-492-2673 (f)	100 Thorndale Drive		San Rafael		94903
West Marin Senior Services	Charles	Gompertz	President	cynthia@wmss.org	www.wmss.org	415-663-8148	415-663-1268 (f)	11435 State Route One		Point Reyes	CA	94956
Whitecaps of Bolinas and Stinson Beach	Gharles	aompertz	ricoluent	pres@whitecapsbsb.org	www.whitecapsbsb.org	415-868-1613	-10-000-1200 (I)	PO Box 411		Bolinas	-	94930 94924
Whistlestop	Terry	Scussel	General Manager of	tscussel@whistlestop.org	www.whistlestop.org	415-456-9062	415-456-2858 (f)	930 Tamalpais Avenue		San Rafael	CA	94924 94901
L		L	Transportation		1	1						,

# Golden Gate Bridge Transportatin Management Plan Contact List Senior Services

	First						Alternative				Τ	
Affiliation	name	Last name	Title	Email	Website	Phone	Phone	Address Line 1	Address Line 2	City	St	Zip
Sonoma												
Southwest Adult Day Services				janiced@srhealthcenters.org	www.swhealthcenter.org	707-573-4522		684 Benicia Drive		Santa Rosa	CA	95409
Bella Vista Villages Senior Residental Care				Mt25p@aol.com	www.calqualitycare.org	707-433-6161		209 Matheson Street		Healdsburg	CA	95448
Brookdale Place of Chanate	Scott	Carlson	Executive Director	scarlson1@brookdaleliving.com	www.brookdaleliving.com	707-575-7503		3250 Chanate Road		Santa Rosa	CA	95404
Catholic Charities Alzheimer's Respite Center				info@sebastopolseniorcenter.org	www.sebastopolseniorcenter.org	707-829-2440		167 High St		Sebastopol	CA	95472
Catholic Charities of the Diocese of Santa Rosa	Chuck	Fernandez	Executive Director	cfernandez@srcharities.org	www.srcharities.org	707-528-8712		987 Airway Court,		Santa Rosa	CA	95403
Chancellor Place of Windsor	Steven	Harms	Executive Director	sharms@brookdaleliving.com	www.brookdaleliving.com	707-837-8785		907 Adele Drive		Windsor	CA	95492
Clover Springs Community Association	Donna	Hollingsworth		cscaoffice@sbcglobal.net	www.clover-springs.org	707-894-8770		210 Red Mountain Drive		Cloverdale	CA	95425
Council on Aging	Marianne	McBridge	President	mmcbride@councilonaging.com	www.sonoma-county.org	707-565-5970		30 Kawana Springs Rd		Santa Rosa	CA	95403
Friends House	Travis	Staples	Interim Executive Director	tstaples@retirement.org	<u>http://www.friendshouse.org/</u> <u>contact-us/</u>	707-538-0152		684 Benicia Drive		Santa Rosa	CA	95409
Healdsburg Senior Center	Diane	Spain	Director of Senior Services	diane.spain@community-family-services.org	www.westcountyservices.org	707-869-0618		15010 Armstrong Woods R	oad	Guerneville	CA	95446
Healdsburg Senior Living Community	Rob	Matthews	Administrator	rmatthews@avalonhci.com	www.avalonhci.com	707-433-4877		725 Grove Street		Healdsburg	CA	95448
Jewish Family & Children's Services	Diana	Klein	Executive Director	DianaK@jfcs.org	www.jfcs.org	707-571-8533		1360 North Dutton Avenue	Suite C	Santa Rosa	CA	95401
Lodge at Paulin Creek	Randy	Bissell	Executive Director	rbissell@brookdaleliving.com	www.brookdaleliving.com	707-575-3722		2375 Range Avenue		Santa Rosa	CA	95403
MSSP-Multipurpose Senior Services Program, Adult and Aging Division	Liz	Claret	Care Manager	lclaret@schsd.org	<u>http://www.sonoma-county.org/</u> human/mssp.htm#work	707-565-5970		P.O. Box 4059		Santa Rosa	CA	95402
Merrill Gardens at Rohnert Park	Colleen	Kabeary	General Manager	gm.rohnertpark@merrillgardens.com	http://www.merrillgardens.com/p/ senior_living/news_store_3253/ rohnert-park-ca-94928/ rohnart-park-3253	707-623-1917		4855 Snyder Lane		Rohnert Park	< CA	94928
Merrill Gardens at Sonoma	Joseph	Sarto	General Manager	gm.sonoma@merrillgardens.com	http://www.merrillgardens.com/ senior_living/Sonoma_CA/zip_95476/ merrill_gardens/3258	707-931-4863		800 Oregon Street		Sonoma	CA	95476
Oakmont Gardens Senior Living					http://mbkseniorliving.com	(707) 585-7878		301 White Oak Drive		Santa Rosa	CA	95409
Petaluma People Services Center	Elece	Hempel	Executive Director	admin@petalumapeople.org	http://www.petalumapeople.org/ about.htm	707-765-8488		1500 A Petaluma Boulevar	d S	Petaluma	CA	94952
PEP Housing (Petaluma Ecumenical Properties)	Mary	Stompe	Executive Director	pep@pephousing.org	http://www.pephousing.org/	707-762-2336		951 Petaluma Boulevard S	outh	Petaluma	CA	94952
Petaluma Senior Center	Don	Streeper	Director	dstreeper@ci.petaluma.ca.us		707-778-4349		211 Novak Drive		Petaluma	CA	94954
Primrose Living With Memory Loss	John	Wotring	Director	jjw@primrosealz.com	http://www.primrosealz.com/	(707) 578-8360		2080 Guerneville Road		Santa Rosa	CA	95403
Rohnert Park Senior Center	Jessica	Schieberl	Community Services Specialist	jschieberl@rpcity.org	<u>www.ci.rohnert-</u> park.ca.us/index.aspx?page=138	707-585-6780		6800 Hunter Drive, Suite A		Rohnert Park	< CA	94928
Seniors, Inc.	Barbara	Holms	President		http://www.santarosa seniorcenter.org/	707-542-1228		1208 Fourth Street		Santa Rosa	CA	95404
Sebastopol Area Senior Center	Terry	Kelley	Executive Director	terry@sebastopolseniorcenter.org_	http://www.sebastopol seniorcenter.org/	707-829-2440		167 North High Street		Sebastopol	CA	95472
Sebastopol Community Cultural Center				retire@valleyorchards.com	www.ValleyOrchards.com	(707) 778-6030		2100 E. Washington Street		Petaluma	CA	94954
Sebastopol Senior Day Services				TClark@jtm-esc.org	www.jtm-esc.org	(707) 579-6949		5555 Montgomery Drive		Santa Rosa	CA	95409
Senior Advocacy Services	Annette	Lerdahl	President		www.senioradvocacyservices.org	707-526-4108		3262 Airway Drive	Suite C	Santa Rosa	CA	95103
Sonoma County In-Home Supportive Services				information@councilonaging.com	www.councilonaging.com	707-525-0143		30 Kawana Springs Rd		Santa Rosa	CA	95404
Sonoma Hills	Allegra	Wilson		awilson@schsd.org	<u>http://sonoma-county.org/</u> <u>human/ihss.htm#contact</u>	707-565-5900		3725 Westwind Boulevard		Santa Rosa	CA	95403
Sonoma Hills Retirement Living	Bert	Lombino	Executive Director	blombino@platinumseniorliving.com	sonomaretirement.com	707-939-7856		405 West Mac Arthur		Sonoma	CA	95476
Spring Lake Village					http://www.springlakevillage-esc.org/ contact.html	707-578-8400		5555 Montgomery Drive		Santa Rosa	CA	95409
Springfield Place	Tony	Montellano	General Manager	tmontellano@leisurecare.com	http://www.leisurecare.com/ springfieldplace/	707-769-3300		101 Ely Boulevard South		Petaluma	CA	
The Lodge at Paulin Creek				Mt25p@aol.com	www.sonomaresidentialcare.com	707-483-0998		18941 Sonoma Highway		Sonoma	CA	95476
Tree Haven Estates					www.sonomaretirement.com	707-939-7856		405 W. MacArthur		Sonoma	CA	95476
Valley Orchards				Mt25p@aol.com	www.sonomaresidentialcare.com	707-833-6201		359 Tree Haven Ln		Kenwood	CA	95452
Vineyard Commons at Fountaingrove				info@vintagehouse.org	www.holidaytouch.com	707-206-7791		3585 Round Barn Boulevar	d	Santa Rosa	CA	95403
Vintage Brush Creek	Cindy	Wood	Executive Director	cindy.wood@vintagesenior.com	www.vintagesenior.com	707-703-1057		4225 Wayvern Drive		Santa Rosa	CA	95409
Vintage House Senior Center				cynthia@vintagehouse.org	www.calqualitycare.org	707-935-0850		264 First St. East		Sonoma	CA	95476
Vintage Sonoma	David	Hahklotubbe	Executive Director	david.hahklotubbe@vintagesenior.com	www.vintagesenior.com	707-931-4857		91 Napa Road		Sonoma	CA	95476
West County Senior Services Center	Diane	Spain	Director of Senior Services	diane.spain@community-family-services.org	www.westcountyservices.org	707-869-0618		15010 Armstrong Woods R	oad	Guerneville	CA	95446

# Golden Gate Bridge Transportatin Management Plan Contact List Senior Services

	First						Alternative					
Affiliation	name	Last name	Title	Email	Website	Phone	Phone	Address Line 1	Address Line 2	City	St	Zip
San Francisco												
Canon Kip Senior Center	Phil	Clark	Education and Employment	pclark@ecs-sf.org		415-487-3370		705 Natoma at 8th Street		San Francisco	CA	94103
Self-Help for the Elderly				info@selfhelpelderly.org	http://www.selfhelpelderly.org/ index.php	415-677-7600		407 Sansome Street		San Francisco	CA	94111
30th Street Senior Center	Valorie	Villela	Director	30thStSeniorServices@onlok.org	http://www.onlok.org/30thStreet SeniorCenter.aspx	415-550-2210		225 30th Street	3rd Floor	San Francisco	CA	94131
OMI Catholic Charities				moreinfo@cccyo.org	http://community.cccyo.org/ page.aspx?pid=355	415-334-5550		65 Beverly Street		San Francisco	CA	94132
Independent Living Resource Center (ILRCSF)				info@ilrcsf.org	http://www.ilrcsf.org/	415-543-6318		649 Mission St. 3rd Fl.		San Francisco	CA	94105
Bayview Hunters Point Multi-Purpose Senior Citizens Center	Cathy	Davis	Executive Director	bhpmss1@aol.com	http://bhpmss.org/	415-822-1444		1706 Yosemite		San Francisco	CA	94124
SF Senior Center-Downtown Branch	Georgeann	lang	Business Office Manager	glang@ncphs.org	http://www.sfsenior.com/	415-771-7950		481 O'Farrell Street		San Francisco	CA	94102
Kimochi				kimochikai@kimochi-inc.org	http://www.kimochi-inc.org/	415-931-2294		1715 Buchanan Street		San Francisco	CA	94115
Visitacion Valley Senior Center	Julie	Kavanagn	Senior Program Manager		http://www.vvccsf.org/contact.html	415-970-6996		66 Raymond Avenue		San Francisco	CA	94134
Stonestown YMCA	Marietta	Gilman	Administrative Services Director	mgilman@ymcasf.org	http://www.ymcasf.org/stonestown/	415-242-7100		333 Eucalyptus Drive		San Francisco	CA	94132
Curry Senior Center				info@curryseniorcenter.org	http://curryseniorcenter.org/	415-885-2274		333 Turk Street		San Francisco	CA	94102
Bayanihan Community Center	Glen		Galing Bata Site Coordinator	glenjermyn@bayanihancc.org	http://www.bayanihancc.org/ index.html	415-348-8042		1010 Mission Street		San Francisco	CA	94103
Seniors At Home				info@seniorsathome.org	www.seniorsathome.org	415-507-0564						

# Golden Gate Bridge Transportatin Management Plan Contact List Transportation Tours

Physical         Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Partic Physical         Parit Physical         Partic Physical							Alternative					Τ	1
Department         Jam         am         Jam	Affiliation	First name	Last Name	Title	Email	Phone		Fax	Address Line 1	Address Line 2	City	St	Zip
School         Norm	Trucking Companies/Unions												
Chardon LangelChardon LangelNon-Neuronal ControlNon-Neuronal	California Trucking Association	Jim	Beach	CALTRUX Reporter	jimbeach@surewest.net; CTA@caltrux.org	(916) 782-4246			4148 E. Commerce Way		Sacramento	CA	95834
Name of NeuronizaNeuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza Neuroniza N	California Trucking Association	Mike	Kelechava		mkelechava@caltrux org	(916) 373-7192			4148 F. Commerce Way		Sacramento	CA	95834
Weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight weight w	-								-				
Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mixed metal     Mix		Charles	Ramorino	President	<u>c.ramorino@roadstartruckinginc.com</u>	(510) 487-2404			30527 San Antonio Street		Hayward	CA	94544
Deminering of and set of an analysis of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of		1		1		1	1		r	1	1	<b></b>	
Index planeIndex planeSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinterSinter <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>_</td> <td></td>											-	_	
Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>94402</td></t<>													94402
Party of PainPain PainPain Pain Pain Pain Pain Pain Pain Pain					· · · · · · · · · · · · · · · · · · ·							-	
Index of partviceindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindexindex<	· · ·												94111
DataDenProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProductProd		Luidgi	-			415-346-2453							
Index spaceImpact and the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state					· · · ·	( 15 5 17 005 1			-	Fisherman's Wharf		_	
Jained Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface Interface In		Darryll	White	President				(( 45) 000 0007				_	
Barl Barl Barl Barl Barl Barl Barl Barl								(415) 929-8687				_	
CathonaCathonaIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndexIndex <td></td> <td>Jeff</td> <td>Sears</td> <td></td>		Jeff	Sears										
Circle Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series Series		Devid	O a b and alb									_	
ComponentionJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJoteJote </td <td></td> <td>David</td> <td>Schmidt</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>235 Douglass Street</td> <td></td> <td>San Francisco</td> <td>CA</td> <td>94114</td>		David	Schmidt						235 Douglass Street		San Francisco	CA	94114
back-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symbolback-symb		1	Later.	0					5/ T		0.0.5	-	0/000
Binder participantionSinter and standingSinter and		Jay	Jeter	General manager								CA	
ElementarianyElementarianyEndIndependentalization (1999)Independentalization (1999) </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>PO Box 5547</td> <td></td> <td>Stockton</td> <td>CA</td> <td>95205</td>									PO Box 5547		Stockton	CA	95205
Serrer MerriSerrer MerriSerrer MerriSerrer MerriSerrer MerriSerrer MerriSerrer MerriSerrer MerriSerrer MerriSerrer MerriSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerrerSerr			-						04 ( Ohana Davad	Outra T	0.0.5	-	
Gramonian International ToringInternational SystemInternational Syst	-		-							Suite I		-	
FeM Tangentation ServicesInternaInterna Trans DirectionInterna Trans Direction <th< td=""><td></td><td></td><td>-</td><td></td><td>Info@eventswest.us</td><td></td><td></td><td></td><td></td><td></td><td>,</td><td>_</td><td></td></th<>			-		Info@eventswest.us						,	_	
Prances         Darwal         Tree Unreported/ Trans Unreported/ Trans Unreported/ Trans Unreported/ Trans Unreported/ Darka Darka         Tree Unreported/ Darka Darka Darka Darka         Tree Unreported/ Darka Darka Darka Darka Darka         No.4         San Francisco         CA         444           GGCar         Am         Hele         Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Darka Da			-		for the second station Operated lands								
Induce prince prince princePrince prince prince princePrince prince princePrince prince princePrince prince princePrince prince princePrince prince princePrince prince princePrince prince princePrince prince 	F&M Transportation Services			Traval Director/	Imtransportation@pacbell.net	510.798.3713			PU B0X 1615		Alameda	CA	94501
Deck         Aim         Hein         Intersection of the standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standbard Department of the Standb	Frances Gorman	Frances	Gorman		francesgorman@gmail.com	(415) 885-0148	(415) 519-0148		2655 Franklin Street	No 4	San Francisco	CA	94123
Golden forcem Traveloneindegedden standard80-210-300ImageImageImageStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandardStandard <td>GoCar</td> <td>David</td> <td></td> <td></td> <td>David.c@gocartours.com</td> <td>415-441-5695</td> <td></td> <td></td> <td>2715 Hyde Street</td> <td></td> <td>San Francisco</td> <td>CA</td> <td>94109</td>	GoCar	David			David.c@gocartours.com	415-441-5695			2715 Hyde Street		San Francisco	CA	94109
Gray IncSint ParalesSint Parales<	GoCar	Adam	Hiels		adamedward12@gmail.com	(415) 218-6664			2715 Hyde Street		San Francisco	CA	94109
Numery base base         Image base base base base         Solution of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of th	Golden Horizon Travel				info@goldenhorizontravel.com	800-210-3008			101 California Street	Suite 2450	San Francisco	CA	94111
Hong Dur Company         Incl	Gray Line				info@graylinesanfrancisco.com	(415) 434-8687					San Francisco	CA	
http://disam/fancisco.Double/DeckerTorr         Non-         Non- <td>Harvest Vacation</td> <td></td> <td></td> <td></td> <td>harvestvacation@yahoo.com</td> <td>650-588-3838</td> <td></td> <td></td> <td>PO BOX 320460</td> <td></td> <td>San Francisco</td> <td></td> <td>94132</td>	Harvest Vacation				harvestvacation@yahoo.com	650-588-3838			PO BOX 320460		San Francisco		94132
Incredible Adventures         Name         Name         Intregeting additionation of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the sec	Honey Tour Company				honeytours@comcast.net	707-583-4981					Sonoma	CA	
Name         Name         Weininger         Menninger         Meininger         Meininge	Hop-On Hop-Off San Francisco Double-Decker Tour					702-233-1627							
Metropolian Shuttle         Inde metropolianshuttle.com         988-569-345         IC         IC         IC         IC         IC         IC         Inde metropolianshuttle.com         987-226-3333         IC         IC         IC         American Canyon         CA         948033           Peninsul Tour         IC         IC         Inde metropolianshuttle.com         987-226-3333         IC         IC         IC         American Canyon         CA         9493           Peninsul Tour         IC         IC         Chauffeer Superison         Inde metropolianshuttle.com         707.783.192         IC         IC         IC         Petaluma         CA         9493           Pure Lucxy Minor Tours         Mary         Honeo         Operations Manager         Eric@qualityasurancetravel.com         IC         IC         IC         IC         9493           Quality Assurance Travel         Moreon         Operations Manager         Eric@qualityasurancetravel.com         IC	Incredible Adventures				info@incadventures.com	415.642.7378			765 Pennsylvania Avenue		San Francisco	CA	94017
Napa Valley Wine Country Tours         Index         Index Minister         707-228-333         Image Valley Wine Country Tours         Maneican Canyon         CA         946333-125           Perialuma KOA Tours         Image Valley Wine Tours         Image Valley Wine Tours         Image Valley Wine Tours         Marty         Hone         Change Wine Separating Cancer         707-763.1423         Image Valley Wine Tours         Partaluma KOA Tours         Marty         Hone         Change Wine Separating Cancer         707-763.1423         Image Valley Wine Tours         Partaluma KOA Tours         Marty         Hone         Change Wine Separating Cancer         707.763.1423         Image Valley Wine Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours         Partaluma KOA Tours<	Marin County Bikeways Committee	Nancy	Weninger		nweninger@mac.com	(415) 924-6887							
Peninsula Tour         Info@peninsulatour.com         (88) 33-125         Info@peninsulatour.com         (88) 33-125         Info@peninsula Road         Petaluma         CA         9417           Perinsula Tour         Mary         Hone Chauffeur Supervisor         mhroe@pureluxury.com         707.763.1462         20 Rainesville Road         Petaluma         CA         9491           Pure Luxury Nie Tours         Mary         Hone Chauffeur Supervisor         mhroe@pureluxury.com         707.753.1462         20 Rainesville Road         Petaluma         CA         9491           Quality Assurance Travel         Eric         Moreno         Operations Manager         Eric@qualityassurancetravel.com         10510/451-5400         2000 Mandela Way         Oakland         CA         9461           Royal Coast Tours         a         a         astritt Felde VS sales & Operations         1600 922-8228         150 Van Ness Avenue         San Francisco         CA         9411           Autromobile Association of Norther Californi         Melisa         Barritt Felde VS sales & Operations         1610 284-450         1600 922-8228         150 Van Ness Avenue         San Francisco         CA         9411           Autromobile Association of Norther Californi         Melisa         Barritt Felde VS sales & Operations and Barritt Felde Vsales & Operations and Barritt Felde Vsales & Operations and Ba	Metropolitan Shuttle				info@metropolitanshuttle.com	866-556-3545							
Petaluma K0A ToursImage: Non-Section of the search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search and search a	Napa Valley Wine Country Tours				info@nvwct.com	707-226-3333			20 Case Count		American Canyon	CA	94503-969
Pure Luxury Wine ToursMartyHroneChauffeur Supervisormhrone@pureluxury.com(707) 775-2920Image of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the	Peninsula Tour				info@peninsulatour.com	(888) 333-1256			1630 Davidson Avenue		San Francisco	CA	94124
Quality Asurance TravelEricMorenoOperations ManagerEric@qualityasurancetravel.comImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImoImo	Petaluma KOA Tours				reservations@sanfranciscokoa.com				20 Rainesville Road		Petaluma	_	94952
Reliant TravelInfo@relianttravelonline.com(510)451-5400Info@relianttravelonline.com(600) 278-001Comodela WayOaklandCA9460Royal Coach ToursNameRoyal Coach ToursRoyal Coach		Marty	Hronec	Chauffeur Supervisor	mhronec@pureluxury.com	(707) 775-2920			4246 Petaluma Boulevard North		Petaluma	CA	94952
Reyal Coach ToursImage: Coach ToursKan JoseCASan JoseCA9912Commerical TransportAAA Automobile Association of Northern CaliforniaMelissaBarritt FeldeVP Sales & Operations(A15) 565-2012(800) 922-8228150 Van Ness AvenueSan FranciscoCA9410AMTRAK - Oakland Corporate OfficeMedia Relationsmediarelationsoakland@amtrak.com(510) 238-4302(510) 238-4372530 Water Street5th FloorOaklandCA9460AMTRAK San FranciscoDeirdreFitzgeralddfitzgerald@thsSCA.org(415) 546-4555(603) 500-3263101 The Embarcadero#200San FranciscoCA9410Golden State PortablesMikeBandaSpecial Events Coordinatormike@goldenstateportables.com(408) 640-9351(510) 630-3597(898) 890-5171San JoseCA9410Zipcar San FranciscoMikeBandaSpecial Events Coordinatormike@goldenstateportables.com(405) 495-7478200 Folsom StreetSan FranciscoCA9410Zipcar San FranciscoMicaelUribeGeneral Managerinfo@zipcar.com(415) 495-7478200 Folsom StreetSan FranciscoCA9410AltPOPT Shuttles and LimoseliceArikSharabiCaSan FranciscoCA9410Altport ExpressArikSharabiCaSan FranciscoCA9410Altport ExpressArikSharabiCaSan FranciscoCA9410Altport ExpressArik<	Quality Assurance Travel	Eric	Moreno	Operations Manager	Eric@qualityassurancetravel.com								
Commerical TransportAAA Automobile Association of Northern CaliforniaMelissaBarritt Felde VP Sales & Operations(415) 565-2012(800) 922-8228150 Van Ness AvenueSan FranciscoCA9410AMTRAK - Oakland Corporate OfficeMedia Relationsmediarelationsoakland@amtrak.com(510) 238-4372530 Water Street5th FloorOaklandCA9460AMTRAK San FranciscoDeirdreFitzgeralddfitzgerald@thsCA.org(415) 546-4555(603) 504-3263101 The Embarcadero#200San FranciscoCA9410Golden State PortablesMikeBandaSpecial Events Coordinatormike@goldenstateportables.com(406) 640-9351(510) 630-3597(888) 800-5171San FranciscoCA9410Zipcar San FranciscoMichaelUribeGeneral Managerinfo@zipcar.com(415) 495-7478(415) 495-1510200 Folsom StreetSan FranciscoCA9411AMRPORT Shuttles and Limo ServicesMichaelUribeGeneral Managerinfo@zipcar.com(415) 495-7478(415) 495-1161191 Second StreetSan FranciscoCA9411Alvanced Airport ShuttleInfo@zipcar.com415.850.7693POB 12272San FranciscoCA9411Alvanced Airport ShuttleArikSharabiinfo@airportexpressf.com415.957.211910 Harrison StreetSan FranciscoCA9411Alvanced Airport ExpressArikSharabiinfo@airportexpressf.com(415) 495-7478(415) 492-7202So07 Old Redwood HwySan FranciscoCA <t< td=""><td>Reliant Travel</td><td></td><td></td><td></td><td>info@relianttravelonline.com</td><td>(510)451-5400</td><td></td><td></td><td>2000 Mandela Way</td><td></td><td>Oakland</td><td>CA</td><td>94607</td></t<>	Reliant Travel				info@relianttravelonline.com	(510)451-5400			2000 Mandela Way		Oakland	CA	94607
AAA Automobile Association of Northern CaliforniaMelissaBarritt FieldVP Sales & Operations(415) 565-2012(800) 922-8228150 Van Ness AvenueSan FranciscoCA9410AMTRAK - Oakland Corporate OfficeMedia Relationsmediarelationsoakland@amtrak.com(510) 238-4372530 Water Street5th FloorOaklandCA9460AMTRAK San FranciscoDeirdreFitzgeralddfitzgerald@hthsSCA.org(415) 546-4555(603) 504-3263101 The Embarcadero#200San FranciscoCA9410Golden State PortablesMikeBandaSpecial Events Coordinatormike@goldenstateportables.com(408) 640-9351(510) 630-3597(88) 880-5171CSan FranciscoCA9410Greyhound BusInfo@goldenstateportables.com(415) 495-11690200 Folsom StreetSan FranciscoCA9410AIRPORT Shuttles and Linon ServicesMichaelUribeGeneral Managerinfo@zipcar.com(415) 495-11690200 Folsom StreetSan FranciscoCA9410Advanced Airport ShuttleInfo.Qual Info@zipcar.com415.850.7693Imager200 Folsom StreetSan FranciscoCA9410Airport ExpressArikSharabiImagerImagerAfing@airportexpressf.com415.850.7693ImagerPOB 12272San FranciscoCAAAirport ExpressArikSharabiImagerImagerAfing@airportexpressf.com415.755.5121Imager910 Harrison StreetSan FranciscoCA94	Royal Coach Tours				sales@royal-coach.com	(408) 279-4801			630 Stockton Street		San Jose	CA	95126
AMTRAK - Oakland Corporate OfficeMedia Relationsmediarelationsoakland@amtrak.com(510) 238-4370(510) 238-4372530 Water Street5th FloorOaklandCA9460AMTRAK San FranciscoDeirdreFitzgeralddfitzgerald@theSCA.org(415) 546-4555(603) 504-3263101 The Embarcadero#200San FranciscoCA9410Golden State PortablesMikeBandaSpecial Events Coordinatormike@goldenstateportables.com(408) 640-9351(510) 630-3597(888) 880-5171CASan JoseCA9410Greyhound BusImbaImbaCommercialsales@greyhound.com(415) 495-1569200 Folsom StreetSan FranciscoCA9410Zipcar San FranciscoMichaelUribeGeneral Managerinfo@zipcar.com(415) 495-7478(415) 495-1161191 Second StreetSan FranciscoCA9410Akap Area LimousineMatea Limousine@yahoo.com415.850.7693(415) 495-1161191 Second StreetSan FranciscoCA9410Advanced Airport ShuttleImbaImbaBalimousine@yahoo.com415.850.7693POB 12272San FranciscoCA9410Airport ExpressArikSharabiInfo@airportexpresssf.com415.775.5121POB 12272San FranciscoCA9410Airport ExpressArikSharabiInfo@airportExpressinc.com(707) 837-8700(800) 327-20245807 Old Redwood HwySan RacesCA9544Airport ExpressArikSharabiImfo@airport@xpressinc.com(707) 837-	Commerical Transport												
AMTRAK San FranciscoDeirdreFitzgeralddfitzgerald@theSCA.org(415) 546-4555(603) 504-3263101 The Embarcadero#200San FranciscoCA9410Golden State PortablesMikeBandaSpecial Events Coordinatormike@goldenstateportables.com(408) 640-9351(510) 630-3597(888) 880-5171CSan JoseCA9410Greyhound BusImage: Commercialsales@greyhound.com(415) 495-1569Image: Commercialsales@greyhound.com(415) 495-1761191 Second StreetSan FranciscoCA9410Zipcar San FranciscoMichaelUribeGeneral Managerinfo@zipcar.com(415) 495-7478(415) 495-1161191 Second StreetSan FranciscoCA9410AAR Bay Area LimousineImage: Commercialsales@greyhound.com415.850.7693Image: Commercialsales@greyhound.com(415) 495-1161191 Second StreetSan FranciscoCA9410AAR Bay Area LimousineImage: Commercialsales@greyhound.com(415) 495-7478Image: Commercialsales@greyhound.com(415) 495-1161191 Second StreetSan FranciscoCA9410AAR Bay Area LimousineImage: Commercialsales@greyhound.com(415) 495-7478Image: CommercialsalesSan FranciscoCASan FranciscoCA9410Advanced Airport ShuttleImage: Commercialsales@greyhound.com415.850.7693Image: CommercialsalesPOB 12272San FranciscoCASan FranciscoCAAAirport ShuttleImage: Commercialsales@greyhound.com415.850.7693Image: Commercialsales <td>AAA Automobile Association of Northern California</td> <td>Melissa</td> <td>Barritt Felde</td> <td>VP Sales &amp; Operations</td> <td></td> <td>(415) 565-2012</td> <td>(800) 922-8228</td> <td></td> <td>150 Van Ness Avenue</td> <td></td> <td>San Francisco</td> <td>CA</td> <td>94101</td>	AAA Automobile Association of Northern California	Melissa	Barritt Felde	VP Sales & Operations		(415) 565-2012	(800) 922-8228		150 Van Ness Avenue		San Francisco	CA	94101
Golden State PortablesMikeBandaSpecial Events Coordinatormike@goldenstateportables.com(408) 640-9351(510) 630-3597(888) 880-5171MiceSan JoseCACAGreyhound BusCCcommercialsales@greyhound.com(415) 495-1569200 Folsom StreetSan FranciscoCA9410Zipcar San FranciscoMichaelUribeGeneral Managerinfo@zipcar.com(415) 495-7478(415) 495-1161191 Second StreetSan FranciscoCA9410ARPORT Shuttles and Limo ServicesAAA Bay Area LimousineCbalimousine@yahoo.com415.850.7693POB 12272San FranciscoCA64Advanced Airport ShuttleCSan SranciscoCA1600 airportexpresssf.com415.755121San FranciscoCA9410Airport ExpressArikSharabiInfo@airportExpressinc.com(707) 837-8700(800) 327-20245807 Old Redwood HwySan FranciscoCA9410American Airporte ShuttleCSun pronticaniproter.com415.202.0733(415) 614-2000(415) 202-0726120 Willow StreetSan FranciscoCA9410	AMTRAK - Oakland Corporate Office	Media Relation	s		mediarelationsoakland@amtrak.com	(510) 238-4360	(510) 238-4372		530 Water Street	5th Floor	Oakland	CA	94607
Greyhound BusImage: commercialsales@greyhound.com(415) 495-1569200 Folsom StreetSan FranciscoCA9410Zipcar San FranciscoMichaelUribeGeneral Managerinfo@zipcar.com(415) 495-7478(415) 495-1161191 Second StreetSan FranciscoCA9410ARPORT Shuttles and Limo ServicesAAA Bay Area LimousineImage: Colspan="4">A balimousine@yahoo.com415.850.7693POB 12272San FranciscoCA9410Advanced Airport ShuttleImage: Colspan="4">General Manager415.850.7693POB 12272San FranciscoCA9410Advanced Airport ShuttleImage: Colspan="4">General Info@airportexpresssf.com415.850.7693POB 12272San FranciscoCA9410Airport ExpressArikSharabiImfo@airportexpresssf.com415.755.121Image: Colspan="4">910 Harrison StreetSan FranciscoCA9410Airport ExpressArikSharabiImfo@airportExpressinc.com(707) 837-8700(800) 327-20245807 Old Redwood HwySanta RosaCA9540American Airporter ShuttleImage: colspan="4">Support@americanairporter.com415.202.0733(415) 614-2000(415) 202-0726120 Willow StreetSan FranciscoCA9410	AMTRAK San Francisco	Deirdre	Fitzgerald		dfitzgerald@theSCA.org	(415) 546-4555	(603) 504-3263		101 The Embarcadero	#200	San Francisco	CA	94105
Zipcar San FranciscoMichaelUribeGeneral Managerinfo@zipcar.com(415) 495-7478(415) 495-1161191 Second StreetSan FranciscoCA9410ARRPORT Shuttles and Limo ServicesAAA Bay Area LimousineAAA Bay Area LimousineAdvanced Airport ShuttleOBB 12272San FranciscoCAAdvanced Airport ShuttleAir MichaelAir Michael	Golden State Portables	Mike	Banda	Special Events Coordinator	mike@goldenstateportables.com	(408) 640-9351	(510) 630-3597	(888) 880-5171			San Jose	CA	
AIRPORT Shuttles and Limo Services         AAA Bay Area Limousine       AA Bay Area Limousine       415.850.7693       POB 12272       San Francisco       CA         Advanced Airport Shuttle       650.504.6641       0       O       CA       CA         Airport Express       Arik       Sharabi       info@airportexpresssf.com       415.775.5121       910 Harrison Street       San Francisco       CA       9410         Airport Express       Arik       Sharabi       info@airportexpresssf.com       (707) 837-8700       (800) 327-2024       5807 Old Redwood Hwy       San Francisco       CA       9544         American Airport Express       support@americanairporter.com       415.020.0733       (415) 614-2000       (415) 202-0726       120 Willow Street       San Francisco       CA       9410	Greyhound Bus					(415) 495-1569			200 Folsom Street		San Francisco	CA	94105
AAA Bay Area LimousineImage InformationImage Information<	Zipcar San Francisco	Michael	Uribe	General Manager	info@zipcar.com	(415) 495-7478		(415) 495-1161	191 Second Street		San Francisco	CA	94105
Advanced Airport Shuttle         Imfo@airportexpresssf.com         650.504.6641         Imfo@airportexpressf.com         910 Harrison Street         San Francisco         CA         9410           Airport Express         Arik         Sharabi         info@airportexpresssf.com         415.775.5121         910 Harrison Street         San Francisco         CA         9410           Airport Express Santa Rosa         Imfo@AirportExpressInc.com         (707) 837-8700         (800) 327-2024         5807 Old Redwood Hwy         San Francisco         CA         9544           American Airporter Shuttle         Support@americanairporter.com         415.202.0733         (415) 614-2000         (415) 202-0726         120 Willow Street         San Francisco         CA         9410	AIRPORT Shuttles and Limo Services												
Advanced Airport Shuttle         Imfo@airportexpresssf.com         650.504.6641         Imfo@airportexpressf.com         San Francisco         CA         9410           Airport Express         Arik         Sharabi         info@airportexpresssf.com         415.775.5121         910 Harrison Street         San Francisco         CA         9410           Airport Express         San Francisco         Info@airportexpressinc.com         (707) 837-8700         (800) 327-2024         5807 Old Redwood Hwy         San Francisco         CA         9544           American Airporter Shuttle         Support@americanairporter.com         415.202.0733         (415) 614-2000         (415) 202-0726         120 Willow Street         San Francisco         CA         9410	AAA Bay Area Limousine				balimousine@yahoo.com	415.850.7693			POB 12272		San Francisco	CA	
Arik         Sharabi         info@airportexpresssf.com         415.775.5121         910 Harrison Street         San Francisco         CA         9410           Airport Express         0         0         info@AirportExpressInc.com         (707) 837-8700         (800) 327-2024         5807 Old Redwood Hwy         Santa Rosa         CA         9410           American Airport Express         0         0         support@americanairporter.com         415.020.0733         (415) 614-2000         (415) 202-0726         120 Willow Street         San Francisco         CA         9410												1	1
Airport Express Santa Rosa         Info@AirportExpressInc.com         (707) 837-8700         (800) 327-2024         5807 Old Redwood Hwy         Santa Rosa         CA         9540           American Airporter Shuttle         support@americanairporter.com         415.020.0733         (415) 614-2000         (415) 202-0726         120 Willow Street         San Francisco         CA         9410		Arik	Sharabi	İ	info@airportexpresssf.com		1		910 Harrison Street		San Francisco	CA	94109
American Airporter Shuttle         support@americanairporter.com         415.202.0733         (415) 614-2000         (415) 202-0726         120 Willow Street         San Francisco         CA         9410		1					(800) 327-2024	ł				-	95403
		1					· · · ·	(415) 202-0726	,				94109
	American Limousine & Sedan Service	Operations Mgr			bayarealimo@gmail.com	(650) 988-9292	, 2000	(650) 903-9044				CA	

#### Golden Gate Bridge Transportatin Management Plan Contact List Transportation Tours

-	-			1			1		·		_	
Affiliation	First name	Last Name	Title	Email	Phone	Alternative Phone	Fax	Address Line 1	Address Line 2	City	C+	Zin
Associated Limousines Inc.	Thorname	Last Maine	Inte	info@sflimo.com	(800) 258-2660	Filone	1 47	1398 Bryant Street	Address Line 2	San Francisco	CA	94014
Avon Airporter Shuttle				avonairporter@yahoo.com	707-732-6601							
Bauers Intelligent Transportation				chsahyoun@gmail.com	1 (800) 546-6688						1	
Bay Shuttle				moreinfo@bayshuttle.com	415.564.3400							
Bayporter Express					415.467.1800			27 Industrial Way		Brisbane	CA	94005
Black Tie Airporter	Debbie	Moore	VP Operations	dmoore@blacktietrans.com	(800) 820-3028						CA	
Carey Limousines	Todd	Zagurski	VP, Operations, West	events@carey.com	(415) 337-2736	(202) 895-1200				San Francisco	CA	
Crown Limousine				info@crownlimousine.com	415-644-0988			350 Bay Street	#100-73	San Francisco	CA	94133
Davis Airporter	Operations Mgr				(530) 756-6715	1		-		1	CA	
East Bay Connection	Operations Mgr			info@eastbayconnection.net	(800) 675-3278						CA	
Elite Limousine				elitelimo@gmail.com	650-777 0977			221 King Street	#360	San Francisco	CA	94107
Evans Transportation and California Wine Tours, Inc.				karen@californiawinetours.com	707-255-1559	1	707-255-0753	4075 Solano Avenue		Napa	CA	94558
Globe Best Limos				info@globebestlimos.com	866-960-9487							
Go Lorrie's Airport Shuttle				maria@sfovan.com	415.334.9000							
Horizon Airporter					(707) 552-8111	1				1		
Marin Airporter				randy@marinairporter.com	(415) 461-4222			8 Lovell Avenue		San Rafael	CA	94901
Marin County Airport Express					415.666.0166	1				1		
Marin Door to Door				marindoortodoor@yahoo.com	(415) 457-2717			5 Mitchell Boulevard	Suite 1	San Rafael	CA	94903
M & M Luxury Shuttle	Ted	Tehrani	Principal		(415) 552-3200			30 Adrian Court		Burlingame	CA	94010-2101
Monterey Airbus				airbus@maineventlimousines.com	(831) 373-7777							
Pacific Airport Shuttle				JD1718@gmail.com	415.681.6318							
Peter's Airport Shuttle				-	650.577.8858							
Quake City Shuttle				quake1city@yahoo.com	415.255.4899	415.621.2831						
Regency Limousine				limo@regencysf.com	(415) 922-0123			2121 Sacramento Street	Suite 201	San Francisco	CA	94109
Royal Limousine & Sedan Service	Operations Mgr			info@royallimosvc.com	(415) 227-4676	(650) 347-3857	(650) 342-1083	1015 Cadillac Way	#107	Burlingame	CA	
San Francisco City Shuttle				<u>please fax</u>	888.850.7878		415-822-2396					
San Francisco Comprehensive Shuttle Tours, LLC				info@sanfranshuttletours.com	415.513.5400							
San Francisco Limo				info@sanfranciscolimo.com	650.228.1920		650.228.1921					
Santa Cruz Airport Flyer				earlybirdshuttle@aol.com	831.423.5937							
Sonoma Airporter				info@SonomaAirporter.com	(707) 938-4246			5807 Old Redwood Highway		Santa Rosa	CA	95403
Sonoma County Airport Express				tony@airportexpressinc.com	707.837.8700							
South & East Bay Shuttle				<u>please fax</u>	800.548.4664	408.225.4444	(408) 226-4444					
SuperShuttle				jbishop@supershuttle.net	415.552.3200							
VIP Airport Shuttle				service@viptransportgroup.com	(408) 986-6000							
United Airlines South Bay Flyer	Operations Mgr				(888) 463-5937						CA	
Western Eagle Shuttle					(415) 533-4466		(415) 460 -9782	200 Las Gallinas		San Rafael	CA	94903
TAXI Companies - San Francisco and Marin												
SF Green Cab LLC/Affiliated Taxi Services	Operations Mgr				(415) 626-4733			2940 16th Street	#313	San Francisco	CA	
Luxor Cab	Operations Mgr		Administration Office		(415) 282-4141			2230 Jerrold Avenue		San Francisco	CA	94124
Metro Cab	Operations Mgr				(415) 920-0715					San Francisco	CA	
Yellow Cab Cooperative	Operations Mgr			info@yellowcabsf.com	(415) 333-3333			1200 Mississippi Street		San Francisco	CA	
DeSoto Cab	Operations Mgr				(415) 970-1300			555 Selby Street		San Francisco	CA	
Black & White Checker Cab	Operations Mgr				(415) 206-1900					San Francisco	CA	
CityWide Disptach Service	Operations Mgr			citywidedispatch@gmail.com	(415) 920-0700					San Francisco	CA	
AC Taxi of Santa Rosa	Kevin	Kroh			707-777-7777			1243 Lotus Court		Santa Rosa	CA	95404
A Marin Taxi (AMT)					415-497-6656			Loring & Highway 1		Mill Valley	CA	9494
A Taxi Express				patrick.Muithya@ataxiexpress.com	415-250-4787			61 La Brea Way		San Rafael	CA	94903
Bay Area Town Cars					415-351-2000							
Bubba's Cab Company					415-342-2260			2 S Green Street		Larkspur	CA	9493
Marin North Bay Cooperative Taxi					415-258-2800	ļ					$\perp$	
Marin Taxi	Greg	McCord	President	Greg@MarinTaxis.com	415-924-7344			49 C Industrial Way		Greenbrae	СА	94904
(A-1 Taxi, Belaire Cab, Radio Cab, Yellow Cab Marin)									#242			
Marin Taxi Cab Co.					415-789-1999			3030 Bridgeway Boulevard	#242	Sausalito	CA	9496
Marin Taxi Services				dan Quasadatasi agar	415-383-5511						+	
Novato Taxi		L		dan@novatotaxi.com	415-898-8484			405 Liberty Otra 1		Database	+	
Petaluma Green Taxi					707-769-8294	ł		125 Liberty Street	-	Petaluma	CA	9495
Petaluma Taxi Company					707-776-4888			40 4th Street	a 11 (aa	Petaluma	CA	9495
PlanetTran	Lori van	Dam	President	customerservice@planettran.com	1-888-756-8876			533 Airport Boulevard	Suite 400	Burlingame	CA	94010

# Golden Gate Bridge Transportatin Management Plan Contact List

Transportation Tours
----------------------

Affiliation	Eirot nomo	Loot Name	Title	Email	Bhono	Alternative Phone	Fox	Address Line 1	Address Line 2	City	St	Zin
Affiliation Safari Taxi	First name	Last Name	Title	Email admin@safaritaxiservice.com	Phone 415-462-0808	Filone	Fax	AUULESS LINE I	Auuress Line Z	City	ວເ	zip
Taxi Marin Cab Company				taximarin@gmail.com	415-970-2434			150 Shoreline Highway		Mill Valley	CA	94941
Town Taxi Cab Marin				townTCM@gmail.com	415-686-6053			150 Shoretine Highway		witt vattey	UA.	3434
Airports/Aviation		!		townrewiegman.com	413-000-0033	I		1		•	-	
	1	1	Manager of Media &		1	r –	1		1	1	1	r
Oakland Airport & Port of Oakland	Robert	Bernardo	Public Relations	rbernardo@portoakland.com	(510) 627-1401			1 Airport Drive		Oakland	CA	94621
SF Airport	Zeke	Zamara	Traffic Management	<u>zeke.zamara@flysfo.com</u>	(650) 821-6532							
Napa County Airport	Martin	Pehl		martin.pehl@countyofnapa.org	(707) 253-4300			2030 Airport Road		Napa	CA	94558
Sonoma County Airport	Jon	Stout	Airport Facilities Manager	airport@sonoma-county.org	(707) 565-7243			2290 Airport Boulevard		Santa Rosa	CA	95403
Sonoma Jet Center				atyourservice@sonomajetcenter.com	(707) 523-2800			6000 Flight Drive		Santa Rosa	CA	95403
Sonoma Helicopter, LLC					(707) 528-4883			5790 Flightline Drive		Santa Rosa	CA	95403
Petaluma Municipal Airport	Bob	Patterson	Airport Facilities Manager	airport@ci.petaluma.ca.us	(707) 778-4404	(707) 753-1166	(707) 778-4405	601 Sky Ranch Drive		Petaluma	CA	94952
SolAirus Aviation	24 Hr Disptach Cntr				(415) 897-4522	(800) 359-7861		201 First Street		Petaluma	CA	94952
Barron Air					(707) 284-9786			2290 Becker Boulevard		Santa Rosa	CA	95403
Kaiser Air - Santa Rosa Jet Center					(707) 528-7400			2240 Airport Boulevard		Santa Rosa	CA	95403
North Coast Air					(707) 542-8687			5010 Flightline Drive		Santa Rosa	CA	95403
Experimental Aircraft Association - EAA Chapter 124					(707) 539-5188			5550 Windsor Road		Windsor	CA	95492
The Ninety-Nines Int'l. Organization of Women Pilots	Peg	Thompson	Vice Chairman	info@santarosa99s.org				2247 Airport Boulevard		Santa Rosa	CA	95403
Bay Cities Chapter 99s	Kath	Holcombe						3 Admiral Drive	#469	Emeryville	CA	94608-1548
Dragonfly Aviation					(707) 575-8750			2222 Airport Boulevard		Santa Rosa	CA	95403
Mineta San Jose International Airport	David	Vossbrink	Communications Director	dvossbrink@sjc.org	(408) 501-7700			1732 N. First Street, Suite 600		San José	CA	95112
TOUR BUS Operators - San Francisco, Marin, Sonoma	•						•	•	•			
Ride the Ducks San Francisco				info@sanfranciscoducks.com	877-887-8225							
San Francisco Fire Engine Tours				sffiretruck@gmail.com	415-333-7077			650 Beach Street		San Francisco	CA	94133
San Francisco Minibus		1		info@sfminibus.com	415-777-5555			P.O. Box 882374		San Francisco	CA	94188
San Francisco Shuttle Tours		1		info@sfshuttletours.com	415-513-5400					San Francisco	CA	
San Francisco Site Seeing		1		info@graylinesanfrancisco.com	415-434-8687							
San FranciscoTours				No e-mail address available	888-478-1465		800-410-8234					
SF Best Bus		1		info@sfcapitol.com	415-238-8667		(415) 826-0279					
Silverado Stages				cpereira@silveradostages.com	916-564-8455							
Sonoma Valley Wine Country Tours				reservations@sonomavalleywinecountryton	800-856-3456							
Starline Tours				info@starlinetours.com	800-959-3131							
Super Sightseeing				info@supersightseeing.com	888-868-7788			2627 Taylor Street		San Francisco	CA	94133
Terrific Tours		1		terrifictours@gmail.com	707-658-2748			40 Fourth Street	#214	Petaluma	CA	94952
The Electric Tour Company - San Francisco and Sausalito				chelseasfelectrictour.com	415-474-3130			165 Jefferson Street	Suite 2F	San Francisco	CA	94133-120
Thunderstar Stages				info@thunderstarcharter.com	707-541-6295					Rohnert Park	CA	94927
TourCorp					415-474-9855	T		165 Jefferson Street	Suite 2E	San Francisco	CA	94133
Tower Tours				reservations@towertours.com	415-345-8687	T						
Trans America Travel				TransAmericanTravel@Gmail.com	415-519-1558					Fremont	CA	94555
United Coach Tours				info@unitedcoachtours.com	650-873-3138			69 South Linden Avenue		So. San Francisco	CA	94080
Urban Safari				Daniel@TheUrbanSafari.com	(866) 697-2327						1	İ
West Valley Trailways		1		info@westvalleytrailways.com	(408) 371-1230			240 Cristich Lane		Campbell	CA	95008
Whitecastle Tours		1		info@whitecastletours.com	(925) 238-8747			220 Dandellion Lane		San Ramon	CA	94582
Wine Country Tour Shuttle	1	1	1		(415) 513-5400	1	1		1	1	1	1

Attachment G: Traffic Special Provisions

## 8-1.10B FAILURE TO COMPLETE WORK PARTS WITHIN SPECIFIED TIMES

Attention is directed to Sections 12-4.04, 12-4.05B, 12-4.05C and 12-4.05E of these Special Provisions for the traffic lane closure charts.

EXCEPT FOR THE 52-HOUR WEEKEND BRIDGE CLOSURE, LIQUIDATED DAMAGES FOR FAILING TO OPEN THE REQUIRED BRIDGE OR EXPRESSWAY TRAFFIC LANES TO PUBLIC TRAFFIC BY THE TIMES SPECIFIED SHALL BE FIVE THOUSAND DOLLARS (\$5,000) FOR EACH FULL TEN MINUTE PERIOD OR PART THEREOF AFTER THE FIRST TEN MINUTE PERIOD. THE TOTAL LIQUIDATED DAMAGES FOR EACH TWELVE (12) HOURS OF SUCH DELAY SHALL NOT EXCEED ONE HUNDRED FIFTY THOUSAND DOLLARS (\$150,000). Contractor shall pay said liquidated damages as herein provided and further agrees that the District may deduct the amount thereof from any moneys due or that may become due the Contractor under the Contract.

LIQUIDATED DAMAGES FOR FAILING TO COMPLETE ALL THE WORK FOR STAGES 4S AND 5N IN ALL PARTS AND REQUIREMENTS BY THE TIMES SPECIFIED SHALL BE TEN THOUSAND DOLLARS (\$10,000) FOR EACH FULL TEN MINUTE PERIOD OR PART THEREOF AFTER THE FIRST TEN MINUTE PERIOD FOR THE INITIAL FIRST HOUR. LIQUIDATED DAMAGES FOR EACH ADDITIONAL 10 MINUTE PERIOD OR PART THEREOF AFTER THE INITIAL FIRST HOUR IS TWENTY-FIVE THOUSAND DOLLARS (\$25,000). THE TOTAL LIQUIDATED DAMAGES FOR EACH TWELVE (12) HOURS OF SUCH DELAY SHALL NOT EXCEED THREE HUNDRED THOUSAND DOLLARS (\$300,000). Contractor shall pay said liquidated damages as herein provided and further agrees that the District may deduct the amount thereof from any moneys due or that may become due the Contractor under the Contract.

In addition to the liquidated damages specified above, Contractor shall indemnify and hold harmless the District and its representatives from and against all claims, suits, or actions of every name, kind and description, brought for or on account of traffic delays, monetary losses or other consequential damages which resulted from, or were alleged to have resulted from, in whole or in part, Contractor's (and its subcontractors') failure to maintain bridge traffic lanes open for use by the public as required by the terms of the Contract. The duty of the Contractor to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code. This indemnification shall survive termination of the Contract. All terms and conditions in Section 3-1.07, 7-1.05 and 7-1.06 of these specifications are hereby incorporated into this section.

# Revise Special Provisions Section 12 as marked:

# **12 TEMPORARY TRAFFIC CONTROL**

# Replace section 12-2 with: 12-2 CONSTRUCTION PROJECT FUNDING SIGNS

#### 12-2.01 GENERAL

Section 12-2 includes specifications for installing construction project funding signs.

Construction project funding signs must comply with the details shown on Caltrans'_Traffic Operations Web site.

Keep construction project funding signs clean and in good repair at all times.

## 12-2.02 MATERIALS

Construction project funding signs must be wood post signs complying with section 56-4.

Sign panels for construction project funding signs must be framed, single sheet aluminum panels complying with section 56-2.

The background on construction project funding signs must be Type II retroreflective sheeting on the Authorized Material List for signing and delineation materials.

The legend must be retroreflective, except for nonreflective black letters and numerals. The colors blue and orange must comply with PR Color no. 3 and no. 6, respectively, as specified in the Federal Highway Administration's *Color Tolerance Chart*.

The legend for the type of project on construction project funding signs must read as follows:

#### MOVEABLE MEDIAN BARRIER

The legend for the types of funding on construction project funding signs must read as follows and in the following order:

#### STATE TRANSPORTATION IMPROVEMENT PROGRAM FUNDS

#### GOLDEN GATE BRIDGE TOLL FUNDS

The legend for the year of completion on construction project funding signs must read as follows:

#### YEAR OF COMPLETION 2014

The size of the legend on construction project funding signs must be as described. Do not add any additional information unless authorized.

#### 12-2.03 CONSTRUCTION

Install 2 Type 1 construction project funding signs at the locations designated by the Engineer before starting major work activities visible to highway users.

When authorized, remove and dispose of construction project funding signs upon completion of the project.

#### **12-2.04 PAYMENT**

Full compensation for furnishing, erecting, maintaining, repairing, removing and disposal of the construction project funding signs shall be considered as included in the Contract lump sum price paid for Contract Item: Construction Area Signs and no additional compensation shall be allowed therefor.

# Replace section 12-3.05 with:

# 12-3.05 PORTABLE FLASHING BEACONS

#### 12-3.05A General

Section 12-3.05 includes specifications for installing, removing, and moving portable flashing beacons.

Each portable flashing beacon must have:

- 1. Standard and base
- 2. Lighting unit
- 3. Flasher unit
- 4. Battery power source

Assemble units to form a complete, self-contained, flashing beacon that can be delivered to the job site and placed into immediate operation.

#### 12-3.05B Materials

The lens for the beacon lighting unit must have a visible diameter of 12 inches. The lens must be glass or plastic as specified in ANSI D-10.1 for a yellow traffic signal lens.

Provide a minimum 8-inch-long visor and a backplate for the beacon lighting unit. Visors are not required during the hours of darkness.

The flasher unit must provide 50 to 60 flashes per minute with 250- to 350-milliseconds dwell time.

The standard must be adjustable to provide variable mounting of the lighting unit from 6 to 10 feet, measured from the bottom of the base to the center of the lens, with provisions for securing the standard at the desired height. Securely attach the standard to the base and provide enough length of multi-conductor, neoprene jacketed cable as required for the full vertical height.

The base must be large enough to accommodate a minimum of two 12-V automotive-type storage batteries, and must be of such shape and mass that the beacon will not roll in the event it is struck by a vehicle or pushed over.

The lamp must be rated at 25 W for operation on 12-V battery current.

The flashing beacon assembly must be weatherproof and must be capable of operating a minimum of 150 hours between battery recharging or other routine maintenance.

The standard and base must be finished with 2 applications of commercial-quality, orange enamel similar in color to color no. 12473 of Federal Standard 595B. The interior of the visor and the front face of the backplate must be finished with 2 applications of commercial-quality flat black enamel.

#### 12-3.05C Construction

Remove portable flashing beacon from the traveled way at the end of each night's work.

Immediately repair and repaint, or replace flashing beacons in their original locations when they are displaced or not in an upright position from any cause.

The District does not pay for repair or replacement of portable flashing beacons.

#### 12-3.05D Payment

Full compensation for furnishing, erecting, maintaining, repairing, relocating, removal and disposal of the portable flashing beacons shall be considered as included in the Contract lump sum price paid for Contract Item: Traffic Control Systems and no additional compensation shall be allowed therefor.

#### Add to section 12-3.08D:

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the Temporary Railing (Type K) for the lane closures at the Toll Plaza on Highways 101 and 1 and on the Bridge, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be considered as included in the Contract lump sum price paid for Contract Item: Traffic Control System and no additional compensation shall be allowed therefor.

All other Temporary Railing (Type K) shall be measured and paid for once at each location shown on the Contract Plans. Any relocation or temporary movement of the Temporary Railing (Type K) due to the Contractor's operations or as required to perform the work shall be considered as included in the Contract price for Contract Item: Temporary Railing (Type K) and no additional compensation shall be allowed therefor.

#### Replace section 12-3.13 with:

## 12-3.13 IMPACT ATTENUATOR VEHICLE

#### 12-3.13A General

#### 12-3.13A(1) Summary

Section 12-3.13 includes specifications for protecting traffic and workers with an impact attenuator vehicle during moving lane closures when placing and removing components of stationary lane closures, ramp closures, shoulder closures, or a combination, maintaining and removing traffic control devices, cold planing the existing pavement and placing the new asphalt concrete overlay, removal of pylon holders, grouting of pylon holders, removal of existing pavement markers, placement of pavement markers and striping.

Impact attenuator vehicles must comply with the following test levels under National Cooperative Highway Research Program 350:

- 1. Test level 3 if the preconstruction posted speed limit is 50 mph or more
- 2. Test levels 2 or 3 if the preconstruction posted speed limit is 45 mph or less

Comply with the attenuator manufacturer's instructions for:

- 1. Support truck
- 2. Trailer-mounted operation
- 3. Truck-mounted operation

Flashing arrow signs must comply with section 12-3.03. You may use a portable changeable message sign instead of a flashing arrow sign. If a portable changeable message sign is used as a flashing arrow sign, it must comply with section 6F.56 "Arrow Panels" of the *California MUTCD*.

#### 12-3.13A(2) Definitions

**impact attenuator vehicle:** A support truck that is towing a deployed attenuator mounted to a trailer or a support truck with a deployed attenuator that is mounted to the support truck.

#### 12-3.13A(3) Submittals

Upon request, submit a certificate of compliance for each attenuator used on the project.

#### 12-3.13A(4) Quality Control and Assurance

Do not start impact attenuator vehicle activities until authorized.

Before starting impact attenuator vehicle activities, conduct a preinstallation meeting with the Engineer, subcontractors, and other parties involved with traffic control to discuss the operation of the impact

attenuator vehicle during moving lane closures and when placing and removing components of stationary traffic control systems.

Schedule the location, time, and date for the preinstallation meeting with all participants.

#### 12-3.13B Materials

Attenuators must be a brand on the Authorized Material List for highway safety features.

The combined weight of the support truck and the attenuator must be at least 19,800 pounds, except the weight of the support truck must not be less than 16,100 or greater than 26,400 pounds.

For the Trinity MPS-350 truck–mounted attenuator, the support truck must not have a fuel tank mounted underneath within 10'-6" of the rear of the support truck.

Each impact attenuator vehicle must have:

- 1. Legal brake lights, taillights, sidelights, and turn signals
- Inverted "V" chevron pattern placed across the entire rear of the attenuator composed of alternating 4-inch wide nonreflective black stripes and 4-inch wide yellow retroreflective stripes sloping at 45 degrees
- 3. Type II flashing arrow sign
- 4. Flashing or rotating amber light
- 5. Operable 2-way communication system for maintaining contact with workers

#### 12-3.13C Construction

Except where prohibited, use an impact attenuator vehicle:

- 1. To follow behind equipment and workers who are placing and removing components of a stationary lane closure, ramp closure, shoulder closure, or any combination. Operate the flashing arrow sign in the arrow or caution mode during this activity, whichever applies. Follow at a distance that prevents intrusion into the workspace from passing traffic.
- 2. As a shadow vehicle in a moving lane closure.
- 3. Maintaining and removing traffic control devices, cold planing the existing pavement and placing the new asphalt concrete overlay, removal of pylon holders, grouting of pylon holders, removal of existing pavement markers, placement pavement markers and striping.

After placing components of a stationary traffic control system you may place the impact attenuator vehicle in advance of the work area or at another authorized location to protect traffic and workers.

Secure objects, including equipment, tools, and ballast on impact attenuator vehicles to prevent loosening upon impact by an errant vehicle.

Do not use a damaged attenuator in the work. Replace any attenuator damaged from an impact during work activities at your expense.

#### 12-3.13D Payment

Payment for furnishing, maintaining, and repairing of the IMPACT ATTENUATOR VEHICLE shall be considered as included in the Contract lump sum price paid for Contract Item: Traffic Control Systems and no additional compensation shall be allowed therefor.

# Add section 12-3.19: 12-3.19 TEMPORARY ALTERNATIVE CRASH CUSHION

#### 12-3.19A GENERAL

Section 12-3.18 includes specifications for installing and maintaining temporary alternative crash cushion systems.

Whenever work activity exposes traffic to a fixed obstacle, protect the traffic from the obstacle with a temporary crash cushion. The crash cushion must be in place before opening traffic lanes adjacent to the obstacle.

#### 12-3.19B MATERIALS

Temporary alternative crash cushion systems shall be furnished and installed at locations as shown on the plans and in conformance with these special provisions.

ABSORB 350 - Manufactured by Lindsay Transportation Solutions Sales & Service, 180 River Road, Rio Vista, CA 94571, Telephone No.: (707) 374-6800, Toll Free: (888) 800-3691.

QUADGUARD (Type QS3606) - Manufactured by Energy Absorption Systems, Inc. 35 East Wacker Drive, Chicago, IL 60601-2076, Telephone No.: (312) 467-6750 and from distributors Energy Absorption Systems, Inc. P.O. Box 3333-#291 Encinitas, CA 92024 Telephone No.: (619) 438-7887, Fax No.: (619) 438-7848, or Energy Absorption Systems, Inc. Customer Service Department, One East Wacker Drive, Chicago, IL 60601-2076, Telephone No.: 1-800-255-3240, Fax No.: (312) 467-0201

The system(s) shall be tested and perform in an acceptable manner in accordance with the guidelines of NCHRP 350 at Test Level 3 (62 mph) as shown on the plans.

#### 12-3.19C CONSTRUCTION

Temporary alternative crash cushion systems shall be installed in conformance with the manufacturer's recommendations.

Secure temporary alternative crash cushion in place before commencing a work activity requiring a temporary crash cushion.

Immediately repair temporary crash cushion systems damaged due to your activities. Remove and replace any system damaged beyond repair. Repair of temporary crash cushions damaged by traffic is change order work.

Remove temporary crash cushion systems at the time of Contract acceptance. Do not install temporary crash cushion systems in the permanent work.

#### 12-3.19D PAYMENT

Payment for temporary alternative crash cushion system includes anchor bolts, nuts, washers, marker panels, structure excavation, structure backfill, concrete anchor and slab with bar reinforcing steel, transition plate and W-beam connector.

#### Add to section 12-4.01:

Before commencement of any site activities, the Contractor shall submit and obtain Engineer's approval in accordance with "Submittals" elsewhere in these Special Provisions of a Construction Traffic Management Plan for the Bridge, Highway 1, Highway 101, local streets, pedestrian and bike trails. Said Plan shall conform to the Plans and these Special Provisions and shall show a comprehensive path of travel, and describe in detail traffic control, safety features, proposed limited detours, and proposed duration of use. The Construction Traffic Management Plan shall also include:

- detail descriptions and drawings showing locations of all traffic control devices and all other traffic control measures for Marin Headland Road, Conzelman Road, Moore Road, Bridge Road, Bluff Road and Lincoln Boulevard;
- include in the TMP the speed limit of 15 mph for all vehicles for Marin Headland Road, Conzelman Road, Moore Road, Bridge Road, Bluff Road and other areas as designated by the Engineer;
- detail description and working drawings for the pedestrian and bicycle access facilities and all safety and traffic control measures at all work locations;

 working drawings for all elements of the traffic control system for lane closures on Highways 101 and 1 and the Bridge, including sequences and methods of installation, maintenance and removal of the traffic control system.

The Engineer's approval of the Plan is contingent on the approval of the GGNRA and Caltrans.

Any changes to the approved Construction Traffic Management Plan, including any additional detour plans for the limited detour of vehicular, pedestrian or bicycle traffic not included in the approved Construction Traffic Management Plan, shall be submitted as supplements to the Construction Traffic Management Plan for Engineer's approval in accordance with "Submittals" elsewhere in these Special Provisions. The Engineer's approval is contingent on the approval of the GGNRA, and Caltrans. The Contractor shall obtain Engineer's approval of the Construction Traffic Management Plan supplement before commencement of the work involving such changes and additional detours.

Attention is directed to Section "Permits, Licenses, Agreements and Certifications" of these Special Provisions for the requirements of this and other additional traffic management plans.

#### Add to section 12-4.02A:

If work including installing, maintaining, and removing Type K temporary railing is to be performed within 6 feet of the adjacent traffic lane, close the adjacent traffic lane.

Except as listed above, closure of the adjacent traffic lane is not required for installing, maintaining, and removing traffic control devices.

For grinding and grooving operations, saw cutting concrete slabs, and installing loop detectors, closure of the adjacent traffic lane is not required if an impact attenuator vehicle is used as a shadow vehicle.

For a one-way reversing traffic-control lane closure, traffic may be stopped in 1 direction for periods not to exceed 5 minutes. After each stoppage, all accumulated traffic for the 52-hour weekend closure only must pass through the work zone before another stoppage is made.

Not more than 1 stationary lane closure configuration will be allowed in each direction of travel at one time. Freeway closure charts are for the erection and removal of falsework, placement and removal of overhead sign structures, and other authorized work.

Personal vehicles of your employees must not be parked on the traveled way or shoulders, including sections closed to traffic, or public parking lots within the District, Caltrans, NPS or Presidio Trust's Right of Way. Contractor's work vehicles or equipment not actively being used in the work may be parked in the areas designated on the Plans for the Contractor's use. Personal vehicles of the contractor's employees may be parked in the laydown area designated on the Plans.

If work vehicles or equipment are parked within 6 feet of a traffic lane, close the shoulder area as shown.

Materials or equipment must not be stored on any Bridge approach roads within 30 feet of a traffic lane.

If work vehicles or equipment are parked within 6 feet of a traffic lane, close the shoulder area with fluorescent orange traffic cones or portable delineators. Place the cones or delineators on a taper in advance of the parked vehicles or equipment and along the edge of the traveled way at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. Use at least 9 cones or delineators for the taper. Use a W20-1, "Road Work Ahead," W21-5b, "Right/Left Shoulder Closed Ahead," or C24(CA), "Shoulder Work Ahead," sign mounted on a crashworthy, portable sign support with flags. The sign must be 48 by 48 inches and placed as ordered by the Engineer. If a cone or delineator is displaced or overturned, immediately restore the device to its original position or location.

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

Provide pedestrian access facilities whenever pedestrian and/or bicycle traffic is directed through construction areas. Provide pedestrian walkways with skid resistant surfacing and free of irregularities. Safety features such as temporary railings, or other approved protective barrier system, must be provided on the access facilities as necessary to protect pedestrian, bicyclists, and District traffic from hazards due to construction operations or adjacent vehicular traffic. Protective overhead covering must be provided as necessary to insure protection from overhead operations.

The Contractor may perform work on the bridge sidewalks between 9pm and 5 am only. When the construction operations are actively in progress in sidewalk and trail areas, provide a clear passage way of 5 feet minimum width for the passage of pedestrians, bicyclists, and District equipment The Contractor's area must be clearly delineated as approved by the Engineer with cones, tapes, barricades or other safety devices, and continuously monitored by the Contractor, including flagging to ensure the safety of the public and District personnel.

When construction operations are not actively in progress in sidewalk and trail areas, provide full width of sidewalk or trail area open for passage of pedestrians, bicyclists, and District equipment unless otherwise approved by the Engineer. When construction operations are not actively in progress in sidewalk and trail areas, the Contractor must remove all materials and equipment from the sidewalk or trail area and provide for the clear passage and all necessary safety devices.

In the sidewalk areas, protect the surface from any damage while performing any operations that may mar, deface or discolor the surface of the sidewalks. Repair such damage at your expense.

#### Bridge Sidewalk Closures

East Sidewalk

The east sidewalk of the Bridge must be kept open for unrestricted use by pedestrians and/or bicyclists as follows:

#### Monday to Friday

5:30 a.m. – 3:30 p.m.	Bicyclists and Pedestrians
3:30 p.m. – 9:00 p.m.	Pedestrians and Bicyclists
9:00 p.m. – 5:30 a.m.	Bicyclists only, Sergeants Office will open gate for bicyclists
Saturday, Sunday, lega	l Holidays:
5:00 a.m. – 9:00 p.m.	Pedestrians and Bicyclists
9:00 p.m. – 5:00 a.m.	Bicyclists only, Sergeants Office will open gate for bicyclists

#### West Sidewalk

The west sidewalk of the Bridge must be kept open for unrestricted use by bicyclists:

Monday to Friday 3:30 p.m. – 9:00 p.m. Bicyclists only Saturday, Sunday, legal Holidays:

5:00 a.m. – 9:00 p.m. Bicyclists only

The west sidewalk must also be kept open for District maintenance crew between 5:00 a.m. and 3:30 p.m. from Monday through Friday.

The District will be responsible for setting traffic pylons for the District's lane arrangements. The District's night lane arrangements are set prior to 9 p.m. and consist of two northbound lanes and two southbound

lanes opened to traffic and two center lanes are closed separating northbound and southbound traffic, except on Fridays and days before legal holidays when three northbound lanes and two southbound lanes are opened to traffic and one lane is closed separating northbound and southbound traffic. For the North Approach weekend median reconstruction work only, the District's lane configuration shall be three northbound and three southbound lanes from Friday at 10pm to Monday at 5am. District's daily lane arrangement schedule will be available upon the written request from the Contractor to the Engineer. The Engineer will have 72 hours to provide the information to the Contractor. All other lane closures shall be performed by the Contractor. After completion of each shift of work, and prior to the lane opening deadline shown on the Lane Closure Charts, the Contractor must return the lanes to the District's lane arrangement required at that time. After the moveable median barrier installation, the District will be responsible for moving the barrier for the District's lane arrangements. The District's night lane arrangements with the barrier will be set prior to 9 p.m. and consist of three northbound lanes and three southbound lanes open to traffic except on Fridays and days before legal holidays when the barrier will be set in this night lane arrangements prior to 10 p.m. At the request of the Contractor, for the pylon holder removal, and paving and striping work under stages 5S, 6N and 7N, the District's night lane arrangements with the barrier will be set prior to 10 p.m. and consist of four northbound lanes and two southbound lanes open to traffic or will be set prior to 11 p.m. and consist of two northbound lanes and four southbound lanes open to traffic.

At any time a lane is closed for construction operations and it becomes necessary to clear the lane for use by public traffic due to congested conditions, conditions of reduced atmospheric visibility or for any other reason, immediately stop active Contract operations and commence clearing the lane. If after the installation of a lane closure, the Contractor is ordered by the Engineer to remove the closure and open the lanes to traffic prior to 2:00 a.m., the Contractor will be compensated a lump sum amount of \$5,000. In addition, if work crews and equipment, other than the work crews and equipment associated with installing and removing the lane closures, are performing work inside the lane closure which the Engineer orders to be removed prior to 2:00 a.m., and if work crews and equipment are unable to continue working for the remainder of the work shift or are unable to be re-assigned to another work task for the remainder of the work shift, the Contractor will be compensated for the labor and equipment costs associated with that portion of the work shift that the work crews and equipment were not able to continue working. Compensation for the labor and equipment not re-assigned and not able to continue working inside the lane closure will be determined in the same manner as determinations are made for labor and equipment used in the performance of extra work paid for on a force account basis, as specified in section 9-1.04, "Force Account Payment," of the Standard Specifications. The District does not pay for any additional costs associated with installing and removing the lane closure or for any other labor or equipment costs associated with work crews or equipment working inside the lane closure. If after the installation of a lane closure, the Contractor is ordered to remove the closure and open the lanes to traffic after 2:00 a.m., the Contractor shall not be compensated for any additional costs associated with installing and removing the lane closure or for any other labor or equipment costs associated with work crews or equipment working inside the lane closure.

The Engineer extends lane availability on a lane-by-lane, hour-by-hour basis, without penalty to the Contractor or credit to the District.

If the Contractor plans to work at the same time at more than one location along the length of the Bridge, the work locations must be restricted to the same traffic lanes and the same traffic lane closure pattern must be maintained throughout the length of the Bridge.

Penalties for late opening of the Bridge roadway to traffic lanes are specified in section 8-1.10B "Failure to Complete Work Parts Within a Specified Time."

Where not otherwise prohibited, transportation of construction crews, materials, tools and equipment to all work areas on the Bridge may be facilitated on the bridge sidewalks by motor vehicles similar to the Bridge District's maintenance scooter, which has weight and dimensional limitations of 1,000 pounds per scooter, 8.5 feet long, 4.5 feet wide, and a wheelbase of 6.5 feet. The District does not allow any traffic closures for such transportation on the Bridge sidewalks.

No lane reduction or obstruction will be permitted during conditions of reduced atmospheric visibility which will impair safe Contract operations.

The Contractor must provide for free movement of vehicle, bicycle and pedestrian traffic on all streets and roads within the District, Caltrans, NPS or Presidio Trust's Right of Way. The Contractor must provide traffic control at all locations as necessary to provide for safe movement of construction vehicles and equipment and other construction operations. Traffic control must provide for safe turning movements for construction vehicles and equipment onto and leaving the project site.

Conzelman Road must remain open to bicycle, pedestrian and Bridge maintenance traffic. The existing gates on Conzelman Road at the Marin Abutment parking lot and near Moore Road shall not be obstructed by the Contractor to allow passage by bicycle and pedestrian traffic and the District and NPS vehicles. Public motor vehicle access must be prohibited. These gates must always be closed except to allow passage of Contractor's and District vehicles.

Section 12-4.02A does not void section 7-1.04, "Public Safety."

All work on the bridge deck that requires traffic lane or sidewalk closures must be performed only when lane closures are allowed. Minor deviations from the requirements concerning hours of work, which do not change the cost of the work, may be permitted upon the written request of the Contractor through a submittal of a supplement to the approved Construction Traffic Management Plan for Engineer's approval in accordance with section 5-1.23, "Submittals" if the Engineer determines public traffic will be better served and the work expedited. Such deviations must not be adopted until the Engineer has issued his approval. Submit such request and obtain the Engineer's approval at least 72 hours before the proposed use of the deviation.

#### Replace "Reserved" in section 12-4.02D with:

Equipment and materials must not remain in a lane unless the lane is closed to traffic and is used for Contract activities.

Your vehicles are subject to the provisions of chapter 13, "Vehicular Crossings," of the Vehicle Code.

Do not close lanes if the atmospheric visibility is less than 1,000 feet.

#### Replace RSS section 12-4.03A with:

#### **Closure Schedule and Conditions**

Lane closures on Highways 101 and 1 and on the Bridge shall conform to the Plans, this section "Maintaining Traffic" and "Traffic Control System for Lane Closure" elsewhere in these Special Provisions.

Roadway traffic lanes must be closed only during the hours designated in this section "Maintaining Traffic." Except for emergency work for compliance with the provisions in sections "Public Convenience" and "Public Safety", all other work that interferes with public traffic must be performed only during the hours shown for lane closures. All lane closures for work under this Contract must be coordinated with and approved by the Engineer and by Caltrans. The Contractor must notify the Engineer 72 hours before implementation of any previously approved lane closure.

**Replace "Sunday" at each occurrence in the 1st paragraph of the RSS for section 12-4.03B with:** Friday

Replace "LCS" at each occurrence of the RSS for section 12-4.03B with:

District

#### Add to the RSS for section 12-4.03C:

Submit a contingency plan for each of the following activities:

- Cold planning HMA
   HMA Paving
   Asphalt or concrete grinding
- 4. Striping
- 5. Pavement markers or delineators
- 6. Median reconstruction at north end
- 7. Toll booth demolitions

Obtain approval of the contingency plan with the Engineer at least 5 business days before starting the activity.

Thu	Lane (	Sat	Sun	Mon	Tues	Wed	Thu	Fri	Sat	Sun
THU	H	Out	Oun	IVIOII	1005		ma		Out	
х	xx	xx	xx							
~	SD	~~	~~							
	XX									
		н								
х	xx	xx	xx							
		SD								1
		XX								
			Н							
	х	хх	xx	xx						
			SD							
			xx							
				Н						
	х	ХХ	XX	XX	XXX					
				SD						
	Х	XX	XX	XX	XXX					
					Н					
				Х	XX					
					SD					
				Х	XX					
						н				
					Х	XX				
						SD				
	-					XX				<b> </b>
						V	H	~~~	N/V	~~~~
						Х	xx SD	XX	XX	XX
			1	l			XX		1	1
Legen	٩.									
Legen		lane re	quiremer	nt charte						
х	The full	width of	the trave		must be	onen for	use hv	traffic aft	er 2nm	
XX	The full	width of	the trave	eled way	must be	open for	use by	traffic	<u>or 2pm.</u>	
XXX					must be				til 7nm	
H		ated holi		sica way	11001.00	0001101	400 by		<i>i</i> pin.	
SD	Special		uuy							

Replace "Reserved" in section 12-4.04 with:

						Re	epla	ce "	Res	serv	ed''	in s	ecti	on 1	2-4.0	)5B	witł	า:						
							Froo	wow			Cha	-	-	Por	quire	mor	ate.							
Count	ty: S	San F	ran	cisc	o/Ma		Tee				ction							F 9	.74/	MR	0.2	9		
Closu							ו Ga	ite E	Bridg	je, b	etwe	een	04-5	SF-1	01 PI	M 9.	74 a	and	04-	MRN	I-10 ⁻	1 PM	0.2	9
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	15 1	6	17	18	19	20	21 2	2 2	23 24
Mon											#	#	#	#							2	2	2	1
Tue- Thu	1	1	1	1	1						#	#	#	#							2	2	2	1
Fri	1	1	1	1	1						#	#	#	#								2	2	2
Sat																								
Sun	Sun I I I I I I I I I I I I I I I I I I I																							
Leger 1 2 #	Pro Pro No	ovide rthbo	e at l ounc e clo	eas d cui	t 2 a rb la	idjac ne c	ent on br	thro ridge	ugh e ma	free ay be	eway e clo	' lan sed	es o	pen	n of t in dii hway	recti	on c				lane	clos	ure i	s
REMA	٩RK	S:																						
•		t lea veek					ld b	e op	en t	o tra	affic	thro	ugh	out F	Proje	ct cc	onsti	ruct	ion	(exc	ept f	or 52	-hoı	ır

						F	Free	wa	/Ex		Cha		-	Rec	quirer	nen	ts							
Count	ty: S	an F	ran	cisc	o/Ma						ction							F 9.	74/N	/IRN	0.29	)		ł
Closu	re lir	mits	: US	-10	1/Gc	older	ו Ga	ite E	Bridg	je, b	etwe	en	04-S	F-1	01 PN	/ 9.	74 a	nd (	)4-N	1RN	-101	PM	0.29	9
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	51	6 .	7 1	8	19 2	20 2	21 2	2 2	23 24
Mon											#	#	#	#	#						2	1	1	1
Tue- Thu	1	1	1	1	1						#	#	#	#	#						2	1	1	1
Fri																								
Sat	1	1	1	1	1	1	1																	
Sun	Sun I I I I I I I I I I I I I I I I I I I																							
Leger 1 2	Legend: 1 Provide at least 1 through freeway lane open in direction of travel																							
#	Soι	uthb	ound	d cu	rb la	ine (	on b	ridg	e ma	ay b	e clo	sed												
			e clo uireo		e pei	rmitt	ed.	Wo	rk al	llow	ed w	ithin	the	higł	nway	whe	ere s	hοι	lder	or l	ane (	closi	ure i	s
REMA	٩RK	S:																						
•			st o end				ld b	e op	en t	o tra	affic	thro	ugho	out F	Projec	t co	nstr	ucti	on (e	exce	pt fo	r 52	-hoı	ır

Chart no. 3 52-hour weekend closure Complete Freeway/Expressway Closure Hours
County: San Francisco/Marin Route/Direction: US-101/NB SB PM: SF 9.74/MRN 0.29
Closure limits: Golden Gate Bridge
Hour 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Mon C C C C
Fri         2         1         1
Sat         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C
Sun         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C
Legend:         1       Provide curb lane on the Bridge open in direction of travel         2       Provide at least 2 adjacent through freeway lanes open in direction of travel         C       Freeway may be closed completely.         No complete freeway or expressway closure is allowed.         REMARKS:         •       Detour traffic as per Drawing No. CS-7 and CS-8.         •       Simultaneous closures of the following ramps are allowed: Northbound Route 101: Merchant Road off and on-ramps, Vista Point off- & on-ramps and Sausalito Lateral off-ramp. Southbound Route 101: Merchant Road off-ramp, Sausalito Lateral on- and off- ramps, Spencer Ave on-ramp, Rodeo Ave. on-ramp, Donahue St. on-ramp.         •       This chart shall be used only during one 52-hour weekend closure beginning Saturday at 0000 hrs and opening Monday at 0400 hrs         •       Provide one 12-feet wide lane open in direction of travel to authorized vehicles in accordance with Section 5-1.04, "Order of Work" of the Special Provisions

									52-h		Cha we		-	losı	ire									
						Со	nple		-		-				losu	re H	our	S						
Coun	ty: N	1arir	I					Rou	ute/C	Direc	tion	: US	5-10	1/SE	3	PN	1: M	RN (	0.29	/MR	N 3.	.57		
Closu	ire li	mits	: Fro	om C	Gold	en G	ate	Brid	lge t	o Sa	ausa	alito/	Mar	in Ci	ity (D	onał	nue	Stre	et) I	nter	char	ige		
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	5 1	6 1	7 1	8 1	92	0 2	21 2	2 2	23 24
Mon	С	С	С	С																				
Sat	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Sun																С								
C REM,	No complete freeway or expressway closure is allowed         REMARKS:																							
• •	Simu S S This 52-h Prov	ultan outh peno cha our ide o	eou bou cer / rt sh wee one	s clo nd F Ave all b keno 12-f	Sure Rout on-r oe us d clo eet v	es of e 10 amp sed o sure wide	f the 1: N , Rc only e beg lan	e follo Nercl odeo duri ginn e op	bwin hant Ave ing c ing s ing s	ig ra Roa e on one Satu n dii	ad o -ram Irday recti	ff-ra ip ai y at i on o	mp, nd E 0000	Sau Iona Iona I hrs	d: Isalito hue S and o aut sions	St or ope	n-ran ning	np. Mo	nda	y at	040(	) hrs		

Chart no. 5 52-hour weekend closure	
Complete Freeway/Expressway Closure Hours	
County: San Francisco Route/Direction: US-101/NB PM: SF 8.32/SF 9.74	
Closure limits: From Marina Blvd. to Golden Gate Bridge	
Hour 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	23 24
Mon C C C C	
Sat         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C	С
	С
<ul> <li>Legend:</li> <li>C Freeway and expressway may be closed completely.</li> <li>No complete freeway or expressway closure is allowed</li> <li>REMARKS:</li> <li>Detour traffic per drawing no. CS-7.</li> <li>Simultaneous closures of the following ramps are allowed: Northbound Route 101: Marina Blvd on-ramp, Merchant Road on- &amp; off-ramps, Vista Point of and on-ramps, and Sausalito Lateral off-ramp.</li> <li>This chart shall be used only during one 52-hour weekend closure beginning Saturday at 0000 hrs and opening Monday at 0400 hrs</li> <li>Provide one 12-feet wide lane open in direction of travel to authorized vehicles in accordance with Section 5-1.04, "Order of Work" of the Special Provisions.</li> </ul>	_

										nour	Chai wee	eker	nd c											
						Cor	nple	ete I	=ree	way	/Ex	pres	SWa	ay C	losu	re H	our	S						
Count	ty: S	an F	Fran	cisc	0			Rοι	ute/C	Direc	tion	: SR	-1/N	IB		PN	1: SF	= 5.8	81/S	F 7.	04			
Closu	re li	mits	: Fro	om L	ake	Stre	et to	ว ปร	S-10	1						1								
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	5 1	6 1	7 1	8 1	92	0 2	21 2	2 2	23 24
Mon																								
Sat																								
Sun	Sun C C C C C C C C C C C C C C C C C C C																							
Leger C	Legend:																							
• 1	Deto This 52-h	ur tr cha our v	rt sh wee	iall b kend	be us d clo	sed o sure	only beg	duri ginn	ing c ing S	Satu	-				and	-	-		-					

• Provide one 12-feet wide lane open in direction of travel to authorized vehicles in accordance with Section 5-1.04, "Order of Work" of the Special Provisions.

							più		1100		cu		Secu		12-7	.05									
				_		_	_						o. 7		_	_		_							
				C	om	plete	e Ra	ımp	Clo	sur	e Ho	ours	s/Ra	mp	Lan										
Count	y: N	larin	1					Rοι	ute/[	Dire	ctior	1: US	S-10	1/NI	В		PM:	MF	RN C	0.06	65 &	0.08	34		
Closu	re lii	mits	: Vis	ta P	oint	On-	Rar	np/C	)ff-F	?am	p														
								•																	
Hour 2		1		3		5	6	7	8	9	10	11	12	13	14	15	16	17	7 18	3 1	192				23 24
Mon-	С	С	С	С	С	С															С	С	С	С	С
Thu					_						_	_			_							_			
Fri	С	С	С	С	С	С															С	С	С	С	С
Sat	С	С	С	С	С	С																	С	С	С
Sun	С	С	С	С	С	С															С	С	С	С	С
Leger	nd:																								
С	Rar	mp r	nay	be c	close	ed co	omp	lete	ly																
	N	<b>D</b>						-1																	
	INO	кап	np C	JOSL	ire F	Perm	nite	u																	
REMA	<u>NBK</u>	<u>c</u> .																							
	AL UA	З.																							

# Replace "Reserved" in section 12-4.05E with:

				С	om	plete	e Ra	amp	Clo				o. 8 s/Ra	mp	Lane	e Rec	qui	ren	nent	s					
Count	y: N	larin						<u> </u>					S-10	<u> </u>			-		N 0.		4				
Closure limits: Sausalito Lateral Off-Ramp           Hour 24 1         2         3         4         5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22																									
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 1	6	17	18	19	92	0 2	1 2	2 2	3 24
Mon-         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C															С	С									
Fri	С	С	С	С	С	С															С	С	С	С	С
Sat	С	С	С	С	С	С																	С	С	С
Sun	С	С	С	С	С	С															С	С	С	С	С
Leger C	Rar	•	-			ed co Perm	•	oletel d	ly									·	·						
REMA	RK	S:																							
•	D	etou	ır tra	affic	to n	ext o	off-ra	amp																	

				С	om	plete	e Ra	mp	Clo			-	o. 9 s/Ra	mp	Lan	e R	equ	iren	nent	s					
Count	ty: N	larir	1					<u> </u>					S-10	<u> </u>		_	<u> </u>		N 0.						Ť
Closu	re li	mits	: Sa	usal	ito L	ater	al O	n-R	amp	)															
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	3 24
Mon- Thu	С	С	С	С	С	С																	(	5	С
Fri	С	С	С	С	С	С																			С
Sat	С	С	С	С	С	С	С	С	С														(	2	С
Sun	С	С	С	С	С	С	С	С	С														(	C	С
Leger C	Rai	•	-			ed co Perm	-		У	·															
REMA																									
•	D	etou	ur tra	affic	per	Drav	wing	No	. TC	-18.															

									52-ł	-			o. 10 nd c	losi	ure									
						Ran	וף C	los	ure	Hou	irs/F	Ram	p La	ine	Requ	iren	nent	S						
County: Marin     Route/Direction: US-101/NB     PM: MRN 0.65 & 0.084       Closure limits: Vista Point On-Bamp/Off-Bamp																								
Closure limits: Vista Point On-Ramp/Off-Ramp																								
															23 24									
Mon																								
Sat	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Sun	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Leger	nd:																							
С	Rai	mp r	nay	be o	close	ed co	omp	letel	у															
	No	Ran	np C	losi	ure F	Perm	itte	b																
REM#			rt sh	all b	be us	sed (	only	dur	ing c	one														

52-hour weekend closure beginning Saturday at 0000 hrs and opening Monday at 0400 hrs

						Dom	C			nour		ekei	nd c	losi		iron		-						
Count	ty: N	larir	1			nan	<u>ір С</u>								Requ			RN (	0.26	4				
Closure limits: Sausalito Lateral Off-Ramp																								
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	5 1	61	7 1	81	92	02	21 2	2 2	3 24
Sat	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Sun	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Leger		mp r	nav	beo	close	ed co	omp	letel	v.				•		•	1						. <u> </u>		
		•				Perm			,															
5 • F	This 52-ho Prov	cha our ide (	wee one	keno 12-f	d clo eet v	wide	be lan	ginn e op	ing ( en i	Satu n dir	recti	on o	of tra	vel t	and o aut	horiz	•							

• Detour traffic per Drawing No. CS-8.

						Ran	וף C			our	Char we irs/F	eke	nd c	losı	ure Requ	iren	nent	s						
Count	y: N	larin	1					Rou	ute/D	Direc	ction	: US	5-10 ⁻	1/SB	}	PN	1: M	RN	1.71					
Closure limits: Spencer Ave. On-Ramp           Hour 24 1         2         3         4         5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         2																								
															3 24									
Sat	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Sun	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Leger		np r	nay	be d	close	ed co	omp	lete	ly	1	1	1			1		1	1	1			1		
	No	Ran	np C	losı	ure F	Perm	itte	b																
5	This 52-ho	cha our v	weel	kend	d clo	sure	e beg	ginn	ing S	Satu	-	/ at			s and o aut		-			-				

with Section 5-1.04, "Order of Work" of the Special Provisions.
Detour traffic per Drawing No. CS-8.

									52-h	-	har we	• • • •			ıre									
						Ran	וף C	los	ure	Hou	rs/F	lam	p La	ine	Requ	iren	nent	S						
Count	ty: N	larir	1					Rοι	ute/C	Direc	tion	: US	-10	1/SE	5	ΡN	1: M	RN (	0.23	5				
Closu																								
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	51	61	71	81	92	02	21 2	2 2	3 24
Mon	Mon C C C C																							
Sat	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Sun	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Leger C	Rar	•	-		close ure F				у															
5 • F v	This 52-ho Prov	cha our v ide o Sec	weel one tion	keno 12-f 5-1.	d clo eet v 04, '	sure vide 'Ord	e beg land er o	ginn e op f Wo	ing s en i ork"	Satu n dir	ectio	o nc	f tra	vel t	and o aut ions.	horiz								

						Ran	n C			nour	Char ' we	eke	nd c	losı	ıre Requ	iron	nont	e						
Count	ty: N	larir	1			man					ction				<u> </u>			RN (	0.17	0				
Closure limits: Sausalito Lateral On-Ramp           Hour 24 1         2         3         4         5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         2																								
Hour 2	<u>2</u> 4 ·	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	5 1	61	71	81	92	02	21 2	22	3 24
Mon C C C C																								
Sat	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Sun	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Leger C	Rar	•			close ure F				у.			I					1	1	1					
	NO	nan	np C	1030		em	nite	J.																
5	This 52-ho	cha our v	weel	kend	d clo	sure	e beg	ginn	ing S	Satu	-				s and o aut		-							

Introvide one 12-neet wide rane open in direction of traver to address with Section 5-1.04, "Order of Work" of the Special Provisions.
Detour traffic per Drawing No. CS-8.

									52-h	C nour	har we	• • • •			ıre									
						Ran	וף C	los	ure	Hou	rs/F	lam	p La	ne	Requ	iren	nent	s						
Count	ty: N	larir	l					Rou	ute/C	Direc	tion	: US	6-10 ⁻	1/SE	5	PN	/: M	RN :	2.56					
Closu	Closure limits: Rodeo Ave On-Ramp																							
Hour 2	lour 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23															3 24								
Mon	C	C	C	C	- 		0	/							1 1					52				.0 24
	Mon C C C C															-								
Sat	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Sun	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Leger C	Rai					ed co Perm			y.															
• F • V	This 52-h Prov	cha our ide o Sec	wee one tion	keno 12-f 5-1.	d clo eet v 04, '	sure wide 'Ord	e beg lan er o	ginn e op f Wo	ing s en i ork"	Satu n dir	ecti	on o	of tra	vel t	and o aut ions.	horiz								

						Ran	וף C			our	Char we Irs/F	eker	nd c		ıre Requ	iren	nent	s						
Count	y: M	larin						Rou	ute/C	)irec	tion	: US	-101	/SB		PM	1: M	RN :	3.40					
Closure limits: Donahue Street On-Ramp Hour 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 2																								
															3 24									
Sat	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Sun	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Leger C		np r	nay	be d	close	ed co	omp	letel	у.	1	1	1	1		L	1		1		1				
	No	Ran	np C	losı	ure F	Perm	hitte	d.																
5	This 52-ho	cha our v	wee	kend	d clo	sure	e beg	ginn	ing S	Satu	-				and o aut		-							

with Section 5-1.04, "Order of Work" of the Special Provisions.
Detour traffic per Drawing No. CS-8.

								;	52-h	-	har we	• • • •			ıre									
						Ran	וף C	los	ure	Hou	rs/F	lam	p La	ne	Requ	iren	nent	S						
Count	ty: S	an F	Fran	cisc	0			Roι	ute/D	Direc	tion	: US	-10	1/NE	3	ΡM	1: SF	= 9.8	30 a	nd 9	.82			
Closu	ire lii	mits	: Me	rcha	ant F	Roac	l Off	-Ra	mp/0	On-F	Ram	р												
Hour 2	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14 1	5 1	6 1	7 1	8 1	92	0 2	21 2	2 2	3 24
Mon	Mon         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C																							
Sat	Sat         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C															С								
Sun																С								
Leger C	Rar					ed co Perm	•		у															
• • V	This 52-ho Prov	cha our vide Sec	weel one tion	keno 12- 5-1.	d clo feet 04, '	sure wide 'Ord	e beg e lar er o	ginn ie op f Wo	ing s oen ork"	Satu in di	recti	ion c	of tra	avel	s and to au sions.	thori								

						Ran	np C			nour	we	eke	. 18 nd c p La	losı	ıre Requ	iren	nent	s						
Count	y: S	an I	Fran	cisc									5-10 ⁻		-			= 9.8	32					
Closure limits: Merchant Road Off-Ramp																								
Hour 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 2															3 24									
Mon	С	С	С	С																				
Sat	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Sun	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
Leger C	Rar	•				ed co Perm			y.				•											
5 • F	This 52-ho Prov	cha our ide (	wee one	keno 12-f	d clo eet v	wide	be lan	ginn e op	ing s en i	Satu n dir	recti	on o	of tra	vel t	s and o aut sions.	horiz	-			-				

• Detour traffic per Drawing No. CS-7.

## Replace section 12-4.05H with:

## 12-4.05H PAYMENT

Full compensation for furnishing all labor, material, tools, equipment and incidentals and for doing all work involved in maintaining traffic, including preparing and submitting Construction Management Traffic Plan, Plan supplements and contingency plans in accordance with the Plans and with the provisions of this section "Maintaining Traffic" shall be considered as included in the Contract Lump Sum price paid for either Contract Item: Traffic Control System or Contract Item: Traffic Control System (Weekend Bridge Closure) and no additional compensation shall be allowed thereof.

# Replace section 12-5 with: 12-5 TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE

## 12-5.01 GENERAL

Section 12-5 includes specifications for closing traffic lanes, ramps, or a combination, with stationary and moving lane closures on multilane highways and 2-lane, 2-way highways. The traffic control system for a lane closure or a ramp closure must comply with the details shown.

Traffic control system includes signs.

## 12-5.02 MATERIALS

Vehicles equipped with attenuators must comply with section 12-3.13 of the special provisions.

#### 12-5.03 CONSTRUCTION

#### 12-5.03A General

Whenever components of the traffic control system are displaced or cease to operate or function as specified from any cause, immediately repair the components to the original condition or replace the components and restore the components to the original location.

#### 12-5.03B Stationary Lane Closures

For a stationary lane closure, ramp closure, or a combination, made only for the work period, remove the components of the traffic control system from the traveled way and shoulder, except for portable delineators placed along open trenches or excavation adjacent to the traveled way at the end of each work period. You may store the components at selected central locations designated by the Engineer within the limits of the highway.

For multilane freeway or expressway lane closures, do not place the 2L tangent section shown along lane lines between the lane closure tapers.

#### 12-5.03C Moving Lane Closures

A changeable message sign used in a moving lane closure must comply with section 12-3.12 except the sign must be truck-mounted. The full operational height to the bottom of the sign may be less than 7 feet above the ground but must be as high as practicable.

A flashing arrow sign used in a moving lane closure must be truck-mounted. Operate the flashing arrow sign in the caution display mode whenever it is being used on a 2-lane, 2-way highway.

#### **12-5.04 PAYMENT**

Flagging costs are included in the payment for Traffic Control System or Traffic Control System (Weekend Bridge Closure).

Traffic control system for lane closure is paid for as traffic control system.

The requirements in section 4-1.05 for payment adjustment do not apply to traffic control system. Adjustments in compensation for traffic control system will be made for an increase or decrease in traffic control work if ordered and will be made on the basis of the cost of the necessary increased or decreased traffic control. The adjustment will be made on a force account basis for increased work and estimated on the same basis in the case of decreased work.

A traffic control system required by change order work is paid for as a part of the change order work.

## Replace section 12-8 with: 12-8 TEMPORARY PAVEMENT DELINEATION

#### 12-8.01 GENERAL

Section 12-8 includes specifications for placing, applying, maintaining, and removing temporary pavement delineation.

Temporary signing for no-passing zones must comply with section 12-3.06.

Temporary traffic stripes and pavement markings used for temporary delineation must be temporary painted traffic stripes and painted pavement markings and must comply with section 84-3. Temporary traffic stripes shown as Detail 13M on the plans must include temporary pavement markers as shown.

During 52-hour weekend closure of the bridge, should inclement weather or when atmospheric temperatures drop below the allowed limits for installation of temporary painted traffic stripes or painted pavement markings in Section 84-3, the Contractor must place temporary pavement markers instead of the temporary painted traffic stripes for the work under stage 5N or instead of permanent lane striping for

the work under stage 4S shown on the Stage Construction plans. The temporary pavement markers must be on the Authorized Material List. The Contractor must replace the temporary pavement markers with the temporary painted traffic stripes or the permanent lane striping respectively during the next work shift when the weather and temperature allows the installation of the temporary painted traffic stripes and permanent lane striping.

# 12-8.02 MATERIALS

#### 12-8.02A General

Not Used

#### 12-8.02B Temporary Lane Line and Centerline Delineation

Temporary pavement markers must be the same color as the lane line or centerline markers being replaced. Temporary pavement markers must be temporary pavement markers on the Authorized Material List for short-term day/night use, 14 days or less, or long-term day/night use, 180 days or less. Place temporary pavement markers under the manufacturer's instructions.

#### 12-8.02C Temporary Edge Line Delineation

On multilane roadways, freeways, and expressways open to traffic where edge lines are obliterated and temporary pavement delineation to replace those edge lines is not shown, provide temporary pavement delineation for:

- 1. Right edge lines consisting of (1) a solid 4-inch wide traffic stripe tape of the same color as the stripe being replaced, (2) traffic cones, or (3) portable delineators or channelizers placed longitudinally at intervals not exceeding 100 feet
- Left edge lines consisting of (1) solid 4-inch wide traffic stripe tape of the same color as the stripe being replaced, (2) traffic cones, (3) portable delineators or channelizers placed longitudinally at intervals not exceeding 100 feet, or (4) temporary pavement markers placed longitudinally at intervals not exceeding 6 feet

## 12-8.02D Temporary Traffic Stripe Tape

Temporary traffic stripe tape must be one of the types of temporary, removable striping tape on the Authorized Material List.

## 12-8.02E Temporary Traffic Stripe Paint

Comply with section 84-3.

## 12-8.02F Temporary Pavement Marking Tape

Temporary pavement marking tape must be one of the types of temporary, removable pavement marking tape on the Authorized Material List and must be applied and removed as specified for applying and removing temporary, removable traffic stripe tape.

#### 12-8.02G Temporary Pavement Marking Paint

You may use one of the types of temporary removable pavement marking tape or permanent pavement marking tape on the Authorized Material List instead of temporary pavement marking paint.

#### 12-8.02H Temporary Pavement Markers

Temporary pavement markers must be one of the temporary pavement markers on the Authorized Material List for long term day/night use, 180 days or less.

# 12-8.03 CONSTRUCTION

#### 12-8.03A General

Wherever work activities obliterate pavement delineation, place temporary or permanent pavement delineation before opening the traveled way to traffic. Place lane line and centerline pavement delineation for traveled ways open to traffic. On multilane roadways, freeways and expressways, place edge line delineation for traveled ways open to traffic.

Establish the alignment for the temporary pavement delineation including required lines or markers. Surfaces to receive an application of paint or removable traffic tape must be dry and free of dirt and loose material. Do not apply temporary pavement delineation over existing pavement delineation or other temporary pavement delineation. Maintain temporary pavement delineation until it is superseded or you replace it with a new pattern of temporary pavement delineation or permanent pavement delineation.

When the Engineer determines the temporary pavement delineation is no longer required for the direction of traffic, remove the temporary pavement markers, underlying adhesive, and removable traffic tape from the final layer of surfacing and from the existing pavement to remain in place. Remove temporary pavement delineation that conflicts with any subsequent or new traffic pattern for the area.

# 12-8.03B Temporary Lane line and Centerline Delineation

Whenever lane lines or centerlines are obliterated and temporary pavement delineation to replace the lines is not shown, the minimum lane line and centerline delineation must consist of temporary pavement markers placed longitudinally at intervals not exceeding 24 feet. For temporary pavement markers on the Authorized Material List for long-term day/night use, 180 days or less, cement the markers to the surfacing with the adhesive recommended by the manufacturer except do not use epoxy adhesive to place the pavement markers in areas where removal of the markers will be required.

For temporary lane line or centerline delineation consisting entirely of temporary pavement markers on the Authorized Material List for short-term day/night use, 14 days or less, place the markers longitudinally at intervals not exceeding 24 feet. Do not use the markers for more than 14 days on lanes opened to traffic. Place the permanent pavement delineation before the end of the 14 days. If the permanent pavement delineation endows, replace the temporary pavement markers with additional temporary pavement delineation equivalent to the pattern specified or shown for the permanent pavement delineation for the area. The District does not pay for the additional temporary pavement delineation.

## 12-8.03C Temporary Edge Line Delineation

You may apply temporary painted traffic stripe where removal of a 4-inch wide traffic stripe is not required.

The Engineer determines the lateral offset for traffic cones, portable delineators, and channelizers used for temporary edge line delineation. If traffic cones or portable delineators are used for temporary pavement delineation for edge lines, maintain the cones or delineators during hours of the day when the cones or delineators are being used for temporary edge line delineation.

Channelizers used for temporary edge line delineation must be an orange surface-mounted type. Cement channelizer bases to the pavement under section 85 for cementing pavement markers to pavement except do not use epoxy adhesive to place channelizers on the top layer of the pavement. Channelizers must be one of the 36-inch, surface-mounted types on the Authorized Material List.

Remove the temporary edge line delineation when the Engineer determines it is no longer required for the direction of traffic.

## 12-8.03D Temporary Traffic Stripe Tape

Apply temporary traffic stripe tape under the manufacturer's instructions. Slowly roll the tape with a rubber-tired vehicle or roller to ensure complete contact with the pavement surface. Apply the tape straight on a tangent alignment and on a true arc on a curved alignment. Do not apply the tape when the air or pavement temperature is less than 50 degrees F unless the installation procedures are authorized beforehand.

The temporary traffic stripe tape must be complete in place at the location shown before opening the traveled way to traffic.

# 12-8.03E Temporary Traffic Stripe Paint

Apply 2 coats of temporary traffic stripe paint for new or existing pavement.

The painted temporary traffic stripe must be complete in place at the location shown before opening the traveled way to traffic. Removal of painted temporary traffic stripe is not required unless otherwise shown.

#### 12-8.03F Temporary Pavement Marking Tape

Apply temporary pavement marking tape at the locations shown. The tape must be complete in place at the location shown before opening the traveled way to traffic.

#### 12-8.03G Temporary Pavement Marking Paint

Apply and maintain temporary pavement markings consisting of painted pavement markings at the locations shown. The painted temporary pavement marking must be complete in place at the location shown before opening the traveled way to traffic. Removal of painted temporary pavement marking is not required.

Apply 2 coats of temporary pavement marking paint for new or existing pavement.

#### 12-8.03H Temporary Pavement Markers

Place temporary pavement markers under the manufacturer's instructions. Cement the markers to the surfacing with the manufacturer's recommended adhesive, except do not use epoxy adhesive in areas where removal of the pavement markers is required.

Type A white non-reflective pavement markers used for the Detail 13M temporary pavement delineation must comply with section 85, except the waiting period before placing pavement markers on new HMA surfacing as specified in section 85-1.03 does not apply.

Temporary pavement markers (inclement weather) must be on the Authorized Material List.

You may use retroreflective pavement markers specified in section 85 instead of temporary pavement markers for long term day/night use, 180 days or less, except to simulate patterns of broken traffic stripe. Retroreflective pavement markers used for temporary pavement markers must comply with section 85, except the waiting period before placing pavement markers on new HMA surfacing as specified in section 85-1.03 does not apply. Do not use epoxy adhesive to place pavement markers in areas where removal of the pavement markers is required.

Temporary pavement markers must be complete in place before opening the traveled way to traffic.

#### **12-8.04 PAYMENT**

The requirements in section 4-1.05 for payment adjustment do not apply to temporary pavement marker (inclement weather). The actual linear feet of temporary pavement marker (inclement weather) to be paid will be based on actual number of temporary traffic stripe (paint) replaced with temporary pavement marker (inclement weather) in accordance with written direction from the Engineer.

# **End Notes**

- ⁽ⁱ⁾ Golden Gate Bridge Seismic Retrofit Phase IIIA North Anchorage Housing/North Pylon in The City and County of San Francisco and Marin County California February 19,2008. Prepared for the Golden Gate Bridge, Highway and Transportation District by AECOM.
- (ii) Transportation Management Plan Guidelines, Division of Traffic Operations Office of System Management Operations, June 2009. California Department of Transportation.
- (iii) Plan Bay Area Project Performance Assessment: Benefit-Cost Assessment Methodology. February 2, 2012. Association of Bay Area Governments.