## CITY OF SEAL BEACH

OFFICE OF THE CITY ATTORNEY
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## MEMORANDUM

TO:

**Interested Persons** 

FROM:

Craig A. Steele, City Attorney

DATE:

August 16, 2018

SUBJECT:

I-405 Improvement Project

The City of Seal Beach has received the attached letter from the Orange County Transportation Authority ("OCTA") and Caltrans, explaining Caltrans' decision to move the Almond Avenue sound wall as a part of the I-405 Improvement Project. The work is currently scheduled to take place later in 2020.

Caltrans' takes the position that, given the widening and reconfiguring of I-405 that will take place as part of the project, the sound wall must be moved to provide a safe design of the freeway that meets Caltrans design regulations. They have refused to waive those guidelines to leave the wall in place. Whether to move the Almond Avenue sound wall has always been Caltrans' sole decision to make. The wall is completely in the right-of-way for the I-405 (currently and in the future position) and is part of a freeway facility. While the City of Seal Beach attempted to convince Caltrans to leave the wall in place, the decision to move it is consistent with Caltrans' regulations.

The attached letter explains the decision, and outlines some of the conditions that will be applied to the work. As part of an agreement with OCTA and Caltrans, the City has the ability to request additional conditions and mitigation measures when the new wall project is designed, and the City's engineers will do so. As a part of the same agreement, Caltrans and OCTA will hold a noticed public meeting in the affected neighborhood at a time that is closer to the construction project. If you have questions regarding this project, we suggest that you contact OCTA and Caltrans or refer to the project website at:

http://www.octa.net/Projects-and-Programs/Under-Construction/I-405-Improvement-Project/?frm=7135

Attachment(s)

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## RECEIVED

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Darrell E. Johnson Chief Executive Officer July 16, 2018

Ms. Jill R. Ingram City Manager City of Seal Beach 211 Eighth Street Seal Beach, CA 90740

Re: Interstate 405 Improvement Project - Almond Avenue Sound Wall

Dear Ms. Ingram:

Pursuant to Section 1.1 of the executed Settlement Agreement and Release of Claims (Agreement) between the Orange County Transportation Authority (OCTA), the California Department of Transportation (Caltrans), and the City of Seal Beach (City), we are providing this letter to the City regarding the Almond Avenue sound wall.

Why Portions of the Almond Avenue Sound Wall Require Relocation

As you know, State highways, such as Interstate 405 (I-405), are required to conform to minimum safety standards when they are constructed or significantly reconstructed. These standards include provisions such as minimum lane and shoulder widths, minimum lane merging distances for vehicles seeking to enter onto the freeway facility, and minimum curve radii where freeway or ramp alignments are not straight. These standards are meant to avoid or reduce accidents; promote efficient use of the facility, and provide all users with a facility that is appropriate for the expected users.

In consideration of several public comments received during the environmental phase of the I-405 Improvement Project (Project) related to the Almond Avenue sound wall, Caltrans considered whether it could utilize reduced standard design parameters as an exception to the otherwise applicable minimum State highway standards. The reduced standards which were considered included reducing the inside/ median shoulder width; reducing the merging distance for the Express Lanes connector from westbound (WB) State Route 22 (SR-22) to northbound (NB) I-405, and reducing the curve radius on I-405. In order to avoid impacts to the sound wall, it was determined that all of these reduced standards would be required. However, after a thoughtful engineering review, Caltrans and OCTA both concluded these reduced standards were ultimately not justified due to safety concerns related to very high traffic volumes on I-405 and several NB

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merging movements happening in the vicinity of the Almond Avenue sound wall, as described in more detail below.

Today, I-405 in the vicinity of the Almond Avenue sound wall is one of the most heavily traveled freeways in the nation, with more than 370,000 daily trips at speeds of up to 65 miles per hour or greater. The number of daily trips is anticipated to grow by approximately 30 percent by 2040. Simply put, every three days, over a million Californians use the I-405. More are expected to do so in the future.

Upon completion of the improvements, there will be two lanes from the WB SR-22 general purpose (GP) which will need to merge with the five lanes from the curving NB I-405 GP lanes. Additionally, the one-lane WB SR-22 Express Lanes connector will need to merge with the two-lane NB I-405 Express Lanes that will create three Express Lanes that will then be reduced down to two Express Lanes in this same area. All of these merging operations will need to occur at freeway speeds.

As noted previously, the combination of high traffic volumes using I-405 and the merging conditions in the area are not conducive to reducing the design standards from a safety perspective and thus, the reduced design standards are not justified.

It should be noted that in order to accommodate these traffic movements, no private property is anticipated to be impacted by the portions of Almond Avenue sound wall that require relocation.

## Estimated Construction Schedule

Construction related to the portions of the Almond Avenue sound wall is estimated to begin in September 2020 and will last approximately four months.

## Mitigation Measures

Mitigation measures in place to address noise, safety, and other construction related impacts are included as Attachment 1.

## Post-Construction Wall and Street Design

The portions of the Almond Avenue sound wall that require relocation will be reconstructed at the same height as the existing sound wall. Aesthetic features will be included as part of the sound wall design. Additionally, the existing

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overhead electrical facilities will be undergrounded in the locations where the Almond Avenue sound wall is relocated.

City street design standards require a minimum width of 36 feet for this type of low-volume street. OCTA will ensure that the Almond Avenue sound wall relocation is designed in a manner and location that maintains a minimum street width of 36 feet and, to the extent practicable, maximize the width of the parking strip adjacent to the sound wall.

## Public Informational Meeting

As required by the executed Agreement, OCTA, Caltrans, and the City will work cooperatively to provide public notice and hold at least one public informational meeting at least 90 days prior to the time the design-builder begins any significant staging or construction activities related to the Almond Avenue sound wall. Additional written notification will be provided as needed prior to and throughout construction to keep the adjacent community informed.

OCTA and Caltrans look forward to working closely with City staff as the Project progresses.

Sincerely.

leff Mills, P.E.

OCTA I-405 Program Manager

for Nooshin Yoosefi, P.E.

Caltrans I-405 Corridor Manager

## Attachment

c: Darrell Johnson, OCTA Chief Executive Officer Jim Beil, OCTA Executive Director, Capital Programs Rose Casey, OCTA Director, Highway Programs James Donich, OCTA General Counsel Jerry DeSantos, Caltrans Acting District Director Glenn Mueller, Caltrans Assistant Chief Counsel

# Almond Soundwall Construction Mitigation Measures Relevant Contract and Technical Provisions Sections

## <u>Safety</u>

#### Contract Section 5.2.1

Design-Builder shall take all reasonable precautions and be solely responsible for the safety of, and shall provide protection to prevent damage, injury, or loss to, all persons on the Site or who would reasonably be expected to be affected by the Work, including individuals performing Work, employees of Authority and its consultants, employees of Caltrans and FHWA, visitors to the Site and members of the public who may be affected by the Work. Design-Builder shall at all times comply with all safety requirements of the Contract Documents, the approved Health, Safety and Environmental Work Plan and all such requirements under applicable Governmental Rules.

#### **Contract Section 5.4**

Design-Builder shall ensure that all of its activities and the activities of DB-Related Entities are undertaken in a manner that will minimize the effect on surrounding property and the public to the maximum extent reasonably practicable.

#### Contract Section 14.2 Suspensions for Cause and Authorized by Law

Authority has authority to suspend the Work by written order, wholly or in part, for Design-Builder's failure to:

- (a) Correct conditions unsafe for the Project personnel or the general public;
- (b) Comply with any Governmental Approval, Governmental Rule or otherwise carry out the requirements of the Contract Documents;
- (c) Carry out orders of Authority or Directive Letters;
- (d) Comply with requirements for developing and implementing the Quality Management Plan;
- (e) Remove and replace personnel to the extent specified in Section 7.6.6;
- (f) Provide proof of required insurance coverage as set forth in Section 9;
- (g) Reopen lanes closed to public traffic as part of a Lane Closure by the time specified in the approved closure request as set forth in TP Section 18.3.3 or the time specified in a closure approval described in TP Section
- (h) Comply with environmental requirements; or
- (i) Correct conditions or activities that present an imminent danger as provided in Section 5.2.2.

Design-Builder shall promptly comply with any such written suspension order. Design-Builder shall promptly recommence the Work upon receipt of written notice from Authority directing Design-Builder to resume the Work. Authority shall have no liability to Design-Builder in connection with any such suspension, and Design-Builder shall have no right to any adjustment in the Contract Price or Completion Deadline(s) in connection with any suspension of Work founded on any of the grounds set forth in this Section 14.2. If Authority orders suspension of Work on one of the foregoing grounds but it is finally determined under the dispute resolution procedures of the Contract that such grounds did not exist, it shall be treated as a suspension for Authority's convenience under Section 14.1.

Design-Builder acknowledges that Caltrans has the authority to issue an order suspending Work wholly or in part and to take appropriate action when public safety is jeopardized as authorized under Streets and Highways Code section 91.2(b). Design-Builder shall promptly comply with any such written suspension order. Design-Builder shall promptly recommence the Work upon receipt of written notice from Caltrans directing Design-Builder to resume the Work. Neither Authority nor Caltrans shall have any liability to

Design-Builder in connection with any such suspension, and Design-Builder shall have no right to any adjustment in the Contract Price or Completion Deadline(s) in connection with any suspension of Work by Caltrans as provided in this paragraph.

#### Site Security

#### **Contract Section 10.1**

Design-Builder shall provide appropriate security for the Site, and shall take all reasonable precautions and provide protection to prevent damage, vandalism, theft or loss to the Work and materials and equipment to be incorporated into the Work, as well as all other property at or on the Site, whether owned by Design-Builder, Authority, Caltrans or any other Person.

#### Contract Section 10.2.1.4

Design-Builder shall protect from damage or loss existing property, structures, Utilities, curbs, walks, drives, trees, shrubs, lawns and landscape work of third parties on or adjacent to the Site or affected by its activities and shall provide such guards, protection and covering as is necessary. Design-Builder shall immediately notify affected third parties of any damage or loss to their property arising out of the Work. Damaged or lost items of the Work and Site shall be repaired or replaced to the condition required by the Contract Documents for the initial construction of the Project. Damaged or lost items that are the property of other affected parties shall be rebuilt, repaired or replaced to their prior condition; provided, however that they shall be rebuilt, repaired or replaced to any better or different condition to the extent required by applicable Governmental Rules or by any preexisting third party agreement between the property owner and either Authority or Design-Builder. Design-Builder shall either perform such rebuild, repair or replacement itself, or the affected third party may elect to rebuild, repair or replace at Design-Builder's expense. Should Design-Builder not rebuild, repair or replace such damaged or lost items (or not reimburse a property owner electing to do its own rebuild, repair or replacement), Authority may take corrective measures and to deduct the amount of such costs (including an administrative charge equal to 10% of the costs) from any sums owed by Authority to Design-Builder pursuant to the Contract and/or obtain reimbursement from Design-Builder for such costs (plus an administrative charge equal to 10% of the costs).

# Contract Appendix 2 (Modified General Provisions) Section 5-1.36A Property and Facility Preservation - General

Preserve and protect:

- 1. Highway improvements and facilities
- 2. Adjacent property
- 3. Waterways
- 4. ESAs
- 5. Lands administered by the Authority or other agencies
- 6. Roadside vegetation not to be removed
- 7. Railroads and railroad equipment
- 8. Nonhighway facilities, including utilities
- 9. Survey monuments
- 10. Department's instrumentation
- 11. Temporary work

Immediately report damage to the Authority's Authorized Representative.

If you cause damage, you are responsible.

The Department may make a temporary repair to restore service to a damaged facility.

Install suitable safeguards to preserve and protect facilities from damage.

Install temporary facilities such as sheet piling, cribbing, bulkheads, shores, or other supports necessary to support existing facilities or support material carrying the facilities.

## Contract Appendix 2 (Modified General Provisions) Section 7-1.04 Public Safety

You are responsible to provide for public safety.

Do not construct a temporary facility that interferes with the safe passage of traffic.

Control dust resulting from the work, inside and outside the right-of-way.

Move workers, equipment, and materials without endangering traffic.

Whenever your activities create a condition hazardous to the public, furnish, erect and maintain those fences, temporary railing, barricades, lights, signs, and other devices and take any other necessary protective measures to prevent damage or injury to the public.

Any fences, temporary railing, barricades, lights, signs, or other devices furnished, erected and maintained by you are in addition to those for which payment is provided elsewhere in the specifications.

Provide flaggers whenever necessary to ensure that the public is given safe guidance through the work zone. Flagging must comply with section 12-1.

At locations where traffic is being routed through construction under one-way controls, move your equipment in compliance with the one-way controls unless otherwise ordered.

Use of signs, lights, flags, or other protective devices must comply with the California MUTCD and any directions of the Authority's Authorized Representative. Signs, lights, flags or other protective devices must not obscure the visibility of, nor conflict in intent, meaning, and function of either existing signs, lights and traffic control devices, or any construction area signs.

Keep existing traffic signals and highway lighting in operation. Other forces within the Department will perform routine maintenance of these facilities during the work.

Cover signs that direct traffic to a closed area. Except for work specified in Section 12, maintaining, and removing the covers on construction area signs is change order work.

Install temporary illumination such that the illumination and the illumination equipment do not interfere with public safety. The installation of general roadway illumination does not relieve you from furnishing and maintaining any protective devices.

Equipment must enter and leave the highway via existing ramps and crossovers and must move in the direction of traffic. All movements of workmen and construction equipment on or across lanes open to traffic must be performed in a manner that do not endanger the public. Your vehicles or other mobile equipment leaving an open traffic lane to enter the construction area must slow down gradually in advance of the location of the turnoff to give the traffic following an opportunity to slow down. When leaving a work area and entering a roadway carrying traffic, your vehicles and equipment must yield to traffic.

Immediately remove hauling spillage from a roadway lane or shoulder open to traffic. When hauling on roadways, trim loads and remove material from shelf areas to minimize spillage.

Notify the Authority's Authorized Representative not less than 25 days and not more than 125 days before the anticipated start of an activity that will change the vertical or horizontal clearance available to traffic, including shoulders.

If vertical clearance is temporarily reduced to 15.5 feet or less, place low clearance warning signs in compliance with the California MUTCD and any directions of the Engineer. Signs must comply with the dimensions, color, and legend requirements of the California MUTCD and section 12-3.11 except that the signs must have black letters and numbers on an orange retroreflective background. W12-2P signs must be illuminated so that the signs are clearly visible.

Pave or provide full width continuous and cleared wood walks for pedestrian openings through falsework. Protect pedestrians from falling objects and concrete-curing water. Extend overhead protection for pedestrians at least 4 feet beyond the edge of the bridge deck. Illuminate all pedestrian openings through falsework. Temporary pedestrian facilities must comply with the California MUTCD, Part 6, Chapter 6D, "Pedestrian and Worker Safety."

Do not store vehicles, material, or equipment in a way that:

- 1. Creates a hazard to the public
- 2. Obstructs traffic control devices

Do not install or place temporary facilities used to perform the work which interfere with the free and safe passage of traffic.

Temporary facilities that could be a hazard to public safety if improperly designed must comply with design requirements described in the Contract for those facilities or, if none are described, with standard design criteria or codes appropriate for the facility involved. Submit shop drawings and design calculations for the temporary facilities and show the standard design criteria or codes used. Shop drawings and supplemental calculations must be sealed and signed by a Registered Civil Engineer.

If you appear to be neglectful or negligent in furnishing warning devices and taking protective measures, the Authority's Authorized Representative may direct your attention to the existence of a hazard. You must furnish and install the necessary warning devices. Such notification, or failure to provide notification, on the part of the Authority's Authorized Representative relating to the existence of a hazard does not relieve you from your responsibility for public safety or abrogate your obligation to furnish and pay for these devices and measures.

Install Type K temporary railing or other authorized protective systems under any of the following conditions:

- 1. Excavations: Where the near edge of the excavation is within 15 feet from the edge of an open traffic lane
- 2. Temporarily unprotected permanent obstacles: When the work includes the installation of a fixed obstacle together with a protective system, such as a sign structure together with protective railing, and you elect to install the obstacle before installing the protective system; or you, for your convenience and as authorized, remove a portion of an existing protective railing at an obstacle and do not replace such railing completely the same day
- 3. Storage areas: When material or equipment is stored within 15 feet of the edge of an open traffic lane and the storage is not otherwise prohibited by the Contract
- 4. Height differentials: When construction operations create a height differential greater than 0.15 feet within 15 feet of the edge of traffic lane

Installation of Type K temporary railing is not required if an excavation within 15 feet from the edge of an open traffic lane is protected by any of the following:

- 1. Steel plate or concrete covers of adequate thickness to prevent accidental entry by traffic or the public
- 2. Side slope where the downhill slope is 4:1 (horizontal:vertical) or less unless a naturally occurring condition
- 3. Barrier or railing

Offset the approach end of Type K temporary railing a minimum of 15 feet from the edge of an open traffic lane. Install the temporary railing on a skew toward the edge of the traffic lane of not more than 1 foot transversely to 10 feet longitudinally with respect to the edge of the traffic lane. If the 15-foot minimum offset cannot be achieved, the temporary railing must be installed on the 10 to 1 skew to obtain the maximum available offset between the approach end of the railing and the edge of the traffic lane, and an array of temporary crash cushion modules must be installed at the approach end of the temporary railing.

Secure Type K temporary railing in place with pins before starting work for which the temporary railing is required.

If a traffic lane is closed with channelizers for excavation work, move the devices to the adjacent edge of the traveled way when not excavating. Space the devices as specified for the closure.

Do not move or temporarily suspend anything over a traffic lane open to the public unless the public is protected.

## **Technical Provisions Section 22.3.2 Security Plan**

Develop and implement a comprehensive Security Plan to protect employees, the public, property (including office facilities), equipment, and Project supplies. The written plan must be included as a part of the Health, Safety and Environmental Work Plan.

## Storage/Clean-up

## Contract Appendix 2 (Modified General Provisions) Section 4-1.13 Cleanup

Before final inspection, Contractor shall clean the highway, material sites and all ground occupied by Contractor in connection with the Work and leave the job site neat and presentable and dispose of:

- 1. Rubbish
- 2. Excess materials
- 3. Falsework
- 4. Temporary structures
- 5. Equipment

Nothing herein, however, shall require Design-Builder to remove warning, regulatory, or guide signs until Final Acceptance.

## Contract Appendix 2 (Modified General Provisions) Section 5-1.31 Job Site Appearance

Keep the job site neat. In areas visible to the public:

- 1. If practicable, dispose of debris removed during clearing and grubbing concurrently with its removal. If stockpiling is necessary, dispose of debris weekly.
- 2. Furnish trash bins for construction debris. Place the debris in trash bins daily.
- 3. For falsework to be reused, stack the forms neatly and concurrently with their removal.

#### **Technical Provisions Section 6.3.4.4**

Make every effort to keep the Work within the boundaries of the Project ROW and Major Environmental Approvals. Any Project activities (e.g., ROW acquisition, Utility Relocation, staging, storage, batch plant, grading, etc.) that occur outside the Project ROW shall be in accordance with the Contract Documents. Design-Builder shall notify the Authority in writing of any Project activities that will occur outside of the Project ROW. During the design submittal process set forth in Section 3.3 (Design Requirements), Caltrans shall review any Work outside the Project ROW to determine any necessary changes to Appendix 3 Approvals or if any additional environmental modification and re-evaluation activities are necessary. Design- Builder's responsibilities with respect to such modifications and re-evaluations are set forth in Contract Section 6.11 (New Approvals).

## Technical Provisions Section 6.3.4.6.1 Hazardous Materials Management Plan

Prepare and submit to the Authority for approval a Hazardous Materials Management Plan including the following contents at a minimum:

- Responsible personnel and qualifications related to management of Hazardous Materials and Hazardous Waste
- Statement indicating that all Hazardous Materials and Hazardous Waste encountered on the Project shall be remediated by a remediation contractor that has the appropriate current certifications, licenses and/or qualifications to complete the Hazardous Materials handling, in accordance with the Contract Documents
- Site information and site map
- Procedures for handling any Hazardous Materials encountered on Site, including Special Provisions and, at a minimum, the following SSPs:
  - 14-11.09A Minimal Disturbance of Areas Hazardous Waste Concentrations of ADL
  - 14-11.12 Remove Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue
  - 14-11.13 Disturbance of Existing Paint System on Bridge
  - 14-11.14 Treated Wood Waste
- Spill prevention, control, and countermeasure Best Management Practices (BMPs)
- Contaminated soil handling, stockpiling procedures, hauling routes, and disposal
- Contaminated groundwater handling, treatment, and disposal
- Excavation and Transportation Plan
- Health and safety measures for Hazardous Materials
- Remediation measures required to obtain approval from applicable Governmental Entities

The Excavation and Transportation Plan shall establish the procedures used to comply with requirements for excavating, stockpiling, transporting, and disposing material. The plan shall include:

- Excavation schedule (by location and date)
- Location of staging areas for temporary storage of stockpiled excavated soil
- Dust control measures during excavation activities
- Sampling and analysis plans for soils underneath Design-Builder's contaminated or Hazardous Materials stockpile areas after removal of a stockpile contaminated soil, which shall include at a minimum:
  - Location and number of samples in each area
  - Analytical laboratory and testing requirements
- Air monitoring for dust and Volatile Organic Compounds including:
  - Location and type of dust and/or VOC monitoring equipment,
  - Sampling frequency
  - Analytical laboratory testing requirements
- Transportation equipment and hauling routes

- Methods for preventing spills and tracking of material onto public roads
- Truck waiting and staging areas
- List of licensed, Authority-approved, Hazardous Waste Treatment, Storage, and Disposal facilities (TSDF)
- A Spill Contingency Plan for
  - All stored solid waste
  - Extracted groundwater
  - Contaminated or Hazardous soils
  - Hazardous Materials stored by Design-Builder
  - Any other construction related spills (i.e., refueling, etc.)
- Stockpile management procedures
  - Stockpiles of material containing contaminated or Hazardous Materials shall not be placed in areas affected by surface run-on or run-off.
  - Stockpiles of material containing contaminated or Hazardous Materials shall not be placed within OCFCD ROW or upon real property interests intended to be conveyed to OCFCD as part of the Project.
  - Stockpiles shall be covered with plastic sheeting 13 mils minimum thickness or equivalent. Stockpiled material shall not enter storm drains, inlets, or waters of the State.

Excavation, transportation, placement, and handling of material containing contaminated or Hazardous Materials shall result in no visible dust migration. Dust control procedures shall include use of a water truck or tank on the Site at all times while clearing and grubbing and performing earthwork operations in Work areas containing contaminated or Hazardous Materials.

Prior to traveling on public roads, remove loose and extraneous material from surfaces outside the cargo areas of the transporting vehicles and cover cargo with tarpaulins or other cover.

The EPA Generator Number will be provided by the Authority, after Design-Builder provides the necessary Hazardous Materials information.

## **Construction Noise**

#### Technical Provisions Section 6.4.1 Construction Noise

Work within Caltrans ROW shall be in accordance to Project Standards and Work outside

Caltrans ROW shall be according to applicable local ordinances and policies. The noise levels from the Design Builder's operations between the hours of 9:00 p.m. and 7:00 a.m. shall not exceed 86 dBa at a distance of 50 feet from the generation location. This requirement shall not relieve the Design-Builder from responsibility for complying with local ordinances regulating noise levels and other Project requirements.

#### **Technical Provisions Section 6.4.2 Temporary Noise Abatement**

Temporary noise abatement shall be installed between residential and construction areas when an existing adjacent freeway soundwall or community barrier is altered or removed. The temporary noise abatement shall be placed within 30 days of removal of existing soundwall or barrier and shall remain in place until completion of the new soundwall adjacent to property, with the exception noted below. The temporary noise abatement shall be a barrier at least 8 feet high and with a Sound Transmission Class (STC) rating of at least 25. The temporary noise abatement may require early removal prior to completion of the permanent soundwall to facilitate the completion of the permanent soundwall. This early removal period shall be approved by the Authority and shall not exceed 30 days prior to construction of the permanent soundwall.

#### **Technical Provisions Section 6.4.5**

Comply with the following requirements:

- Limit idling of machinery.
- Water all land clearing/earth moving activity areas to control dust. Areas shall remain visibly moist during active operations.
- Sweep adjacent streets as necessary during construction, but not less frequently than hourly, if visible soil material has been carried onto adjacent public paved roads.
- Visually inspect construction equipment prior to leaving Work sites. Wash off any loose dirt with wheel washers as necessary.
- Water all unpaved roads and staging areas at least three times daily or apply non-toxic soil stabilizers to reduce off-site transport of fugitive dust.
- Maintain and operate construction equipment so as to minimize exhaust emissions.
- During construction activities, trucks and vehicles in loading and unloading queues shall have their engines turned off when not in use to reduce noise and exhaust emissions.
- Establish on-Site construction equipment staging areas and construction worker parking lots on either paved surfaces or unpaved surfaces treated with soil stabilization materials.
- Use electricity from electric Utility systems where feasible, rather than temporary diesel or gasoline powered generators. Muffle noise from generators to the extent practical.
- Use on-Site mobile equipment powered by alternative fuel sources, such as ultra-low sulfur diesel, methanol, natural gas, propane or butane.
- Do not perform grading or earth moving on days when wind gusts exceed or are forecast to exceed 25 mph.
- Properly store fuel and other contaminants.
- Keep the construction area, including storage areas used by it, free from accumulations of waste
  material or rubbish, and prior to Final Acceptance remove all rubbish from Authority owned
  premises and all tools, scaffolding, equipment and materials not the property of the Authority.
  Upon Final Acceptance, leave the Work and premises in a clean, neat and workmanlike condition
  satisfactory to the Authority.
- Prior to Final Acceptance, clean the Site, including all areas under the control of the Authority, that have been used by Design-Builder in connection with the Work, and remove all debris, surplus material and equipment, and all temporary construction or facilities of whatever nature, unless otherwise approved by Authority. Final Acceptance will not be granted until Design-Builder has satisfactorily complied with the foregoing cleanup requirements.

## **Maintenance of Traffic**

## **Technical Provisions Section 18.3.6.2 Complete Street Closures**

Complete arterial street closures are not allowed except for the arterial overcrossings proposed to be constructed in one stage as shown in Table 18-1 (Section 18.3.2.3). One-stage overcrossing construction requires complete closure of the overcrossing arterial street segment for an extended period. At these locations, provide detour routes and perform Traffic Analysis. Traffic Analysis must be approved by the Authority and affected Corridor Cities. Notify the Authority a minimum of seven days prior to Work related to closures and confirm 24 hours before start of this Work.

#### Maintenance During Construction

## Technical Provisions Section 10.3.7 Barriers, Visual Screening, and Privacy Fencing

If any roadway profile is raised more than 2 feet vertically from existing conditions, adjacent to residential

property, provide 6-foot-high chain link fence with privacy screen at the back of walk or on bridge railing consistent with Attachment 20-1 (Project Aesthetic and Landscape Master Plan).

#### **Technical Provisions Section 21.3.2 Temporary Fencing**

Furnish, install, and maintain temporary construction fencing and gates, as necessary, around each construction area until installation of the permanent fencing or construction of walls, including placement of fencing screens (tarps) as designated in the Contract Documents or as directed by the Authority. Remove and dispose of the temporary construction fence and gates and restore all adjacent areas to their original condition immediately prior to installation of the permanent fence and gates or construction of a wall. Sequence and perform Work to maintain security of adjacent properties at all times. Perform restoration at no additional cost to the Authority.

## Health and Safety/Construction Requirements

#### **Technical Provisions Section 22.4.7 Vehicle and Roadway Requirements**

Ensure that all Design-Builder vehicles, including those of its Subcontractors, Suppliers, vendors, and employees are parked in designated parking areas, and vehicles are identified by company name and/or logo, and comply with traffic routes, and posted traffic signs in areas other than the employee parking lots.

Personal vehicles belonging to Design-Builder employees shall not be parked on the traveled way or shoulders including any section closed to public traffic, State easements, or areas of the community that may cause interference or complaints.

Only authorized vehicles shall access onto Authority-controlled construction projects and property.

Excessive dust caused by vehicular traffic is not acceptable, and shall require appropriate control measures.

Operators shall ensure equipment/vehicles prevent tracking of Site soils, dust, and materials off the Project. Site materials shall not impact the community and/or public roadways.

Vehicles entering/exiting the Project shall do so safely and quietly and not draw the attention of the surrounding community.

Only company vehicles covered by Design-Builders' submitted certificate of insurance and with a company logo or company sign on the vehicle doors and high visibility flashing beacons when required shall be authorized to access into Work areas of the Project. All other vehicles shall be considered personal vehicles and are required to park in designated employee parking areas.

Design-Builder's motorized off-road type industrial tractors and earthmoving equipment traversing into or onto public traffic roadways and highways, shall be loaded onto a haul tractor trailer with proper warning beacons, or on roadways traversing for short distance between Work sites shall be accompanied by a pilot vehicle with high visibility flashing beacons and warning signs for the protection of the traveling public.

\*Caltrans Standard Specifications also apply.