2012 ADDENDUM TO THE

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (MND) AND ENVIRONMENTAL ASSESSMENT (EA) FOR THE COMBINED PROJECT STUDY REPORT (PSR) / PROJECT REPORT FOR THE:

42ND AVENUE/HIGH STREET ACCESS IMPROVEMENT PROJECT

ORIGINALLY APPROVED BY THE CITY OF OAKLAND IN SEPTEMBER 2001

Prepared For: City of Oakland Public Works Agency 250 Frank H. Ogawa Plaza, Suite 4314 Oakland, CA

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> > January 2012



2011 Addendum for the 42nd Avenue/High Street Access Improvements Project

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- D: Initial Study/Mitigated Negative Declaration and Environmental Assessment for the Combined Project Study Report/Project Report, October of 2001

Purpose of Document

In 1999 and 2000, the City of Oakland developed plans for widening and realignment of local streets, connector roads, and ramps in the vicinity of the I-880/High Street interchange, in conjunction with Caltrans' High Street Overhead Seismic Retrofit Project. The City's plans for this area are known as the 42nd Avenue/High Street Access Improvements Project ("the Project"). In March of 2001, the City published a Combined Notice of Finding of No Significant Impact (FONSI) and Mitigated Negative Declaration for the Project, and in October of 2001 the Oakland City Council made findings and approved the Initial Study/Mitigated Negative Declaration (the 2001 Neg. Dec.) and subsequently approved the Project.

Implementation of the City's 42nd Avenue/High Street Access Improvements Project will only commence once Caltrans' High Street Overhead Seismic Retrofit Project (which is currently under construction) is complete, funding for the City Project is secured, and necessary right-of-way has been acquired. Caltrans now estimates that construction of their High Street Overhead Seismic Retrofit Project will be complete in 2014. In order to acquire necessary right-of-way, the City anticipates the need to acquire portions of certain private parcels, potentially by eminent domain. If the City proceeds by eminent domain, the City Council must first exercise its discretion to adopt a Resolution of Necessity. As the decision whether to adopt a Resolution of Necessity is a discretionary action, it is considered a "project" under CEQA.

The purpose of this document is to determine, pursuant to Public Resources Code Sections 21090 and 21166 and California Environmental Quality Act (CEQA) Guidelines Sections 15180, 15162 and 15163, whether a Subsequent or Supplemental Environmental Impact Report (EIR) or Negative Declaration (Neg. Dec.) is needed to fully assess and evaluate the potential environmental effects of the 42nd Avenue/High Street Access Improvements Project, or whether the City can rely on the previously prepared 2001 Neg. Dec. prepared for that project for its current pending actions.

CEQA provides that when an EIR has been certified or a Negative Declaration has been adopted, no Subsequent or Supplemental environmental review shall be prepared unless the Lead Agency determines, on the basis of substantial evidence, one or more of the following:

- substantial changes are proposed as part of the Project that would involve major revisions to the previous 2001 Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects,
- substantial changes have occurred with respect to circumstances under which the Project is undertaken (i.e., a significant change in the existing or future condition) that would involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects, and/or
- information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the 2001 MND was adopted, shows that; a) new significant environmental effects or a substantial increase in the severity of significant environmental effects already identified in the 2001 MND; or b) mitigation measures which were previously determined not to be feasible would in fact be feasible, or mitigation measures which are considerably different from those adopted pursuant to the 2001 MND would substantially reduce significant effects of the project, but the City declines to adopt them.

If none of these factors are applicable, then no subsequent or supplemental Negative Declaration would be required. If some changes or additions to the original environmental document are necessary, but none of the changes would warrant preparation of a subsequent or supplemental Negative Declaration, the City may prepare and Addendum to the previous CEQA document, pursuant to CEQA Guidelines Section 15164.

Changes in Circumstances

There have been changes in circumstances since certification of the 2001 Neg. Dec., including:

- Caltrans is currently constructing the High Street Overhead Seismic Retrofit Project, which was approved in December of 1999. The High Street Overhead Seismic Retrofit Project is scheduled to be complete in the summer of 2014.
- Traffic volumes in and around the Project area have changed over time as a result of cumulative growth and development, as well as the re-routing of traffic flow as a result of construction of Caltrans' High Street Overhead Seismic Retrofit Project.
- The City of Oakland has completed several of the fee and easement acquisitions within the Project area necessary to implement the Project.
- Additional hazardous materials characterization and clean-up operations have been conducted on several properties within the Project area. These changes are more fully documented in the Hazards and hazardous Materials section of this document.

The degree to which these changed circumstances may have new or previously unanticipated environmental consequences affecting the proposed Project are more fully evaluated in subsequent sections of this document.

Changes in the Project

This document assesses the extent to which changes to the Project may result in new or significantly increased effects. Further environmental review of the Project is only required if necessary to address substantial changes to the previous 2001 Neg. Dec. necessary to adequately address new or different information specific to the current Project. The current Project is the same project as analyzed in the 2001 Neg. Dec., and no changes are proposed.

The current discretionary action before the City is consideration of adoption of one or more Resolutions of Necessity, a formal decision to acquire property by eminent domain. Such a resolution must be adopted before the City can commence an eminent domain action in court. Acquisition of those properties that are the subject of a potential Resolution of Necessity was fully contemplated in the 2001 Neg. Dec., and a decision by the City to pursue acquisition of right-of-way for these improvements at 42nd and High Street is not a change in the Project.

New Information

This document also assesses the extent to which new information, not known at the time of preparation of the 2001 Neg. Dec., may indicate a new or significantly increased environmental effect. Although not legally required, in order to provide more information to the public and decision makers, and in the interest of being conservative, new information specifically includes new guidance and environmental review requirements related to greenhouse gas emissions and global climate change which were not addressed in the previous Neg. Dec., as well as new thresholds for air quality impacts as recommended by the Bay Area Air Quality Management District (BAAQMD) and now utilized by the City of Oakland.

Since information on air quality and climate change was known, or could have been known in 2001, it is not legally "new information" as specifically defined under CEQA. However, an analysis of the proposed Project relying on the new Air District guidance and thresholds has been conducted.

Additionally, since 2001 the City has adopted Uniformly Applied Development Standards and Standard Conditions of Approval. These development standards are incorporated into all projects as Standard Conditions of Approval (SCAs), regardless of a project's environmental determination, pursuant in part to CEQA Guidelines Section 15183. As applicable, the SCAs are adopted as requirements of an individual project when approved by the City. These standards are designed to, and will substantially mitigate environmental effects. All applicable SCAs will be adopted as requirements of the Project. All applicable City of Oakland Standard Conditions of Approval are included in the Standard Conditions of Approval and Mitigation Monitoring Program (SCAMMP) for the Project, attached as **Appendix A**.

General Project Information

The purpose of this evaluation is to determine whether a Subsequent or Supplemental Environmental Impact Report (EIR) or Mitigated Negative Declaration is needed to fully assess and evaluate the impacts of the proposed 42nd Avenue/High Street Access Improvements Project. Previous environmental review was conducted for the Project pursuant to an *Initial Study/Mitigated Negative Declaration and Environmental Assessment for the Combined Project Study Report/Project Report* approved by the City of Oakland in October of 2001 (the 2001 Neg. Dec.). The 2001 Neg. Dec. was a combined project-specific, focused environmental document prepared for the 42nd Avenue/High Street Access Improvements Project, required under the 1969 National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) of 1970. The intent of that combined NEPA/CEQA document was to address potential environmental issues associated with the construction and operation of the proposed Project.

As detailed below, an Addendum to that 2001 Neg. Dec. is the appropriate CEQA document and no Supplemental or Subsequent EIR or Mitigated Negative Declaration is required. This document constitutes the Addendum.

Project Title:

42nd Avenue/High Street Access Improvements Project

Lead Agency Name and Address:

City of Oakland Public Works Agency, Transportation Services Division 250, Frank H. Ogawa Plaza, Suite 4344 Oakland, CA 94612

Contact Person and Phone Number:

Ade Oluwasogo, P.E. (C.E./T.E.) Supervising Transportation Engineer Phone: 510-238-6103 <u>Ade.Oluswago@oaklandnet.com</u>

Project Location:

The proposed 42nd Avenue/High Street Improvement Project is located within the City of Oakland, along the 1-880 corridor in Alameda County (see **Figure 1-1**). The Project Area is limited to the surface streets of 42nd Avenue, High Street, East 8th Street, Alameda Avenue, Oakport Street and Coliseum Way, all located within the City of Oakland.

Project Sponsor's Name and Address:

City of Oakland Public Works Agency, Transportation Services Division 250 Frank H. Ogawa Plaza, Suite 4344 Oakland, CA 94612

General Plan Designation

Within the Project area, lands on the north side of High Street are designated under the Estuary Plan as General Commercial, and lands on the south side of High Street are designated under the Estuary Plan as Light Industry 3.

Zoning

All lands west of I-880 in the Project area are Zoned M-40: Heavy Industry

Existing Land Uses

The Project area is developed with transportation facilities (I-880 and adjoining arterial roads), commercial and light industrial uses, and one residence. The eastern portion of the Project area, east of I-880 is developed and used for a combination of construction-related retail and general industry uses. The western side of the Project area, west of 1-880 is a combination of light industrial and commercial development. One single-family residence is located at the intersection of Jensen and High streets.

Description of the Project

The proposed 42nd Avenue/High Street Improvement Project includes widening and realignment of local streets, connector roads and ramps in the vicinity of the I-880/High Street interchange, in conjunction with Caltrans' High Street Overhead Seismic Retrofit Project (see following Project Description).

The right-of-way needed for these improvements requires acquisition of portions of properties and/or easements from up to 16 separate parcels. Several of these properties and/or easements have already been acquired, but the City has, as yet, been unable to obtain all of the right-of-way needed for the Project. To acquire all other remaining portions of those parcels not yet acquired, the City anticipates commencing eminent domain actions to condemn this land. A Resolution of Necessity is the City's formal decision to acquire property by eminent domain, and it must be adopted before the City can commence an eminent domain action in court. Adoption of a Resolution of Necessity is a discretionary action, and thus subject to CEQA.

Other Public Agency Approvals Required

- Caltrans
- Alameda County Transportation Commission

Requested Actions and Required Approvals

This Addendum is intended to, and does provide CEQA clearance for any and all discretionary actions and approvals for the Project, including without limitation:

- Decisions to acquire additional real property interests, including without limitation by the adoption of one or more Resolutions of Necessity and commencement of eminent domain proceedings and/or other actions necessary for acquisition of property
- Award of construction contracts
- Grading, encroachment, "P' job and any/all construction-related permits and approvals

Evaluation of Environmental Impacts

Pursuant to CEQA Guidelines Section 15063, this document provides an evaluation of whether the Project will have any new significant effects on the environment.

- If an environmental issue would not be affected by the Project or its impact would be less than significant, it is identified in the following evaluation as "No Impact" or "Less than Significant".
- If the Project may cause a significant effect on the environment, this evaluation also determines whether this effect was adequately examined in the previous 2001 Neg. Dec. If the environmental issue was adequately examined in the previous document, it is identified in the following evaluation as "**No New Impact**". To the extent that mitigation measures were adopted pursuant to the 2001 Neg. Dec., and these measures continue to be applicable to the Project, these measures are specifically identified. In some cases, the City has since adopted Standard Conditions of Approval (SCAs) that would update or add to the adopted mitigation measures, and these SCAs are identified as well.
- If there is a new significant environmental effect or a substantial increase in the severity of a previously identified significant effect, it would be identified in the following evaluation as potentially significant. To the extent that mitigation measures recommended in this document are capable of reducing the significance of such impacts to less than significant, it is identified in the following evaluation as "Less than Significant with Mitigation".



Lead Agency Determination

The City prepared an Initial Study (dated December 18, 2000), which evaluated the environmental impacts of the 42nd Avenue/High Street Access Improvement Project and the City Council adopted a Mitigated Negative Declaration and approved the Project on October 2, 20001, via Resolution No. 76735 C.M.S. ("2001 MND"). No legal action was filed challenging the 2001 MND and thus it is presumed valid. The City relied on the 2001 MND in 2007 and again in 2009 when it took further actions to advance the Project. In addition, on November 3, 2008, the City Council adopted Standards Conditions of Approval/Uniformly Applied Development Standards, via Ordinance No. 12899 C.M.S., which were revised, in part, in July 2011.

This Addendum (2011 Addendum) demonstrates that no further/additional CEQA review is required as none of the circumstances necessitating preparation of additional CEQA review as specified in CEQA and the CEQA Guidelines, including without limitation Public Resources Code Section 21166 and CEQA. Guidelines Sections 15162 and 15163, are present in that:

- a) there are no substantial changes to the Project that would result in new significant environmental impacts or a substantial increase in the severity of significant impacts already identified in the 2001 MND;
- b) there are no substantial changes in circumstances that would result in new significant environmental impacts or a substantial increase in the severity of significant impacts already identified in the 2001 MND; and
- c) there is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the 2001 MND was adopted, which is expected to result in (a) new significant environmental effects or a substantial increase in the severity of significant environmental effects already identified in the 2001 MND; or (b) mitigation measures which were previously determined not to be feasible would in fact be feasible, or which are considerably different from those recommended in the 2001 MND, and which would substantially reduce significant effects of the project, but the City declines to adopt them.

Thus, in considering approval of the Resolutions of Necessity and other actions, the City can rely on the previously adopted 2001 MND, as documented in this 2012 Addendum.

1/9/12

Date

Signature Eric Angstadt, Deputy Director of CEDA, Environmental Review Officer

Background

Caltrans' I-880 Corridor Improvement Project

Following the 1989 Loma Prieta earthquake, which resulted in collapse of the Cypress Street Viaduct, Caltrans embarked upon a major reconstruction of the collapsed portion of I-880 with a more seismically sound structure along a new alignment around the outskirts of West Oakland. Due to age and heavy use, Caltrans determined that a number of additional seismic and safety improvements along the I-880 corridor were required, and embarked upon a major I-880 Corridor Improvement Project. The I-880 Corridor Improvement Project includes a number of re-designed and expanded interchanges to improve traffic flow, rehabilitation and repaving of the freeway surfaces, and replacement of existing bridges with more seismically secure structures. The individual improvements included under the I-880 Corridor Improvement Project include widening of I-880/I-238, reconstruction of the SR-92/I-880 interchange, I-880 surface rehabilitation and repaving, seismic retrofit of the 5th Avenue interchange, replacement of the 23rd Avenue Bridge, replacement of the 29th Avenue bridge, rehabilitation of the Fruitvale Avenue overhead interchange, and seismic retrofit of the High Street bride. Each of these individual projects is in various stages of design, construction or completion.

Currently, seismic reconstruction at the 5th Avenue and High Street bridges on I-880 in Oakland represent some of the last seismic retrofit projects on major transportation corridors to occur in California.

Caltrans' High Street Overhead Seismic Retrofit Project

As one of California's last major seismic retrofit projects, Caltrans is currently replacing the old High Street Bridge structure with a new structure designed in accordance with modern seismic safety standards. The Combined Project Study Report/Project Report for the Caltrans' High Street Overhead Seismic Retrofit Project was approved in December of 1999. That project was developed through a partnership with the City of Oakland, the City of Alameda, and the Alameda County Transportation Commission. Construction began in fall 2009, at an estimated cost of \$100 million.

The Caltrans' High Street Overhead Seismic Retrofit Project (see **Figure 2-1**) consists of replacing two bridges along 1-880 which span an abandoned Union Pacific Railroad rail track, High Street and SR77 (42^{nd} Avenue). The old ramps and connectors are being replaced with at-grade intersections, with the exception of the northbound on-ramp structure, which was previously retro-fitted and will remain in place. At 42^{nd} Avenue, the Caltrans High Street Overhead Seismic Retrofit Project is removing the ramp connectors to I-880 and replacing them with at-grade intersections. Once complete, 42^{nd} Avenue will terminate at the I-880 southbound off-ramp. The Caltrans High Street Overhead Seismic Retrofit Project is realigning a portion of East 8th Street south of 37th Avenue, and is re-aligning Oakport Street further west in order to rebuild the I-880 southbound structure. The Caltrans High Street Overhead Seismic Retrofit Project does not include reconstruction or realignment of Coliseum Way.

In mid-November of 2011, Caltrans opened the new southbound I-880 bridge over High Street, and southbound traffic shifted onto the new bridge. After the traffic shift, northbound I-880 traffic shifted onto the older southbound bridge at High Street. This allowed for demolition of the existing northbound I-880 bridge and construction the new northbound bridge.



Photo of pre-construction conditions



Illustration of post-construction improvements

The Caltrans High Street Overhead Seismic Retrofit Project is scheduled to be complete in the summer of 2014. Once complete, the new High Street Bridge will be smoother and stronger, will provide motorists with better visibility and larger shoulders, and will reconfigure the exit ramps to reduce back-ups entering and exiting the freeway at the SR- $77/42^{nd}$ Avenue interchange.

City of Oakland's 42nd Avenue/High Street Access Improvements Project

The Caltrans High Street Overhead Structure Seismic Retrofit Project is being developed to mitigate structural deficiencies on 1-880 only. It is not intended to address access or capacity improvements or improvements to local circulation, even though the extension of 42nd Avenue, the reconfiguration of the at-grade SR 77 interchange, and the connector ramps for the new High Street Bridge will tie directly into existing local roadways. Therefore, in order to provide conjunctive improvements needed to link and optimize traffic circulation between the local roadway network and the reconfigured interchange and associated intersections, the City of Oakland developed plans for local roadways intended to be mutually supportive to the Caltrans' High Street Overhead Seismic Retrofit Project.

In 1999 and 2000, the City of Oakland held meetings with the City of Alameda and Caltrans to discuss issues and coordinate the City of Oakland's plans for widening and realignment of local streets, connector roads, and ramps in the vicinity of the interchange with Caltrans' High Street Overhead Seismic Retrofit Project. The purpose of the City's plans for this area, known as the 42nd Avenue/High Street Access Improvements Project, is to: the proposed improvements

- Improve circulation of local roadways at the 1-880 and 42nd Avenue interchange. Improved circulation would relieve local traffic congestion and encourage development for the cities of Oakland and Alameda, and the Port of Oakland.
- Improve access for vehicles traveling to and from the cities of Oakland and Alameda via 42nd Avenue and High Street from 1-880. The proposed improvements are needed to facilitate movement of local traffic on and off of 1-880, and to destinations both east and west of the existing 1-880 freeway.
- Improve operational capacity for the intersections at the freeway on-ramps and off-ramps. Three signalized intersections, all of which are on High Street, currently serve the Project area. Although, the level of service during AM and PM peak periods in 2001 ranged between LOS A and LOS D, the estimated maximum queues during the AM and PM peak periods present significant problems at the two intersections serving freeway ramps.
- Major queuing also occurs at both northbound and southbound off-ramps in both peak periods. The queue extends upstream and blocks other traffic movements, resulting in constricted traffic flows during peak periods.
- Identify acceptable column locations for the Caltrans' High Street Overhead Seismic Retrofit Project which would not preclude or interfere with the City's plans.

The proposed Project will serve to implement Policy SAF-IO of the City of Oakland Estuary Plan, which states "Work with Caltrans, BART, and other Transportation Agencies to upgrade connecting routes between inland neighborhoods, 1-880, and local streets, to enhance East Oakland access to the waterfront." The proposed Project also implements Policy SAF-IO.2 of the Estuary Plan, which states, "If feasible, construct an urban diamond interchange at 42nd Avenue with frontage road connections to Fruitvale Avenue."

The specific improvements contemplated under the City's 42nd Avenue/High Street Access Improvements Project are described below, and are shown on **Figure 2-2**.

High Street Improvements

High Street runs perpendicular to I-880 and parallel to 42^{nd} Avenue in the vicinity of the proposed Project. High Street will be widened from four to six lanes to provide improved capacity at intersections with frontage roads and freeway connections. The widening of High Street at the intersections of the northbound off-ramp and southbound on-ramps to I-880 will increase the operational capacity of the intersections and circulation will improve.

The widening of High Street under I-880 to accommodate the additional lanes required placement of a pier for the Caltrans High Street Overhead Seismic Retrofit Project in the median of High Street. The construction staging of High Street requires building the outside lanes first, while traffic uses the existing High Street. Traffic will then shift to the newly completed outer portions of High Street while building the inside lanes and median. The proposed grade will match the existing grade to allow easy detour of traffic to newly completed portions of High Street. The new ramps for northbound and southbound 1-880 will align with the existing ramp intersections, so that no substantial portion of the interchange ramps will have to be re-built. Landscaping will be provided within the median areas on High Street, and at the edge of sidewalks where new sidewalks will be provided.

42nd Avenue Extension

The Project will extend 42^{nd} Avenue as a new roadway, parallel to High Street and connecting to a realignment of Alameda Avenue. The extension of 42^{nd} Avenue to Alameda Avenue will result in a parallel roadway to High Street, and will provide a direct route for traffic from the southbound I-880 off-ramp traveling to Alameda, as well as for Alameda traffic heading to the freeway in both the northbound and southbound direction. This addition will improve local circulation. Landscaping will be provided at the edge of sidewalks where new sidewalks will be constructed.

Realignment of Other Connecting Street

West of I-880, the parallel streets of Howard Street and Jensen Street will be realigned to eliminate an off-set intersection. Re-alignments are also proposed for Oakport Street and Coliseum Way.

Right-of-Way Acquisition and Other Effects

Right-of-way acquisition will be (or has been) required from an estimated 16 parcels, none of which are anticipated to be full parcel takes. Nine businesses located on High Street, Oakport Street and Alameda Avenue may be affected by the Project. The Project will require demolition of buildings on High Street and reconstruction of entrances, parking and landscaping along the remaining business frontages. All other parcels affected by the Project are un-improved land or are impacted such that the partial take has little effect on the remainder.



Diagram showing proposed street improvements

Project's PSR and Environmental Review History

A brief history of documentation for the 42nd Avenue/High Street Access Improvement Project includes the following key milestones:

- In 1999 the City was awarded \$1 million from the 2000 State Transportation Improvement Program (STIP) for engineering design work.
- In December of 2000, the City issued a Combined Project Study Report/Project Report describing the proposed 42nd Avenue/High Street Access Improvements Project.
- Neighborhood meetings were held in both Oakland and Alameda to inform and obtain input from the community.
- In March of 2001, the City published a Combined Notice of Finding of No Significant Impact (FONSI) and Mitigated Negative Declaration for the Project.
- In July of 2001, Caltrans gave the City the authorization to proceed with the plans and specifications for the Project.
- In October of 2001, the Oakland City Council made findings and determined, prior to taking action on the Project, that: i) the Initial Study/Mitigated Negative Declaration was prepared by the City of Oakland as the lead agency and properly circulated for public review and comments; ii) the proposed IS/NIND was independently reviewed and analyzed by the Oakland City Council and reflects the independent judgment of the Council; iii) the IS/MND is legally adequate and was completed in compliance with the California Environmental Quality Act (CEQA) ; iv) the IS/MND identifies all potential significant impacts and feasible mitigation measures that would reduce these impacts to less than significant levels; and v) the Mitigation Monitoring Program is adopted and incorporated into the Project
- Following their CEQA findings, the City Council adopted a resolution authorizing the City Manager to make application, accept and appropriate Regional Improvement Program Funds to be programmed by the Metropolitan Transportation Commission (MTC) in the 2002 Regional Transportation Improvement Program (RTIP) for improvements to 42nd Avenue/High Street Access Improvement Project. The City requested programming of \$3,130,000 for right of way acquisition.

Current "Project"

In order for the City to continue its efforts toward implementation of the 42nd and High Street I-880 Access Improvement Project, staff has determined that the City of Oakland's acquisition of certain property rights (fee, permanent easement and temporary construction easement) is necessary for the widening and extension of the right-of-way for the Project. Staff plans to propose that the City Council authorize acquisition by eminent domain of these property rights from parcels owned by Equilon Enterprises, Laurence C. & Diane M. Webster, and the defunct Leona Chemical Company.

The City Council previously approved the negotiated acquisition of all property interests necessary for the Project. The City has currently accepted contracts, or has closed escrow on twenty-one of the twenty-seven property interests that are required for the Project. The property rights now at issue are among the property interest identified for negotiated acquisition, but which the City has not successfully negotiated acquisition. The property rights on these properties have been appraised and offers to acquire the property rights at the appraised fair market values have been made to all of the property owners, except for the

property which had been owned by the now-defunct Leona Chemical Company) and for which the City has been unable to identify a current owner).

Table 2-1: Properties Proposed to be Acquired

	1 1	1	
PROPERTY ADDRESS	REQUIRED AREA (SF±)	INTEREST TO BE ACQUIRED	APN
600 High Street	2,015	Partial Take	034-2295-001-03
600 High Street	1,829	Temp. Const. Easement	034-2295-001-03
4200 Alameda Ave.	1,062	Easement	033-2203-006-00
4200 Alameda Ave	3,489	Easement	033-2203-004-02
4200 Alameda Avenue	418	Temp. Const. Easement	033-2203-004-02
4200 Alameda Avenue	42	Temp. Const. Easement	033-2203-006-00
Leona Chemical Company	7,400	Fee	n/a

The following Table 2-1 shows the property rights proposed to be acquired:

The City's acquisition of these last remaining property interests is necessary to construct the Project, specifically for the new alignment and reconfiguration of High Street, Alameda Avenue and Jensen Street.

A formal decision by the City to acquire property through eminent domain, known as a Resolution of Necessity, must be adopted before the City (as condemning agency) can commence an eminent domain action in court.

California Code of Civil Procedure Section 1245.230 provides that in order to adopt a resolution of necessity, the government agency must find:

- a) that the project for which the property is to be acquired is necessary;
- b) that the property is necessary for the public project;
- c) that the project is located in such a manner as to offer the greatest public benefit with the least private detriment; and
- d) that an offer to purchase the property has been made pursuant to Government Code section 7267.2, or that no offer was made because the owner could not be found.

Funding for right-of-way acquisition is being provided by a State Transportation Improvement Program (STIP) grant, which was programmed in 2007.

Summary of the 2001 Negative Declaration

2001 Setting

Circulation System

The 2001 Neg. Dec described the existing circulation system within the Project area as including the following major roadways:

- I-880
- 42nd Avenue (SR77)
- High Street
- East 8th Street
- Alameda Avenue
- Oakport Street
- Coliseum Way
- Howard Street

Intersection Level of Service

In 2001, the Project area was served by three signalized intersections located at Oakport Street/High Street; Howard Street/High Street; and Coliseum Way/High Street. Operations at these intersections were studied to establish baseline traffic conditions in the Project area. As shown in **Table 3-1** below, the existing levels of service range from LOS A to LOS D, with a maximum delay of 51.6 seconds.

Signal Location				
AM Peak	Level of Service	Avg. Total Delay (sec/veh.)	Volume/Capacity	
Alameda Ave. at High St	С	31.9	0.94	
Howard St. at High St	В	10.6	0.66	
Coliseum Way at High St	С	31.6	0.90	
PM Peak				
Alameda Ave. at High St.	С	28.5	0.86	
Howard St. at High St.	А	8.3	0.59	
Coliseum Way at High St	D	51.6	1.00	

Table 3-1: Project Intersection Operations, 2001

Note: Performance measures based on procedures in 1997 Highway Capacity Manual for Signalized Intersections.

Intersection Queues

In 2001, traffic queues occurring during the AM and PM peak periods presented significant problems at the two intersections serving freeway on-ramps. Of particular concern was the northbound left turn movement at the intersection of High Street/Coliseum Way, where queues extended upstream past the Alameda Avenue intersection, causing restricted traffic flows during peak periods. Major queuing also occurred on both off-ramps during both peak periods. Traffic backed up onto the freeway at the northbound and southbound off-ramps during the 2001 AM and PM peak periods. Additionally, single left-turn lanes under the High Street overhead bridge had deficient storage in both directions, causing backups to the northbound and southbound 1-880 traffic on High Street.

2001 Neg. Dec Environmental Conclusions (Impacts and Mitigation Measures)

This section summarizes the traffic operations that the 2001 Neg. Dec. expected to result from implementation of the Project. The analysis of traffic operations was based on projected future traffic volumes, the ability of the Project to accommodate this volume, and comparisons between the No Project and Project scenarios.

Travel Demand Forecasts

The 2001 Neg. Dec. estimated that the Project would result in an increase of 12% of eastbound traffic on High Street in the AM peak, and 17% in the PM peak. An increase in traffic was also expected for westbound traffic on High Street, west of Howard Street during both peak hours. The Project's improved connections to Alameda Avenue and High Street were expected to result in traffic increases in both the eastbound and westbound directions on 42nd Avenue as compared to the No Project scenario.

Traffic Analysis Results

Future traffic operations were analyzed for the No Project and Project scenario by calculating levels of service for six signalized intersections in the Project area.

Intersection Analysis

The intersections that would be created as part of the Project, or substantially impacted by the Project, were analyzed for the year 2025. As shown in **Table 3-2**, the analysis indicated that by 2025 without the Project (i.e., the No Project scenario), traffic increases were projected to result in the following conditions:

- The level of service at the intersection of Coliseum Way/High Street would worsen to LOS F by 2025, and eventually cause an extension of the AM and PM peak periods at that intersection.
- Traffic queues would significantly increase as compared to 2001 conditions. The largest increases in queue length would occur on the northbound approach to High Street from the off-ramp, and at the eastbound left and westbound through movements. The increase for the eastbound left turn movement was particularly troublesome, as the queue for this movement already significantly exceeded the available storage length.
- The No Project scenario was found to not provide adequate capacity for forecasts of critical movements.

Signal Location	Level of Service	Avg. Total Delay (sec/veh.)	Volume/Capacity
AM Peak			
Coliseum Way at 42nd	А	1.3	0.49
SB Off-Ramp at 42nd Ave.	В	15.0	0.55
High St. at SB Off-Ramp	С	29.3	0.94
Howard at High Street	В	15.2	0.77
Coliseum Way at High St.	F	85.6	1.15
Alameda Ave. at K-Mart	А	6.6	0.24
PM Peak			
Coliseum Way at 42nd	В	10.3	0.63
SB Off-Ramp at 42nd Ave.	В	15.1	0.56
High St. at SB Off-Ramp	С	24.2	0.86
Howard at High Street	С	27.6	0.91
Coliseum Way at High St.	F	142.4	1.20
Alameda Ave. at K-Mart	А	7.3	0.30

 Table 3-2: Estimated 2025 Intersection Operations, No Project (from 2001 Neg. Dec.)

Note: Performance measures based on procedures in 1997 Highway Capacity Manual for Signalized Intersections.

However, as shown in **Table 3-3** with implementation of the proposed Project, all intersections were expected to be signalized and to operate at acceptable service levels of C or better.

Signal Location	Level of Service	Avg. Total Delay (sec/veh.)	Volume/Capacity
AM Peak			
Coliseum Way at 42nd	А	7.9	0.53
SB Off-Ramp at 42nd Ave.	В	17.7	0.62
High St. at SB Off-Ramp	С	20.4	0.89
Howard at High Street	А	3.9	0.60
Coliseum Way at High St.	В	17.8	0.73
Alameda Ave. at K-Mart	А	3.6	0.21
PM Peak			
Coliseum Way at 42nd	В	14.4	0.69
SB Off-Ramp at 42nd Ave.	В	19.1	0.79
High St. at SB Off-Ramp	С	21.6	0.80
Howard at High Street	А	5.8	0.60
Coliseum Way at High St.	В	16.1	0.67
Alameda Ave. at K-Mart	А	4.4	0.29

Table 3-3: Estimated 2025 Intersection Operations, With Project (from 2001 Neg. Dec.)

Note: Performance measures based on procedures in 1997 Highway Capacity Manual for Signalized Intersections.

Existing (2011) Setting

Circulation System

Currently a portion of the Project site is under construction for the Caltrans' High Street Overhead Seismic Retrofit Project. The street configuration shown in **Figure 3-1** represents current conditions during construction of the Caltrans' High Street Overhead Seismic Retrofit Project. The local streets and freeway ramps affected by the High Street Seismic Retrofit Project are shown in **Figure 3-2**. The street configuration shown in Figure 3-2 shows the street layout prior to construction of the Caltrans' High Street Overhead Seismic Retrofit Project are shown in Figure 3-2.

I-880

I-880 is an existing, eight-lane, divided freeway with southbound on-ramps and northbound off-ramps connecting at-grade with High street. Within Alameda County, 1-880 varies from a six-to eight-lane urban freeway, extending from downtown Oakland to the Alameda/Santa Clara County line in the City of Milpitas. The facility is one of the principal means of access for northern and southern areas of Alameda County and the Bay Area, and is a vital highway for the transport of goods and people in the region.

42nd Avenue (SR77)

42nd Avenue (SR77) is an existing four lane divided expressway with curb and gutter and raised median. 42nd Avenue begins just east of Foothill Boulevard and runs west to terminate with ramp connectors at 1-880. 42nd Avenue passes below the Union Pacific railroad approximately 130 feet east of I-880. This section of 42nd Avenue is in a deep cut with no pedestrian access and no on-street parking. The posted speed limit is 45 mph.

High Street

High Street is a major east-west four-lane arterial connecting the cities of Oakland and Alameda. Between Oakport Street and Coliseum Way, High Street is widened to six lanes, which includes side-by-side left-turn lanes. Pedestrian access is provided along the south side of High Street through the construction area and sidewalks are provides along both sides of the street east and west of the Project area. On-street parking is prohibited along High Street in the Project vicinity. The posted speed limit is 35 mph.

East 8th Street

East 8th Street is a two-lane, two-way frontage road extending north from Alameda Avenue to a Home Depot south entrance, where access further to the north is restricted by a barricade. At Alameda Avenue, southbound movements on 8th Street are restricted to right-turn only.

Alameda Avenue

Alameda Avenue is a two-lane roadway with curb and gutter and sidewalk on the north side along the Home Depot parking lot. A separate left-turn lane serves westbound turning movements from Alameda Avenue to Howard Street. Between Oakport Street and East 8th Street, Alameda Avenue is one-way westbound.

Oakport Street

Oakport Street is a two-lane frontage road that runs parallel to the west side 1-880, starting at High Street and extending south to Hegenberger Road. In the vicinity of High Street, Oakport Street carries traffic from High Street to the southbound I-880 on-ramp.



Street system during consruction of Caltrans' High Street Seismic Retrofit Project



Intersection Levels of Service – Existing (2011)

Level of Service Methodology

The level of service (LOS) at study intersections was analyzed for the a.m. peak and p.m. peak hours using methodologies described in the Highway Capacity Manual. The intersection operations analysis was conducted using the Synchro analysis tool, as required by the City. The signal timing sheets were provided by the City of Oakland staff. Turning movement data is provided in **Appendix B**.

The LOS for signalized and unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, and lost travel time. Delay is a complex measure and is dependent upon a number of variables, including the number of vehicles in the traffic stream. For signalized intersections, delay is also dependent on the quality of signal progression, the signal cycle length, and the "green" ratio for each approach or lane group. For intersections with one or two stop signs, delay is dependent on the number of gaps available in the uncontrolled traffic stream. **Table 3-4** and **Table 3-5** define LOS and criteria for the signalized and unsignalized intersection analyses.

Level of		Average Delay Per Vehicle
Service	Description of Traffic Conditions	(Seconds)
	Signalized Intersections	
А	Free flowing. Most vehicles do not have to stop.	≤10.0
В	Minimal delays. Some vehicles have to stop, although waits are not bothersome.	>10.0 and ≤20.0
С	Acceptable delays. Significant numbers of vehicles have to stop because of steady, high traffic volumes. Still, many pass without stopping.	>20.0 and ≤35.0
D	Tolerable delays. Many vehicles have to stop. Drivers are aware of heavier traffic. Cars may have to wait through more than one red light. Queues begin to form, often on more than one approach.	>35.0 and ≤55.0
Е	Significant delays. Cars may have to wait through more than one red light. Long queues form, sometimes on several approaches.	>55.0 and ≤80.0
F	Excessive delays. Intersection is jammed. Many cars have to wait through more than one red light, or more than 60 seconds. Traffic may back up into "up-stream" intersections.	>80.0

Table 3-4: Intersection Level of Service Definition for Signalized Intersections

Table	3-	5:	Intersectio	n I	Level	of	Se	rvice	De	efini	tion	for	Sign	alize	d	Intersections
	-					-						-				

Level of Service	Description of Traffic Conditions	Average Delay Per Vehicle (Seconds)
	Unsignalized Intersections	
А	Little or no delay	≤10.0
В	Short traffic delay	$>10.0 \text{ and } \le 15.0$
С	Average traffic delays	$>15.0 \text{ and } \le 25.0$
D	Long traffic delays	>25.0 and ≤35.0
E	Very long traffic delays	>35.0 and ≤50.0
F	Extreme delays potentially affecting other traffic movements in the intersection	>50.0

Existing Intersection Levels of Service

Study intersections for the Project area and existing traffic volumes are shown in Figure 3-3.

The existing intersection LOS for the study intersections (without the implementation of the proposed Project) are shown in **Table 3-6**. As shown in this table, all study intersections currently operate at acceptable LOS C or better.

		AM Peak		PM	Peak	
	Intersection	LOS1	Delay2	LOS1	Delay2	
1	42nd Ave. & International Blvd.	С	33.6	С	34.5	
2	High St. & International Blvd.	С	20.9	С	20.5	
3	High St. & San Leandro St.	В	20.0	С	25.5	
4	42nd Ave. & I-880 NB Ramp	В	13.1	В	12.7	
5	High St. & Coliseum Way	С	23.0	С	30.5	
6	42nd Ave. & I-880 SB Ramp	В	10.4	В	11.7	
7	High St. & Oakport St.	С	26.4	С	27.1	
8	High St. & Howard St.	А	9.6	С	20.6	
9	42nd Ave. & Howard St.	(Intersection does not exist)				

Table 3-6: Existing	(2011)	Intersection	Levels	of Se	rvice
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Source: Dowling Associates, 2011 Notes:

1 LOS = Level of Service

2 Average control delay in seconds per vehicle



Existing Traffic Volumes, Lanes and Traffic Controls

Existing Regulatory Setting

Since 2001 the City has adopted Uniformly Applied Development Standards and Standard Conditions of Approval that apply to all development projects, and thus will also apply to this Project.

SCA Traf-1: Construction Traffic and Parking (Prior to the issuance of a demolition, grading or building permit). The project applicant and construction contractor shall meet with appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project applicant shall develop a construction management plan for review and approval by the Planning and Zoning Division, the Building Services Division, and the Transportation Services Division. The plan shall include at least the following items and requirements:

- a) A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes.
- b) Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur.
- c) Location of construction staging areas for materials, equipment, and vehicles at an approved location.
- d) A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager. The manager shall determine the cause of the complaints and shall take prompt action to correct the problem. Planning and Zoning shall be informed who the Manager is prior to the issuance of the first permit issued by Building Services.
- e) Provision for accommodation of pedestrian flow.
- f) Provision for parking management and spaces for all construction workers to ensure that construction workers do not park in on street spaces.
- g) Any damage to the street caused by heavy equipment, or as a result of this construction, shall be repaired, at the applicant's expense, within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to issuance of a final inspection of the building permit. All damage that is a threat to public health or safety shall be repaired immediately. The street shall be restored to its condition prior to the new construction as established by the City Building Inspector and/or photo documentation, at the applicant's expense, before the issuance of a Certificate of Occupancy.
- h) Any heavy equipment brought to the construction site shall be transported by truck, where feasible.
- i) No materials or equipment shall be stored on the traveled roadway at any time.
- j) Prior to construction, a portable toilet facility and a debris box shall be installed on the site, and properly maintained through project completion.
- k) All equipment shall be equipped with mufflers.
- Prior to the end of each work day during construction, the contractor or contractors shall pick up and properly dispose of all litter resulting from or related to the project, whether located on the property, within the public rights-of-way, or properties of adjacent or nearby neighbors.

These Standard Conditions of Approval are mandatory City requirements and will be imposed and implemented by the Project. With implementation, these Standard Conditions of Approval will reduce potential construction-period traffic impacts to less-than-significant levels.

Potential Effects

Proposed Project

The proposed Project expands the traffic capacity for local roadways at the I-880/SR-77 (42nd Avenue)/High Street interchange and provides a direct connection between 42nd Avenue and Alameda Avenue with two eastbound lanes, one westbound through lane and one westbound left turn lane. Bike lanes would be provided along both sides of the new connection and along Alameda Avenue through the Project area. The Project includes re-alignments for Howard Street, Oakport Street, Coliseum Way and Jensen Street. High Street would be widened at the intersections with the frontage roads and freeway connections. New sidewalks would be provided along both sides of High Street through the Project area.

This section evaluates transportation related impacts of the proposed Project. Study intersections were evaluated for cumulative year 2035 conditions. Intersections were not analyzed for the year 2020 conditions as there are no planned transportation improvements between years 2020 and 2035 that are expected to affect the study findings. In addition, traffic volumes in 2035 are likely to be higher than in 2020. Given both of those conditions, 2035 likely represents a worst case scenario for the assessment of transportation impacts. If there is no impact in 2035, it is not likely that an impact would occur in 2020. Also, if there is an impact in 2035, it is not likely to be worse in 2020.

Significance Thresholds

The significance criteria are based on the current version from City of Oakland dated August 24, 2011. Only the thresholds that would apply to this type of project are listed below, along with the threshold number from the City's CEQA Thresholds of Significance Guidelines.

The project would not:

- Affect traffic operations on signalized intersections within the Downtown area
- Significantly affect unsignalized intersections
- Generate vehicle trips on the CMP or MTS
- Reduce the vehicle capacity of a roadway segment of the CMP Network
- Generate substantial multi-modal traffic traveling across at-grade railroad crossings
- Fundamentally conflict with adopted City policies
- Result in a change in air traffic patterns

Implementation of the Project would have a new significant effect pertaining to traffic and circulation, or a substantial increase in the severity of previously identified significant traffic and circulation effect if it would:

Traffic Load and Capacity Thresholds

1. At a study, signalized intersection which is located outside the Downtown area1, the project would cause the level of service (LOS) to degrade to worse than LOS D (i.e., LOS E);

2. At a study, signalized intersection outside the Downtown area where the level of service is LOS E, the project would cause the total intersection average vehicle delay to increase by four (4) or more seconds or degrade to worse than LOS E (i.e., LOS F);

3. At a study, signalized intersection for all areas where the level of service is LOS E, the project would cause an increase in the average delay for any of the critical movements of six (6) seconds or more or degrade to worse than LOS E (i.e., LOS F);

4. At a study, signalized intersection for all areas where the level of service is LOS F, the project would cause (a) the overall volume-to-capacity ("V/C") ratio to increase 0.01 or more or (b) the critical movement V/C ratio to increase 0.02 or more;

5. Result in substantially increased travel times for AC Transit buses;

Traffic Safety Thresholds

10. Directly or indirectly cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent and substantial transportation hazard due to a new or existing physical design feature or incompatible uses;

11. Directly or indirectly result in a permanent substantial decrease in pedestrian safety;

12. Directly or indirectly result in a permanent substantial decrease in bicyclist safety;

13. Directly or indirectly result in a permanent substantial decrease in bus rider safety;

Other Thresholds

17. Result in a substantial, though temporary, adverse effect on the circulation system during construction of the project.

Cumulative Impacts

18. A project's contribution to cumulative impacts is considered "considerable" (i.e., significant) when the project exceeds at least one of the thresholds listed above in a future year scenario.

Intersections

Existing Conditions

Existing conditions were evaluated as a baseline to determine the extent of the impacts of the Project on today's conditions (November 2011), without completion of the Caltrans' High Street Overhead Seismic Retrofit Project. Traffic operations for baseline conditions at study intersections are shown in **Table 3-7**. As shown, the Project would result in increased delays and lower levels of service at some intersections

¹ The Downtown area is defined in the Land Use and Transportation Element of the General Plan (page 67) as the area generally bounded by the West Grand Avenue to the north, Lake Merritt and Channel Park to the east, the Oakland Estuary to the south, and I-980/Brush Street to the west.

but would not cause any intersections to operate below LOS D. The Project's impacts at study intersections would be less than significant.

		Existing				Existing + Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
	Intersection	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
1	42nd Ave. & International Blvd.	С	33.6	С	34.5	С	33.6	D	36.3
2	High St. & International Blvd.	С	20.9	С	20.5	В	19.9	С	20.4
3	High St. & San Leandro St.	В	20.0	С	25.5	В	18.8	С	24.8
4	42nd Ave. & I-880 NB Ramp	В	13.1	В	12.7	В	12.7	В	15.2
5	High St. & Coliseum Way.	С	23.0	С	30.5	С	24.9	С	28.4
6	42nd Ave. & I-880 SB Ramp	В	10.4	В	11.7	С	30.0	С	30.2
7	High St. & Oakport St.	С	26.4	С	27.1	С	21.6	С	35.0
8	High St. & Howard St.	А	9.6	С	20.6	С	22.7	С	25.8
9	42nd Ave. & Howard St.	(In	tersection	does not e	exist)	С	20.1	D	53.7

Table 3-7: Traffic Operations at Intersections for Existing Conditions (2011)

Source: Dowling Associates, 2011

Notes:

1 LOS = Level of Service

2 Average control delay in seconds per vehicle

Shaded values indicate a significant impact

Existing Conditions plus Improvements

An evaluation was performed to determine the effects of the Project for conditions after completion of the Caltrans' High Street Overhead Seismic Retrofit Project, which is anticipated to be completed by summer of 2013.² Study intersections for the Project area and plus-Project traffic volumes are shown in **Figure 3-4**.Traffic operations for conditions after completion of the Caltrans' High Street Overhead Seismic Retrofit Project are shown in **Table 3-8**. As, the Project would result in a significant impact at the High Street & Coliseum Way intersection, where the Project would degrade traffic operations to LOS E during the p.m. peak hour. The Project impacts at this intersection would be significant.

² Traffic volumes for existing conditions were increased for all movements by 2% to produce traffic volumes for 2013 conditions, after completion of the Seismic Retrofit Project.



9 42nd Ave / Howard St 42nd Ave	6 42nd Ave / I-880 SB Ramp	42nd Ave / Coliseum Way		1 42nd Ave / International Blvd
409 (731) 85 (165) 409 (731) 409 (731) 400 (731) 4	W (S (B)) (C (C)) 42nd Ave 98 (S (C)) 42nd Ave 98 (S (C)) 410 (432) 98 (S (C)) 208 (258)	42nd Ave ▲ 292 (213) ← 371 (397)		Internation Inte
Howard St 34 (45) \$ 5 (5) \$ 13 (51) \$ 13 (51) \$ Junnen St	222 (421) 197 (320)	247 (293) ↓ (6, 5 247 (293) ↓ (7, 293) 077 446 (478) 028 68 (330) ↓ (7, 293)		124 (208) ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★
8 High St / Howard St	7 High St / Oakport St	5 High St / Coliseum Way	3 High St / San Leandro St	2 High St / International Blvd
27 (26) 27 (46) 791 (476)→	High St High St 1392 (397) 1225 (312) 981 478 (197) ↓ 125 (312) 127 ↓ 126 (51) 6 127 (51) 6 1	High St ← 69 (118) ↓ 12 (15) 258 (390) 205 (111) 95 (56) + 12 (15) +	$\begin{array}{c c} \mbox{High St} & \mbox{High St} \\ \mbox{19} & \mbox{110} & 11$	$\begin{array}{c c} \textbf{High St} \\ \textbf{High St} \\ \textbf{103 (93)} \\ \textbf{252 (25)} \\ 252 (25$

 KEY

 31 (27) = AM (PM) peak hour traffic volumes

 ●
 = Signalized intersection

 ✓
 = Intersection approach lane

Existing Plus Improvements (post-Caltrans' High Street project) Plus Project - Traffic Volumes, Lanes and Traffic Controls

		Existing + Improvements				Existing + Improvements + Project			
		AM	Peak	PM Peak		AM Peak		PM Peak	
	Intersection	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
1	42nd Ave. & International Blvd.	С	32.8	С	34.1	С	33.2	D	36.2
2	High St. & International Blvd.	С	21.0	С	20.5	В	20.0	С	21.0
3	High St. & San Leandro St.	В	19.7	С	25.6	В	18.8	С	29.0
4	42nd Ave. & I-880 NB Ramp	А	7.2	А	7.9	В	10.4	В	12.2
5	High St. & Coliseum Way.	С	34.4	С	31.9	С	29.9	Е	56.8
6	42nd Ave. & I-880 SB Ramp	А	7.2	А	7.8	С	29.5	С	32.8
7	High St. & Oakport St.	D	41.6	D	43.1	С	26.3	D	39.8
8	High St. & Howard St.	А	9.7	В	18.9	С	22.4	С	29.1
9	42nd Ave. & Howard St.	(Intersection would not exist)			В	11.5	D	37.9	

Table 3-8: Traffic Operations at Intersections for Conditions after Completion of the Caltrans' High Street Overhead Seismic Retrofit Project

Source: Dowling Associates, 2011

Notes:

1 LOS = Level of Service

2 Average control delay in seconds per vehicle

Shaded values indicate a significant impact

Mitigation Measure

- **MM Traf-1: High Street & Coliseum Way**. Optimize the signal timing at the intersection of High Street & Coliseum Way. Coordinate the signal timing changes at this intersection with adjacent intersection that are in the same signal coordination group. To implement this measure, the Project sponsor shall submit the following to City of Oakland's Transportation Service Division and Caltrans for review and approval:
 - a) Only if signal modernization is required: Plans, Specifications, and Estimates (PS&E) to modify the intersection. All elements shall be designed to Caltrans standards in effect at the time of construction and all new and upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both Caltrans standards and ADA standards (according to Federal and State Access Board guideline) at the time of construction.
 - b) Signal timing plans for the signals in the coordination group.
c) The Project sponsor shall fund, prepare and install the approved plans and improvements.

This change would improve traffic operations to LOS D with 52.7 seconds of delay for the p.m. peak hour, and would mitigate the impact of the Project to less-than-significant (Less than Significant with Mitigation).

Cumulative Conditions

Future conditions were evaluated to determine the extent to which impacts would result from the Project in combination with past, present and other reasonably foreseeable future projects. Reasonably foreseeable projects included general growth anticipated in the Bay Area as reflected in the land use data sets for future years in the Alameda Countywide Travel Model with land uses that include the Oakland Central Estuary Plan, as described in the Central Estuary Implementation Guide Traffic Forecasting Report. Study intersections for the Project area and future cumulative plus-Project traffic volumes are shown in **Figure 3-5**. Traffic operations for future (2035) conditions are shown in **Table 3-9**.

		С	Cumulative without Project			(Cumulative	Plus Project	
		AM	Peak	PM	PM Peak		AM Peak		Peak
	Intersection	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
1	42nd Ave. & International Blvd.	F	303.5	F	157.2	F	323.3	F	191.2
2	High St. & International Blvd.	F	332.2	F	276.8	F	230.4	F	287.0
3	High St. & San Leandro St.	F	485.3	F	484.9	F	451.2	F	454.8
4	42nd Ave. & I-880 NB Ramp	В	10.7	В	11.5	В	17.0	В	15.7
5	High St. & Coliseum Way.	F	123.7	F	177.7	Е	75.5	Е	71.9
6	42nd Ave. & I-880 SB Ramp	А	8.2	А	8.3	D	45.5	D	48.3
7	High St. & Oakport St.	F	182.1	F	106.6	С	34.4	D	36.7
8	High St. & Howard St.	В	16.6	В	20.0	В	14.8	В	19.7
9	42nd Ave. & Howard St.	(Int	ersection w	vould not	exist)	С	23.7	D	52.8

Table 3-9: Traffic Operations at Intersections for Cumulative Conditions (2035)

Source: Dowling Associates, 2011

Notes:

1 LOS = Level of Service

2 Average control delay in seconds per vehicle

Shaded values indicate a significant impact due to increased volume-to-capacity (V/C) ratios



42nd Ave / Howard St	42nd Ave / I-880 SB Ramp	42nd Ave / Coliseum Way		42nd Ave / International Blvd
42nd Ave 762 (718) 99 (178) ▼ 20 (20)	dure ¥ 85 068-1 (<i>b</i> (2) <i>b</i> (2) <i>b</i> (2) (<i>b</i> (2) <i>b</i> (2) <i>b</i> (2) <i>b</i> (2) (<i>b</i> (2) <i>b</i> (42nd Ave ▲ 243 (269) ← 1035 (683)		4200 420 420 420 420 420 420 420 420 420
Howard St 57 (25) 5 (51) 5 (51) 5 (5) 5 (5)	447 (588) 257 (412) ↓	202 (328) ↔ (42) 8 203 (438) ↔ (528) 4 194 (328) ↔ (528) 4 194 (328) ↔ (528) 4 202 (328) ↔ (528) (328) ↔ (528) (328) ↔ (528) (328) ↔ (528) ↔		222 (440) ★ ★ ↑ ↓ 208 (299) ★ ★ ↓ 60 (167) ★ ↓ 875 (1672) 897
R High St / Howard St	7 High St / Oakport St	5 High St / Coliseum Way	3 High St / San Leandro St	2 High St / International Blvd
Image: Specific test of test o	High St High S	High St High St 91 (201) 885 (685) 226 (229) 386 (443) 485 (863) 485 (863) 303 (269) (582)	High St High St 380 (370) 380 (370) 391 (650) 397 (618) 397 (618)	High St High St High St High St High St High St 199 (95) (1000) 1000 (1000) 251 (1000) 251 (1000) 2751 (856) 144 (46) ↓ 751 (857) 144 (87) 145

 KEY

 31 (27) = AM (PM) peak hour traffic volumes

 Image: Signalized intersection

 Image: Intersection approach lane

Cumulative (2035) Plus Project Traffic Volumes, Lanes and Traffic Controls

Source: Dowling Associates

As shown in Table 3-9, the Project would result in a significant impact at the following intersections, which would operate at LOS F without the Project and the Project would cause either the overall volume-to-capacity ("V/C") ratio to increase 0.01 or more or the critical movement V/C ratio to increase 0.02 or more:

- 42nd Ave. & International Blvd. during the a.m. and p.m. peak hours
- High St. & International Blvd. during the p.m. peak hour
- High St. & San Leandro St. during the a.m. peak hour
- High St. & Coliseum Way. during the a.m. and p.m. peak hours

The Project's impacts at these intersections would be significant.

The High St. & Oakport St. intersection would operate at LOS D after implementation of the Project. The impact at that intersection would not be significant (**Less than Significant**).

Mitigation Measures

- **MM Traf-2: 42nd Avenue & International Boulevard.** Modify the northwest bound and southeast bound approaches on International Boulevard at the intersection of 42nd Avenue & International Boulevard by adding a left turn lane in each direction. The resulting approach lanes would consist of two left-turn lanes one through lane and one through-right lane. Optimize intersection signal timing. Coordinate the signal timing changes at this intersection with adjacent intersection that are in the same signal coordination group. To implement this measure, the Project sponsor shall submit the following to City of Oakland's Transportation Service Division and Caltrans for review and approval:
 - a) Only if signal modernization is required: Plans, Specifications, and Estimates (PS&E) to modify the intersection. All elements shall be designed to Caltrans standards in effect at the time of construction and all new and upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both Caltrans standards and ADA standards (according to Federal and State Access Board guideline) at the time of construction.
 - b) Signal timing plans for the signals in the coordination group.
 - c) The Project sponsor shall fund, prepare and install the approved plans and improvements.

A straight line interpolation of total intersection delay between Existing plus Improvements and Cumulative conditions indicates that mitigation at this intersection may be required by the time the Project is constructed (2016). Investigation of the need for this mitigation shall be studied at the time of construction and every 3 years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.

After mitigation, the intersection would operate at LOS F during the a.m. and p.m. peak hours; however, the V/C ratios for the entire intersection and the critical lane movements would be less than or equal to those that would occur without the Project. This mitigation measure would reduce the impact of the Project to less-than- significant. (Less than Significant with Mitigation)

MM Traf-3: High Street & International Boulevard. Optimize the signal timing at the intersections of High Street and International Boulevard. Coordinate the signal timing changes at this intersection with adjacent intersections that are in the same signal coordination group. To

implement this measure, the Project sponsor shall submit the following to City of Oakland's Transportation Service Division and Caltrans for review and approval:

- a) Only if signal modernization is required: Plans, Specifications, and Estimates (PS&E) to modify the intersection. All elements shall be designed to Caltrans standards in effect at the time of construction and all new and upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both Caltrans standards and ADA standards (according to Federal and State Access Board guideline) at the time of construction.
- b) Signal timing plans for the signals in the coordination group.
- c) The Project sponsor shall fund, prepare and install the approved plans and improvements.

A straight line interpolation of total intersection delay between Existing plus Improvements and Cumulative conditions indicates that mitigation at this intersection may be required by the time the project is constructed (2016). Investigation of the need for this mitigation shall be studied at the time of construction and every 3 years thereafter until 2035, or until the mitigation measure is implemented, whichever occurs first.

After mitigation, the intersection would operate at LOS F during the a.m. and p.m. peak hours; however, the V/C ratios for the entire intersection and the critical lane movements would be less than or equal to those that would occur without the Project. This mitigation measure would reduce the impact of the Project to less-than-significant. (Less than Significant with Mitigation)

- **MM Traf-4: High Street & San Leandro Street**. Optimize the signal timing at the intersection of High Street & San Leandro Street. Coordinate the signal timing changes at this intersection with adjacent intersections that are in the same signal coordination group. To implement this measure, the Project sponsor shall submit the following to City of Oakland's Transportation Service Division for review and approval:
 - a) Only if signal modernization is required: Plans, Specifications, and Estimates (PS&E) to modify the intersection. All elements shall be designed to City standards in effect at the time of construction and all new and upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both City standards and ADA standards (according to Federal and State Access Board guideline) at the time of construction.
 - b) Signal timing plans for the signals in the coordination group.
 - c) The Project sponsor shall fund, prepare and install the approved plans and improvements.

A straight line interpolation of total intersection delay between Existing plus Improvements and Cumulative conditions indicates that mitigation at this intersection may be required by the time the Project is constructed (2016). Investigation of the need for this mitigation shall be studied at time of construction and every 3 years thereafter until 2035, or until the mitigation measure is implemented, whichever occurs first.

After mitigation, the intersection would operate at LOS F during the a.m. and p.m. peak hours; however, the V/C ratios for the entire intersection and the critical lane movements would be less than or equal to those that would occur without the Project. This mitigation measure would reduce the impact of the Project to less-than-significant. (Less than Significant with Mitigation)

- **MM Traf-5: High Street & Coliseum Way**. Modify the northwest bound approach on Coliseum Way to provide one left-through lane and one through-right lane. Optimize intersection signal timing. Coordinate the signal timing changes at this intersection with adjacent intersection that are in the same signal coordination group. To implement this measure, the Project sponsor shall submit the following to City of Oakland's Transportation Service Division and Caltrans for review and approval:
 - a) Only if signal modernization is required: Plans, Specifications, and Estimates (PS&E) to modify the intersection. All elements shall be designed to Caltrans standards in effect at the time of construction and all new and upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both Caltrans standards and ADA standards (according to Federal and State Access Board guideline) at the time of construction.
 - b) Signal timing plans for the signals in the coordination group.
 - c) The Project sponsor shall fund, prepare and install the approved plans and improvements.

A straight line interpolation of total intersection delay between Existing plus Improvements and Cumulative conditions indicates that mitigation at this intersection may be required by 2024. Investigation of the need for this mitigation shall be studied at time of construction and every 3 years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.

After mitigation, the intersection would operate at LOS C during the a.m. peak hour and LOS D during the p.m. peak hour in compliance with City of Oakland operating standards. This mitigation measure would reduce the impact of the Project to less-than-significant. (Less than Significant with Mitigation)

Potential Effects of East Bay Bus Rapid Transit (BRT)

The BRT project is not approved and not fully funded. Therefore, it is not included in the future baseline conditions as it is not reasonably foreseeable. Nevertheless, it is discussed as follows.

Within the vicinity of the study area, the East Bay BRT project would run along International Boulevard. That project would convert one travel lane in each direction to BRT-only operations along International Boulevard. The dedicated BRT lanes would reduce lane capacity at the study intersections along International Boulevard. The Project was analyzed with the assumption that the East Bay BRT would not be constructed. If the East Bay BRT project were to be constructed, the impacts at intersections on International Boulevard would be considerably greater, as traffic capacity would decrease. This finding is consistent with the findings of the Central Estuary Implementation Guide Traffic Forecasting Report. It would be the responsibility of the BRT project, if funded and approved, to mitigate any of its potential impacts.

3 – TRAFFIC AND CIRCULATION

						out Drole				,				
				20	35 With	out Proje	CI							
		Overall					С	ritical Mo	vement	V/C				
	Intersection	V/C	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
1	42nd Ave. & International Blvd.	1.32	1.04	0.88		0.81						4.79	1.40	
2	High St. and International Blvd.	3.94				4.73							2.29	
3	High St. and San Leandro St.	2.14		2.17			3.00						3.19	
5	High St. & Coliseum Way	1.16					0.90		1.36			1.26	1.26	
7	High St. & Oakport St.	1.27			0.88	0.22				1.76		1.29		
					2035 Plu	s Project								
	Critical Movement V/C													
	Interception	Overall	сгi	сгт	сгр	NI\A/I			МГІ	МГТ		C///I	C/WT	CMD
1		V/C	SEL	SEI	SER			INVIK	NEL	NEI	NEK	SWL	SWI	SWK
1	42nd Ave. & International Blvd.	1.50	1.04	0.88		1.83						4.86	1.38	
2	High St. and International Blvd.	1.79				1.57							2.28	
3	High St. and San Leandro St.	1.95		2.26			3.68						1.83	
5	High St. & Coliseum Way	1.00				_	0.98		0.81			2.18	0.95	
7	High St. & Oakport St.					Interse	ection wo	ould opera	ate at LO	DS C.				
			2	2035 Plu	is Projec	t With Mi	tigation							
		Overall					С	ritical Mo	vement	V/C				
	Intersection	V/C	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
1	42nd Ave. & International Blvd.	1.25	0.92	0.89		0.79						3.80	1.38	
2	High St. and International Blvd.	1.79				1.57							2.28	
3	High St. and San Leandro St.	2.01		2.17			2.78						2.11	
5	High St. & Coliseum Way					Interse	ection wo	ould operation	ate at LO	DS C.				
7	High St. & Oakport St.]	No mitig	ation is re	equired.					

Table 3-10: V/C Ratios for LOS F Intersections (2035 AM Peak Hour)

Shaded values indicate a significant impact.

				203	35 Witho	out Projec	t							
		Overall					Сі	ritical Mov	vement	//C				
	Intersection	V/C	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
1	42nd Ave. & International Blvd.	1.34	1.71			1.08	1.33		1.82				0.87	
2	High St. and International Blvd.	2.68	2.68			2.93				3.60				
3	High St. and San Leandro St.	2.15					2.63						3.27	
5	High St. & Coliseum Way.	1.35				0.86	0.61		1.73	1.04		1.56	1.56	
7	High St. & Oakport St.	1.08		0.77				0.86		1.46		0.84		
2035 Plus Project														
		Overall					Сі	ritical Mov	vement	//C				
	Intersection	V/C	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
1	42nd Ave. & International Blvd.	1.38	1.73			2.13	1.34		1.97				0.87	
2	High St. and International Blvd.	2.69	2.82			1.53				3.79				
3	High St. and San Leandro St.	2.05					2.54						2.74	
5	High St. & Coliseum Way.	1.00				0.54	1.01		1.00	0.90		2.03	0.89	
7	High St. & Oakport St.					Interse	ction wo	uld opera	ate at LC	OS D.				
			2	035 Plus	s Projec	t With Mit	igation							
		Ovorall					Сі	ritical Mov	vement	//C				
	Intersection	V/C	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
1	42nd Ave. & International Blvd.	1.31	1.29	-		0.87	1.30	-	1.83		-		0.85	

Table 3-11: V/C Ratios for LOS F Intersections (2035 PM Peak Hour)

			2	035 PIU	s Projec		tigation							
		Overall					C	ritical Mo	vement	V/C				
	Intersection	V/C	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SM
1	42nd Ave. & International Blvd.	1.31	1.29			0.87	1.30		1.83				0.85	
2	High St. and International Blvd.	2.12	2.25			1.29				3.04				
3	High St. and San Leandro St.	2.05					2.54						2.74	
5	High St. & Coliseum Way.	Intersection would operate at LOS D.												
7	High St. & Oakport St.		No mitigation is required.											

Transit

Local and Trans-Bay Transit Service

No transit lines currently travel along the streets that would be potentially affected by the Project. Trans bay transit lines S and SB travel along I-880. Local Lines 1, 1R, 14, 47, and all-nighter Line 801 travel along International Boulevard. The Project would not substantially increase travel times for AC Transit buses. Therefore, the Project's impacts on local and Trans-bay transit service would be less than significant. (Less than Significant)

Traffic Safety

Safety for Roadway Users

The Project is expected to improve traffic safety for all modes of travel. Therefore, the Project's impacts on traffic safety would be less than significant. (Less than Significant)

Pedestrian Safety

Pedestrian crossing distances would be increased at the following crossings:

- High Street & Coliseum Way east leg, where the crossing distance will be increased from 64 feet to 88 feet. A pedestrian refuge island will be installed at this crossing with pedestrian signals and pedestrian pushbutton.
- High Street & Oakport Street west leg, where the crossing distance will be increased from 93 feet to 100 feet. A pedestrian refuge island will be installed at this crossing with pedestrian signals and pedestrian pushbutton.

These increased crossing distances should not result in a substantial decrease in pedestrian safety as the crossing would be controlled by traffic signals.

Pedestrian safety would be improved by the following Project features:

- New sidewalks and pedestrian crosswalks will be installed along the northwest side of High Street from Oakport Street to Coliseum Way, where no pedestrian access is currently allowed.
- Two new pedestrian crosswalks will be installed across Alameda Avenue at the Howard Street/ Jensen Street intersection.

The Project's impacts on pedestrian safety would be less than significant. (Less than Significant)

Bicyclist Safety

Bicyclist safety will be improved by the addition of bike lanes along both sides of Alameda Avenue and 42nd Avenue from the I-880 southbound exit ramp to the western terminus of the Project at the Home Depot driveway. The elimination of the skewed Alameda Avenue connection to the High Street & Oakport Street intersection will improve safety for bicyclists. Therefore, the Project's impacts on bicyclist safety would be less than significant. (Less than Significant)

Bus Rider Safety

Bus rider safety would not be affected by the Project as no existing bus facilities would be removed. Therefore, the Project's impacts on bus rider safety would be less than significant. (Less than Significant)

Construction

Construction of the Project may result in a temporary, adverse effect on the circulation system; however, construction will be staged in a manner that should minimize the adverse effects and those effects should not be substantial. The conditions of approval for this Project will ensure that construction effects be minimized and the Project's impacts of construction on the circulation system would be less than significant. (Less than Significant)

Planning-Related Non-CEQA Issues

Parking

The Court of Appeal has held that parking is not part of the permanent physical environment, that parking conditions change over time as people change their travel patterns, and that unmet parking demand created by a project need not be considered a significant environmental impact under CEQA unless it would cause significant secondary effects. Similarly, the December 2009 amendments to the State CEQA Guidelines (which become effective March 18, 2010) removed parking from the State's Environmental Checklist (Appendix G of the State CEQA Guidelines) as an environmental factor to be considered under CEQA. Parking supply/demand varies by time of day, day of week, and seasonally. As parking demand increases faster than the supply, parking prices rise to reach equilibrium between supply and demand. Decreased availability and increased costs result in changes to people's mode and pattern of travel. However, the City of Oakland, in its review of the proposed Project, wants to ensure that the Project's provision of parking spaces along with measures to lessen parking demand (by encouraging the use of non-auto travel modes) would result in minimal adverse effects to Project occupants and visitors, and that any secondary effects (such as on air quality due to drivers searching for parking spaces) would be minimized. As such, although not required by CEQA, parking conditions are evaluated in this document as a non-CEQA topic for informational purposes.

Parking deficits may be associated with secondary physical environmental impacts, such as air quality and noise effects, caused by congestion resulting from drivers circling as they look for a parking space. However, the absence of a ready supply of parking spaces, combined with available alternatives to auto travel (e.g., transit service, shuttles, taxis, bicycles or travel by foot), may induce drivers to shift to other modes of travel, or change their overall travel habits. Any such resulting shifts to alternative modes of travel would be in keeping with the City's Public Transit and Alternative Modes Policy (sometimes referred to as the "Transit First" policy).

Additionally, regarding potential secondary effects, cars circling and looking for a parking space in areas of limited parking supply is typically a temporary condition, often offset by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area. Hence, any secondary environmental impacts that might result from a shortfall in parking in the vicinity of the proposed Project are considered less than significant.

This document evaluates if the Project's estimated parking demand (both Project-generated and Projectdisplaced) would be met by the Project's proposed parking supply or by the existing parking supply within a reasonable walking distance of the Project site. Project-displaced parking results from the Project's removal of standard on-street parking, City or Redevelopment Agency owned/controlled parking and/or legally required off-street parking (non-open-to-the-public parking which is legally required).

The Project would not remove parking spaces or cause the need for more parking spaces.

Transit Ridership

Transit load is not part of the permanent physical environment; transit service changes over time as people change their travel patterns. Therefore, the effect of the proposed Project on transit ridership need not be considered a significant environmental impact under CEQA unless it would cause significant secondary effects, such as causing the construction of new permanent transit facilities which in turn causes physical effects on the environment. Furthermore, an increase in transit ridership is an environmental benefit, not an impact. One of the goals of the Land Use and Transportation Element of the Oakland General Plan is to promote transit ridership. The City of Oakland, however, in its review of the proposed Project, wants to understand the Project's potential effect on transit ridership. As such, although not required by CEQA, transit ridership is evaluated in this document as a non-CEQA topic for informational purposes.

This document evaluates whether the Project would exceed any of the following:

- Increase the average ridership on AC Transit lines by three (3) percent at bus stops where the average load factor with the Project in place would exceed 125% over a peak thirty minute period;
- Increase the peak hour average ridership on BART by three (3) percent where the passenger volume would exceed the standing capacity of BART trains; or
- Increase the peak hour average ridership at a BART station by three (3) percent where average waiting time at fare gates would exceed one minute.]

The Project is not expected to have a significant effect on transit ridership as it is not a development project generating new vehicle trips.

Summary of the 2001 Negative Declaration

2001 Setting

The 2001 Neg. Dec described the existing physical and regulatory setting for air quality, as following:

"Air quality is controlled through the attainment and maintenance of ambient air quality standards and enforcement of emission limits. Pursuant to the federal Clean Air Act of 1970 and its subsequent amendments, the U.S. Environmental Protection Agency (EPA) has established national ambient air quality standards for six air pollutants: ozone, carbon monoxide, particulate matter, nitrogen oxides, lead, and sulfur dioxides. In addition to national standards, the Project area is also regulated by state standards established by the California Air Resources Board (CARB). Many of these standards are more stringent than the corresponding national standards.

The San Francisco Bay Area, including the Project site, is currently designated as a nonattainment area for ozone on the federal level and for ozone and suspended particulates (PMIO) on the state level.

The Bay Area Air Quality Management District (BAAQMD) is the agency responsible for regulating air pollutant emissions within the San Francisco Bay Area Air Basin. Responsible agencies must develop plans that demonstrate how they plan to meet the federal and state standards. The plans concentrate on stationary and mobile source control measures that will reduce the amount of air pollutants being emitted. Some of the control measures (e.g., construction-related measures) can be enforced on specific projects, such as the 42^{nd} Avenue/High Street Project.

The plan that state agencies develop to meet national standards is called the State Implementation Plan (SIP). The BAAQMD has prepared the San Francisco Bay Area Ozone Attainment Plan for the One-Hour National Ozone Standard (Adopted June 1999) and has submitted this plan to the CARB for incorporation into the SIP. The BAAQMD has also developed the 1997 Bay Area Clean Air Plan to document how it plans to meet state standards."

2001 Neg. Dec. Environmental Conclusions

The 2001 Neg. Dec. concluded that air quality-related impacts from the Project were expected to be the generation of emissions during construction of the project, and during the life of the Project due to changes in motor vehicle traffic. These previously identified environmental effects are described below.

Construction Phase

The 2001 Neg. Dec. found that construction-related emissions are temporary and vary day-to-day, depending on level of activity. Particulate matter was the pollutant of greatest concern resulting from construction activities. The potential for fugitive dust (i.e., particulate matter) to be emitted during Project construction as a result of earth moving, grading, and material hauling operations was identified.

At that time, the BAAQMD did not consider construction emissions of particulate matter to be significant for a project if certain control measures were included in project planning. In general, larger construction areas generate more particulate matter emissions and thus require more control measures. The 2001 Neg. Dec. concluded that, since specifications for the construction contract will include dust control measures that meet BAAQMD requirements; there would be no significant construction-phase impacts. The following mitigation measure was recommended:

- **MM Air-1: Construction-Period Air Quality Controls**: The following control measures should be implemented during Project construction:
 - d) Water all exposed soil at the construction site at least twice a day.
 - e) Cover haul trucks containing dirt and debris.
 - f) Pave areas as soon as possible.
 - g) Sweep daily all paved access roads, parking areas and staging areas at the construction site.

This mitigation measure is replaced by Standard Condition of Approval Air-1 (see discussion, below).

Operation Phase

Regional Emissions Analysis

The 2001 Neg. Dec. found that implementation of the proposed project's access improvements would not result in an increase of regional emissions over projected levels without the project. The Project was not expected to generate any additional motor vehicle trips. Its main purpose is to improve access for vehicles traveling to and from the cities of Oakland and Alameda via 42^{nd} Avenue and High Street from 1-880. In addition, conditions may improve for localized traffic in the Project area that is not using 1-880. These improvements in access may actually decrease regional air pollutant emissions as a result of less vehicle queuing and delay.

Localized Carbon Monoxide Analysis

At the time of publication of the 2001 Neg. Dec., a project located in a federal or state carbon monoxide (CO) non-attainment or maintenance area was required to show that the project would not generate CO emissions that would produce new CO standard violations, worsen existing violations, or delay timely attainment of CO standards. A CO analysis for the Project was conducted, following guidance provided in the Transportation Project-Level Carbon Monoxide Protocol (Protocol) developed by Caltrans and the Institute of Transportation Studies at the University of California, Davis (December 1997). At the time, the Project was in an attainment/maintenance area for CO and did not require a micro-scale CO modeling analysis. Using the Protocol criteria, it was concluded that the Project would not worsen localized air quality within the Project area:

- The Project would not significantly increase the number of vehicles operating in cold start mode (i.e., starting a vehicle with a cold engine).
- Increases in traffic volumes as a result of the Project would not impact roadway operations in such a way as to significantly impact air quality.
- The Project would not worsen traffic flow.
- The Project would not impact signalized intersections that operate at level of service (LOS) E or F, or lead to the worsening of LOS to E or F for a signalized intersection.

The 2001 Neg. Dec predicted that by the year 2025, traffic volumes on most streets in the Project area would remain the same or be decreased if the Project were to be implemented as compared to a no-build situation. Traffic volumes on two roadways (42nd Avenue and the 1-880 northbound on-ramp at 42nd Avenue) were expected to increase by 100 to 450 vehicles per travel direction. This increase in traffic

volumes would exceed a 5% screening threshold as used in the Protocol methodology to signify a potentially significant increase. However, this increase in traffic volumes was not found to result in significant air quality impacts because the roadways would have adequate operational capacity to accept the additional vehicles without worsening traffic flow (i.e., reducing travel speeds) or affecting level of service.

The potential for significant air quality impacts (i.e., CO violations) typically occur at signalized intersections, especially those that operate at LOS E or F. In general, by year 2025 the intersections in the Project area (except the Coliseum Way/High Street intersection) were found to operate at a satisfactory LOS (i.e., LOS C or better). Under the no-build condition, the intersection of Coliseum Way and High Street would operate at a LOS F during both AM and PM peak traffic hours. Construction of the Project was found to significantly improve operations at this intersection, resulting in a LOS B. Improvements at other intersections were found to be less pronounced; in many cases the LOS would remain the same but the average total delay per vehicle would be less.

Odors

Based on a list of facilities developed by the BAAQMD known to emit objectionable odors, the Project was not found to be the type of project expected to generate significant odors. It was not anticipated that exhaust generated during construction and operation of the Project would create a significant amount of odor emissions.

Existing (2011) SETTING

Changed Circumstances

Air quality conditions in the San Francisco Bay Area Air Basin have improved significantly, and ambient concentrations of air pollutants and the number of days during which the region exceeds air quality standards have fallen dramatically. Exceedance of air quality standards occurs primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights or hot, sunny summer afternoons.

- Ozone levels, measured by peak concentrations and the number of days over the State 1-hour standard, have declined substantially as a result of aggressive programs by the BAAQMD and other regional, state and federal agencies. The reduction of peak concentrations represents progress in improving public health; however, the Bay Area still exceeds the State standard for 1-hour ozone.
- Levels of particulate matter (PM_{10} and $PM_{2.5}$) in the Bay Area have exceeded state standards at least two times per year during the past three years. The Bay Area is considered a non-attainment area for PM_{10} and $PM_{2.5}$ relative to the state standard, and unclassified for the federal standards.
- No exceedance of the State or federal carbon monoxide (CO) standards has been recorded at any of the region's monitoring stations since 1991. The Bay Area is currently considered a maintenance area for State and federal CO standards.

Toxic air contaminants (TACs) are not criteria pollutants, but are associated with health-related effects and have appreciable concentrations in the Bay Area. The US Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have identified over 800 substances that are emitted into the air that may affect human health. Some of these substances are considered to be carcinogens, while others are known to have other adverse health effects. As part of ongoing efforts to identify and assess potential health risks to the public, BAAQMD has collected and compiled air toxic emissions data from industrial and commercial sources of air pollution throughout the Bay Area. Monitoring data and emissions inventory of toxic air contaminants helps the BAAQMD determine health risk to Bay Area residents. The 2003 emissions inventory shows that emissions of many TACs are decreasing in the Bay Area.

Ambient monitoring concentrations of TACs indicates that pollutants emitted primarily from motor vehicles (1,3-butadiene and benzene) account for slightly over one-half of the average calculated cancer risk from ambient air in the Bay Area. According to the BAAQMD, ambient benzene levels declined dramatically in 1996 with the advent of Phase 2 reformulated gasoline. Due to this reduction, the calculated average cancer risk based on monitoring results has been reduced to 143 in one million. However, this risk does not include the risk resulting from exposure to diesel particulate matter or other compounds not monitored. Although not specifically monitored, recent studies indicate that exposure to diesel particulate matter may contribute significantly to cancer risk (approximately 500 - 700 in one million) that is greater than all other measured TACs combined.

Existing (2011) Regulatory Setting

Air Quality Standards

Both State and federal governments have established health-based Ambient Air Quality Standards (AAQS) for six air pollutants: carbon monoxide (CO); ozone (O3), nitrogen dioxide (NO2), sulfur dioxide (SO₂), lead (Pb) and suspended particulate matter (PM). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. These standards are designed to protect public health and welfare with a reasonable margin of safety. In addition to primary and secondary AAQS, the State of California has established a set of episode criteria for O3, CO, NO₂, SO₂ and PM. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health. Health effects are progressively more severe as pollutant levels increase. California and national Ambient Air Quality Standards for the criteria pollutants are listed in **Table 4.1**.

Pollutant	Averaging Time	California Standard	National Standard
Ozone	1 Hour	0.09 ppm	
	8 Hour	0.070 ppm	0.075 ppm
Carbon Monoxide	1 Hour	20 ppm	35 ppm
	8 Hour	9.0 ppm	9 ppm
Nitrogen Dioxide	1 Hour	0.18 ppm	
	Annual	0.03 ppm	0.053 ppm
Sulfur Dioxide	24 Hour	0.04 ppm	0.14 ppm
	Annual		0.030 ppm
Particulates	24 Hour	50 ug/m3	150 ug/m3
< 10 microns	Annual	20 ug/m3	
Particulates	24 Hour		35 ug/m3
< 2.5 microns	Annual	12 ug/m3	15 ug/m3

 Table 4-1: Federal and State Ambient Air Quality Standards

Concentrations: ppm = parts per million ug/m3 = micrograms per cubic meter

Source: Bay Area Air Quality Management District, Bay Area Pollution Summary - 2008.

As of 2009, the Bay Area still exceeded the State standard for 1-hour ozone and is considered a nonattainment area for this pollutant, and is considered a non-attainment area for PM_{10} and $PM_{2.5}$ relative to the State standard and unclassified for the federal standards. The Bay Area is considered a maintenance area for State and federal CO standards, and attainment or unclassified for all other pollutants under the more stringent State standards (see **Table 4-2**).

8	,	
Pollutant	Federal Status	State Status
Ozone (O3) – 1-Hour Standard	No Designation	Serious Non-attainment
Ozone (O3) – 8-Hour Standard	Marginal Non-attainment	Non-attainment
Respirable Particulate Matter (PM10)	Unclassified	Non-attainment
Fine Particulate Matter (PM2.5)	Unclassifiable/Attainment	Non-attainment
Carbon Monoxide (CO)	Attainment/Unclassified	Attainment
Nitrogen Dioxide (No2)	Attainment/Unclassified	Attainment
Sulfur Dioxide (SO2)	Attainment	Attainment
Sulfates	No Designation	Attainment
Lead	No Designation	Attainment
Hydrogen Sulfide	No Designation	Unclassified
Visibility Reducing Particles	No Designation	Unclassified

4-2: Regional Attainment Status, as of 2009

Source: Bay Area Air Quality Management District

Pollutant monitoring results for the years 2007 through September 2009 are shown in **Table 4.3**. This table shows information for the monitoring station located at 9925 International Boulevard in Oakland,

the closest monitoring station to the Project site. This data indicates that air quality in the Project area has general been good; no violations of the state PM_{10} standard were recorded, no violations of the federal PM10 standard were recorded, one violation of the federal PM2.5 standard occurred (February 3, 2009), the state 1-hour ozone standard and the federal 8-hour ozone standard have not been exceeded, and both state and federal NO₂ standards were not exceeded in this area during the monitoring period.

Table 4-3: Ambient Air Quality Monitoring Data9925 International Boulevard, Oakland –2007 through 2009

Pollutant	billutant Standard Days Standard Exceed			
		2007*	2008	2009**
Ozone	State 1-Hour	0	0	0
Ozone	Federal 8-Hour	0	0	0
Ozone	State 8-Hour	0	0	0
PM_{10}	Federal 24-Hour	0	0	0
PM_{10}	State 24-Hour	0	0	0
PM _{2.5}	Federal 24-Hour	0	0	3
Nitrogen Dioxide	State 1-Hour	0	0	0

Notes:

*Monitoring began at this station on November 1, 2007.

**Monitoring data through 9/30/09 only.

PM10 and PM25 are measured every sixth day, so the number of days exceeding the standard is estimated.

Source: Telephone Conversation with Kent Chrysler, BAAQMD on 11/24/09, CARB Air Quality Data Statistics at http://www.arb.ca.gov/adam/index.html .

California Air Resources Board (CARB) Air Quality and Land Use Handbook

In April 2005, the CARB prepared the *Air Quality and Land Use Handbook* which is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. The CARB Handbook recommends that planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses such as homes, medical facilities, daycare centers, schools and playgrounds.

Air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners and large gasoline service stations. Key recommendations in the Handbook include taking steps to avoid siting new, sensitive land uses (including residences, day care centers, playgrounds or medical facilities):

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day.
- Within 1,000 feet of a major service and maintenance rail yard.
- Immediately downwind of ports (in the most heavily impacted zones) and petroleum refineries.
- Within 300 feet of any dry cleaning operation (for operations with two or more machines, provide 500 feet).

• Within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater).

The Handbook specifically states that its recommendations are advisory, and acknowledges land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

The Project site is not a sensitive land use (i.e., does not include homes, medical facilities, day-care centers, schools or playgrounds), and thus these recommendations do not apply.

Bay Area Air Quality Management District (BAAQMD) Ozone Attainment Plan

The BAAQMD prepared the 2009 Ozone Attainment Plan (OAP) to address non-attainment of the National 1-hour ozone standard in the Bay Area Air Basin. The purpose of the 2009 OAP is to:

- Update the Bay Area 2005 Ozone Strategy in accordance with the requirements of the CCAA to implement "all feasible measures" to reduce ozone;
- Consider the impacts of ozone control measures on particulate matter (PM), air toxics, and greenhouse gases in a single, integrated plan;
- Review progress on improving air quality in recent years;
- Establish emission control measures to be adopted or implemented in the 2009-2012 timeframe.

The BAAQMD's 2009 Ozone Attainment Plan (OAP) contains district-wide control measures to reduce ozone precursor emissions (e.g., ROG and NOx) and particulate matter. Ozone, in particular, results from the reaction of organic gases (ROG) and nitrogen oxide (NOx) in the atmosphere. To reduce ozone, its precursors (ROG and NOx) are regulated. Similarly, the BAAQMD prepared the 2009 Clean Air Plan to address non-attainment of the California AAQS.

BAAQMD CEQA Guidelines and Thresholds of Significance

On May of 2011 the BAAQMD Board of Directors adopted their latest version of Thresholds of Significance for use in determining the significance of projects' environmental effects under the California Environmental Quality Act (Thresholds), and published their latest version of CEQA Guidelines for consideration by lead agencies. The Thresholds lowered the previous (1999) threshold of significance for annual emissions of Reactive Organic Gases (ROG), Nitrogen Oxides (NOx) and particulate matter exhaust (PM₁₀), and set a standard for smaller particulates (PM_{2.5}) and fugitive dust. The 2011 CEQA Guidelines include methodologies for evaluating risks and hazards for the siting of stationary sources and of sensitive receptors.

Projects that do not comply with the latest version of the Thresholds of Significance will normally be determined to have a significant effect on the environment for purposes of CEQA, and projects that comply with the CEQA Thresholds of Significance normally will be determined to have a less-thansignificant effect on the environment for purposes of CEQA. The 2011 CEQA Guidelines are intended to be viewed as minimum considerations for analyzing air quality impacts. Lead agencies are encouraged to tailor air quality impact analyses to meet the needs of the local community and may conduct refined analyses that utilize more sophisticated models, more precise input data, innovative mitigation measures, and/or other features. The Guidelines contain screening criteria to determine projects may have potentially significant impacts requiring detailed analysis, and assessment methods and mitigation measures for operational-related, local community risk and hazards, local carbon monoxide (CO), odors, construction-related, and plan-level impacts. Although not legally required, in order to provide more information to the public and decision makers, and in the interest of being conservative, the following analysis relies on the new guidance and thresholds for air quality impacts as recommended by the Bay Area Air Quality Management District (BAAQMD) and now utilized by the City of Oakland.

Potential Effects

Significance Thresholds

Implementation of the Project would have a new significant effects regarding air quality, or a substantial increase in the severity of previously identified significant air quality effect if it would:

- a) During project construction result in average daily emissions of 54 pounds per day of ROG, NOx, or PM2.5 or 82 pounds per day of PM10;
- b) During project operation result in average daily emissions of 54 pounds per day of ROG, NOx, or PM2.5 or 82 pounds per day of PM10; or result in maximum annual emissions of 10 tons per year of ROG, NOx, or PM2.5 or 15 tons per year of PM10;
- c) Contribute to carbon monoxide (CO) concentrations exceeding the California Ambient Air Quality Standards (CAAQS) of nine parts per million (ppm) averaged over eight hours and 20 ppm for one hour³;
- d) During either project construction or project operation expose persons by siting a new source or a new sensitive receptor to substantial levels of Toxic Air Contaminants (TACs) resulting in (a) a cancer risk level greater than 10 in one million, (b) a non-cancer risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average PM2.5 of greater than 0.3 micrograms per cubic meter [NOTE: Pursuant to the BAAQMD CEQA Guidelines, when siting new TAC sources consider receptors located within 1,000 feet, and when siting new sensitive receptors consider TAC sources located within 1,000 feet including, but not limited to, stationary sources, freeways, major roadways (10,000 or greater vehicles per day), truck distribution centers, ports, and rail lines. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers.] or;
- e) Frequently and for a substantial duration, create or expose sensitive receptors to substantial objectionable odors affecting a substantial number of people [NOTE: For this threshold, sensitive receptors include residential uses, schools, daycare centers, nursing homes, and medical centers (but not parks).].
- f) During either project operation or project construction expose persons, by siting a new source or a new sensitive receptor, to substantial levels of TACs resulting in (a) a cancer risk level greater than

³ Pursuant to BAAQMD CEQA Guidelines, localized CO concentrations should be estimated for projects in which (a) project-generated traffic would conflict with an applicable congestion management program established by the county congestion management agency or (b) project-generated traffic would increase traffic volumes at affected intersections to more than 44,000 vehicles per hour (or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited, such as tunnels, parking garages, bridge underpasses, natural or urban street canyons, and below-grade roadways). In Oakland, only the MacArthur Maze portion of Interstate 580 exceeds the 44,000 vehicles per hour screening criteria.

100 in a million, (b) a non-cancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average PM2.5 of greater than 0.8 micrograms per cubic meter

Construction Period Fugitive Dust Emissions

Project-related construction activities including demolition, site preparation, earthmoving and general construction activities would generate short-term emissions of fugitive dust. Construction-related fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. Construction activities may result in significant quantities of dust, and as a result, local visibility and PM_{10} and $PM_{2.5}$ concentrations may be adversely affected on a temporary and intermittent basis. In addition, the fugitive dust generated by construction would include larger particles that would fall out of the atmosphere within several hundred feet of the site and could result in nuisance-type impacts. This impact was fully addressed in the 2001 Neg. Dec., and mitigation measures recommended. These previous mitigation measures would be replaced by Standard Condition of Approval Air-1, as indicated below. (**No New Impact**)

New Standard Conditions of Approval

Since 2001 the City has adopted Uniformly Applied Development Standards and Standard Conditions of Approval that apply to all development projects, and thus will also apply to this project. The City's Standard Conditions of Approval SCA Air-1 (listed below) is consistent with both the "Basic" and "Enhanced" measures recommended by the BAAQMD. This Standard Condition of Approval provides equal or more effective mitigation of construction-period fugitive dust emissions, and replaces or supersedes the mitigation measure adopted pursuant to the 2001 Neg. Dec.

SCA Air-1: Construction-Related Air Pollution Controls; Dust and Equipment Emissions (*Ongoing throughout demolition, grading, and/or construction*). During construction, the project applicant shall require the construction contractor to implement all of the following measures recommended by the Bay Area Air Quality Management District (BAAQMD):

- a) Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.
- b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d) Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- e) Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- f) Limit vehicle speeds on unpaved roads to 15 miles per hour.
- g) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations. Clear signage to this effect shall be provided for construction workers at all access points.

- h) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- i) Post a publicly visible sign that includes the contractor's name and telephone number to contact regarding dust complaints. When contacted, the contractor shall respond and take corrective action within 48 hours. The telephone numbers of contacts at the City and the BAAQMD shall also be visible. This information may be posted on other required on-site signage.
- j) All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- k) All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.
- I) Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- m) Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).
- n) Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.
- o) Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize windblown dust. Wind breaks must have a maximum 50 percent air porosity.
- p) Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- q) The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- r) All trucks and equipment, including tires, shall be washed off prior to leaving the site.
- s) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
- t) Minimize the idling time of diesel-powered construction equipment to two minutes.
- u) The project applicant shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate matter (PM) reduction compared to the most recent California Air Resources Board (CARB) fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as they become available.
- v) Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).
- w) All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM.
- x) Off-road heavy diesel engines shall meet the CARB's most recent certification standard.

The Standard Conditions of Approval incorporate development policies and standards from various adopted plans, policies, and ordinances (including the BAAQMD Best management Practices and the City Municipal Code, Section 15.36.100; Dust Control Measures) which have been found to substantially

mitigate environmental effects. These Standard Conditions of Approval are mandatory City requirements and will be imposed and implemented by the project. With implementation, these Standard Conditions of Approval will reduce potential cultural resource and historic resource impacts to less-than-significant levels.

Construction Period Criteria Air Pollutants and Precursor Emissions

Project-related construction activities including demolition, site preparation, earthmoving and general construction activities would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions. Emissions generated from these activities include dust particles that are 10 microns or less in diameter (PM_{10}) and particles that are less than 2.5 microns in diameter ($PM_{2.5}$), combustion emissions of criteria pollutants (ROG, NO_x , CO, SO_x and PM_{10}) from operation of construction equipment and from worker vehicles, and evaporative emissions (ROG) from asphalt.

This impact was not addressed in the 2001 Neg. Dec.

New Standard Conditions of Approval

The proposed Project will be subject to implementation of the Standard Condition of Approval SCA Air-1, as discussed above. This condition of Project approval includes measures addressing constructionperiod air emissions.

Analysis of Potential Effect

Quantification of construction-period emissions has been conducted using the Urban Land Use Emissions Model (URBEMIS) Input and assumptions used in the URBEMIS model run for the Project's construction period effects include the following:

- Start Date: URBEMIS indicates the earliest start date yields the most conservative results. Therefore, this analysis has assumed a conservatively early start date for demolition in April 2013, and an end date for final construction in May of 2014. Actual construction will not occur until Caltrans completes their work on the Caltrans' High Street Overhead Seismic Retrofit Project, which is not scheduled to be complete in the summer of 2014, and at such time as full funding for the Project has been acquired. This conservatively early start date provides a "worst-case" analysis irrespective of these timing constraints.
- Construction Schedule: The construction schedule has been modeled based on the duration schedule as provided in the 42nd and High Street Project Preliminary Construction Schedule (Wood Rodgers, 2011), and includes construction phasing for demolition, grading, trenching, asphalt paving and lane striping.
- The Standard Conditions of Approval are incorporated into the URBEMIS air quality model as input.

Other detailed modeling assumptions and URBEMIS output sheets are included in Appendix C.

The daily criteria pollutant emissions associated with Project-related construction activity is shown in **Table 4-4** for reactive organic gases (ROG) and nitrogen oxides (NO_x) (two precursors of ozone) and particulate matter (PM_{10} and $PM_{2.5}$).

	Reactive Organic Gases	Nitrogen Oxides	PM ₁₀ Exhaust	PM _{2.5} Exhaust
2013 Daily Regional Emissions	4.05	42.3	1.8	5.1
2014 Daily Regional Emissions	5.06	34.2	2.1	6.3
BAAQMD 2010 Threshold	54.0	54.0	82.0	54.0
Exceed?	No	No	No	No

Table 4-4: Project Co	onstruction Emission	Estimates, Peak Da	ay (in Pounds Per Day)
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Source: Lamphier-Gregory, 2011

As indicated in Table 4.4, Project-related emissions would not exceed the 2011 BAAQMD *Thresholds of Significance* for ROG, NO_x , PM_{10} or $PM_{2.5}$. Thus, the Project's regional ozone precursor emissions and regional particulate matter emissions during construction would be less than significant (Less than Significant).

Construction-Period Toxic Air Contaminant Exposure

Construction activity that uses traditional diesel-powered equipment such as bulldozers, generators and pavers all contribute to both cancer and non-cancer health risks. Long-term exposure to diesel particulate matter (DPM) poses the highest cancer risk, but even short term exposure (such as during a construction period) at high concentrations can pose a risk for cancer or non-cancer health concerns. Due to the variable nature of construction activity, the generation of toxic air contaminant (TAC) emissions would be temporary, especially considering the short amount of time such equipment is typically within an influential distance resulting in the exposure of sensitive receptors to substantial concentrations.

Analysis of Potential Effect

The methods used in the following analysis of health risks associated with diesel particulate matter (DPM) from Project-related construction activities are consistent with CEQA Guidelines and BAAQMD health risk guidance, which includes by reference Air Toxics Hot Spots Program Risk Assessment Guidelines published by the Office of Environmental Health Hazard Assessment (OEHHA 2003). The Health Risk Assessment (HRA) includes three primary calculations, each of which are based on conservative (i.e., worst case) assumptions; 1) an estimate of construction-period DPM emission; 2) a calculation of DPM concentrations at the maximum exposed individual; and 3) an estimate of excess cancer risk and chronic health risks for that maximum exposed individual (see **Appendix C**).

Estimated Construction-Period Diesel Emissions

Consistent with BAAQMD recommended methodology, PM_{10} from exhaust has been used as a surrogate for DPM. The total DPM emissions resulting from Project construction activity has been calculated using the Urban Land Use Emissions Model (URBEMIS). Input and assumptions used in the URBEMIS model for estimating the Project's construction period emission (see Appendix C) have been calculated based on the following construction-period assumptions:

• The assumed construction schedule as described above, beginning in year 2013 and concluding in 2014.

• Assumptions regarding the types of diesel equipment to be used during the construction period are based on URBEMIS defaults.

The estimated annual DPM emissions generated by construction activity (assuming daily operating load factors and construction periods) are approximately 0.06 metric tons of DPM during 2013 and approximately 0.04 metric tons during 2014, for a total of approximately 0.11 tons of DPM during the total construction period. Averaged across the construction period, this equates to an average of about 0.08 short tons per year of DPM emissions.

DPM Concentrations at the Maximum Exposed Individual

The SCREEN3 air dispersion model was used to calculate the anticipated maximum 1-hour concentration of DPM at off-site sensitive receptor locations. The model found that the maximum 1-hour concentration of DPM would occur at a distance of 200 meters from the construction site at maximum concentrations of 1.271 ug/m³. The SCREEN3 model conservatively assumes the worst case meteorology for assessing emission concentrations over time (i.e., does not account for wind, elevation or other local factors that may reduce emission concentrations). The result of the SCREEN3 model for the maximum 1-hour concentration was then scaled to derive an annual average ground-level concentration for the maximum exposed individual (MEI), calculated to be 0.1727 ug/m³ of DPM.

BAAQMD also recommends characterizing potential health effects from exposure to fine particulate matter, represented by $PM_{2.5}$ emissions. The SCREEN3 air dispersion model was again used to calculate the anticipated maximum 1-hour concentration of $PM_{2.5}$ at off-site sensitive receptor locations, as described for DPM above. The result of the SCREEN3 model was then scaled to derive an annual average ground-level concentration for the maximum exposed individual, also calculated to occur at a distance of 200 meters from the construction site. This annual average ground-level concentration was calculated to be 0.14 ug/m³ of $PM_{2.5}$ concentration during the peak construction period.

Health Risk to Adjacent Residences

Consistent with BAAQMD's recommended methodology, OEHHA's inhalation cancer risk and inhalation chronic hazard equations were used to calculate the potential risks to sensitive receptors due to these construction-period concentrations of toxic air contaminants (DPM). The Construction-Period Health Risk Assessment (see Appendix C) found that the maximum exposed individual could be exposed to the following health risk levels:

• <u>Carcinogenic Impacts</u>: The results of the HRA indicated that the maximum exposed adult inhalation cancer risk over a 70 year averaging time would be an inhalation cancer risk of 0.702 in 1 million. However, current models and methodologies for conducting health risk assessment consider long-term exposure periods, which do not necessarily account for the increased susceptibility of infants and children to carcinogens, as compared to adults. OEHHA age sensitivity factors (ASF) were used to add age-specific weighting factors in calculating cancer risks from exposures of infants to reflect their special sensitivity to carcinogens. OEHHA recommends weighting cancer risk by a factor of 10 for exposures that occur from the third trimester of pregnancy to two years of age. Applying the age sensitivity factor results in a maximum age-sensitive inhalation cancer risk of 7.02 in 1 million. This risk level does not exceed the threshold of 10 in a million, and therefore the potential for increased cancer risk would be less than significant.

- <u>Chronic Impacts</u>: The results of the HRA indicate that the maximum chronic hazard index would be a chronic non-cancer inhalation index of 0.0345, which is less than the threshold of an index of 1. Therefore, the potential for chronic exposure would be less than significant.
- <u>Fine Particulate Matter Exposure</u>: The results of the HRA indicate that the maximum exposed individual could be exposed to annual average $PM_{2.5}$ concentrations of 0.14 ug/m³ during the construction period, which is less than the threshold of 0.3 ug/m³. Therefore, the potential for exposure fine particulate matter (PM^{2.5}) would be less than significant.

Implementation of City of Oakland Standard Condition of Approval Air-1, including its diesel reduction measures, would reduce the construction–period health risks to adjacent residents to level considered by the Air District to be less than significant (Less than Significant).

Operational Related Criteria Air Pollutants

The 2001 Neg. Dec. found that implementation of the proposed project's access improvements would not result in an increase of regional emissions over projected levels without the project. The Project will not generate any additional motor vehicle trips, but instead will improve access for vehicles traveling to and from the cities of Oakland and Alameda via 42nd Avenue and High Street from 1-880. Improved local traffic conditions would decrease regional air pollutant emissions as a result of less vehicle queuing and delay.

Circumstances

The existing circumstances under which the Project will be undertaken are presented above under the Existing (2011). There has been no substantial or appreciable change in the project's setting that would involve new significant operational-related criteria air pollutant effect or a substantial increase in the severity of previously identified significant operational-related criteria air pollutant effect.

Project

The Project as currently defined is the same Project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new significant operational-related criteria air pollutant effects or a substantial increase in the severity of previously identified significant operational-related criteria air pollutant effect.

New Information

Since 2001, the City has updated its CEQA Thresholds of Significance, as presented above under Criteria of Significance. Since the Project will not generate any additional motor vehicle trips, and instead will improve access and decrease regional air pollutant emissions, the Project will not have any new significant operational-related criteria air pollutant effects that were not discussed in the prior 2001 Neg. Dec. There is no other new information which would indicate that the Project's effects pertaining to operation-period criteria pollutants would have an adverse effect.

Carbon Monoxide Concentrations

The 2001 Neg. Dec concluded that the Project would not worsen localized air quality (CO concentrations) within the area, finding that the Project would not significantly increase the number of vehicles operating in cold start mode, that increases in traffic volumes as a result of the Project would not impact roadway operations in such a way as to significantly impact air quality, and that the Project would not worsen traffic flow.

Circumstances

The existing circumstances under which the Project will be undertaken are presented above under the Existing (2011) Setting. Generally, emissions and ambient concentrations of carbon monoxide have decreased greatly in recent years due largely to the introduction of cleaner burning motor vehicles and motor vehicle fuels. No exceedance of the State or national CO standard has been recorded at any of the Bay Area's monitoring stations since 1991, and the Bay Area has attained the state and national CO standard. There has been no substantial or appreciable change in the Project's setting that would involve a new significant CO effect or a substantial increase in the severity of previously identified significant CO effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new significant CO effects or a substantial increase in the severity of previously identified significant CO air pollutant effect.

New Information

Since 2001, the City has updated its CEQA Thresholds of Significance, as presented above. These thresholds, modeled after the May 2011 BAAQMD CEQA Thresholds, indicate that a project contributing to CO concentrations exceeding the California Ambient Air Quality Standard (CAAQS) of 9 parts per million (ppm) averaged over 8 hours and 20 ppm for 1 hour would be considered to have a significant impact. The 2011 BAAQMD CEQA Guidelines include preliminary screening criteria which provide lead agencies with a conservative indication of whether a proposed project would result in CO emissions likely to exceed these thresholds. If all of the following screening criteria are met, the proposed Project would result in a less-than-significant impact to localized CO concentrations:

a) Is the project consistent with an applicable Congestion Management Program established by the County Congestion Management Agency for designated roads or highways, regional transportation plan, and local congestion management agency plans?

The Project is consistent with the County Congestion Management Program, the I-880 Corridor Improvement Project, the State Transportation Improvement Program (STIP) and the Regional Transportation Improvement Program.

b) Would the project result in an affected intersection experiencing more than 44,000 vehicles per hour, or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway)?

The proposed Project would not contribute a substantial number of vehicle trips to any intersection experiencing more than 44,000 vehicles per hour, or to any intersection experiencing more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited. Peak hour traffic volumes at all surrounding intersections are well below the 44,000 vehicle-per-hour criteria established in the Draft Guidelines, and are projected to remain below that level in 2015 and 2030.

Since the Project would not exceed these screening level criteria, the Project would be expected to result in a less-than-significant impact to air quality from CO concentrations (**Less than Significant**)

Odors

The 2001 Neg. Dec concluded that the Project was not expected to generate significant odors, and that exhaust generated during construction and operation of the Project would create a significant amount of odor emissions.

Circumstances

The existing circumstances under which the Project will be undertaken are presented above under Existing (2011) Setting. There has been no substantial or appreciable change in the project's setting that would involve new significant odor effect or a substantial increase in the severity of previously identified significant odor effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new significant odor effects or a substantial increase in the severity of previously identified significant odor effect.

New Information

There is no other new information which would indicate that the Project's effects pertaining to odor would have an adverse effect.

Summary of the 2001 Negative Declaration

Climate change and greenhouse gas emissions were not addressed in the 2001 Neg. Dec. However, since information on climate change and greenhouse gas emissions was known, or could have been known in 2001, it is not legally "new information" as specifically defined under CEQA and additional analysis is not legally required under CEQA. However, in order to provide more information to the public and decision makers, and in the interest of being conservative, an analysis of the proposed Project's contribution to climate change based on new guidance and environmental review recommendations of the BAAQMD and now utilized by the City of Oakland has been conducted.

Existing (2011) Setting

There is a general scientific consensus that global climate change is occurring, caused in whole or in part, by increased emissions of greenhouse gases (GHGs) that keep the Earth's surface warm by trapping heat in the Earth's atmosphere⁴, in much the same way as glass traps heat in a greenhouse. While many studies show evidence of warming over the last century and predict future global warming, the precise causes of such warming and its potential effects are far less certain.⁵ In its "natural" condition, the greenhouse effect is responsible for maintaining a habitable climate on Earth, but human activity has caused increased concentrations of these gases in the atmosphere, thereby contributing to an increase in global temperatures.

The U.S. EPA has recently concluded that scientists know with virtual certainty that:

"Human activities are changing the composition of Earth's atmosphere. Increasing levels of greenhouse gases like CO_2 in the atmosphere since pre-industrial times are well documented and understood.

- The atmospheric buildup of CO₂ and other greenhouse gases is largely the result of human activities such as the burning of fossil fuels.
- A warming trend of approximately 0.7 to 1.5°F occurred during the 20th century. Warming occurred in both the northern and southern hemispheres, and over the oceans.
- The major greenhouse gases emitted by human activities remain in the atmosphere for periods ranging from decades to centuries. It is, therefore, virtually certain that atmospheric concentrations of greenhouse gases will continue to rise over the next few decades. Increasing greenhouse gas concentrations tend to warm the planet."⁶ At the same time, there is much uncertainty concerning the magnitude and rate of the warming. Specifically, the U.S. EPA notes

⁴ U.S. Environmental Protection Agency (U.S. EPA), Global Warming – Climate: Uncertainties (web page), January 2000, http://yosemite.epa.gov/oar/globalwarming.nsf/content/ClimateUncertainties.html#likely, accessed July 24, 2007.

⁵ "Global climate change" is a broad term used to describe any worldwide, long-term change in the earth's climate. "Global warming" is more specific and refers to a general increase in temperatures across the earth, although it can cause other climatic changes, such as a shift in the frequency and intensity of weather events and even cooler temperatures in certain areas, even though the world, on average, is warmer.

⁶ U.S. EPA, 2000, op. cit.

that "important scientific questions remain about how much warming will occur; how fast it will occur; and how the warming will affect the rest of the climate system, including precipitation patterns and storms. Answering these questions will require advances in scientific knowledge in a number of areas:

- Improving understanding of natural climatic variations, changes in the sun's energy, land-use changes, the warming or cooling effects of pollutant aerosols, and the impacts of changing humidity and cloud cover.
- Determining the relative contribution to climate change of human activities and natural causes.
- Projecting future greenhouse emissions and how the climate system will respond within a narrow range.
- Improving understanding of the potential for rapid or abrupt climate change."⁷

Greenhouse Gases

Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃), and water vapor (H₂O) are the principal GHGs, and when concentrations of these gases exceed the natural concentrations in the atmosphere, the greenhouse effect may be enhanced. Without these GHGs, Earth's temperature would be too cold for life to exist. CO₂, CH₄, and N₂O occur naturally, as well as through human activity. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely byproducts of fossil fuel combustion, whereas CH₄ results from off gassing associated with agricultural practices and landfills. Man-made GHGs (with much greater heat-absorption potential than CO₂) include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆), which are byproducts of certain industrial processes.⁸

The Global Warming Potential (GWP) concept is used to compare the ability of each GHG to trap heat in the atmosphere relative to carbon dioxide (CO₂), which is the most abundant GHG. CO₂ has a GWP of 1, expressed as CO₂ equivalent (CO₂e). Other GHGs, such as methane and nitrous oxide are commonly found in the atmosphere at much lower concentrations, but with higher warming potentials, having CO₂e ratings of 21 and 310, respectively. Trace gases such as chlorofluorocarbons and hydro chlorofluorocarbons, which are halocarbons that contain chlorine, have much greater warming potential. Fortunately these gases are found at much lower concentrations and many are being phased out as a result of global efforts to reduce destruction of stratospheric ozone. In the United States in 2008, CO₂ emissions account for about 85 percent of the GHG emissions, followed by methane at about 8 percent and nitrous oxide at just under 5 percent.⁹

As mentioned above, the primary GHG generated by human activity is CO_2 . Fossil fuel combustion, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO_2 emissions (and thus substantial increases in atmospheric concentrations). In 1994, atmospheric CO_2 concentrations were found to have increased by nearly 30 percent above pre-industrial (c.1860) concentrations.

⁷ U.S. EPA, 2000, op. cit.

⁸ CalEPA, 2006b. Final 2006 Climate Action Team Report to the Governor and Legislature. Sacramento, CA. April 3.

⁹ Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2008. U.S. EPA. April 15, 2010, Table 2-1: Recent Trends in U.S. Greenhouse Gas Emissions and Sinks.

Global Emissions

Worldwide emissions of GHGs in 2004 were 30 billion tons of CO_2e per year¹⁰ (including both ongoing emissions from industrial and agricultural sources, but excluding emissions from land-use changes).

U.S. Emissions

In 2004, the United States emitted about 8 billion tons of CO_2e or about 25 tons/year/person. Of the four major sectors nationwide - residential, commercial, industrial and transportation - transportation accounts for the highest fraction of GHG emissions (approximately 35 to 40 percent); these emissions are entirely generated from direct fossil fuel combustion.¹¹

State of California Emissions

In 2004, California emitted approximately 550 million tons of CO_2e , or about 6 percent of the U.S. emissions. This large number is due primarily to the sheer size of California compared to other states. By contrast, California has one of the fourth lowest per capita GHG emission rates in the country, due to the success of its energy-efficiency and renewable energy programs and commitments that have lowered the State's GHG emissions rate of growth by more than half of what it would have been otherwise.¹² Another factor that has reduced California's fuel use and GHG emissions is its mild climate compared to that of many other states.

The California EPA Climate Action Team stated in its March, 2006, report that the composition of gross climate change pollutant emissions in California in 2002 (expressed in terms of CO_2 equivalence) were as follows:

- Carbon dioxide (CO2) accounted for 83.3 percent;
- Methane (CH4) accounted for 6.4 percent;
- Nitrous oxide (N2O) accounted for 6.8 percent; and
- Fluorinated gases (HFCs, PFC, and SF6) accounted for 3.5 percent.13

The California Energy Commission found that transportation is the source of approximately 41 percent of the State's GHG emissions, followed by electricity generation (both in-state and out of- state) at 23 percent, and industrial sources at 20 percent. Agriculture and forestry is the source of approximately 8.3 percent, as is the source categorized as "other," which includes residential and commercial activities.¹⁴

¹⁰ United Nations Framework Convention on Climate Change (UNFCCC), Sum of Annex I and Non-Annex I Countries Without Counting Land-Use, Land-Use Change and Forestry (LULUCF). Predefined Queries: GHG total without LULUCF (Annex I Parties). Bonn, Germany, <u>http://unfccc.int/ghg_emissions_data/</u> predefined_queries/items/3814.php, accessed May 2, 2007.

¹¹ U.S. EPA, 2000, op. cit.

¹² California Energy Commission (CEC), Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004 - Final Staff Report, publication # CEC-600-2006-013-SF, Sacramento, CA, December 22, 2006; and January 23, 2007 update to that report.

¹³ CalEPA, 2006b, op. cit.

¹⁴ California Energy Commission (CEC), 2007, op. cit.

Bay Area Emissions

BAAQMD most recently updated the GHG emission inventory in 2010 using a base year of 2007.¹⁵ In the Bay Area, fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of the Bay Area's GHG emissions, accounting for 36.41% of the Bay Area's 95.8 million tons of GHG emissions in 2007. Industrial and commercial sources were the second largest contributors of GHG emissions with about 36.40% of total emissions. Domestic sources (e.g., home water heaters, furnaces, etc.) account for about 7% of the Bay Area's GHG emissions, and energy production accounted for 15.9% percent. Off-road equipment and agriculture make us the remainder with approximately 3% and 1.2% of the total Bay Area 2007 GHG emissions, respectively.

Oakland Emissions

The City of Oakland, in partnership with the Local Governments for Sustainability (ICLEI), has developed a greenhouse gas emissions inventory estimating citywide GHG emissions for the year 2005 at approximately 3 million metric tons of CO2e. This citywide GHG emissions inventory reflects all the energy used and waste produced within the Oakland city limits. When emissions from highway transportation are considered in this total, approximately 58% of Oakland's GHG emissions are associated with the transportation sector. Natural gas consumption represents approximately 22% of Oakland's GHG emissions, while electricity use and decomposition represent 16% and 4% of Oakland's GHG emissions, respectively.

Potential Effects of Global Climate Change

Global Effects

Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG at or above current rates would induce more extreme climate changes during the 21^{st} century than were observed during the 20th century. A warming of about $0.2^{\circ}C$ ($0.36^{\circ}F$) per decade is projected, and there are identifiable signs that global warming is taking place, including substantial ice loss in the Arctic.¹⁶

The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects, according to the IPCC.¹⁷

- Snow cover is projected to contract, with permafrost areas sustaining thawing.
- Sea ice is projected to shrink in both the Arctic and Antarctic.
- Hot extremes, heat waves, and heavy precipitation events are likely to increase in frequency.
- Future tropical cyclones (typhoons and hurricanes) will likely become more intense.

¹⁵ BAAQMD, 2010. Source Inventory of Bay Area Greenhouse Gas Emissions. February.

¹⁶ International Panel on Climate Change (IPCC) *Special Report on Emissions Scenarios, 2000,* www.grida.no/climate/ipcc/emission/002.htm, accessed July 24, 2007.

¹⁷ Ibid.

- Non-tropical storm tracks are projected to move poleward, with consequent changes in wind, precipitation, and temperature patterns. Increases in the amount of precipitation are very likely in high-latitudes, while decreases are likely in most subtropical regions.
- Warming is expected to be greatest over land and at most high northern latitudes, and least over the Southern Ocean and parts of the North Atlantic Ocean.

Potential secondary effects from global warming include global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

Effects on the State of California

According to CARB, some of the potential impacts in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years.¹⁸ Several recent studies have attempted to explore the possible negative consequences that climate change, left unchecked, could have in California. These reports acknowledge that climate scientists' understanding of the complex global climate system, and the interplay of the various internal and external factors that affect climate change, remains too limited to yield scientifically valid conclusions on such a localized scale. Substantial work has been done at the international and national level to evaluate climatic impacts, but far less information is available on regional and local impacts. In addition, projecting regional impacts of climate change and variability relies on large-scale scenarios of changing climate parameters, using information that is typically at too general a scale to make accurate regional assessments.¹⁹

Below is a summary of some of the potential effects reported in an array of studies that could be experienced in California as a result of global warming and climate change:

- <u>Air Quality</u> Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. For other pollutants, the effects of climate change and/or weather are less well studied, and even less well understood.²⁰ If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat related deaths, illnesses, and asthma attacks throughout the State.²¹
- <u>Water Supply</u> Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. For example, models that predict drier conditions (i.e.,

¹⁸ California Air Resources Board (CARB), 2006c. Public Workshop to Discuss Establishing the 1990 Emissions Level and the California 2020 Limit and Developing Regulations to Require Reporting of Greenhouse Gas Emissions, Sacramento, CA. December 1.

¹⁹ Kiparsky, M. and P.H. Gleick, 2003. *Climate Change and California Water Resources: A Survey and Summary of the Literature*. Oakland, CA: Pacific Institute for Studies in Development. July.

²⁰ U.S. EPA, 2007, op. cit.

²¹ California Climate Change Center (CCCC), 2006. *Our Changing Climate: Assessing the Risks to California*, CEC-500-2006-077, Sacramento, CA. July.

parallel climate model [PCM]) suggest decreased reservoir inflows and storage and decreased river flows, relative to current conditions. By comparison, models that predict wetter conditions (i.e., HadCM2) project increased reservoir inflows and storage, and increased river flows.²²

- <u>Hydrology</u> As discussed above, climate change could potentially affect the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Sea level rise can be a product of global warming through two main processes: expansion of seawater as the oceans warm, and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could also jeopardize California's water supply. In particular, saltwater intrusion would threaten the quality and reliability of the state's major fresh water supply that is pumped from the southern portion of the Sacramento/San Joaquin River Delta. Increased storm intensity and frequency could affect the ability of flood-control facilities (including levees) to handle storm events.
- <u>Agriculture</u> California has a \$30 billion agricultural industry that produces half the country's fruits and vegetables. The California Climate Change Center (CCCC) notes that higher CO2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater ozone pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year that certain crops, such as wine grapes, bloom or ripen, and thus affect their quality.²³
- <u>Ecosystems and Wildlife</u> Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. In 2004, the Pew Center on Global Climate Change released a report examining the possible impacts of climate change on ecosystems and wildlife.24 The report outlines four major ways in which it is thought that climate change could affect plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes such as carbon cycling and storage.

Existing (2011) Regulatory Setting

International and Federal

Kyoto Protocol

The United States participates in the United Nations Framework Convention on Climate Change (UNFCCC) (signed on March 21, 1994). The Kyoto Protocol is a treaty made under the UNFCCC and

²² Brekke, L.D., et afl, 2004. "Climate Change Impacts Uncertainty for Water Resources in the San Joaquin River Basin, California." *Journal of the American Water Resources Association*. 40(2): 149–164. Malden, MA, Blackwell Synergy for AWRA.

²³ California Climate Change Center (CCCC), 2006, op. cit.

²⁴ Parmesan, C. and H. Galbraith, *Observed Impacts of Global Climate Change in the U.S.*, Arlington, VA: Pew Center on Global Climate Change, November 2004.

was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated 5 percent from 1990 levels during the first commitment period of 2008–2012. It should be noted that although the United States is a signatory to the Kyoto Protocol, Congress has not ratified the Protocol and the United States is not bound by the Protocol's commitments.

Copenhagen Summit

The 2009 United Nations Climate Change Conference (Copenhagen Summit) was held in Denmark in December 2009. The conference included the 15 Conference of the Parties to the United Nations Framework Convention on Climate Change, and the fifth meeting of the Parties to the Kyoto Protocol. A framework for climate change mitigation beyond 2012 was to be agreed there. The Copenhagen Accord was drafted by the US, China, India, Brazil, and South Africa on December 18, and judged to be a "meaningful agreement" by the United Stated government. It was "taken note of" but not "adopted" in a debate of all the participating countries the next day, and it was not passed unanimously. The document recognized that climate change is one of the greatest challenges of the present day and that actions should be taken to keep any temperature increases to below 2 degrees C. The document is not legally binding and does not contain any legally binding commitments for reducing CO2 emissions.

Climate Change Technology Program

The United States has opted for a voluntary and incentive-based approach toward emissions reductions in lieu of the Kyoto Protocol's mandatory framework. The Climate Change Technology Program (CCTP) is a multi-agency research and development coordination effort (which is led by the Secretaries of Energy and Commerce) that is charged with carrying out the President's National Climate Change Technology Initiative.²⁵

U.S. Environmental Protection Agency (U.S. EPA)

To date, the U.S. EPA has not regulated GHGs under the Clean Air Act (discussed above) based on its assertion in *Massachusetts et al. v. EPA et al*²⁶ that the "Clean Air Act does not authorize it to issue mandatory regulations to address global climate change and that it would be unwise to regulate GHG emissions because a causal link between GHGs and the increase in global surface air temperatures has not been unequivocally established." However, in the same case (*Massachusetts v. EPA*), the U.S. Supreme Court held that the U.S. EPA can, and should, consider regulating motor-vehicle GHG emissions.

In December of 2009 the EPA issued an "endangerment" finding about carbon dioxide and other greenhouse gases. The endangerment finding classified six greenhouse gases as pollutants that threaten health: carbon dioxide, methane, nitrous oxide, hydro-fluorocarbons, per-fluorocarbons and sulfur hexafluoride. These findings could potentially enable the EPA to make rules restricting greenhouse gas emissions under the Clean Air Act, but to date no such rules have been enacted.

²⁵ Climate Change Technology Program (CCTP), About the U.S. Climate Change Technology Program (web page), Washington, D.C., last updated April 2006, http://www.climatetechnology.gov/about/index.htm, accessed July 24, 2007.

²⁶ U.S. Supreme Court, *Massachusetts et. al. v. EPA et. al* (No. 05-1120, 415F 3d 50), April 2, 2007.

State of California

Assembly Bill (AB) 1493

On July 1, 2002, the California Assembly passed Assembly Bill (AB) 1493 (signed into law on July 22, 2002), requiring the CARB to "adopt regulations that achieve the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." The regulations were to be adopted by January 1, 2005, and apply to 2009 and later model-year vehicles. In September 2004, CARB responded by adopting "CO₂-equivalent fleet average emission" standards. The standards will be phased in from 2009 to 2016, reducing emissions by 22 percent in the "near term" (2009–2012) and 30 percent in the "mid-term" (2013–2016), as compared to 2002 fleets.

Executive Order (EO) S-3-05

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order (EO) S-3-05, establishing statewide GHG emission reduction targets. This EO provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent below 1990 levels. The Secretary of the California Environmental Protection Agency (CalEPA) is charged with coordinating oversight of efforts to meet these targets and formed the Climate Action Team (CAT) to carry out the EO. Several of the programs developed by the CAT to meet the emission targets are relevant to residential construction and are outlined in a March 2006 report.²⁷ These include prohibition of idling of certain classes of construction vehicles, provision of recycling facilities within residential buildings and communities, compliance with the Energy Commission's building and appliance energy efficiency standards, compliance with California's Green Buildings and Solar initiatives, and implementation of water-saving technologies and features.

AB 32 and the Air Resource Board's Climate Change Scoping Plan

In 2006, the governor of California signed AB 32, the Global Warming Solutions Act, into legislation. The Act requires that California cap its GHG emissions at 1990 levels by 2020.

On December 11, 2008, the California Environmental Protection Agency Air Resources Board (ARB) adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of ARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce GHG emissions by 174 million metric tons (MMT), or approximately 30 percent, from the state's projected 2020 emissions level of 596 MMT of CO₂e under a business-as-usual scenario. The Scoping Plan also breaks down the amount of GHG emissions reductions ARB recommends for each emissions sector of the state's GHG inventory. While ARB has identified a GHG reduction target of 15 percent for local governments themselves, it has not yet determined what amount of GHG emissions reductions it recommends from local government land use decisions. However, the Scoping Plan does state that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions. ARB further acknowledges that decisions on how land is used will have large effects on the GHG emissions that will

²⁷ California Environmental Protection Agency (CalEPA), 2006a. Climate Action Team, Executive Summary. Climate Action Team Report to Governor Schwarzenegger and the California Legislature. Sacramento, CA, March.

result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. The measures approved by ARB must be enacted by 2012. As of April 2010, 14 ARB regulations had been approved, including all nine Discrete Early Actions, which will provide a reduction of approximately 78 MMTCO2e in 2020 (almost 50% of the goal).²⁸

California Senate Bill 1368 (SB 1368)

On August 31, 2006, the California Senate passed SB 1368 (signed into law on September 29, 2006), which required the Public Utilities Commission (PUC) to develop and adopt a "greenhouse gases emission performance standard" by February 1, 2007, for the private electric utilities under its regulation. The PUC adopted an interim standard on January 25, 2007, but formally requested a delay until September 30, 2007, for the local publicly-owned electric utilities under its regulation. These standards apply to all long-term financial commitments entered into by electric utilities. The California Energy Commission (CEC) was required to adopt a consistent standard by June 30, 2007. However, this date was missed, and CEC will address the concerns of the Office of Administrative Law (OAL) and resubmit the rulemaking as soon as possible. The rulemaking then must be approved by the OAL before it can take effect.²⁹

California Senate Bill 97 (SB 97)

Governor Schwarzenegger signed SB 97 (Chapter 185, Statutes 2007) into law on August 24, 2007. The legislation provides partial guidance on how greenhouse gases should be addressed in certain CEQA documents.

SB 97 required the Governor's Office of Planning and Research (OPR) to prepare CEQA Guidelines for the mitigation of GHG emissions, including, but not limited to, effects associated with transportation or energy consumption. The Resources Agency was required to certify and adopt the guidelines by January 1, 2010. OPR and the Resources Agency are then required to periodically review the guidelines to incorporate new information or criteria adopted by CARB pursuant to the Global Warming Solutions Act, scheduled for 2012.

2008 California Air Pollution Control Officers Association (CAPCOA) "White Paper"

In January 2008, the California Air Pollution Control Officers Association (CAPCOA) issued a "white paper" on evaluating and addressing GHGs under CEQA. This resource guide was prepared to support local governments as they develop their programs and policies around climate change issues. The paper was not a guidance document. It was not intended to dictate or direct how any agency chooses to address GHG emissions. Rather, it was intended to provide a common platform of information about key elements of CEQA as they pertain to GHG, including an analysis of different approaches to setting significance thresholds.

The paper noted that for a variety of reasons local agencies may decide not to have a CEQA threshold. Local agencies may also decide to assess projects on a case-by-case basis when the projects come forward. The paper also discussed a range of GHG emission thresholds that could be used. The range of thresholds discussed includes a GHG threshold of zero and several non-zero thresholds. Non-zero

²⁸ California Air Resource Board. April 22, 2010. AB 32 Scoping Plan Implementation Update. Accessed at http://www.arb.ca.gov/board/books/2010/042110/10-4-1pres.pdf.

²⁹ Collard, Gary, California Energy Commission, email correspondence to Robert Vranka, Ph.D, ESA, July 12, 2007.

thresholds include percentage reductions for new projects that would allow the state to meet its goals for GHG emissions reductions by 2020 and perhaps 2050. These would be determined by a comparison of new emissions versus business as usual emissions and the reductions required would be approximately 30 percent to achieve 2020 goals and 90 percent (effectively immediately) to achieve the more aggressive 2050 goals. These goals could be varied to apply differently to new projects, by economic sector, or by region in the state.

2008 OPR Technical Advisory

On June 19, 2008, OPR published a technical advisory on CEQA and climate change. The advisory provided OPR's perspective on the emerging role of CEQA in addressing climate change and greenhouse gas emissions, while recognizing that approaches and methodologies for calculating greenhouse gas emissions and addressing environmental impacts through CEQA review are rapidly evolving. The advisory recognized that OPR will develop, and the Resources Agency will adopt, amendments to the CEQA Guidelines pursuant to SB 97. In the interim, the technical advisory "offers informal guidance regarding the steps lead agencies should take to address climate change in their CEQA documents."

The technical advisory pointed out that neither CEQA nor the CEQA Guidelines prescribe thresholds of significance or particular methodologies for performing an impact analysis. The advisory stated, "This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable." OPR recommended that "the global nature of climate change warrants investigation of a statewide threshold of significance for GHG emissions." Until such a standard is established, OPR advises that each lead agency should develop its own approach to performing an analysis for projects that generate greenhouse gas emissions.

2009/2010 Amendments to the CEQA Guidelines

In January 2009, OPR released preliminary proposed amendments to the CEQA Guidelines regarding GHG emissions. No significance threshold was included in the draft and the guidelines afforded the customary deference provided to lead agencies in their analysis and methodologies. The introductory preface to the amendments recommended that CARB set state-wide thresholds of significance. OPR emphasized the necessity of having a consistent threshold available to analyze projects, and the analyses should be performed based on the best available information. The proposed revisions included a new section specifically addressing the significance of GHG emissions, building upon OPR's 2008 technical advisory. Like the advisory, the proposed Guidelines section calls for quantification of GHG emissions. The proposed section states that the significance of GHG impacts should include consideration of the extent to which the project would result in the following:

- help or hinder compliance with AB 32 goals;
- increase energy use, especially energy use generated by fossil fuel combustion;
- improve energy efficiency; and
- result in emissions that would exceed any applicable significance threshold.

In April 2009, OPR forwarded the draft revisions to the California Natural Resources Agency for review and proposed adoption. On July 3, 2009, the California Natural Resources Agency began the formal rulemaking process for adopting the CEQA Guidelines. As directed by SB97, the Natural Resources Agency adopted Amendments to the CEQA Guidelines for greenhouse gas emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became
effective on March 18, 2010. Among the changes included in these recent CEQA Guidelines amendments are guidance for determining the significance of impacts from greenhouse gas emissions (CEQA Guidelines §15064.4). These guidelines indicate that "The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency . . . A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." A lead agency shall have discretion to determine, in the context of a particular project, whether to use a model or other methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use, or whether to rely on a qualitative analysis or performance based standard.

These Guidelines also indicate that a lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

- "The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions."

In determining thresholds of significance for greenhouse gas emissions, § 15064.7 indicates that "Each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. Thresholds of significance to be adopted for general use as part of the lead agency's environmental review process must be adopted by ordinance, resolution, rule, or regulation, and developed through a public review process and be supported by substantial evidence. When adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

Finally, in considering mitigation measures related to greenhouse gas emissions, § 15126.4 indicates that "lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:

- Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision;
- Reductions in emissions resulting from a project through implementation of project features, project design, or other measures;
- Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions; and
- Measures that sequester greenhouse gases;
- In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific

measures that may be implemented on a project-by-project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions."

California Senate Bill 375 (SB 375)

Governor Schwarzenegger signed SB 375 into law in September 2008 (Chapter 728, Statutes of 2008). The legislation aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) that will prescribe land use allocation in the MPO's regional transportation plan. CARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects will not be eligible for funding programmed after January 1, 2012.

California Urban Water Management Act

The California Urban Water Management Planning Act requires various water purveyors throughout the State of California (such as EBMUD) to prepare UWMPs, which assess the purveyor's water supplies and demands over a 20-year horizon (California Water Code, Section 10631 *et seq.*). As required by that statute, UWMPs are updated by the purveyors every five years. As discussed above, this is relevant to global climate change which may affect future water supplies in California, as conditions may become drier or wetter, affecting reservoir inflows and storage and increased river flows.³⁰

Bay Area Air Quality Management District (BAAQMD)

The BAAQMD's prior CEQA Guidelines, which were last updated in 1999, contained no thresholds of significance for GHG emissions. However, in May of 2011 the BAAQMD adopted its most recent update to its CEQA Guidelines, and adopted new *Thresholds of Significance (2011 Thresholds)*.³¹

The adopted 2011 *Thresholds of Significance* identify a project-specific threshold of 1,100 metric tons per year, and an efficiency-based threshold of 4.6 metric tons per year per service population (residents and employees) as resulting in a cumulatively considerable contribution of GHG emission and a cumulatively significant impact to global climate change.

City of Oakland

Oakland Energy and Climate Action Plan

In July 2009 the Oakland City Council directed staff to develop a draft Oakland Energy and Climate Action Plan using a preliminary planning GHG reduction target equivalent to 36% below 2005 GHG emissions by 2020, annual benchmarks for meeting the target. Based on Oakland's baseline 2005 GHG

³⁰ Brekke, 2004, op. cit.

³¹ BAAQMD, Thresholds Of Significance For Use In Determining The Significance Of Projects' Environmental Effects Under The California Environmental Quality Act (*Thresholds of Significance*), June 2, 2010

inventory, totaling approximately 3 million metric tons of CO_2e emissions and current forecasts of business-as-usual emissions growth, reducing GHG emissions by the equivalent of 36% below 2005 levels by 2020 will require taking actions that cumulatively add up to approximately 1.1 million metric tons of CO_2e reductions. A draft Oakland Energy and Climate Action Plan was released in early 2010.

City of Oakland General Plan

The City of Oakland General Plan, including its Land Use and Transportation Element (LUTE), Open Space, Conservation and Recreation Element (OSCAR), Historic Preservation Element, and Safety Element all contain numerous policies that address issues related to GHG emissions and climate change, with a particular focus on Transit-oriented development, bikeways and pedestrian ways, encouraging and promoting use of public transit, encouraging energy efficiency and use of alternative energy sources, and other.

California Green Building Standards Code

The Green Building Standards Code (CALGREEN), requiring all new buildings in the state to be more energy efficient and environmentally responsible, took effect on January 1, 2011. These comprehensive regulations are targeted to achieve major reductions in greenhouse gas emissions, energy consumption and water use to create a greener California.

CALGREEN will require that every new building constructed in California:

- Reduce water consumption by 20 percent,
- Divert 50 percent of construction waste from landfills
- Install low pollutant-emitting materials
- Requires separate water meters for nonresidential buildings' indoor and outdoor water use
- Requires moisture-sensing irrigation systems for larger landscape projects
- Requires mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity and according to their design efficiencies.

Other City of Oakland Programs and Policies

The City of Oakland has supported and adopted a number of programs and policies designed to reduce GHG emissions and continue Oakland's progress toward becoming a model sustainable city. Programs and policies of relevance to new residential development include:

Sustainable Oakland Program

Oakland's sustainability efforts are coordinated through the Sustainable Oakland program, a product of the Oakland Sustainability Community Development Initiative created in 1998 (ordinance 74678 C.M.S.)

Downtown Housing

The 10K Downtown Housing Initiative has a goal of attracting 10,000 new residents to downtown Oakland by encouraging the development of 6,000 market-rate housing units. This effort is consistent with Smart Growth principles.

Waste Reduction and Recycling

The City of Oakland has implemented a residential recycling program increasing the collection of yard trimmings and food waste. This program has increased total yard trimming collections by 46 percent compared to 2004, and recycling tonnage by 37 percent. The City also adopted a *Construction and Demolition Recycling* program, for which the City passed a resolution in July 2000 (Ordinance 12253. OMC Chapter 15.34), requiring certain nonresidential or apartment house projects to recycle 100 percent of all asphalt & concrete (A/C) materials and 65 percent of all other materials.

Polystyrene Foam Ban Ordinance

In June 2006 the Oakland City Council passed the Green Food Service Ware Ordinance (Ordinance 14727, effective as of January 1, 2007), which prohibits the use of polystyrene foam disposable food service ware and requires, when cost neutral, the use of biodegradable or compostable disposable food service ware by food vendors and City facilities.

Zero Waste Resolution

In March 2006 the Oakland City Council adopted a Zero Waste Goal by 2020 Resolution (Resolution 79774 C.M.S.), and commissioned the creation of a Zero Waste Strategic Plan to achieve the goal.

Stormwater Management

On February 19, 2003, the Regional Water Quality Control Board, San Francisco Bay Region, issued a municipal stormwater permit under the National Pollutant Discharge Elimination System (NPDES) permit program to the Alameda Countywide Clean Water Program (ACCWP). The purpose of the permit is to reduce the discharge of pollutants in stormwater to the maximum extent practicable and to effectively prohibit non-stormwater discharges into municipal storm drain systems and watercourses. The City of Oakland, as a member of the ACCWP, is a co-permittee under the ACCWP's permit and is, therefore, subject to the permit requirements. Provision C.3 of the NPDES permit is the section of the permit containing stormwater pollution management requirements for new development and redevelopment projects. Among other things, Provision C.3 requires that certain new development and redevelopment projects incorporate post-construction stormwater pollution management measures, to reduce stormwater pollution after the construction of the project. These requirements are in addition to standard stormwater-related best management practices (BMPs) required during construction.

Community Gardens and Farmer's Markets

Community Garden locations include Arroyo Viejo, Bella Vista, Bushrod, Golden Gate, Lakeside Horticultural Center, Marston Campbell, Temescal, and Verdese Carter. Weekly Farmer's Market locations include the Jack London Square, Old Oakland, Grand Lake, Mandela, and Temescal districts. Both efforts promote and facilitate the principal of growing and purchasing locally, which effects reductions in truck and vehicle use and GHG emissions.

Potential Impacts

Significance Thresholds

The Project would have a significant impact on the environment if it would:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, specifically:
 - For a project involving a stationary source, produce total emissions of more than 10,000 metric tons of CO2e annually.
 - For a project involving a land use development, produce total emissions of more than 1,100 metric tons of CO₂e annually AND more than 4.6 metric tons of CO₂e per service population annually. The project's impact would be considered significant if the emissions exceed BOTH the 1,100 metric tons threshold and the 4.6 metric tons threshold. Accordingly, the impact would be considered less than significant if the project's emissions are below EITHER of these thresholds.
 - The project's expected greenhouse gas emissions during construction should be annualized over a period of 40 years, and then added to the expected emissions during operation for comparison to the threshold.
- b) Fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions.

Greenhouse gas impacts are, by their nature, cumulative impacts because one project by itself cannot cause global climate change. These thresholds pertain to a project's contribution to cumulative impacts.

The following activities associated with typical development could contribute to the generation of GHG emissions:

- Removal of Vegetation The net removal of vegetation for construction results in a loss of carbon sequestration in plants. Alternately, planting of additional vegetation would result in additional carbon sequestration and lower carbon footprint of the Project.
- Construction Activities Construction equipment typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as carbon dioxide, methane, and nitrous oxide. Furthermore, methane is emitted during the fueling of heavy equipment.
- Gas, Electricity and Water Use Gas use results in the emissions of two GHGs: methane (the major component of natural gas) and carbon dioxide from the combustion of natural gas (as before a flame on a stove is sparked), and from small amounts of methane that is un-combusted in a natural gas flame. Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California's water conveyance system is energy-intensive, with electricity used to pump and treat water.
- Motor Vehicle Use Transportation associated with a project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

Operational Related Criteria Air Pollutants

The 2001 Neg. Dec. found that implementation of the proposed Project's access improvements would not result in an increase in vehicle emissions over the amount of emissions that would otherwise be anticipated without the Project. The Project will not generate any additional motor vehicle trips, but instead will improve access for existing and expected future vehicles traveling to and from the cities of Oakland and Alameda via 42nd Avenue and High Street from 1-880. Improved local traffic conditions would decrease vehicle emissions, including emissions of GHG gasses, as a result of less vehicle queuing and delay. (**No Impact**)

Circumstances

The existing circumstances under which the Project will be undertaken are presented above under the Existing (2011) Setting. There has been no substantial or appreciable change in the Project's setting that would involve new significant operational-related GHG emissions.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new significant operational-related GHG emission effects.

New Information

Since 2001, the City has updated its CEQA Thresholds of Significance to address these issues. However; since the Project will not generate any additional motor vehicle trips but will instead improve access and decrease regional vehicle emissions, the Project will not have any new significant operational-related GHG emission effects that were not discussed in the prior 2001 Neg. Dec. There is no other new information which would indicate that the Project's effects pertaining to GHG emissions would have an adverse effect.

Construction Period GHG Emissions

Project construction activities, including demolition, site preparation, earthmoving and general construction activities, would generate short-term emissions including emissions of carbon dioxide (CO_2) and other GHG emission. This impact was not addressed in the 2001 Neg. Dec.

New Thresholds of Significance

The City's Thresholds of Significance, presented above, are based on the 2011 BAAQMD *Thresholds of Significance* and consider construction emissions, even though temporary, to potentially result in a significant cumulative impact. A project's expected greenhouse gas emissions during construction are annualized over a period of 40 years and then added to the expected emissions during operation for comparison to the threshold. The BAAQMD thresholds were originally developed for project operation impacts only; therefore, combining both the construction emissions and operation emissions for comparison to the threshold represents a conservative analysis of potential greenhouse gas impacts.

New Standard Conditions of Approval

The City's Standard Condition of Approval for GHG impacts applies under any of the following scenarios:

- a) Scenario A: Projects which (a) involve a land use development (i.e., a project that does <u>not</u> require a permit from the Bay Area Air Quality Management District (BAAQMD) to operate), (b) exceed the greenhouse gas (GHG) emissions screening criteria contained in the BAAQMD CEQA Guidelines, <u>AND</u> (c) after a GHG analysis is prepared, would produce total GHG emissions of more than 1,100 metric tons of CO₂e annually and more than 4.6 metric tons of CO₂e per service population annually (with "service population" defined as the total number of employees and residents of the project).
- b) Scenario B: Projects which (a) involve a land use development, (b) exceed the GHG emissions screening criteria contained in the BAAQMD CEQA Guidelines, (c) after a GHG analysis is prepared would exceed <u>at least one</u> of the BAAQMD Thresholds of Significance (more than 1,100 metric tons

of CO₂e annually <u>OR</u> more than 4.6 metric tons of CO₂e per service population annually), <u>AND</u> (d) are considered to be "Very Large Projects."

c) Scenario C: Projects which (a) involve a stationary source of GHG (i.e., a project that requires a permit from BAAQMD to operate) <u>AND</u> (b) after a GHG analysis is prepared would produce total GHG emissions of more than 10,000 metric tons of CO₂e annually.

As indicated in the analysis presented below, the Project would not exceed either of the identified Thresholds of Significance (more than 1,100 metric tons of CO2e annually, or more than 4.6 metric tons of CO2e per service population annually), nor is it a stationary source of GHG that would produce total GHG emissions of more than 10,000 metric tons of CO2e annually. Therefore, the City's Standard Condition of Approval requiring preparation of a Greenhouse Gas (GHG) Reduction Plan would not be applicable.

Analysis of Potential Effect

Quantification of construction-period GHG emissions has been conducted using the Urban Land Use Emissions Model (URBEMIS). Input and assumptions used in the URBEMIS model run for the Project's construction period effects are the same as presented in Chapter 4: Air Quality under the topic of Construction-Period Criteria Pollutant Emissions. Detailed modeling assumptions and URBEMIS output sheets are included in **Appendix C**. The peak daily and annual GHG emissions associated with Project-related construction activity is shown in **Table 5-1**.

	Annual CO ₂ Emissions (tons/year)	Annual CO2 Emissions (metric tons/year)	Annual Co2e Emissions (metric tons/year)
2013 Emissions	122	111	117
2014 Emissions	57	51	54
BAAQMD 2010 Threshold			1,100
Exceed?			No

Table 5-1: Project Construction-Period GHG Emission Estimates

Source: Lamphier-Gregory

2011 tons were converted to metric tons using a conversion factor of 0.91. Consistent with U.S. EPA assumptions, BAAQMD assumes CO2 accounts for 95% of the GHG from vehicles, so the CO2 emission were multiplied by 1.0526 to account for other GHGs and convert the emissions to CO2 equivalent (CO2e).

As indicated in Table 5.1, Project-related construction emissions would not exceed the annual threshold of significance for GHG. Annualizing these emissions over a 40-year period would even further reduce these construction-period emissions, and GHG emission form Project construction would be less than significant (Less than Significant).

Conflict with the Applicable Air Quality Plan

The approach employed for this criterion is that the effects of a proposed Project may be evaluated based not upon the quantity of emission, but rather on whether practicable available control measures are implemented, similar to construction-related dust emissions within the San Francisco Bay air basin. Theoretically, if a project implements reduction strategies identified in AB 32, the Governor's Executive Order S-3-05, or other strategies to help toward reducing GHGs to the level proposed by the Governor and targeted by the City of Oakland, it could reasonably follow that the Project would not result in a significant contribution to the cumulative impact of global climate change. Alternatively, a project could reduce a potential cumulative contribution to GHG emissions through energy efficiency features, density and locale (e.g., compact development near transit and activity nodes of work or shopping) and by contributing to available mitigation programs, such as reforestation, tree planting, or carbon trading.

While the proposed Project and all projects of similar nature would generate GHG emissions, the City of Oakland's ongoing implementation of its Sustainability Community Development Initiative and other programs/policies will collectively reduce the levels of GHG emissions and contributions to global climate change attributable to activities throughout Oakland. ³² While no significant GHG emissions-related impacts have been identified, and no mitigation (or Standard Conditions of Approval) is required, characteristics and design features which have been included in the Project to reduce the amount of GHG emissions generated during construction and operation are provided below:

- <u>Energy Efficiency</u> The proposed Project would be required to comply with all applicable local, state, and federal regulations associated with the generation of GHG emissions and energy conservation. Construction of the proposed Project would be required to meet the requirements of pertinent City policies as identified in the City of Oakland General Plan, helping to reduce future energy demand as well as reduce the Project's contribution to regional GHG emissions.
- <u>Construction Waste</u> The proposed Project would be required to comply with the Construction and Waste Reduction Ordinance and submit a Construction and Demolition Waster Reduction Plan for review and approval. Reuse of concrete, asphalt, and other debris will reduce the amount of material introduced to area landfills.
- <u>Pedestrian Improvements</u> The Project is proposing streetscape improvements including new and increased sidewalk, curb, and gutter; right-of-way landscaping; and streetlights. These features, as outlined in the Pedestrian Master Plan adopted in November 2002, are identified as design amenities that develop a pedestrian-oriented environment that facilitate walking and transit use. As such, the Project would reduce transportation-related GHG emissions by encouraging additional pedestrian trips.

Although no significant impacts related to GHG emissions have been identified, and no mitigation is required, the Project's GHG emissions generated during construction and operation would be minimized by virtue of the existing characteristics and design features that have been included in the Project. In addition, emissions would also be reduced since the Project is subject to all the regulatory requirements, mitigation measures, and standard conditions in this Addendum that would reduce GHG emissions of the Project. These include, for example, adherence to best management construction practices and equipment use, and maximizing Provision C.3 standards regulating post-construction stormwater. (Less than Significant)

³² The City of Oakland has adopted legislation related to sustainability and reduction of GHG Emission's which include the following: the Climate Protection Ordinance; Construction and Demolition Recycling Ordinance; Green Building Ordinance; Green Fleet Resolution; Waste Reduction Resolution; Chicago Climate Exchange Resolution; Zero Waste Resolution; and the Oil Independence Resolution. Current City of Oakland programs that reduce GHG Emissions include the following: California Youth Energy Services; Residential and Business Recycling; encouraging Transit Village Development Plans; and implementation of the Pedestrian and Bicycle Master Plans.

Aesthetics

2001 Setting and Environmental Conclusions

The 2001 Negative Declaration described existing aesthetic resources along the I-880 corridor as being predominantly bordered by commercial and industrial development interspersed with residential development. The natural landscape and visual elements in the Project area had been altered, obscured or paved over. Views from the Project area included the Oakland hills to the east and the Peninsular Ranges to the west. Significant scenic resources were not identified in the Project area. The visual quality of the area was found to be generally low to moderate. I-880 was not considered a state scenic highway and there are no rock outcroppings or historic buildings within a state scenic highway affected by the project. Views of foothills to the east were found to be frequently obscured by commercial and industrial development, preventing views from forming a distinctive visual pattern. The integrity of the natural and man-made landscape and the degree to which the natural landscape was free from visual encroachment was substantially reduced by existing development. Viewers in the Project area included residents of the area and workers in the adjoining businesses. The sensitivity of residential viewers in the Project was considered moderate, and the visual sensitivity of workers was considered low to moderate.

The 2001 Neg. Dec. concluded that the project:

- would not have a substantial adverse effect on a scenic vista;
- would not substantially damage scenic resources including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway; and
- would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The Project will result in the widening of existing roadways and construction of new connector roads. All construction was described as occurring at-grade level, not affecting distant views in any direction. The Project was described as resulting in an equivalent look and feel to the existing conditions and not affecting distinct visual patterns nor will affecting the integrity of the natural or man-made landscape. The visual continuity of the area was determined to be unaffected by the project.

Since the Project was found to have no significant impacts on aesthetic resources, no mitigation measures pertaining to aesthetic resources were adopted pursuant to the 2001 Neg. Dec.

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's aesthetic setting that would involve new significant aesthetic effects or a substantial increase in the severity of previously identified significant aesthetic effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new significant aesthetic effects or a substantial increase in the severity of previously identified significant aesthetic effects.

New CEQA Thresholds

Since 2001, the City has updated CEQA Thresholds of Significance to address several additional aesthetics/visual quality concerns that were not addressed in the 2001 Neg. Dec. These new thresholds are addressed below.

a) Would the project introduce landscape that would now or in the future cast substantial shadows on existing solar collectors (in conflict with California Public Resource Code Section 25980-25986)?

Based on a field survey conducted in October 2011, there are no existing solar collectors within the Project area and its immediate surroundings. Streetscape improvements associated with the Project may include new street trees, but such trees would not be so large as to cast shadows that may adversely affect solar collectors that may be installed in the future. (*No Impact*)

b) Would the project cast shadow that substantially impairs the function of a building using passive solar heat collection, solar collectors for hot water heating, or photo-voltaic solar collectors; cast shadow that substantially impacts the beneficial use of any public or quasi-public park, lawn, garden, or open space; or cast shadow on an historic resource, as defined by CEQA Section 15064.2(a), such that the shadow would materially impair the resource's historic significance by materially altering those physical characteristics of the resource that convey its historical significance and that justify its inclusion or eligibility for listing in the National Register of Historic Places, California Register of Historic Resources, Local register of historic resources or a historical resource survey form (DPR Form 523) with a rating of 1-5?

Based on a field survey conducted in October 2011, there are no existing buildings using passive solar heat collection, solar collectors for hot water heating, photo-voltaic solar collectors, public or quasi-public parks, lawns, gardens or open spaces, or historic resource within the Project area and its immediate surroundings. New Project features may include new street trees, streetlights and traffic signals, but such features would not cast shadows that would adversely affect aesthetic resources. (*No Impact*)

c) Would the project require an exception (variance) to the policies and regulations in the General Plan, Planning Code, or Uniform Building Code, and the exception causes a fundamental conflict with policies and regulations in the General Plan, Planning Code, and Uniform Building Code addressing the provisions of adequate light related to appropriate uses?

There is nothing about the Project that would require an exception or variance, or result in an inconsistency with policies or regulations addressing the provisions of adequate light related to appropriate uses. (*No Impact*)

d) Would the project create winds exceeding 36 mph for more than 1 hour during daylight hours during the year?

A wind analysis only needs to be done if the project's height is 100 feet or greater (measured to the roof) and one of the following conditions exist: (a) the Project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the Project is located in Downtown. Since the Project is not 100 feet or greater in height, no wind impacts would occur. (*No Impact*)

Based on the above analysis, the Project will not have any new significant aesthetic effects that were not discussed in the prior 2001 Neg. Dec.

New Standard Conditions of Approval

Since 2001 the City has adopted Uniformly Applied Development Standards and Standard Conditions of Approval that apply to all development projects, and thus will also apply to this project. Although the Project would have no adverse impacts on aesthetic resources, the following standard conditions of approval would nonetheless apply:

SCA Aesth-1: Lighting Plan. *Prior to the issuance of an electrical or building permit*. The proposed lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. Plans shall be submitted to the Planning and Zoning Division and the Electrical Services Division of the Public Works Agency for review and approval. All lighting shall be architecturally integrated into the site.

SCA Aesth-2: Tree Removal Permit. *Prior to issuance of a demolition, grading, or building permit*. Prior to removal of any protected trees, per the Protected Tree Ordinance, located on the project site or in the public right-of-way adjacent to the project, the project applicant must secure a tree removal permit from the Tree Division of the Public Works Agency, and abide by the conditions of that permit.

SCA Aesth-3: Tree Replacement Plantings. *Prior to issuance of a final inspection of the building permit.* Replacement plantings shall be required for erosion control, groundwater replenishment, visual screening and wildlife habitat, and in order to prevent excessive loss of shade, in accordance with the following criteria:

- a) No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.
- b) Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye) or Umbellularia californica (California Bay Laurel) or other tree species acceptable to the Tree Services Division.
- c) Replacement trees shall be at least of twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.
- d) Minimum planting areas must be available on site as follows:
 - i. For Sequoia sempervirens, three hundred fifteen square feet per tree;
 - ii. For all other species listed in #2 above, seven hundred (700) square feet per tree.
- e) In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee as determined by the master fee schedule of the city may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians.
- f) Plantings shall be installed prior to the issuance of a final inspection of the building permit, subject to seasonal constraints, and shall be maintained by the project applicant until established. The Tree Reviewer of the Tree Division of the Public Works Agency may require a landscape plan showing the replacement planting and the method of irrigation. Any replacement planting which fails to become established within one year of planting shall be replanted at the project applicant's expense.

These Standard Conditions of Approval incorporate development policies and standards from various adopted plans, policies, and ordinances which have been found to substantially mitigate environmental effects. These Standard Conditions of Approval are mandatory City requirements and will be imposed and implemented by the project. With implementation, these Standard Conditions of Approval will even further reduce potential aesthetic resource impacts to less-than-significant levels.

Agricultural and Forest Resources

2001 Setting and Environmental Conclusions

The 2001 Negative Declaration found that there were no agricultural lands or lands subject to the Williamson Act in the Project area or its vicinity. Based on this, the 2001 Neg. Dec. concluded that the project:

- would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use;
- would not conflict with existing zoning for agricultural use or a Williamson Act contract; and
- would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use.

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's setting that would involve new significant agricultural effects or a substantial increase in the severity of previously identified significant agricultural effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new significant agricultural effects or a substantial increase in the severity of previously identified significant agricultural effects.

New CEQA Thresholds

Since 2001, the City has updated CEQA Thresholds of Significance to address several additional agricultural issues that were not addressed in the 2001 Neg. Dec. These new thresholds are addressed below.

Would the Project:

- a) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production(as defined by Government Code section 51104(g))?
- b) Result in the loss of forest land or conversion of forest land to non-forest use?

The Project site is not designated forest land or timberland, nor is it currently forested or used for forest resource purposes. There would be no impact related to the potential loss of forest or timber resources. (*No Impact*)

Based on the above analysis, the Project will not have any new significant agricultural effects that were not discussed in the prior 2001 Neg. Dec.

Biological Resources

2001 Setting and Environmental Conclusions

Pursuant to the 2001 Neg. Dec., biological resources in the Project area were identified through record searches, literature searches and field surveys. A comprehensive list of special status wildlife species with the potential to occur in the Project area was derived from a search of the California Department of Fish and Game Natural Diversity Database (CNDDB). There were no observations of any special status plant or animal species. In addition, habitat which may have supported special status species was not identified in the Project area. The Project study area did not support special status species habitats or wetland habitats. There were no creeks, swales or drainages in the Project area. Vegetation was limited to ruderal species in the roadway medians and ornamental plantings along East 8th Street. The heavily industrial and commercial nature of the Project study area made it highly unlikely that special status species would occur in the Project area. The results of field surveys confirmed that conclusion.

The 2001 Neg. Dec. concluded that the project:

- would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species;
- would not have a substantial adverse effect on any riparian habitat or other sensitive natural community;
- would not have a substantial adverse effect on federally protected wetlands;
- would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's setting that would involve new significant biological effects or a substantial increase in the severity of previously identified significant biological effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new significant biological effects or a substantial increase in the severity of previously identified significant biological effects.

New CEQA Thresholds

Since 2001, the City has updated CEQA Thresholds of Significance to address several additional biological resource issues that were not addressed in the 2001 Neg. Dec. These new thresholds are addressed below.

Would the Project:

a) Fundamentally conflict with the City of Oakland Tree Protection Ordinance (Oakland Municipal Code (OMC) Chapter 12.36) by removal of protected trees under certain circumstances

Pursuant to SCA Aesthetics-1, the project applicant must secure a tree removal permit from the Tree Division of the Public Works Agency and abide by the conditions of that permit prior to removal of any protected trees located on the Project site and/or in the public right-of-way. Pursuant to SCA Aesth-3, tree replacement plantings shall be required for erosion control, groundwater replenishment, visual screening, wildlife habitat, and in order to prevent excessive loss of shade. With compliance with these Standard Conditions of Approval, the Project would not fundamentally conflict with the City of Oakland tree Protection Ordinance (Less than Significant).

b) Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources.

The Project study area does not support any creeks, swales or drainages that would be subject to the City of Oakland Creek Protection Ordinance (**No Impact**).

Based on the above analysis of the Project against these new City CEQA Thresholds, the Project will not have any significant biological effects that were not discussed in the prior 2001 Neg. Dec.

New Standard Conditions of Approval

Since 2001 the City has adopted Uniformly Applied Development Standards and Standard Conditions of Approval that apply to all development projects, and thus will also apply to this Project. Although the Project would have no adverse impacts on biological resources, the following standard conditions of approval would nonetheless apply:

SCA Bio-1: Tree Removal During Breeding Season (*Prior to issuance of a tree removal permit*): To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of raptors shall not occur during the breeding season of March 15 and August 15.

- a) If tree removal must occur during the breeding season, all sites shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to start of work from March 15 through May 31, and within 30 days prior to the start of work from June 1 through August 15. The pre-removal surveys shall be submitted to the Planning and Zoning Division and the Tree Services Division of the Public Works Agency.
- b) If the survey indicates the potential presences of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be

allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the CDFG, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.

SCA Bio-2: Tree Protection During Construction (*Prior to issuance of a demolition, grading, or building permit*): Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist:

- a) Before the start of any clearing, excavation, construction or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the City Tree Reviewer. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.
- b) Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the City Tree Reviewer from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree.
- c) No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the Tree Reviewer from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the tree reviewer. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.
- d) Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.
- e) If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Agency of such damage. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.
- f) All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.

These Standard Conditions of Approval incorporate development policies and standards from various adopted plans, policies, and ordinances which have been found to substantially mitigate environmental effects. These Standard Conditions of Approval are mandatory City requirements and will be imposed and implemented by the project. With implementation, these Standard Conditions of Approval will even further reduce potential biological resource impacts to less-than-significant levels.

Cultural and Historic Resources

2001 Setting and Environmental Conclusions

Pursuant to the 2001 Negative Declaration, a thorough investigation of existing cultural and historic resources within the Project area was conducted. A background record search of the California Inventory of Historic Resources (Northwest Information Center at Sonoma State University, June 2000) and the Sacred Lands file (Native American Heritage Commission, Sacramento, June 200) located no previously recorded properties or sites containing cultural resources within the Project area or within ¹/₂ mile of the Project area. Textual sources and historic maps (Bancroft Library; Earth Sciences Map Library at UC Berkeley, California State Library in Sacramento, and the Historic General Land Office at the BLM) were consulted. No historic sites were located through these sources. The Alameda County Historical Society and the Oakland Cultural Heritage Survey were contacted for information regarding cultural resources in or near the Project area, and the Historic Property Survey Report for the Caltrans' High Street Overhead Seismic Retrofit Project (Caltrans 1999) was also consulted. No historic sites were located through these searches. The National Register and California Historical Landmark listings (as of November 2000) were consulted to determine whether previously identified historic properties or districts are located in or adjacent to the Project area. No historic sites were located through these sources. The entire Project area was surveyed for historical resources (Caltrans 1999 and Garcia and Associates, August and June 2000). These surveys found 34 resources in the Project area considered as historical resources or historic properties, but none of these resources met the eligibility criteria for listing on either the California Register of Historical Resources or the National Register of Historic Places.

The 2001 Neg. Dec concluded that, while there are no known historical resources or historic properties within the Project area, the Project may cause adverse changes to the significance of unknown historical resources or historic properties. The Project area was considered as having the potential to contain unknown archaeological resources from both prehistoric and historical time periods. Portions of archaeological resources could be damaged and destroyed by trenching, drilling or grading through cultural deposits, or by heavy vehicular movement. These impacts were identified as being significant, but capable of being reduced to a less-than-significant level through implementation of mitigation measures adopted as part of the 2001 Neg. Dec. These mitigation measures included:

- MM Cultural-1: Identify and Evaluate Archaeological Resources for California Register of Historical Resources Eligibility. Archival research has indicated a high probability of the presence of archaeological resources within the Project area. Surface survey is an inadequate method for defining and evaluating these resources. A program of subsurface testing, utilizing traditional or remote sensing methods, will be designed and implemented by a Registered Professional Archaeologist. Testing will determine the nature and extent of archaeological deposits. OR -
- **MM Cultural-2: Monitor Ground Disturbing Project Activities**. Ground disturbing activities include, at a minimum, trenching, drilling, and grading. Monitoring is required within any project area for which Mitigation Measure 1 has not been completed. Monitors must have a minimum of a bachelor's degree in anthropology or archaeology and two years of professional experience. Monitors must be under direct supervision of a Registered Professional Archaeologist. If cultural resources are located during monitoring, monitors will immediately halt construction and notify the Registered Professional Archaeologist. The Registered Professional Archaeologist will inspect the find and implement Mitigation Measure 1. If the resource contains human remains, the Registered Professional Archaeologist also will implement Mitigation Measure 3.

MM Cultural-3: Call the County Coroner. If human remains are found at any time during project activities, all work will immediately stop within 250 feet of the find. A Registered Professional Archaeologist will be notified immediately and will, in tum, immediately notify the Alameda County Coroner in compliance with Section 7050.5 of the California Health and Safety Code. Upon the completion of compliance with all relevant sections of the California Health and Safety Code, the Registered Professional Archaeologist will implement Mitigation Measure HR1.

These mitigation measures are replaced by Standard Conditions of Approval Cultural-1 through -3 (see discussion, below).

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's setting that would involve new significant cultural or historic effects or a substantial increase in the severity of previously identified significant cultural or historic resource effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new significant cultural or historic effects or a substantial increase in the severity of previously identified significant cultural or historic effects.

New Standard Conditions of Approval

Since 2001 the City has adopted Uniformly Applied Development Standards and Standard Conditions of Approval that apply to all development projects, and thus will also apply to this project.

The City's Standard Conditions of Approval relevant to cultural and historic resources are listed below, and are incorporated and required as part of the Project. These Standard Conditions of Approval provide equal or more effective mitigation of cultural and historic impacts, and replace or supersede the mitigation measures adopted pursuant to the 2001 Neg. Dec.

SCA Cultural-1: Archaeological Resources: Ongoing throughout demolition, grading, and/or construction. Pursuant to CEQA Guidelines section 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted.

- a. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Oakland. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.
- b. In considering any suggested measure proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the project applicant shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or

infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while measure for historical resources or unique archaeological resources is carried out.

c. Should an archaeological artifact or feature be discovered on-site during project construction, all activities within a 50-foot radius of the find would be halted until the findings can be fully investigated by a qualified archaeologist to evaluate the find and assess the significance of the find according to the CEQA definition of a historical or unique archaeological resource. If the deposit is determined to be significant, the project applicant and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate measure, subject to approval by the City of Oakland, which shall assure implementation of appropriate measure measures recommended by the archaeologist. Should archaeologically-significant materials be recovered, the qualified archaeologist shall recommend appropriate analysis and treatment, and shall prepare a report on the findings for submittal to the Northwest Information Center.

SCA Cultural-2: Paleontological Resources. Ongoing throughout demolition, grading, and/or construction. In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 1995,1996)). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval.

SCA Cultural-3: Human Remains. Ongoing throughout demolition, grading, and/or construction. In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.

These Standard Conditions of Approval incorporate development policies and standards from various adopted plans, policies, and ordinances which have been found to substantially mitigate environmental effects. These Standard Conditions of Approval are mandatory City requirements and will be imposed and implemented by the project. With implementation, these Standard Conditions of Approval will reduce potential cultural resource and historic resource impacts to less-than-significant levels.

Geology and Soils

2001 Setting and Environmental Conclusions

The 2001 Neg. Dec described the existing geologic setting for the Project as being located in the San Francisco Bay Area, one of the more seismically active regions of California. The Project area's main geologic structures are associated with three major faults: the Calaveras, Hayward and San Andreas faults. The maximum credible earthquake in the Project area would occur on the San Andreas Fault at a Richter scale measurement of approximately 8.25. The Hayward fault zone is approximately 3 miles east of the Project site. The Hayward fault has long been documented as active, with major earthquakes in 1836 and 1868. The other two faults have also been historically active, but are farther from the project: the Calaveras fault lies approximately 15 miles east of I-880 and the San Andreas Fault is approximately 17 miles west of I-880. The Project area generally consists of alluvial soils that have been formed by years of erosion and sediment transport from the hills. They are characterized by low erosion potential.

The 2001 Neg. Dec concluded that the project:

- would have no impact regarding the rupture of a known earthquake fault;
- would have no impact regarding landslides;
- would not result in substantial soil erosion or the loss of topsoil;
- would not be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project;
- would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- would have no impact regarding soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems;
- would have a less than significant effect regarding strong seismic-related ground shaking;
- would have a less than significant effect regarding seismic-related ground failure including liquefaction; and
- would have a less than significant effect related to expansive soil creating substantial risks to life or property.

The 2001 Neg Dec concluded that the Project site was relatively close to two active faults (the Hayward and San Andreas), and would be subjected to strong ground shaking in the event of a major earthquake originating on these faults. The hazards associated with the proposed Project were considered to be the same as those that would occur in any seismically active area of California. It concluded that the proposed Project would be designed to meet current seismic safety standards and thus would be expected to withstand the maximum credible earthquake. Applicable seismic design criteria for the freeway and interchange improvements would ensure that the interchange improvements would be serviceable when subjected to peak acceleration during an earthquake. While the 2001 Neg. Dec. concluded that the Project would result in minor changes to existing topography (some fill would be used to support portions of the proposed ramps), the relatively flat terrain and the fact that the Project would not be located on unstable or expansive soil these topographic changes were not found to be environmental effects resulting from construction of the project.

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's setting that would involve new significant effects to geologic or a substantial increase in the severity of previously identified significant geological resource effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new significant geologic effects or a substantial increase in the severity of previously identified significant geologic effects.

New Standard Conditions of Approval

Since 2001 the City has adopted Uniformly Applied Development Standards and Standard Conditions of Approval that apply to all development projects, and thus will also apply to this project. The City's Standard Conditions of Approval relevant to geology and soils are listed below, and are incorporated and required as part of the Project. These Standard Conditions of Approval are consistent with and supplement the required seismic safety standards and applicable seismic design criteria for freeway and interchange improvements as indicated in the 2001 Neg. Dec.

SCA Geo-1: Soils Report. A preliminary soils report for each construction site within the project area shall be required as part of the project and submitted for review and approval by the Building Services Division. The soils reports shall be based, at least in part, on information obtained from on-site testing. Specifically the minimum contents of the report should include:

- a) Logs of borings and/or profiles of test pits and trenches:
 - i. The minimum number of borings acceptable, when not used in combination with test pits or trenches, shall be two (2), when in the opinion of the Soils Engineer such borings shall be sufficient to establish a soils profile suitable for the design of all the footings, foundations, and retaining structures.
 - ii. The depth of each boring shall be sufficient to provide adequate design criteria for all proposed structures.
 - iii. All boring logs shall be included in the soils report.
- b) Test pits and trenches
 - iv. Test pits and trenches shall be of sufficient length and depth to establish a suitable soils profile for the design of all proposed structures.
 - v. Soils profiles of all test pits and trenches shall be included in the soils report.
- c) A plat shall be included which shows the relationship of all the borings, test pits, and trenches to the exterior boundary of the site. The plat shall also show the location of all proposed site improvements. All proposed improvements shall be labeled.
- d) Copies of all data generated by the field and/or laboratory testing to determine allowable soil bearing pressures, sheer strength, active and passive pressures, maximum allowable slopes where applicable and any other information which may be required for the proper design of

foundations, retaining walls, and other structures to be erected subsequent to or concurrent with work done under the grading permit.

- e) Soils Report. A written report shall be submitted which shall include, but is not limited to, the following:
 - i. Site description;
 - ii. Local and site geology;
 - iii. Review of previous field and laboratory investigations for the site;
 - iv. Review of information on or in the vicinity of the site on file at the Information Counter, City of Oakland, Office of Planning and Building;
 - v. Site stability shall be addressed with particular attention to existing conditions and proposed corrective attention to existing conditions and proposed corrective actions at locations where land stability problems exist;
 - vi. Conclusions and recommendations for foundations and retaining structures, resistance to lateral loading, slopes, and specifications, for fills, and pavement design as required;
 - vii. Conclusions and recommendations for temporary and permanent erosion control and drainage. If not provided in a separate report they shall be appended to the required soils report;
 - viii. All other items which a Soils Engineer deems necessary;
 - ix. The signature and registration number of the Civil Engineer preparing the report.
- f) The Director of Planning and Building may reject a report that she/he believes is not sufficient. The Director of Planning and Building may refuse to accept a soils report if the certification date of the responsible soils engineer on said document is more than three years old. In this instance , the Director may be require that the old soils report be recertified, that an addendum to the soils report be submitted, or that a new soils report be provided.

SCA Geo-2: Geotechnical Report. A site-specific, design level, Landslide or Liquefaction geotechnical investigation for each construction site within the project area shall be required as part of the project and submitted for review and approval by the Building Services Division. Specifically:

- a) Each investigation shall include an analysis of expected ground motions at the site from identified faults. The analyses shall be accordance with applicable City ordinances and polices, and consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from identified faults.
- b) The investigations shall determine final design parameters for the walls, foundations, foundation slabs, surrounding related improvements, and infrastructure (utilities, roadways, parking lots, and sidewalks).
- c) The investigations shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer, geotechnical engineer, shall be included in the final design, as approved by the City of Oakland.
- d) The geotechnical report shall include a map prepared by a land surveyor or civil engineer that shows all field work and location of the "No Build" zone. The map shall include a statement that the locations and limitations of the geologic features are accurate representations of said features as they exist on the ground, were placed on this map by the

surveyor, the civil engineer or under their supervision, and are accurate to the best of their knowledge.

- e) Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the project's design phase, shall be incorporated in the project.
- f) Final seismic considerations for the site shall be submitted to and approved by the City of Oakland Building Services Division prior to commencement of the project.
- g) A peer review is required for the Geotechnical Report. Personnel reviewing the geologic report shall approve the report, reject it, or withhold approval pending the submission by the applicant or subdivider of further geologic and engineering studies to more adequately define active fault traces.

Hazards and Hazardous Materials

2001 Setting and Environmental Conclusions

Pursuant to the 2001 Neg. Dec, a preliminary site investigation was conducted to identify potential contaminant sources within the Project area that may affect the design and construction of the project. A database search of the Project area (Environmental Data Resources, Inc.) revealed that 12 sites were listed within the general vicinity of the Project area. Seven of the twelve sites were within or adjacent to the Project area, and three sites were reported to have on-going environmental activities requiring further document review. These three sites included the Ekotek Lube at 4299 Alameda Avenue, the Shell Gas Station at 630 High Street, and the Exxon Gas Station at 720 High Street.

4299 Alameda Avenue

As of 2001, the Ekotek Lube site was vacant and fenced for safety and security. Results of remedial investigations conducted on that site indicated that the site's soil and groundwater was contaminated with petroleum hydrocarbons, benzene, toluene, ethylbenzene, zylenes (BTEX), chlorinated solvents, and PCBs. The San Francisco Bay Regional Water Quality Control Board (RWCQB) had adopted Site Cleanup Requirements (Order No. 98-093) for the Ekotek site including an adopted risk management plan, implementing actions and a self-monitoring remediation program. Risk management actions proposed for the site include a passive hydrocarbon recovery system, a pre-redevelopment risk management plan calling for maintaining the paving and fencing on the site, site-specific health and safety worker planning requirements, risk management after site redevelopment, and recordation of an environmental restriction and covenant with the deed of the site.

630 High Street and 720 High Street

The Shell and Exxon station sites involved active leaking underground storage tanks (LUSTs). The Shell Station site was designated as a non-attainment zone by the Alameda County Department of Environmental Health. The Exxon Station site was undergoing active remediation and monitoring. At the time, Exxon proposed closure of the treatment system and a risk-based closure assessment for the site.

In addition to the sites discussed above, aerially deposited lead from automobile exhaust and heavy metals from roadway runoff are likely to occur in the Project area.

The 2001 Neg Dec concluded that the project:

- would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- would not be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and thus would not result in a safety hazard for people residing or working in the Project area;
- would not be located within the vicinity of a private airstrip, and thus would not result in a safety hazard for people residing or working in the Project area;
- would have no impact regarding impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan; and
- would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Potential Impacts

The 2001 Neg. Dec did conclude that two sites (the Ekotek Lube at 4200 Alameda Ave. and the Exxon Station at 720 High St.) listed as "active cases" were located within or immediately adjacent to the Project area and that these sites may contain or be known to have contained one or more underground storage tanks. These sites (identified as Category A sites) posed a potential impact to soil and/or groundwater within the Project area. A third site, the Shell Station at 630 High Street site, was not listed as an active hazardous waste site where characterization, cleanup, and/or monitoring was ongoing. However, the site (identified as a Category B site) was known to contain or to have contained one or more underground storage tanks.

Other sites in the vicinity of the project, including Owens Illinois, Inc.at 3600 Alameda Avenue, Leamer Co., at 3675 Alameda Ave., United States Cold Storage at 3925 Alameda Ave., Super Kmart at 4000 Alameda Ave., Cobbledick Kibbe at 500 High St., Southern Pacific Railroad property at 744/758 High St., American Can Co. at 3801 E. 8th St., and American Pole Products Div. at 4417 Oakport St., exhibited low potential for hazardous waste contamination or were too far from the proposed project's alignment to pose a substantial environmental threat to the right-of-way. For these sites (identified as Category C sites), a Preliminary Site Assessment was not recommended. The 2001 Neg. Dec did recommend that the environmental status of these sites be reviewed and verified at the time of right-of-way acquisition.

The 2001 Neg. Dec. also identified the potential for transport, use or disposal of hazardous materials during construction. Aerially deposited lead was generally found in surface soil along ramps and freeways at concentrations above those considered potentially hazardous to human health or the environment. Pursuant to regulations applicable at the time, any soil generated during construction activities would be subject to the soil reuse variance issued by Cal EPA, Department of Toxic Substances Control (DTSC). Only soils that contain lead within prescribed ranges as specified in the variance may be reused. In accordance with the variance, any lead-affected soil reused in the Project right-of-way cannot be placed within 0.7 meter (2.3 feet) of the groundwater table and would be covered with pavement or clean soil. Soil that cannot be reused within the conditions of the variance would be disposed of at an authorized disposal or treatment facility.

Finally, the 2001 Neg. Dec found that construction activities would be conducted with diesel-powered equipment, and that a limited amount of fueling and maintenance of equipment would be done on-site during construction. Transport, storage, handling, and use of fuels, lubricants, and other chemicals at the

site could create the potential for accidental release of hazardous materials. A required Spill and Pollution Prevention Plan would be prepared by the contractor prior to the start of earthwork activities and submitted to Caltrans for review and approval.

Mitigation Measures

Future actions were recommended pursuant to the following recommended mitigation measures:

- **MM Haz-1: Soils and Groundwater Management Plan.** Plans and specifications for the Project shall include a soils and groundwater management plan to assure that if contaminated soils or groundwater is encountered during construction, it shall be managed according to state, regional or local requirements. The Public Works Department shall oversee the review and approval of these plans and specifications, and shall monitor compliance during construction.
- MM Haz-2: Mitigation for Category A Sites (the Ekotek Lube at 4200 Alameda Ave. and the Exxon Station at 720 High St.): Prior to right-of-way acquisition of Category A sites, steps will be taken to verify that the site contamination has not impacted the Project area, including but not limited to the following actions:
 - a) Performance of a Preliminary Site Assessment;
 - b) Verification of extent of contamination to determine of the source of contamination is included in the area of purchase or if only contaminated material and/or groundwater is involved;
 - c) Location and removal of potential sources of contamination, such as underground storage tanks, piping, etc.;
 - d) Removal of contaminated soil and/or groundwater impacting the Project area; and
 - e) Control of contaminated soil and/or groundwater to avoid generation of contaminated spoils during construction. Acquired right-of-way will be free of hazardous waste. If this is not possible, the estimated cost of cleanup will be deducted from the cost of acquiring the property
- **MM Haz-3: Mitigation for Category B Sites (the Shell Station at 630 High Street):** Prior to right-ofway acquisition of Category B sites, steps will be taken to see that existing underground storage tanks and associated piping are removed and soil or groundwater contamination, if any is present, is properly evaluated and monitored, or remedied in accordance with state and local laws and regulations.

Mitigation was not required for Category C sites.

These mitigation measures are replaced by Standard Conditions of Approval Haz-1 through -10 (see discussion below).

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's setting that would involve new significant effects regarding hazards or hazardous materials, or a substantial increase in the severity of previously identified significant effect pertaining to hazard or hazardous materials.

New Information

New information has been developed which provides additional detail regarding certain of those sites which were known or were suspected of containing one or more underground storage tanks which may have impacted soil and/or groundwater within the Project area, as described in the 2001 Neg. Dec. This new information is included in the following reports:

- Phase I Environmental Site Assessment Report, 4200 Alameda Avenue (Ninyo & Moore, December 7, 2009)
- Phase I Environmental Site Assessment Report and Hazardous Building Material Survey, 615 High Street (Ninyo & Moore, December 11, 2009)
- Phase II Environmental Site Assessment, 615 High Street (Ninyo & Moore, March 13, 2010)

This new information is summarized as follows:

4200 Alameda Avenue Site

The December 7, 2009 Phase I ESA was performed on the property at 4200 Alameda Avenue (identified in the 2001 Neg. Dec. as Ekotek Lube) and a narrow strip of land located between the 4200 Alameda Avenue property and Alameda Avenue. These properties were referred to in the Phase I ESA as the "site", consisting of approximately 48,000 square feet. Due to contamination related to historical site use, an Environmental Restriction and Covenant has been placed on the site by the RWQCB, placing restrictions on the use of the site for residential, hospital, school and groundwater use without first obtaining RWQCB approval, and there is sufficient information available to indicate that the soil and groundwater beneath the site is a recognized environmental concern (REC). The RWQCB has required remediation of groundwater and, depending upon the results of further investigations, a request for more aggressive remediation may be forthcoming. A remediation Workplan has been prepared and conditionally accepted by the RWQCB. Data resulting from this Workplan may become available for areas within the proposed roadway construction, but if construction activities occur outside of the Workplan limits, additional soil and/or groundwater sampling is recommended to evaluate groundwater conditions and the potential for construction worker exposure.

615 High Street Site

The December 11, 2009 Phase I ESA and Building Survey was performed on the property at 615 High Street, a triangular shaped property located adjacent to the western corner of the Alameda Avenue/ High Street intersection, consisting of approximately 14,600 square feet. Existing databases indicated evidence of an 8,000 gallon underground storage tank (UST) of unspecified contents (presumably paint thinner) had historically been located at the site, and which may or may not have been removed. The reconnaissance also identified lead-based and lead-containing paint (LBP and LCP) and the possibility of asbestos-containing materials (ACM) within the on-site structures. Groundwater beneath this site may be impacted by the former oil recycling facility at 4200 Alameda Avenue. The Phase I study recommends further records search to document the closure of the former UST, and if no documentation can be found, site evaluation should be conducted to ascertain the location of the tank, with collection of surrounding soil and groundwater samples; collection of groundwater samples from along the northern site boundary should be analyzed for constituents of concern related to the former oil recycling facility at 4200 Alameda Avenue; and shallow soil samples should be collected in the area of the planned roadway construction. The Phase I study also recommended that prior to any renovation or demolition work that may disturb

identified LBP/LCP, a licensed lead abatement contractor should stabilize or remove the LBP in compliance with applicable laws, regulations and standards; and that materials suspected of containing ACM should be assumed to be hazardous and handled as such.

The March 13, 2010 Phase II Environmental Site Assessment for 615 High Street followed-up on several of the recommendations form the 2009 Phase I ESA with additional soil and groundwater sampling. The 2010 Assessment concluded that lead has impacted shallow soil in the vicinity of the property and some of this soil is classified as hazardous waste and should be disposed of in a Class I landfill. Groundwater throughout the site has also been impacted with both total petroleum hydrocarbons (TPH) compounds and volatile organic compounds (VOC). The Phase II ESA recommended preparation of a Soil and Groundwater Management Plan for use during Project grading and excavation activities, outlining the responsibilities of the City and the contractor, and discussing site-specific soil and groundwater management protocols including soil stockpiling and groundwater dewatering activities.

Conclusions

Although these subsequent reports and investigations have yielded more detailed information and characterization of the potential for hazardous materials in the Project area, this new information does not present any new significant effects regarding hazards or hazardous materials, or a substantial increase in the severity of previously identified significant effect pertaining to hazard or hazardous materials. This information is consistent with the site characterizations completed in 2001, and has been conducted in furtherance of the mitigation measures as recommended in the 2001 Neg. Dec.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new significant effects regarding hazards or hazardous materials, or a substantial increase in the severity of previously identified significant effect pertaining to hazard or hazardous materials.

New Standard Conditions of Approval

Since 2001 the City has adopted Uniformly Applied Development Standards and Standard Conditions of Approval that apply to all development projects, and thus will also apply to this Project. The City's Standard Conditions of Approval relevant to hazards and hazardous materials are listed below, and are incorporated and required as part of the Project. These Standard Conditions of Approval are consistent with the recommendations of the 2009 and 2010 Phase I and Phase II ESAs, and provide equal or more effective mitigation of impacts related to hazards and hazardous materials than the mitigation measures adopted pursuant to the 2001 Neg. Dec., and thus replace or supersede the 2001 mitigation measures.

SCA Haz-1: Site Review by the Fire Services Division (*Prior to the issuance of demolition, grading or building permit*). The project applicant shall submit plans for site review and approval to the Fire Prevention Bureau Hazardous Materials Unit. Property owner may be required to obtain or perform a Phase II hazard assessment.

SCA Haz-2: Phase I and/or Phase II Reports (*Prior to issuance of a demolition, grading, or building permit*): Prior to issuance of demolition, grading, or building permits the project applicant shall submit to the Fire Prevention Bureau, Hazardous Materials Unit, a Phase I environmental site assessment report, and a Phase II report if warranted by the Phase I report for the project site. The

reports shall make recommendations for remedial action, if appropriate, and should be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer.

SCA Haz-3: Lead-Based Paint/Coatings, Asbestos, or PCB Occurrence Assessment (*Prior to issuance of any demolition, grading or building permit*): The project applicant shall submit a comprehensive assessment report to the Fire Prevention Bureau, Hazardous Materials Unit, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACM), lead-based paint, and any other building materials or stored materials classified as hazardous waste by State or federal law.

SCA Haz-4: Environmental Site Assessment Reports Remediation (*Prior to issuance of a demolition, grading, or building permit*): If the environmental site assessment reports recommend remedial action, the project applicant shall:

- a) Consult with the appropriate local, State, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination, groundwater contamination, or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps.
- b) Obtain and submit written evidence of approval for any remedial action if required by a local, State, or federal environmental regulatory agency.
- c) Submit a copy of all applicable documentation required by local, State, and federal environmental regulatory agencies, including but not limited to: permit applications, Phase I and II environmental site assessments, human health and ecological risk assessments, remedial action plans, risk management plans, soil management plans, and groundwater management plans.

SCA Haz-5: Lead-based Paint Remediation (*Prior to issuance of any demolition, grading or building permit*): If lead-based paint is present, the project applicant shall submit specifications to the Fire Prevention Bureau, Hazardous Materials Unit signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: Cal/OSHA's Construction Lead Standard, 8 CCR1532.1 and DHS regulation 17 CCR Sections 35001 through 36100, as may be amended.

SCA Haz-6: Other Materials Classified as Hazardous Waste (*Prior to issuance of any demolition, grading or building permit*): If other materials classified as hazardous waste by State or federal law are present, the project applicant shall submit written confirmation to Fire Prevention Bureau, Hazardous Materials Unit that all State and federal laws and regulations shall be followed when profiling, handling, treating, transporting and/or disposing of such materials.

SCA Haz-7: Health and Safety Plan per Assessment (*Prior to issuance of any demolition, grading or building permit*): If the required lead-based paint/coatings, asbestos, or PCB assessment finds presence of such materials, the project applicant shall create and implement a health and safety plan to protect workers from risks associated with hazardous materials during demolition, renovation of affected structures, and transport and disposal.

SCA Haz-8: Best Management Practices for Soil and Groundwater Hazards (Ongoing throughout demolition, grading, and construction activities): The project applicant shall implement all of the following Best Management Practices (BMPs) regarding potential soil and groundwater hazards.

a) Soil generated by construction activities shall be stockpiled onsite in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must

be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate offsite facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state and federal agencies laws, in particular, the Regional Water Quality Control Board (RWQCB) and/or the Alameda County Department of Environmental Health (ACDEH) and policies of the City of Oakland.

- b) Groundwater pumped from the subsurface shall be contained onsite in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies of the City of Oakland, the RWQCB and/or the ACDEH. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building (pursuant to the Standard Condition of Approval regarding Radon or Vapor Intrusion from Soil and Groundwater Sources
- c) Prior to issuance of any demolition, grading, or building permit, the applicant shall submit for review and approval by the City of Oakland, written verification that the appropriate federal, state or county oversight authorities, including but not limited to the RWQCB and/or the ACDEH, have granted all required clearances and confirmed that the all applicable standards, regulations and conditions for all previous contamination at the site. The applicant also shall provide evidence from the City's Fire Department, Office of Emergency Services, indicating compliance with the Standard Condition of Approval requiring a Site Review by the Fire Services Division pursuant to City Ordinance No. 12323, and compliance with the Standard Condition of Approval requiring a Phase I and/or Phase II Reports.

SCA Hazards-9: Hazards Best Management Practices (*Prior to commencement of demolition, grading, or construction*). The project applicant and construction contractor shall ensure that construction Best Management Practices (BMPs) are implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:

- a) Follow manufacture's recommendations on use, storage, and disposal of chemical products used in construction;
- b) Avoid overtopping construction equipment fuel gas tanks;
- c) During routine maintenance of construction equipment, properly contain and remove grease and oils;
- d) Properly dispose of discarded containers of fuels and other chemicals.
- e) Ensure that construction would not have a significant impact on the environment or pose a substantial health risk to construction workers and the occupants of the proposed development. Soil sampling and chemical analyses of samples shall be performed to determine the extent of potential contamination beneath all UST's, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition, or construction activities would potentially affect a particular development or building.
- f) If soil, groundwater or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notification of regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.

SCA Haz-10: Radon or Vapor Intrusion from Soil or Groundwater Sources (*Ongoing*): The project applicant shall submit documentation to determine whether radon or vapor intrusion from the groundwater and soil is located on-site as part of the Phase I documents. The Phase I analysis shall be submitted to the Fire Prevention Bureau, Hazardous Materials Unit, for review and approval, along with a Phase II report if warranted by the Phase I report for the project site. The reports shall make recommendations for remedial action, if appropriate, and should be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer. Applicant shall implement the approved recommendations.

SCA Haz-11: Asbestos Removal in Structures (*Prior to issuance of a demolition permit*): If asbestoscontaining materials (ACM) are found to be present in building materials to be removed, demolition and disposal, the project applicant shall submit specifications signed by a certified asbestos consultant for the removal, encapsulation, or enclosure of the identified ACM in accordance with all applicable laws and regulations, including but not necessarily limited to: California Code of Regulations, Title 8; Business and Professions Code; Division 3; California Health & Safety Code 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended.

Hydrology and Water Quality

2001 Setting and Environmental Conclusions

According to the 2001 Neg. Dec, the Project area did not cross any waterways with floodplains defined by the Federal Emergency Management Agency (FEMA). The storm-water runoff generated on the roads drained into the city's storm water drainage system.

The 2001 Neg. Dec concluded that the project:

- would have no impact regarding a significant increase in pollutant discharges to receiving waters during or following construction;
- would have no impact regarding substantially depleting groundwater supplies or interfere substantially with groundwater recharge;
- would have no impact regarding substantially altering the existing drainage pattern of the site or area, including the alteration of the course of a stream or river in a manner which would result in substantial erosion or siltation on- or off-site;
- would have no impact regarding substantially increasing the rate or amount of surface runoff; e) would have no impact regarding creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems due to changes in runoff flow rates;
- would have no impact regarding an increase in any pollutant for which a water body is listed as impaired;
- would have no impact regarding placing housing within a 100-year flood hazard area;
- would have no impact regarding placing structures within a 100-year flood hazard area which would impede or redirect flood flows;
- would have no impact regarding exposing people or structures to a significant risk of loss, injury or death involving flooding; and

• would have no impact regarding inundation by seiche, tsunami, or mudflow.

The 2001 Neg Dec did find that the Project could impact water quality as a result of construction activities, storm water runoff, and spills of hazardous materials. However, Project compliance with a required NPDES permit and adherence to erosion control measures following Caltrans Standards and Specifications would reduce or eliminate potential construction-related impacts.

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's setting that would involve new significant hydrology effects, or a substantial increase in the severity of previously identified significant hydrology effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new significant hydrology effects, or a substantial increase in the severity of previously identified significant hydrology effect.

New Standard Conditions of Approval

Since 2001 the City has adopted Uniformly Applied Development Standards and Standard Conditions of Approval that apply to all development projects, and thus will also apply to this project. The City's Standard Conditions of Approval relevant to hydrology and water quality are listed below, and are incorporated and required as part of the Project. These Standard Conditions of Approval provide equal or more effective mitigation of impacts related to hydrology, and are consistent with and supplement the required NPDES permit and erosion control measures pursuant to Caltrans Standards and Specifications as indicated in the 2001 Neg. Dec.

SCA Hydro-1: Stormwater Pollution Prevention Plan (SWPPP) (*Prior to and ongoing throughout demolition, grading, and/or construction activities*): The project applicant must obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the State Water Resources Control Board (SWRCB). The project applicant must file a notice of intent (NOI) with the SWRCB. The project applicant will be required to prepare a stormwater pollution prevention plan (SWPPP) and submit the plan for review and approval by the Building Services Division. At a minimum, the SWPPP shall include a description of construction materials, practices, and equipment storage and maintenance; a list of pollutants likely to contact stormwater; site-specific erosion and sedimentation control practices; a list of provisions to eliminate or reduce discharge of materials to stormwater; Best Management Practices (BMPs), and an inspection and monitoring program. Prior to the issuance of any construction-related permits, the project applicant shall submit to the Building Services Division a copy of the SWPPP and evidence of submittal of the NOI to the SWRCB. Implementation of the SWPPP shall start with the commencement of construction and continue through the completion of the project. After construction is completed, the project applicant shall submit a notice of termination to the SWRCB.

SCA Hydro-2: Erosion, Sedimentation, and Debris Control Measures (*Prior to issuance of demolition, grading, or construction-related permit*): The project applicant shall submit an erosion and sedimentation control plan for review and approval by the Building Services Division. All work

shall incorporate all applicable "Best Management Practices (BMPs) for the construction industry, and as outlined in the Alameda Countywide Clean Water Program pamphlets, including BMP's for dust, erosion and sedimentation abatement per Chapter Section 15.04 of the Oakland Municipal Code. The measures shall include, but are not limited to, the following:

- a) On sloped properties, the downhill end of the construction area must be protected with silt fencing (such as sandbags, filter fabric, silt curtains, etc.) and hay bales oriented parallel to the contours of the slope (at a constant elevation) to prevent erosion into the street, gutters, storm drains.
- b) In accordance with an approved erosion control plan, the project applicant shall implement mechanical and vegetative measures to reduce erosion and sedimentation, including appropriate seasonal maintenance. One hundred (100) percent degradable erosion control fabric shall be installed on all graded slopes to protect and stabilize the slopes during construction and before permanent vegetation gets established. All graded areas shall be temporarily protected from erosion by seeding with fast growing annual species. All bare slopes must be covered with staked tarps when rain is occurring or is expected.
- c) Minimize the removal of natural vegetation or ground cover from the site in order to minimize the potential for erosion and sedimentation problems. Maximize the replanting of the area with native vegetation as soon as possible.
- d) Install filter materials acceptable to the Engineering Division at the storm drain inlets nearest to the project site prior to the start of the wet weather season (October 15); site dewatering activities; street washing activities; saw cutting asphalt or concrete; and in order to retain any debris flowing into the City storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding.
- e) Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains.
- f) Direct and locate tool and equipment cleaning so that wash water does not discharge into the street, gutters, or stormdrains.
- g) Create a contained and covered area on the site for storage of bags of cement, paints, flammables, oils, fertilizers, pesticides, or any other materials used on the project site that have the potential for being discharged to the storm drain system by the wind or in the event of a material spill. No hazardous waste material shall be stored on site.
- h) Gather all construction debris on a regular basis and place them in a dumpster or other container which is emptied or removed on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater pollution.
- i) Remove all dirt, gravel, refuse, and green waste from the sidewalk, street pavement, and storm drain system adjoining the project site. During wet weather, avoid driving vehicles off paved areas and other outdoor work.
- j) Broom sweep the street pavement adjoining the project site on a daily basis. Caked-on mud or dirt shall be scraped from these areas before sweeping. At the end of each workday, the entire site must be cleaned and secured against potential erosion, dumping, or discharge to the street, gutter, storm drains.
- k) All erosion and sedimentation control measures implemented during construction activities, as well as construction site and materials management shall be in strict accordance with the control standards listed in the latest edition of the Erosion and Sediment Control Field Manual published by the Regional Water Quality Board (RWQB).
- I) All erosion and sedimentation control measures shall be monitored regularly by the project applicant. The City may require erosion and sedimentation control measures to be

inspected by a qualified environmental consultant (paid for by the project applicant) during or after rain events. If measures are insufficient to control sedimentation and erosion then the project applicant shall develop and implement additional and more effective measures immediately

SCA Hydro-3: Post-Construction Stormwater Management Plan (*Prior to issuance of building permit* (*or other construction-related permit*): The applicant shall comply with the requirements of Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) permit issued to the Alameda Countywide Clean Water Program. The applicant shall submit with the application for a building permit (or other construction-related permit) a completed Construction-Permit-Phase Stormwater Supplemental Form to the Building Services Division. The project drawings submitted for the building permit (or other construction-related permit) shall contain a stormwater management plan, for review and approval by the City, to manage stormwater run-off and to limit the discharge of pollutants in stormwater after construction of the project to the maximum extent practicable.

- a) The post-construction stormwater management plan shall include and identify the following:
 - x. All proposed impervious surface on the site;
 - xi. Anticipated directional flows of on-site stormwater runoff; and
 - xii. Site design measures to reduce the amount of impervious surface area and directly connected impervious surfaces; and
 - xiii. Source control measures to limit the potential for stormwater pollution;
 - xiv. Stormwater treatment measures to remove pollutants from stormwater runoff; and
 - xv. Hydromodification management measures so that post-project stormwater runoff does not exceed the flow and duration of pre-project runoff, if required under the NPDES permit.
- b) The following additional information shall be submitted with the post-construction stormwater management plan:
 - i. Detailed hydraulic sizing calculations for each stormwater treatment measure proposed; and
 - ii. Pollutant removal information demonstrating that any proposed manufactured/mechanical (i.e. non-landscape-based) stormwater treatment measure, when not used in combination with a landscape-based treatment measure, is capable or removing the range of pollutants typically removed by landscape-based treatment measures and/or the range of pollutants expected to be generated by the project.
- c) All proposed stormwater treatment measures shall incorporate appropriate planting materials for stormwater treatment (for landscape-based treatment measures) and shall be designed with considerations for vector/mosquito control. Proposed planting materials for all proposed landscape-based stormwater treatment measures shall be included on the landscape and irrigation plan for the project. The applicant is not required to include on-site stormwater treatment measures in the post-construction stormwater management plan if he or she secures approval from Planning and Zoning of a proposal that demonstrates compliance with the requirements of the City's Alternative Compliance Program.
- d) Prior to final permit inspection: The applicant shall implement the approved stormwater management plan.

SCA Hydro-4: Maintenance Agreement for Stormwater Treatment Measures (*Prior to final zoning inspection*): For projects incorporating stormwater treatment measures, the applicant shall enter into the "Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement," in accordance with Provision C.3.e of the NPDES permit, which provides, in part, for the following:

- a) The applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity;
- b) Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The agreement shall be recorded at the County Recorder's Office at the applicant's expense.

SCA Hydro-5: Erosion and Sedimentation Control (*Ongoing throughout demolition grading, and/or construction activities*): The project applicant shall implement Best Management Practices (BMPs) to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable. Plans demonstrating the Best Management Practices shall be submitted for review and approval by the Planning and Zoning Division and the Building Services Division. At a minimum, the project applicant shall provide filter materials deemed acceptable to the City at nearby catch basins to prevent any debris and dirt from flowing into the City's storm drain system and creeks.

Land Use and Planning

2001 Setting and Environmental Conclusions

The 2001 Neg Dec indicated that proposed Project area was developed with transportation facilities (I-880 and adjoining arterial roads), commercial and light industrial uses, and one residence. The eastern portion of the Project area, east of I-880, was developed and used for a combination of construction-related retail and general industry. The western side of the Project area, west of 1-880 was also a combination of light industrial and commercial development. One single-family residence was located at the intersection of Jensen and High streets.

Land within the Project area was designated for a variety of uses in the Oakland General Plan. The area west of I-880 was designated Heavy Industrial; east of I-880 to Coliseum Way was designated Business Mix; and the area from Coliseum Way to San Leandro Street was designated General Industrial. The portion of the Project area west of I-880 was located within the Port of Oakland Estuary Plan area. The Estuary Plan includes a set of goals and policies related to the area between Adeline Street, the Nimitz Freeway, 66th Avenue and the Estuary shoreline. The portion of the Project area within the Estuary Plan boundaries was classified as Light Industry 3 and General Commercial.

The 2001 Neg. Dec concluded that the project;

- would have no impact regarding physically dividing an established community;
- would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; and

• would not conflict with any applicable habitat conservation plan or natural community conservation plan.

The 2001 Neg. Dec found that the Project involved improvements to surface arterial streets that would enhance local connections between the east and west sides of I-880. Improved access would be a beneficial impact to employees and customers of the commercial/industrial properties within the area. In addition, the Project would serve to improve access for vehicles traveling to and from the cities of Oakland and Alameda via 42nd Avenue and High Street from I-880. Existing land use designations would not change as a result of the project. The Project would not conflict with any land-use-related plans, policies, or regulations of the City of Oakland General Plan or the Estuary Policy Plan

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's setting that would involve new significant land use effects, or a substantial increase in the severity of previously identified significant land use effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new land use effects, or a substantial increase in the severity of previously identified significant land use effect.

New Information

There is no new information of substantial importance relative to land use that would involve new land use effects, or would involve a substantial increase in the severity of previously identified significant land use effects. There are no new mitigation measures or alternatives to the Project that are now known or have been found to be feasible that would substantially reduce significant land use effects.

Mineral Resources

2001 Setting and Environmental Conclusions

The 2001 Neg. Dec. found that there were no strategic or important mineral resources existing within the Project area. Therefore, the Project would not result in the loss of availability of a known mineral resource, or result in the loss of availability of a locally important mineral resource.

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's setting that would involve new significant mineral resource effects, or a substantial increase in the severity of previously identified significant mineral resource effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new mineral resource effects, or a substantial increase in the severity of previously identified significant mineral resource effect.

New Information

There is no new information of substantial importance relative to mineral resources that would involve new mineral resource effects, or would involve a substantial increase in the severity of previously identified significant mineral resource effect. There are no new mitigation measures or alternatives to the Project that are now known or have been found to be feasible that would substantially reduce significant mineral resource effects.

Noise

2001 Setting and Environmental Conclusions

The 2001 Neg. Dec found that there was only one noise-sensitive residential receptor, located at the southwest comer of Jensen and High streets. Other proximate land uses were industrial and commercial land use in the I-880 and High Street/42nd Street area. The one residence was subject to traffic noise levels from I-880, which exceeded the FHWA/Caltrans Noise Abatement Criteria.

The 2001 Neg. Dec concluded that the project;

- would not expose persons to, or generate noise levels in excess of, standards established in the local general plan or noise ordinance or other applicable standards;
- would not expose persons to, or generate excessive ground borne vibration or ground borne noise levels;
- would not create a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the project;
- would not result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the project;
- would not expose people residing or working in the project area to excessive noise levels from a public airport or public use airport; and
- would not expose people residing or working in the Project area to excessive noise levels from a private airport.

Although the Project was found to increase noise levels in the area, the Project would not move noise sources closer to the affected sensitive residential receptor and would not substantially change traffic volumes in the vicinity of the receptor. The receptor was already impacted by elevated traffic noise levels that were independent of the proposed project, and the receptor would not experience direct impacts from the project. Therefore, noise impacts from the Project were found to be less than significant.

Current Changes in Circumstances, Changes in the Project or New_Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's setting that would involve new significant noise effects, or a substantial increase in the severity of previously identified significant noise effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new noise effects, or a substantial increase in the severity of previously identified significant noise effect.

New Information

There is no new information of substantial importance that would involve new noise effects, or would involve a substantial increase in the severity of previously identified significant noise effect. There are no new mitigation measures or alternatives to the Project that are now known or have been found to be feasible that would substantially reduce significant noise effects.

New Standard Conditions of Approval

Since 2001 the City has adopted Uniformly Applied Development Standards and Standard Conditions of Approval that apply to all development projects, and thus will also apply to this project. The City's Standard Conditions of Approval relevant to noise are listed below, and are incorporated and required as part of the Project.

SCA Noise-1: Days/Hours of Construction Operation (*Ongoing throughout demolition, grading, and/or construction*): The project applicant shall require construction contractors to limit standard construction activities as follows:

- a) Construction activities are limited to between 7:00 AM and 7:00 PM Monday through Friday, except that pile driving and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday.
- b) Any construction activity proposed to occur outside of the standard hours of 7:00 am to 7:00 pm Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division.
- c) Construction activity shall not occur on Saturdays, with the following possible exceptions:
 - i. Requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division.
- ii. Requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed.
- d) No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.
- e) No construction activity shall take place on Sundays or Federal holidays.
- f) Construction activities include but are not limited to: truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held onsite in a non-enclosed area.
- g) Applicant shall use temporary power poles instead of generators where feasible.

SCA Noise-2: Noise Control (*Ongoing throughout demolition, grading, and/or construction*): To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement a site-specific noise reduction program, subject to the Planning and Zoning Division and the Building Services Division review and approval, which includes the following measures:

- a) Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).
- b) Except as provided herein, Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.
- c) Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.
- d) The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.

SCA Noise-3: Noise Complaint Procedures (Ongoing throughout demolition, grading, and/or *construction*): Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the Building Services Division a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:

- a) A procedure and phone numbers for notifying the Building Services Division staff and Oakland Police Department; (during regular construction hours and off-hours);
- b) A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);
- c) The designation of an on-site construction complaint and enforcement manager for the project;

- d) Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity; and
- e) A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

SCA Noise-4: Operational Noise-General (*Ongoing*): Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.

SCA Noise-5: Pile Driving and Other Extreme Noise Generators (Ongoing throughout demolition, grading, and/or construction). To further reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90dBA, a set of site-specific noise attenuation measures shall be completed under the supervision of a gualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the Planning and Zoning Division and the Building Services Division to ensure that maximum feasible noise attenuation will be achieved. This plan shall be based on the final design of the project. A third-party peer review, paid for by the project applicant, may be required to assist the City in evaluating the feasibility and effectiveness of the noise reduction plan submitted by the project applicant. The criterion for approving the plan shall be a determination that maximum feasible noise attenuation will be achieved. A special inspection deposit is required to ensure compliance with the noise reduction plan. The amount of the deposit shall be determined by the Building Official, and the deposit shall be submitted by the project applicant concurrent with submittal of the noise reduction plan. The noise reduction plan shall include, but not be limited to, an evaluation of implementing the following measures. These attenuation measures shall include as many of the following control strategies as applicable to the site and construction activity:

- a) Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;
- b) Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;
- c) Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;
- d) Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and
- e) Monitor the effectiveness of noise attenuation measures by taking noise measurements.

Population and Housing

2001 Setting and Environmental Conclusions

The 2001 Neg. Dec. found that there were no existing or proposed housing developments in the project area or the immediate vicinity of the project, but that there was one single-family residence at the intersection of High and Jensen streets.

The 2001 Neg. Dec concluded that the project;

- would not induce substantial population growth, either directly or indirectly; and
- would not displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere.

The one single-family property located at 574 High Street would not be subject to acquisition or displacement as a result of the project. General growth rates, resident population and employment in the City of Oakland were not expected to change as a result of the Project since the Project was intended to accommodate planned land development, and will not remove a substantial barrier to growth. It was anticipated that the Project would have temporary economic impacts during construction. Eight businesses located along High Street, Alameda Avenue, and East 8th Street may have to close temporarily as Project right-of-way is acquired and new roadways and intersections are constructed. In addition, it is possible that some motorists will use the 66th Avenue or Fruitvale interchanges to avoid construction at the High Street and 42nd Avenue Interchanges. This may result in a decrease in drive-by business at retail establishments in the vicinity, but this impact was considered temporary and not significant under CEQA criteria. Business tax revenues for the City of Oakland would not be significantly affected as a result of these temporary impacts. The Project was found to accommodate future private land development and related employment opportunities, sales tax revenues, and increased property tax base associated with improvements of access, both within and adjacent to the Project area. According to the Estuary Plan, the portion of Oakland located adjacent to the Project area was targeted for continued industrial/commercial development.

To implement the project, the 2001 Neg. Dec found that additional right-of-way would be required from 15 separate parcels. Thirteen of these parcels were privately owned and developed, and two were occupied by public utilities. None of the businesses would be displaced as a result of property acquisition, although utilities may have to be relocated as a result of construction. At some locations, right-of-way acquisition would involve a loss of parking or material storage space. The approximated loss in parking was estimated at a loss of 100 of the existing 655 parking spaces at the K-Mart (15%), a loss of 6 of the existing 16 parking spaces at the Ace Hardware (38%), and a loss of 2 of the existing 12 parking spaces at 743 High Street (15%). The 2001 Neg. Dec. concluded that City of Oakland, in consultation with the owners of property where parking spaces were to be taken, would replace the lost capacity on-site or at a location mutually agreed upon. The acquisition process was to be conducted pursuant to the City of Oakland's relocation policies and procedures.

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's

setting that would involve new significant population or housing effects, or a substantial increase in the severity of previously identified significant population or housing effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new population or housing effects, or a substantial increase in the severity of previously identified significant population or housing effect.

New Information

There is no new information of substantial importance that would involve new population or housing effects, or would involve a substantial increase in the severity of previously identified significant population or housing effect. There are no new mitigation measures or alternatives to the Project that are now known or have been found to be feasible that would substantially reduce significant population or housing effects.

Public Services

2001 Setting and Environmental Conclusions

The 2001 Neg. Dec. identified the Oakland Fire Department as the provider of fire protection, emergency rescue, and medical services in the Project area. The nearest fire station, Station 18 located at 1700 50th Avenue at Bancroft Avenue, was approximately 0.75 miles southeast of the point where High Street crosses under I-880. Response time to the Project area was estimated to be 3 minutes. The City of Oakland Police Department did not have an established emergency response time to the Project site. The nearest school to the Project area was a continuing education high school located approximately 0.25 miles northwest of the Project area.

The 2001 Neg. Dec concluded that the Project would not result in substantial adverse physical impact associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, police protection, schools, parks or other public facilities.

The Project was not found to result in changes to the distribution or numbers of businesses or residences which require public services such as police protection, schools, or parks. There would be no increase in the need for public services in the Project area, and no change in the service ratios from the existing conditions was expected. However, upon completion of the project, public service providers such as police and fire departments would have improved access through the Project area and to portions of Oakland located east and west of I-880.

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's

setting that would involve new significant public service effects, or a substantial increase in the severity of previously identified significant public service effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new public service effects, or a substantial increase in the severity of previously identified significant public service effect.

New Information

There is no new information of substantial importance that would involve public service effects, or would involve a substantial increase in the severity of previously identified significant population or housing effect. There are no new mitigation measures or alternatives to the Project that are now known or have been found to be feasible that would substantially reduce significant public service effects.

Recreation

2001 Setting and Environmental Conclusions

The 2001 Neg. Dec. found that there were no recreational facilities or trails which occurred within the Project area. The park closest to the Project limits was the Martin Luther King Junior Regional Shoreline, which is part of the East Bay Regional Parks District. The park is located approximately 0.25 miles to the southwest of the Project area. The Bay Trail, which is a shoreline pedestrian and bicycle trail planned and developed by ABAG, runs the entire length of the MLK Jr. Regional Shoreline.

The 2001 Neg. Dec concluded that the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, and would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. The Project did not include construction or expansion of any new recreational facility or bike/pedestrian lanes.

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's setting that would involve new significant recreation effects, or a substantial increase in the severity of previously identified significant recreation effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new recreation effects, or a substantial increase in the severity of previously identified significant recreation effect.

New Information

There is no new information of substantial importance that would involve new recreation effects, or would involve a substantial increase in the severity of previously identified significant recreation effect. There are no new mitigation measures or alternatives to the Project that are now known or have been found to be feasible that would substantially reduce significant recreation effects.

Utilities and Services

2001 Setting and Environmental Conclusions

According to the 2001 Neg. Dec., existing service and utility providers included the following:

The East Bay Municipal Utility District (EBMUD) supplied water and provided wastewater treatment for parts of Alameda and Contra Costa counties, including the Project area. EBMUD maintained a wastewater interceptor at Oakport and 8th Avenue.

EBMUD had water and/or gas utilities on Howard Street, Jensen Street, Oakport Street, Coliseum Way, Alameda Avenue, East 8th Street, and High Street.

Pacific Bell was the principal telephone company in the area, with utilities on Alameda Avenue, High Street, Oakport Street, Coliseum Way, and Howard Avenue.

AT&T Cable Services provided cable television lines, with utilities on Alameda Avenue, High Street, Howard Street and Jensen Street.

PG&E was responsible for electrical and natural gas utilities located throughout the Project area.

The City of Oakland had traffic signals and street lighting utilities on Coliseum Way, Oakport Street, and the 1-880 on and off ramps.

Other utility owners within the Project area included Caltrans, Kinder-Morgan (Petroleum Pipeline) and Qwest (Fiber Optic Cable). The Kinder-Morgan and Qwest utilities are both located within the Canadian Pacific Railroad right-of-way to the east of the Project area.

The 2001 Neg. Dec concluded that the project:

- would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- would have sufficient water supplies available to serve the Project from existing entitlements and resources;
- would not result in a determination by the wastewater treatment provider that it does not have adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments;

- would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs; and
- would comply with federal, state, and local statutes and regulations related to solid waste.

The Project was not found to affect the operation of water, wastewater treatment, solid waste or storm water drainage facilities in the Project or their capacities, and any increases in usage of these utilities would be minor. The Project was found to generate solid waste during construction, but not in such volume that it would significantly reduce the lifespan the regional landfill. The 2001 Neg. Dec. indicated that the Project would need to comp1y with solid waste regulations, and that spoil materials generated during construction activities would be disposed off-site at a designated solid waste disposal facility. If soils generated during construction were found to exceed Cal/EPA-prescribed contaminant concentration ranges, the soil would be disposed of at an authorized disposal or treatment facility.

The 2001 Neg. Dec did find that utilities located in High Street, Alameda Avenue, Oakport Street, Coliseum Way, Howard Street and Jensen Street would be affected by construction, and that relocation of certain utilities would be required. Utility relocations would need to be assessed once the specific utility lines alignments were identified, but the following relocation requirements were identified:

- relocation of the EBMUD interceptor at Oakport Street and 8th Avenue
- relocation of approximately 2,000 feet of cable along High Street
- relocation of approximately 500 feet of underground electrical ducts on Jensen Street, Howard Street, and East 8th Street
- relocation of approximately 10 electric poles on High Street and 2 poles on Alameda Avenue
- relocation of 17 street light poles on High Street, 5 light poles on Alameda Avenue, one pole on Jensen, and three poles on Howard Street
- relocation of a section of approximately 500 feet of 8-inch water line along Alameda Avenue, plus one fire hydrant and ten valve covers
- relocation of 500 feet of sewer line, adjustments to two manholes and relocation of 10 other manholes
- Utilities within the Union Pacific right-of-way would not be impacted.

The 2001 Neg. Dec. indicated that final designs for the Project would need to include plans for relocating these utilities in coordination with utility providers. Since the utility relocations would be required because of the project, the cost of relocation would be the responsibility of the Project and were included in the project's cost estimate.

Current Changes in Circumstances, Changes in the Project or New Information

Circumstances

The existing circumstances under which the Project will be undertaken are essentially the same today as described Setting section of the 2001 Neg. Dec. There has been no substantial or appreciable change in the project's setting that would involve new significant utility service effects, or a substantial increase in the severity of previously identified significant utility effect.

Project

The Project as currently defined is the same project as described in the 2001 Neg. Dec. There are no substantial changes in the Project that would involve new utility effects, or a substantial increase in the severity of previously identified significant utility service effect.

New Information

There is no new information of substantial importance that would involve utility service effects, or would involve a substantial increase in the severity of previously identified significant utility service effect. There are no new mitigation measures or alternatives to the Project that are now known or have been found to be feasible that would substantially reduce significant utility service effects.

SCA Utilities-1: Waste Reduction and Recycling. The project applicant will submit a Construction & Demolition Waste Reduction and Recycling Plan (WRRP) and an Operational Diversion Plan (ODP) for review and approval by the Public Works Agency.

- a) (Prior to issuance of demolition, grading, or building permit): Chapter 15.34 of the Oakland Municipal Code outlines requirements for reducing waste and optimizing construction and demolition (C&D) recycling. Affected projects include all new construction, renovations/alterations/modifications with construction values of \$50,000 or more (except R-3), and all demolition (including soft demo). The WRRP must specify the methods by which the development will divert C&D debris waste generated by the proposed project from landfill disposal in accordance with current City requirements. Current standards, FAQs, and forms are available at www.oaklandpw.com/Page39.aspx or in the Green Building Resource Center. After approval of the plan, the project applicant shall implement the plan.
- b) (Ongoing): The ODP will identify how the project complies with the Recycling Space Allocation Ordinance, (Chapter 17.118 of the Oakland Municipal Code), including capacity calculations, and specify the methods by which the development will meet the current diversion of solid waste generated by operation of the proposed project from landfill disposal in accordance with current City requirements. The proposed program shall be in implemented and maintained for the duration of the proposed activity or facility. Changes to the plan may be re-submitted to the Environmental Services Division of the Public Works Agency for review and approval. Any incentive programs shall remain fully operational as long as residents and businesses exist at the project site.

SCA Utilities-2: Stormwater and Sewer (*Prior to completing the final design for the project's sewer service*): Confirmation of the capacity of the City's surrounding stormwater and sanitary sewer system and state of repair shall be completed by a qualified civil engineer with funding from the project applicant. The project applicant shall be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the proposed project. In addition, the applicant shall be required to pay additional fees to improve sanitary sewer infrastructure if required by the Sewer and Stormwater Division. Improvements to the existing sanitary sewer collection system shall specifically include, but are not limited to, mechanisms to control or minimize increases in infiltration/inflow to offset sanitary sewer increases associated with the proposed project. To the maximum extent practicable, the applicant will be required to implement Best Management Practices to reduce the peak stormwater runoff from the project site. Additionally, the project applicant shall be responsible for payment of the required installation or hook-up fees to the affected service providers.

Mandatory Findings

2001 Neg. Dec. Environmental Conclusions

The 2001 Neg. Dec concluded that:

- the Project would not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.
- the Project would not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly, and that
- the Project would not have impacts that are individually limited, but cumulatively considerable.

Potential to Degrade the Quality of the Environment

Based on the analysis presented in this Addendum, there are no changes in circumstances, no changes in the Project and no new information which would indicate that the Project would have the potential to degrade the quality of the environment. It would not result in a new significant effect or a substantial increase in a previously identified significant environmental effect pertaining to a substantial reduction in the habitat of a fish or wildlife species, causing a fish or wildlife population to drop below self-sustaining levels, threatening to eliminate a plant or animal community, reducing the number or restricting the range of a rare or endangered plant or animal, or eliminating important examples of the major periods of California history or prehistory.

Substantial Adverse Effects on Human Beings

Based on the analysis presented in this Addendum, there are no changes in circumstances, no changes in the Project and no new information which would indicate that the Project would have the potential to result in environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

Cumulative Effects

The cumulative impact analysis included in the 2001 Neg. Dec. identifies past, present, and reasonably anticipated future projects producing related or cumulative impacts on resources (e.g., wetlands and cultural resources) and traffic-related impacts (e.g., noise and air quality) including Caltrans projects and projects proposed by other agencies and developers other than Caltrans. The analysis provides an assessment of potential impacts that would not occur under a separate action, but would occur when the Project is combined with other planned and programmed projects. Approved or planned projects in the cumulative analysis included the Caltrans' High Street Overhead Seismic Retrofit Project (Caltrans), the Zhone Technologies project and the Coliseum Shoreline Sports Center project. These projects were located along the I-880 corridor.

The 2001 Neg. Dec. reached the following conclusions regarding cumulative effects:

• Acquisition and relocation measures implemented in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 would off-set property takes for cumulative projects, including the loss of parking spaces. As a result, the Project would not contribute to potential cumulative relocation impacts along the I-880 corridor.

- Comprehensive control of project-related hazards and hazardous materials, on a project-byproject basis, will limit the potential for cumulative hazardous wastes and soil contamination impacts to a less-than-significant level.
- The 42nd Avenue/High Street Project could impact water quality as a result of construction activities, storm water runoff, and spills of hazardous materials. However, project's compliance with the NPDES permit and adherence to erosion control measures following Caltrans Standards and Specifications would reduce or eliminate potential construction-related impacts. The other projects included in this cumulative analysis could also have impacts to water quality, but similar measures have been established to mitigate the impacts to a less than significant level. Because any potential impacts will be mitigated to a less than significant level for all projects in this analysis, the 42nd Avenue/High Street Improvements Project would not result in any cumulative impacts to Water Quality or Hydrology.
- Historically or culturally significant resources were not identified in the Historical Property Survey Report completed for the 42nd Avenue/High Street Improvement Project. Surveys conducted for the other projects included in this analysis did not identify any such resources. Accordingly, it is not anticipated that the 42nd Avenue/High Street Improvements Project would result in any cumulative impacts to culturally or historically significant.

Based on the analysis presented in this Addendum, there are no changes in circumstances, no changes in the Project and no new information which would indicate that the Project would have the potential to cause a new significant effects or a substantial increase in a previously identified significant environmental effects that are individually limited but cumulatively considerable.

Appendices

- A Standard Conditions of Approval / Mitigation Monitoring Program
- **B** Traffic Turning Movement Calculations and Counts, Dowling Associates
- C Air Quality/Greenhouse Gas

URBEMIS2007, Summary Report for Annual Emissions, Tons/Year URBEMIS2007, Summary Report for Summer Emissions, Tons/Year Construction-Period Health Risk Assessment

Appendix "A"

Mitigation Monitoring and Reporting Program

This Standard Conditions of Approval and Mitigation Monitoring and Reporting Program (SCAMMRP) is based on the 2012 Addendum to the Initial Study/Mitigated Negative Declaration and Environmental Assessment for the Combined Project Study Report/Project Report for the 42nd Avenue/High Street Access Improvement Project (2012 Addendum). This SCAMMRP is in compliance with Section 15097 of the CEQA Guidelines, which requires that the Lead Agency "adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." The SCAMMRP lists mitigation measures recommended in the Addendum and identifies mitigation monitoring requirements. The City's Standard Conditions of Approval identified in the Addendum as measures that would minimize potential adverse effects that could result from implementation of the Project are also included in this SCAMMRP to ensure the conditions are implemented and monitored.

The following table presents the mitigation measures identified in the 2012 Addendum necessary to mitigate potentially significant impacts. Each mitigation measure or standard condition of approval is numbered according to the section of the Addendum from which it is derived. For example, Mitigation Measure Traf-1 is the first mitigation measure identified in the Traffic and Circulation chapter of the Addendum. The Standard Conditions are identified with the prefix SCA (e.g., SCA Traf-1).

- The first column indicates the environmental impact as identified in the Addendum,
- The second column identifies the Standard Condition of Approval (SCA) or mitigation measure (MM) applicable to that impact.
- The third column identifies the monitoring schedule or timing,
- The fourth column names the party responsible for monitoring the required action.
- The fifth column, "Monitoring Procedure," outlines the steps for monitoring the action identified in the mitigation measure or condition of approval.

	Mitigation Massures/ Standard Conditions of			
Environmental Impact	Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure
	Traffic, Circulation and F	Parking		
Existing Plus Project Under Existing conditions, the Project would result in a significant impact at the High Street & Coliseum Way intersection, where the Project would degrade traffic operations to LOS E during the p.m. peak hour	 MM Traf-1: High Street & Coliseum Way. Optimize the signal timing at the intersection of High Street & Coliseum Way. Coordinate the signal timing changes at this intersection with adjacent intersection that are in the same signal coordination group. To implement this measure, the Project sponsor shall submit the following to City of Oakland's Transportation Service Division and Caltrans for review and approval: a) Only if signal modernization is required: Plans, Specifications, and Estimates (PS&E) to modify the intersection. All elements shall be designed to Caltrans standards in effect at the time of construction and all new and upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both Caltrans standards and ADA standards (according to Federal and State Access Board guideline) at the time of construction. b) Signal timing plans for the signals in the coordination group. c) The Project sponsor shall fund, prepare and install the approved plans and improvements. 	Investigation of the need for this mitigation shall be studied at the time of construction and every 3 years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	City of Oakland, CEDA- Dept. of Engineering & Construction, Transportation Services Division; Caltrans	Review and approve PS&E. Confirm that improvements are designed and implemented pursuant to approved PS&E.
2035 + Project Under Cumulative conditions, the 42nd Avenue & International Boulevard intersection would operate at LOS F without the Project, and the Project would cause either the overall volume- to-capacity ("V/C") ratio to increase 0.01 or more or the critical movement V/C ratio to increase 0.02 or more during the a.m. and p.m. peak hours.	MM Traf-2: 42nd Avenue & International Boulevard . Modify the northwest bound and southeast bound approaches on International Boulevard at the intersection of 42nd Avenue & International Boulevard by adding a left turn lane in each direction. The resulting approach lanes would consist of two left-turn lanes one through lane and one through-right lane. Optimize intersection signal timing. Coordinate the signal timing changes at this intersection with adjacent intersection that are in the same signal coordination group. To implement this measure, the Project sponsor shall submit the following to City of Oakland's Transportation Service Division and Caltrans for review and approval:	Investigation of the need for this mitigation shall be studied at the time of construction and every 3 years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	City of Oakland, CEDA- Dept. of Engineering & Construction, Transportation Services Division; Caltrans	Review and approve PS&E. Confirm that improvements are designed and implemented pursuant to approved PS&E.

	Mitigation Massures/ Standard Conditions of		Mitigation Monitoring:	
Environmental Impact	Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure
	 a) Only if signal modernization is required: Plans, Specifications, and Estimates (PS&E) to modify the intersection. All elements shall be designed to Caltrans standards in effect at the time of construction and all new and upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both Caltrans standards and ADA standards (according to Federal and State Access Board guideline) at the time of construction. b) Signal timing plans for the signals in the coordination group 			
	c) The Project sponsor shall fund, prepare and install the approved plans and improvements.			
Under Cumulative conditions, the High Street and International Boulevard intersection would operate at LOS F without the Project, and the Project would cause either the overall volume- to-capacity ("V/C") ratio to increase 0.01 or more or the critical movement V/C ratio to increase 0.02 or more during the p.m. peak hour.	 Interapproved plans and improvements. MM Traf-3: High Street & International Boulevard. Optimize the signal timing at the intersections of High Street and International Boulevard. Coordinate the signal timing changes at this intersection with adjacent intersections that are in the same signal coordination group. To implement this measure, the Project sponsor shall submit the following to City of Oakland's Transportation Service Division and Caltrans for review and approval: a) Only if signal modernization is required: Plans, Specifications, and Estimates (PS&E) to modify the intersection. All elements shall be designed to Caltrans standards in effect at the time of construction and all new and upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both Caltrans standards and ADA standards (according to Federal and State Access Board guideline) at the time of construction. b) Signal timing plans for the signals in the coordination group. 	Investigation of the need for this mitigation shall be studied at the time of construction and every 3 years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	City of Oakland, CEDA- Dept. of Engineering & Construction, Transportation Services Division; Caltrans	Review and approve PS&E. Confirm that improvements are designed and implemented pursuant to approved PS&E.

	Mitigation Magguroo/ Standard Conditions of			
Environmental Impact	Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure
	the approved plans and improvements.			
Under Cumulative conditions, the High Street and San Leandro Street intersection would operate at LOS F without the Project, and the Project would cause either the overall volume- to-capacity ("V/C") ratio to increase 0.01 or more or the critical movement V/C ratio to increase 0.02 or more	MM Traf-4: High Street & San Leandro Street . Optimize the signal timing at the intersection of High Street & San Leandro Street. Coordinate the signal timing changes at this intersection with adjacent intersections that are in the same signal coordination group. To implement this measure, the Project sponsor shall submit the following to City of Oakland's Transportation Service Division for review and	Investigation of the need for this mitigation shall be studied at the time of construction and every 3 years thereafter until 2035 or until the mitigation measure is	City of Oakland, CEDA- Dept. of Engineering & Construction, Transportation Services Division; Caltrans	Review and approve PS&E. Confirm that improvements are designed and implemented pursuant to approved PS&E.
during the a.m. peak hour.	 approval: a) Only if signal modernization is required: Plans, Specifications, and Estimates (PS&E) to modify the intersection. All elements shall be designed to City standards in effect at the time of construction and all new and upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both City standards and ADA standards (according to Federal and State Access Board guideline) at the time of construction. b) Signal timing plans for the signals in the coordination group. c) The Project sponsor shall fund, prepare and install the approved plans and improvements. 	occurs first.		
Under Cumulative conditions, the High Street and Coliseum Way intersection would operate at LOS F without the Project, and the Project would cause either the overall volume-to-capacity ("V/C") ratio to increase 0.01 or more or the critical movement V/C ratio to increase 0.02 or more during the a.m. peak hour	 MM Traf-5: High Street & Coliseum Way. Modify the northwest bound approach on Coliseum Way to provide one left-through lane and one through-right lane. Optimize intersection signal timing. Coordinate the signal timing changes at this intersection with adjacent intersection that are in the same signal coordination group. To implement this measure, the Project sponsor shall submit the following to City of Oakland's Transportation Service Division and Caltrans for review and approval: a) Only if signal modernization is required: Plans, Specifications, and Estimates (PS&E) to modify the intersection. All elements shall be designed to Caltrans standards in effect at the time of 	Investigation of the need for this mitigation shall be studied at the time of construction and every 3 years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	City of Oakland, CEDA- Dept. of Engineering & Construction, Transportation Services Division; Caltrans	Review and approve PS&E. Confirm that improvements are designed and implemented pursuant to approved PS&E.

Environmental Impact	Mitigation Massurac/ Standard Conditions of		Mitigation Monitoring:	Mitigation Monitoring:	
	Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	
	construction and all new and upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both Caltrans standards and ADA standards (according to Federal and State Access Board guideline) at the time of construction.				
	b) Signal timing plans for the signals in the coordination group.				
	c) The Project sponsor shall fund, prepare and install the approved plans and improvements.				
Construction of the Project may result in a temporary, adverse effect on the circulation system; however,	SCA Traf-1. Construction Traffic and Parking (Prior to the issuance of a demolition, grading or building permit). The project applicant and construction	Submittal prior to issuance of a grading, demolition, building	City of Oakland, CEDA - Transportation Services Division.	Review and approve the construction management plan;	
construction will be staged in a manner that should minimize the adverse effects and those effects should not be substantial	contractor shall meet with appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project applicant shall develop a construction management plan for review and approval by the Planning and Zoning Division, the Building Services Division, and the Transportation Services Division. The plan shall include at least the following items and requirements:	permit Ongoing through construction		Confirm that all applicable measures are being implemented or complied with per the approved plan.	
	 a) A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. 				
	 b) Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur. 				
	c) Location of construction staging areas for materials, equipment, and vehicles at an approved location.				
	d) A process for responding to, and tracking,				

	Mitigation Massures/ Standard Conditions of			
Environmental Impact	Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure
	complaints pertaining to construction activity, including identification of an onsite complaint manager. The manager shall determine the cause of the complaints and shall take prompt action to correct the problem. Planning and Zoning shall be informed who the Manager is prior to the issuance of the first permit issued by Building Services.			
	e) Provision for accommodation of pedestrian flow.			
	 f) Provision for parking management and spaces for all construction workers to ensure that construction workers do not park in on street spaces. 			
	 g) Any damage to the street caused by heavy equipment, or as a result of this construction, shall be repaired, at the applicant's expense, within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to issuance of a final inspection of the building permit. All damage that is a threat to public health or safety shall be repaired immediately. The street shall be restored to its condition prior to the new construction as established by the City Building Inspector and/or photo documentation, at the applicant's expense, before the issuance of a Certificate of Occupancy. 			
	 h) Any heavy equipment brought to the construction site shall be transported by truck, where feasible. 			
	 No materials or equipment shall be stored on the traveled roadway at any time. 			
	 j) Prior to construction, a portable toilet facility and a debris box shall be installed on the site, and properly maintained through project completion. 			
	k) All equipment shall be equipped with mufflers.			
	 Prior to the end of each work day during construction, the contractor or contractors shall pick up and properly dispose of all litter resulting from or related to the project, whether located on the property, within the public rights-of-way, or 			

	Mitigation Massures/ Standard Conditions of	Mitigation Monito	Mitigation Monitoring:	
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	properties of adjacent or nearby neighbors.			
	Air Quality			
During construction, the proposed Project would generate fugitive dust from demolition, grading, hauling and construction activities. The fugitive dust emissions associated with these construction activities would be effectively reduced to a level of less than significant based on implementation of required City of Oakland Standard Conditions of Approval.	 SCA Air-1: Construction-Related Air Pollution Controls; Dust and Equipment Emissions (Ongoing throughout demolition, grading, and/or construction). During construction, the project applicant shall require the construction contractor to implement all of the following measures recommended by the Bay Area Air Quality Management District (BAAQMD): a) Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible. b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. d) Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. e) Enclose, cover, water twice daily or apply (non- toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.). f) Limit vehicle speeds on unpaved roads to 15 miles per hour. g) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required 	Submittal prior to demolition, grading or construction permit Ongoing throughout demolition, grading, and/or construction	City of Oakland, CEDA, Building Services Division, Zoning Inspection; City of Oakland CEDA, Planning and Zoning	Review and approve plan Confirm that all dust- control mitigation measures are being implemented.

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	by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations. Clear signage to this effect shall be provided for construction workers at all access points.			
	 h) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 			
	 Post a publicly visible sign that includes the contractor's name and telephone number to contact regarding dust complaints. When contacted, the contractor shall respond and take corrective action within 48 hours. The telephone numbers of contacts at the City and the BAAQMD shall also be visible. This information may be posted on other required on-site signage. 			
	 j) All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. 			
	 k) All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph. 			
	 Install sandbags or other erosion control measures to prevent silt runoff to public roadways. 			
	 m) Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more). 			
	 n) Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. 			
	 o) Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize windblown 			

	Mitigation Massures/ Standard Conditions of	Mitigation Monitoring:			
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	dust. Wind breaks must have a maximum 50 percent air porosity.				
	 P) Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. 				
	 q) The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time. 				
	 All trucks and equipment, including tires, shall be washed off prior to leaving the site. 				
	s) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.				
	t) Minimize the idling time of diesel-powered construction equipment to two minutes.				
	 u) The project applicant shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate matter (PM) reduction compared to the most recent California Air Resources Board (CARB) fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as they become available. v) Use low VOC (i.e., ROG) coatings beyond the local 				
	 v) Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings). 				
	w) All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of				

	Mitigation Magguroo/ Standard Conditions of		Mitigation Monitoring:	
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	NOx and PM.			
	 x) Off-road heavy diesel engines shall meet the CARB's most recent certification standard. 			
The potential risk to sensitive receptors (the maximum exposed individual) due to construction-period concentrations of toxic air contaminants was found to be less than significant.	Implementation of City of Oakland Standard Condition of Approval Air-1, including its diesel reduction measures, would reduce the construction–period health risks to adjacent residents to level considered by the Air District to be less than significant	See SCA Air-1 above	See SCA Air-1 above	See SCA Air-1 above
	Greenhouse Gas / Global Clin	nate Change		
The Project would not exceed either of the City's identified Thresholds of Significance (more than 1,100 metric tons of CO2e annually, or more than 4.6 metric tons of CO2e per service population annually), nor is it a stationary source of GHG that would produce total GHG emissions of more than 10,000 metric tons of CO2e annually.	The City's Standard Condition of Approval requiring preparation of a Greenhouse Gas (GHG) Reduction Plan would not be applicable. Although no significant impacts have been identified and no mitigation is required, the Project is subject to all the regulatory requirements including the City's Standard Conditions of Approval, many of which would reduce GHG emissions of the Project. These include, but are not limited to: SCA Air-1: Construction-Related Air Pollution Controls SCA Util-1: Waste Reduction and Recycling SCA Aesth-2 and -3: Tree Removal and Replanting			
	Aesthetic Resource	25		
The Project would resulting in an equivalent look and feel to the existing conditions and would not affect distinct visual patterns nor affect the integrity of the natural or man-made landscape. The visual continuity of the area would be unaffected by the Project.	SCA Aesth-1: Lighting Plan . Prior to the issuance of an electrical or building permit. The proposed lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. Plans shall be submitted to the Planning and Zoning Division and the Electrical Services Division of the Public Works Agency for review and approval. All lighting shall be architecturally integrated into the site.	Submittal prior to the issuance of an electrical or building permit	City of Oakland Public Works Agency, Electrical Services Division	Review and approve plans Confirm implementation of the design features during construction
	SCA Aesth-2: Tree Removal Permit . Prior to issuance of a demolition, grading, or building permit. Prior to removal of any protected trees, per the Protected Tree Ordinance, located on the project site or in the public right-of-way adjacent to the project, the project	Prior to issuance of a demolition, grading or building permit	City of Oakland Public Works Agency-Tree Services Division	Confirm issuance of a tree removal permit and that all conditions of that permit are being implemented and

	Mitigation Macouroo/ Standard Conditions of			
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	applicant must secure a tree removal permit from the Tree Division of the Public Works Agency, and abide by the conditions of that permit.			complied with
	SCA Aesth-3: Tree Replacement Plantings . Prior to issuance of a final inspection of the building permit. Replacement plantings shall be required for erosion	Submittal prior to issuance of a final inspection of the	City of Oakland Public Works Agency-Tree Services Division	Review and approve landscape and tree replacement plan
	control, groundwater replenishment, visual screening and wildlife habitat, and in order to prevent excessive loss of shade, in accordance with the following criteria:	building permit.		Confirm implementation of the landscape and tree replacement plan during
	a) No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.			construction.
	 b) Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye) or Umbellularia californica (California Bay Laurel) or other tree species acceptable to the Tree Services Division. 			
	 c) Replacement trees shall be at least of twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate. 			
	d) Minimum planting areas must be available on site as follows:			
	i. For Sequoia sempervirens, three hundred fifteen square feet per tree;			
	ii. For all other species listed in #2 above, seven hundred (700) square feet per tree.			
	e) In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee as determined by the master fee schedule of the city may be substituted for required replacement plantings, with all such revenues applied toward			

	Mitigation Macouroo/ Standard Conditions of		Mitigation Monitoring:	gation Monitoring:	
Environmental Impact	Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	
	tree planting in city parks, streets and medians.				
	 f) Plantings shall be installed prior to the issuance of a final inspection of the building permit, subject to seasonal constraints, and shall be maintained by the project applicant until established. The Tree Reviewer of the Tree Division of the Public Works Agency may require a landscape plan showing the replacement planting and the method of irrigation. Any replacement planting which fails to become established within one year of planting shall be replanted at the project applicant's expense. 				
	Biological Resource	es			
Although the Project would have no adverse impacts on biological resources, the following standard conditions of approval would nonetheless apply:	 SCA Bio-1: Tree Removal During Breeding Season (Prior to issuance of a tree removal permit): To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of raptors shall not occur during the breeding season of March 15 and August 15. a) If tree removal must occur during the breeding season, all sites shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to start of work from March 15 through May 31, and within 30 days prior to the start of work from June 1 through August 15. The pre-removal surveys shall be submitted to the Planning and Zoning Division and the Tree Services Division of the Public Works Agency. b) If the survey indicates the potential presences of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the CDFG, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds chould suffer around the for raptors and 50 feet for other birds and its description 	Submittal prior to issuance of a tree removal permit if removed during breeding season.	City of Oakland Public Works Agency-Tree Services Division.	Review and approve qualified biologist Prior to removal of any trees during the nesting season, review and approve survey results Confirm implementation of nesting survey recommendations during construction.	

	Mitigation Mascuros/ Standard Conditions of		Mitigation Monitoring:	
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	environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.			
	 SCA Bio-2: Tree Protection During Construction (Prior to issuance of a demolition, grading, or building permit): Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist: a) Before the start of any clearing, excavation, construction or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the City Tree Reviewer. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree. b) Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the City Tree Reviewer from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree. c) No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the Tree Reviewer from the base of any protected trees 	Protection implemented prior to issuance of a demolition, grading, or building permit. Ongoing throughout construction	City of Oakland Public Works Agency-Tree Services Division	Review and approve that the approved landscape and tree replacement plan includes tree protection measures Confirm that implementation of tree protection measures during construction.
	or any other location on the site from which such substances might enter the protected perimeter. No			

	Mitigation Massurac/ Standard Conditions of	Mitigation Monitoring:		
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	heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the tree reviewer. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.			
	d) Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.			
	e) If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Agency of such damage. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.			
	f) All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.			
	Cultural and Historic Res	sources		
The Project area has the potential to contain unknown archaeological resources from both prehistoric and historical time periods. Portions of archaeological resources could be damaged and destroyed by trenching, drilling or grading through cultural deposits, or by heavy vehicular movement.	 SCA Cultural-1: Archaeological Resources: Ongoing throughout demolition, grading, and/or construction. Pursuant to CEQA Guidelines section 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. a. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet 	Ongoing throughout demolition, grading, and/or construction.	City of Oakland CEDA- Building Services Division, Zoning Inspection.	Confirm that all applicable measures are being implemented or complied with.

	Mitigation Massuros/ Standard Conditions of		Mitigation Monitoring:	
Environmental Impact	Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure
	of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Oakland. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.			
	 b. In considering any suggested measure proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the project applicant shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while measure for historical resources or unique archaeological resources is carried out. 			
	c. Should an archaeological artifact or feature be discovered on-site during project construction, all activities within a 50-foot radius of the find would be halted until the findings can be fully investigated by a qualified archaeologist to evaluate the find and assess the significance of the find according to the CEQA definition of a historical or unique archaeological resource. If the deposit is determined to be significant, the project applicant and the qualified archaeologist shall meet to determine the appropriate measure, subject to approval by the City of Oakland, which shall assure implementation of appropriate measure measures recommended by the			

	Mitigation Massures/Standard Conditions of	Mitigation Monitoring:			
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	archaeologist. Should archaeologically-significant materials be recovered, the qualified archaeologist shall recommend appropriate analysis and treatment, and shall prepare a report on the findings for submittal to the Northwest Information Center.				
	SCA Cultural-2: Paleontological Resources. Ongoing throughout demolition, grading, and/or construction. In	Ongoing throughout demolition, grading,	City of Oakland CEDA- Building Services Division, Zoning Inspection.	Review and approve qualified paleontologist	
	the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is	and/or construction; Upon discovery of paleontological resources, cease		Confirm required agency notifications and consultations if resources are found;	
	examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 1995,1996)). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval.	construction until examination by a qualified paleontologist and submittal of a discovery and excavation plan prior to resuming construction.		Review and approve the excavation plan and confirm the plan is implemented and all applicable measures are being implemented or complied with.	
	SCA Cultural-3: Human Remains . Ongoing throughout demolition, grading, and/or construction. In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate	Ongoing throughout demolition, grading, and/or construction; Upon discovery of human remains, cease construction		Confirm required agency notifications and consultations are conducted if human skeletal remains are found;	
	the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not	Submittal of alternate plan prior to resuming construction		Review and approve an alternative plan, and confirm that the plan and all applicable measures are being implemented or complied with prior to resuming construction.	

	Mitigation Measures/ Standard Conditions of Approval	Mitigation Monitoring:			
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	feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.				
	Geology and Soils	6			
The Project site is relatively close to two active faults (the Hayward and San Andreas), and would be subjected to strong ground shaking in the event of a major earthquake originating on these faults. The hazards associated with the proposed Project are the same as those	SCA Geo-1: Soils Report. A preliminary soils report for each construction site within the project area shall be	Submittal with Tentative Tract or Tentative Parcel	City of Oakland CEDA- Planning & Zoning	Review and approve report	
	required as part of the project and submitted for review and approval by the Building Services Division. The soils reports shall be based, at least in part, on information obtained from on-site testing. Specifically the minimum contents of the report should include:	Map.	City of Oakland, CEDA- Building Services Division, Zoning Inspection		
that would occur in any seismically active area of California. The proposed Project would be designed to meet current seismic safety standards and thus would be expected to withstand the maximum credible earthquake. Applicable seismic design criteria for the freeway and interchange improvements would ensure that the interchange improvements would be serviceable when subjected to peak acceleration during an earthquake.	 a) Logs of borings and/or profiles of test pits and trenches: i. The minimum number of borings acceptable, when not used in combination with test pits or trenches, shall be two (2), when in the opinion of the Soils Engineer such borings shall be sufficient to establish a soils profile suitable for the design of all the footings, foundations, and retaining structures. ii. The depth of each boring shall be sufficient to provide adequate design criteria for all proposed structures. iii. All boring logs shall be included in the soils report. b) Test pits and trenches iv. Test pits and trenches shall be of sufficient length and depth to establish a suitable soils profile for the design of all test pits and trenches shall be included in the soils report. c) A plat shall be included which shows the relationship of all the borings, test pits, and trenches to the exterior boundary of the site. The plat shall 				

	Mitigation Measures/ Standard Conditions of Approval	Mitigation Manuscal Chandred Conditions of		Mitigation Monitoring:	
Environmental Impact		Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	
		also show the location of all proposed site improvements. All proposed improvements shall be labeled.			
	d)	Copies of all data generated by the field and/or laboratory testing to determine allowable soil bearing pressures, sheer strength, active and passive pressures, maximum allowable slopes where applicable and any other information which may be required for the proper design of foundations, retaining walls, and other structures to be erected subsequent to or concurrent with work done under the grading permit.			
	e)	Soils Report. A written report shall be submitted which shall include, but is not limited to, the following:			
		i. Site description;			
		ii. Local and site geology;			
		iii. Review of previous field and laboratory investigations for the site;			
		 Review of information on or in the vicinity of the site on file at the Information Counter, City of Oakland, Office of Planning and Building; 			
		v. Site stability shall be addressed with particular attention to existing conditions and proposed corrective attention to existing conditions and proposed corrective actions at locations where land stability problems exist;			
		vi. Conclusions and recommendations for foundations and retaining structures, resistance to lateral loading, slopes, and specifications, for fills, and pavement design as required;			
		 vii. Conclusions and recommendations for temporary and permanent erosion control and drainage. If not provided in a separate report they shall be appended to the required soils report; 			
		viii. All other items which a Soils Engineer deems			

	Mitigation Measures/ Standard Conditions of	Mitigation Monitoring:			
Environmental Impact	Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	
	necessary;				
	ix. The signature and registration number of the Civil Engineer preparing the report.				
	f) The Director of Planning and Building may reject a report that she/he believes is not sufficient. The Director of Planning and Building may refuse to accept a soils report if the certification date of the responsible soils engineer on said document is more than three years old. In this instance, the Director may be require that the old soils report be recertified, that an addendum to the soils report be submitted, or that a new soils report be provided.				
	SCA Geo-2: Geotechnical Report . A site-specific, design level, Landslide or Liquefaction geotechnical investigation for each construction site within the project area shall be required as part of the project and	Submittal with Tentative Tract or Tentative Parcel Map(s)	City of Oakland, CEDA, Building Services Division	Review and approve site-specific, design level geotechnical investigation report;	
	submitted for review and approval by the Building Services Division. Specifically: a) Each investigation shall include an analysis of			Review and approve measures from the report are in final project plans;	
	expected ground motions at the site from identified faults. The analyses shall be accordance with applicable City ordinances and polices, and consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from identified faults.			Confirm all measures are being implemented or complied with during construction	
	 b) The investigations shall determine final design parameters for the walls, foundations, foundation slabs, surrounding related improvements, and infrastructure (utilities, roadways, parking lots, and sidewalks). 				
	c) The investigations shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer, geotechnical engineer, shall be included in the final design, as approved by the City of Oakland.				
	 d) The geotechnical report shall include a map prepared by a land surveyor or civil engineer that 				

		Mitigation Monitoring:			
Environmental Impact	Mitigation Measures/ Standard Conditions of Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	
	shows all field work and location of the "No Build" zone. The map shall include a statement that the locations and limitations of the geologic features are accurate representations of said features as they exist on the ground, were placed on this map by the surveyor, the civil engineer or under their supervision, and are accurate to the best of their knowledge.				
	 Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the project's design phase, shall be incorporated in the project. 				
	 f) Final seismic considerations for the site shall be submitted to and approved by the City of Oakland Building Services Division prior to commencement of the project. 				
	g) A peer review is required for the Geotechnical Report. Personnel reviewing the geologic report shall approve the report, reject it, or withhold approval pending the submission by the applicant or subdivider of further geologic and engineering studies to more adequately define active fault traces.				
	Hazards and Hazardous M	laterials			
Sites listed as "active cases" are located within or immediately adjacent to the Project area, and these sites may contain or be known to have contained one or more underground storage tanks. These sites pose a potential impact to soil and/or groundwater within the Project area.	SCA Haz-1: Site Review by the Fire Services Division (Prior to the issuance of demolition, grading or building permit). The project applicant shall submit plans for site review and approval to the Fire Prevention Bureau Hazardous Materials Unit. Property owner may be required to obtain or perform a Phase II hazard assessment.	Submittal prior to issuance of a demolition, grading, or building permit	City of Oakland, CEDA, Building Services Division, Zoning Inspection Fire Prevention Bureau Hazardous Materials Unit	Review and approve plans	
The Project also poses the potential for transport, use or disposal of hazardous materials during construction. Transport, storage, handling, and use of fuels, lubricants, and other chemicals at the site could create the potential for accidental release of hazardous materials					

	Mitigation Massures/ Standard Conditions of	Mitigation Monitoring:			
Environmental Impact	Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	
	SCA Haz-2: Phase I and/or Phase II Reports (Prior to issuance of a demolition, grading, or building permit): Prior to issuance of demolition, grading, or building permits the project applicant shall submit to the Fire Prevention Bureau, Hazardous Materials Unit, a Phase I environmental site assessment report, and a Phase II report if warranted by the Phase I report for the project site. The reports shall make recommendations for remedial action, if appropriate, and should be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer.	Submittal prior to issuance of a demolition, grading, or building permit	City of Oakland, CEDA, Building Services Division, Zoning Inspection City of Oakland Fire Prevention Bureau, Hazardous Materials Unit	Review and approve Phase I and Phase II reports Confirm that the follow- up subsurface investigations as recommended by the Phase II Subsurface Investigation report for the Project site is conducted, including the types of analyses as recommended by DTSC, and any recommendations from the follow-up investigation are implemented.	
	SCA Haz-3: Lead-Based Paint/Coatings, Asbestos, or PCB Occurrence Assessment (Prior to issuance of any demolition, grading or building permit): The project applicant shall submit a comprehensive assessment report to the Fire Prevention Bureau, Hazardous Materials Unit, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACM), lead-based paint, and any other building materials or stored materials classified as hazardous waste by State or federal law.	Submittal prior to issuance of a demolition, grading, or building permit	City of Oakland, CEDA, Building Services Division, Zoning Inspection Fire Prevention Bureau Hazardous Materials Unit	Review and approve the comprehensive assessment report detailing materials classified as hazardous waste	
	SCA Haz-4: Environmental Site Assessment Reports Remediation (Prior to issuance of a demolition, grading, or building permit): If the environmental site assessment reports recommend remedial action, the project applicant shall:a)Consult with the appropriate local, State, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination,	Submittal prior to issuance of a demolition, grading, or building permit;	City of Oakland, CEDA, Building Services Division, Zoning Inspection Fire Prevention Bureau Hazardous Materials Unit	Review written evidence of approval for any remedial actions required has been obtained and that Remediation Action Plan has been adequately prepared. Review and approve Construction-Phase Risk	

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	groundwater contamination, or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps.			Management Plan	
	b) Obtain and submit written evidence of approval for any remedial action if required by a local, State, or federal environmental regulatory agency.				
	c) Submit a copy of all applicable documentation required by local, State, and federal environmental regulatory agencies, including but not limited to: permit applications, Phase I and II environmental site assessments, human health and ecological risk assessments, remedial action plans, risk management plans, soil management plans, and groundwater management plans.				
	SCA Haz-5: Lead-based Paint Remediation (Prior to issuance of any demolition, grading or building permit): If lead-based paint is present, the project applicant shall submit specifications to the Fire Prevention Bureau,	Submittal prior to issuance of a demolition, grading, or building permit	City of Oakland, CEDA, Building Services Division, Zoning Inspection	Review and approve specifications for the stabilization or removal of any lead paint	
	Hazardous Materials Unit signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: Cal/OSHA's Construction Lead Standard, 8 CCR1532.1 and DHS regulation 17 CCR Sections 35001 through 36100, as may be amended.		City of Oakland Fire Prevention Bureau, Hazardous Materials Unit		
	SCA Haz-6: Other Materials Classified as Hazardous Waste (Prior to issuance of any demolition, grading or building permit): If other materials classified as hazardous waste by State or federal law are present, the	Submittal prior to issuance of a demolition, grading, or building permit	City of Oakland, CEDA, Building Services Division, Zoning Inspection	Review that written confirmation has been obtained that all State and federal laws will be	
	project applicant shall submit written confirmation to Fire Prevention Bureau, Hazardous Materials Unit that all State and federal laws and regulations shall be followed when profiling, handling, treating, transporting and/or disposing of such materials.		Fire Prevention Bureau Hazardous Materials Unit	followed when profiling, handling, treating, transporting and/or disposing of all hazardous waste.	
	SCA Haz-7: Health and Safety Plan per Assessment (Prior to issuance of any demolition, grading or building permit): If the required lead-based paint/coatings,	Submittal prior to issuance of a demolition, grading, or building	City of Oakland, CEDA, Building Services Division, Zoning	Review and approve health and safety plan to protect workers from	

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	asbestos, or PCB assessment finds presence of such	permit;	Inspection.	hazardous waste
	materials, the project applicant shall create and implement a health and safety plan to protect workers from risks associated with hazardous materials during demolition, renovation of affected structures, and transport and disposal.	Implement measures in accordance with timeframes outlined in plan		
	SCA Haz-8: Best Management Practices for Soil and Groundwater Hazards (Ongoing throughout demolition, grading, and construction activities): The project applicant shall implement all of the followingOngoing demolition and/or construction activities	Ongoing throughout demolition, grading, and/or construction activities.	City of Oakland, Fire Prevention Bureau, Hazardous Materials Unit;	Confirm that the appropriate federal, state or county oversight authorities, including but
	Best Management Practices (BMPs) regarding potential soil and groundwater hazards.		City of Oakland, CEDA- Building Services	not limited to the RWQCB and/or the
	 a) Soil generated by construction activities shall be stockpiled onsite in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable 		Division, Zoning Inspection;	all required clearances and confirmed that the all applicable standards, regulations and conditions for all previous contamination at the site.
	local, state and federal agencies laws, in particular, the Regional Water Quality Control Board (RWQCB) and/or the Alameda County Department of Environmental Health (ACDEH) and policies of the City of Oakland.			Review evidence from the City's Fire Department, Office of Emergency Services, indicating compliance
	 b) Groundwater pumped from the subsurface shall be contained onsite in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies of the City of Oakland, the RWQCB and/or the ACDEH. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusio into the building (pursuant to the Standard Condition of Approval regarding Radon or Vapor Intrusion from Soil and Groundwater Sources 			with the Standard Condition of Approval requiring a Site Review by the Fire Services Division pursuant to City Ordinance No. 12323, and compliance with the Standard Condition of Approval requiring a Phase I and/or Phase II Reports
	c) Prior to issuance of any demolition, grading, or building permit, the applicant shall submit for review and approval by the City of Oakland, written verification that the appropriate federal, state or			
	Mitigation Mascuros/ Standard Conditions of	Mitigation Moni	Mitigation Monitoring:	
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Environmental Impact	Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure
	county oversight authorities, including but not limited to the RWQCB and/or the ACDEH, have granted all required clearances and confirmed that the all applicable standards, regulations and conditions for all previous contamination at the site. The applicant also shall provide evidence from the City's Fire Department, Office of Emergency Services, indicating compliance with the Standard Condition of Approval requiring a Site Review by the Fire Services Division pursuant to City Ordinance No. 12323, and compliance with the Standard Condition of Approval requiring a Phase I and/or Phase II Reports.			
	SCA Hazards-9: Hazards Best Management Practices (Prior to commencement of demolition,	Prior to commencement of demolition, grading,	City of Oakland, CEDA, Building Services	Review and approve practices
	grading, or construction). The project applicant and construction contractor shall ensure that construction Best Management Practices (BMPs) are implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:	or construction Ongoing through demolition, grading and construction activities	Division, Zoning Inspection	Confirm that all applicable measures are being implemented and complied with
	a) Follow manufacture's recommendations on use, storage, and disposal of chemical products used in construction;			
	b) Avoid overtopping construction equipment fuel gas tanks;			
	c) During routine maintenance of construction equipment, properly contain and remove grease and oils;			
	d) Properly dispose of discarded containers of fuels and other chemicals.			
	e) Ensure that construction would not have a significant impact on the environment or pose a substantial health risk to construction workers and the occupants of the proposed development. Soil sampling and chemical analyses of samples shall be performed to determine the extent of potential contamination beneath all UST's, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-			

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	 site demolition, or construction activities would potentially affect a particular development or building. f) If soil, groundwater or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notification of regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory 			
	SCA Haz-10: Radon or Vapor Intrusion from Soil or Groundwater Sources (Ongoing): The project applicant shall submit documentation to determine whether radon or vapor intrusion from the groundwater and soil is located on-site as part of the Phase I documents. The Phase I analysis shall be submitted to the Fire Prevention Bureau, Hazardous Materials Unit, for review and approval, along with a Phase II report if warranted by the Phase I report for the project site. The reports shall make recommendations for remedial action, if appropriate, and should be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer. Applicant shall implement the approved recommendations.	Submittal with Phase I and/or Phase II documents, prior to issuance of a demolition, grading or building permit Ongoing if remediation actions are recommended	City of Oakland, Fire Prevention Bureau, Hazardous Materials Unit; City of Oakland, CEDA- Building Services Division, Zoning Inspection;	Review documents indicating compliance with the Standard Condition of Approval requiring a Site Review by the Fire Services Division pursuant to City Ordinance No. 12323, and compliance with the Standard Condition of Approval requiring a Phase I and/or Phase II Reports Confirm implementation of remedial actions if recommended
	SCA Haz-11: Asbestos Removal in Structures (Prior to issuance of a demolition permit): If asbestos-	Make determination prior to issuance of a	City of Oakland, CEDA, Building Services	Confirm that any asbestos removal is

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	containing materials (ACM) are found to be present in building materials to be removed, demolition and disposal, the project applicant shall submit specifications signed by a certified asbestos consultant for the removal, encapsulation, or enclosure of the identified ACM in accordance with all applicable laws and regulations, including but not necessarily limited to: California Code of Regulations, Title 8; Business and Professions Code; Division 3; California Health & Safety Code 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended.	demolition permit;	Division, Zoning Inspection Planning and Zoning Division Fire Prevention Bureau, Hazardous Materials Unit	conducted in accordance with procedures specified by Regulation 11, Rule 2 of BAAQMD regulations and with all applicable measures	
Hydrology					
The Project could impact water quality as a result of construction activities, storm water runoff, and spills of hazardous materials. However, Project compliance with a required NPDES permit and adherence to erosion control measures following Caltrans' Standards and Specifications would reduce or eliminate potential construction-related impacts.	SCA Hydro-1: Stormwater Pollution Prevention Plan (SWPPP) (Prior to and ongoing throughout demolition, grading, and/or construction activities): The project applicant must obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the State Water Resources Control Board (SWRCB). The project applicant must file a notice of intent (NOI) with the SWRCB. The project applicant will be required to prepare a stormwater pollution prevention plan (SWPPP) and submit the plan for review and approval by the Building Services Division. At a minimum, the SWPPP shall include a description of construction materials, practices, and equipment storage and maintenance; a list of pollutants likely to contact stormwater; site-specific erosion and sedimentation control practices; a list of provisions to eliminate or reduce discharge of materials to stormwater; Best Management Practices (BMPs), and an inspection and monitoring program. Prior to the issuance of any construction-related permits, the project applicant shall submit to the Building Services Division a copy of the SWPPP and evidence of submittal of the NOI to the SWRCB. Implementation of the SWPPP shall start with the commencement of construction and continue through the completion of the project. After construction is completed, the project applicant shall submit a notice of termination to the SWRCB.	Submittal prior to applying for first grading permit; Submit copy of approved SWPP prior to issuance of first gradingpermit; Ongoing throughout demolition, grading, and/or construction activities	City of Oakland CEDA- Planning & Zoning City of Oakland CEDA- Building Services Division, Zoning Inspection	Review and approve SWPPP. Confirm that required NOI and SWPPP is filed with SWRCB; Confirm that all measures are being implemented or complied with Confirm that Notice of Termination is filed with SWRCB	

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	 SCA Hydro-2: Erosion, Sedimentation, and Debris Control Measures (Prior to issuance of demolition, grading, or construction-related permit): The project applicant shall submit an erosion and sedimentation control plan for review and approval by the Building Services Division. All work shall incorporate all applicable "Best Management Practices (BMPs) for the construction industry, and as outlined in the Alameda Countywide Clean Water Program pamphlets, including BMP's for dust, erosion and sedimentation abatement per Chapter Section 15.04 of the Oakland Municipal Code. The measures shall include, but are not limited to, the following: a) On sloped properties, the downhill end of the construction area must be protected with silt fencing (such as sandbags, filter fabric, silt curtains, etc.) and hay bales oriented parallel to the contours of the slope (at a constant elevation) to prevent erosion into the street, gutters, storm drains. b) In accordance with an approved erosion control plan, the project applicant shall implement mechanical and vegetative measures to reduce erosion and sedimentation, including appropriate seasonal maintenance. One hundred (100) percent degradable erosion control fabric shall be installed on all graded slopes to protect and stabilize the slopes during construction and before permanent vegetation gets established. All graded areas shall be temporarily protected from erosion by seeding with fast growing annual species. All bare slopes must be covered with staked tarps when rain is occurring or is expected. c) Minimize the removal of natural vegetation or ground cover from the site in order to minimize the potential for erosion and sedimentation problems. Maximize the replanting of the area with native vegetation as soon as possible. d) Install filter materials acceptable to the Engineering Division at the storm drain inlets nearest to the 	Submittal prior to any grading activities Ongoing throughout grading and construction activities	City of Oakland CEDA- Building Services Division, Zoning Inspection	Review the approve Erosion and Sedimentation Control Plan; Confirm that all applicable measures are being implemented or complied with

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	project site prior to the start of the wet weather season (October 15); site dewatering activities; street washing activities; saw cutting asphalt or concrete; and in order to retain any debris flowing into the City storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding.			
	e) Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains.			
	 f) Direct and locate tool and equipment cleaning so that wash water does not discharge into the street, gutters, or stormdrains. 			
	g) Create a contained and covered area on the site for storage of bags of cement, paints, flammables, oils, fertilizers, pesticides, or any other materials used on the project site that have the potential for being discharged to the storm drain system by the wind or in the event of a material spill. No hazardous waste material shall be stored on site.			
	 h) Gather all construction debris on a regular basis and place them in a dumpster or other container which is emptied or removed on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater pollution. 			
	 Remove all dirt, gravel, refuse, and green waste from the sidewalk, street pavement, and storm drain system adjoining the project site. During wet weather, avoid driving vehicles off paved areas and other outdoor work. 			
	 j) Broom sweep the street pavement adjoining the project site on a daily basis. Caked-on mud or dirt shall be scraped from these areas before sweeping. At the end of each workday, the entire site must be cleaned and secured against potential erosion, dumping, or discharge to the street, gutter, storm drains. 			

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	 k) All erosion and sedimentation control measures implemented during construction activities, as well as construction site and materials management shall be in strict accordance with the control standards listed in the latest edition of the Erosion and Sediment Control Field Manual published by the Regional Water Quality Board (RWQB). 			
	 All erosion and sedimentation control measures shall be monitored regularly by the project applicant. The City may require erosion and sedimentation control measures to be inspected by a qualified environmental consultant (paid for by the project applicant) during or after rain events. If measures are insufficient to control sedimentation and erosion then the project applicant shall develop and implement additional and more effective measures immediately 			
	SCA Hydro-3: Post-Construction Stormwater Management Plan (Prior to issuance of building permit (or other construction-related permit): The applicant shall comply with the requirements of Provision C.3 of	Submit plan prior to issuance of building permit (or other construction-related	City of Oakland CEDA- Building Services Division, Zoning Inspection.	Review and approve Post-Construction Stormwater Management Plan.
	the National Pollutant Discharge Elimination System (NPDES) permit issued to the Alameda Countywide Clean Water Program. The applicant shall submit with the application for a building permit (or other construction-related permit) a completed Construction- Permit-Phase Stormwater Supplemental Form to the Building Services Division. The project drawings submitted for the building permit (or other construction- related permit) shall contain a stormwater management plan, for review and approval by the City, to manage stormwater run-off and to limit the discharge of pollutants in stormwater after construction of the project to the maximum extent practicable.	permit) Implement prior to final permit inspection		Confirm all measures in the Plan are being implemented or complied with
	a) The post-construction stormwater management plan shall include and identify the following:			
	i. All proposed impervious surface on the site;ii. Anticipated directional flows of on-site stormwater runoff; and			

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	iii. Site design measures to reduce the amount of impervious surface area and directly connected impervious surfaces; and			
	iv. Source control measures to limit the potential for stormwater pollution;			
	v. Stormwater treatment measures to remove pollutants from stormwater runoff; and			
	vi. Hydromodification management measures so that post-project stormwater runoff does not exceed the flow and duration of pre-project runoff, if required under the NPDES permit.			
	 b) The following additional information shall be submitted with the post-construction stormwater management plan: 			
	i. Detailed hydraulic sizing calculations for each stormwater treatment measure proposed; and			
	 Pollutant removal information demonstrating that any proposed manufactured/mechanical (i.e. non-landscape-based) stormwater treatment measure, when not used in combination with a landscape-based treatment measure, is capable or removing the range of pollutants typically removed by landscape-based treatment measures and/or the range of pollutants expected to be generated by the project. 			
	 c) All proposed stormwater treatment measures shall incorporate appropriate planting materials for stormwater treatment (for landscape-based treatment measures) and shall be designed with considerations for vector/mosquito control. Proposed planting materials for all proposed landscape-based stormwater treatment measures shall be included on the landscape and irrigation plan for the project. The applicant is not required to include on-site stormwater treatment measures in the post-construction stormwater management plan if he or she secures approval from Planning and 			

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	Zoning of a proposal that demonstrates compliance with the requirements of the City's Alternative Compliance Program.				
	d) Prior to final permit inspection: The applicant shall implement the approved stormwater management plan.				
	SCA Hydro-4: Maintenance Agreement for Stormwater Treatment Measures (Prior to final zoning inspection): For projects incorporating	Submittal prior to final inspection	City of Oakland, Public Works Agency, Sewer & Stormwater Division	Review and approve the "Standard City of Oakland Stormwater	
	stormwater treatment measures, the applicant shall enter into the "Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement," in accordance with Provision C.3.e of the NPDES permit, which provides, in part, for the following:		City of Oakland, CEDA- Building Services Division, Zoning Inspection.	Treatment Measures Maintenance Agreement," in accordance with Provision C.3.e of the	
	a) The applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity;			NPDES permit. Confirm recordation at County Recorder's Office	
	 b) Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The agreement shall be recorded at the County Recorder's Office at the applicant's expense. 				
	SCA Hydro-5: Erosion and Sedimentation Control (Ongoing throughout demolition grading, and/or construction activities): The project applicant shall implement Best Management Practices (BMPs) to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable. Plans demonstrating the Best Management Practices shall be submitted for review and approval by the Planning and Zoning Division and the Building Services	See SCA Hydro-2 above			

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	Division. At a minimum, the project applicant shall provide filter materials deemed acceptable to the City at nearby catch basins to prevent any debris and dirt from flowing into the City's storm drain system and creeks.			
	Noise			
Construction activity at the Project site would be expected to generate noise which could affect those living and working nearby.	SCA Noise-1: Days/Hours of Construction Operation. Ongoing throughout demolition, grading, and/or construction The project applicant shall require construction contractors to limit standard construction activities as follows:	Ongoing throughout demolition, grading, and/or construction	City of Oakland CEDA- Building Services Division, Zoning Inspection.	Confirm that all applicable measures are being implemented and complied with
	a. Construction activities are limited to between 7:00 AM and 7:00 PM Monday through Friday, except that pile driving and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday.			
	 b. Any construction activity proposed to occur outside of the standard hours of 7:00 am to 7:00 pm Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division. 			
	 c. Construction activity shall not occur on Saturdays, with the following possible exceptions: i. Prior to the building being enclosed, requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be 			

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	allowed on Saturdays with the prior written authorization of the Building Services Division.			
	ii. After the building is enclosed, requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed.			
	d. No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.			
	e. No construction activity shall take place on Sundays or Federal holidays.			
	f. Construction activities include but are not limited to: truck idling, moving equipment (including trucks, elevators, etc) or materials, deliveries, and construction meetings held on-site in a non- enclosed area.			
	g. Applicant shall use temporary power poles instead of generators where feasible.			
	SCA Noise -2: Noise Control. Ongoing throughout demolition, grading, and/or construction. To reduce	Submittal prior to, and ongoing throughout	City of Oakland, CEDA, Building Services	Review and approve noise reduction plan;
	noise impacts due to construction, the project applicant shall require construction contractors to implement a site-specific noise reduction program, subject to the Planning and Zoning Division and the Building Services Division review and approval, which includes the following measures:	demolition, grading, and/or construction	Division	Confirm that all applicable measures are being implemented and complied with
	a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).			
	b. Except as provided herein, Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with			

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	 compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. c. Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction. d. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented. 			
	 SCA Noise-3: Noise Complaint Procedures. Ongoing throughout demolition, grading, and/or construction. Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the Building Services Division a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include: a. A procedure and phone numbers for notifying the Building Services Division staff and Oakland Police Department; (during regular construction hours and off-hours); b. A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of 	Submit list prior to the issuance of a building permit; Ongoing throughout demolition, grading, and/or construction	City of Oakland, CEDA, Building Services Division City of Oakland – CEDA, Planning and Zoning	Review and approve the list of measures to respond to and track complaints pertaining to construction noise. Confirm that all applicable measures are being implemented and complied with.

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	both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);			
	c. The designation of an on-site construction complaint and enforcement manager for the project;			
	d. Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity; and			
	e. A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.			
	SCA Noise-5: Pile Driving and Other Extreme Noise Generators (Ongoing throughout demolition, grading,	Submit plan prior	City of Oakland, CEDA, Building Services	Review and approve acoustical consultant
	Generators (Ongoing throughout demolition, grading, and/or construction). To further reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90dBA, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified	construction activities involving pile driving or other extreme noise generators;	Building Services Division, Zoning Inspection	Review and approve plan to ensure the maximum feasible noise attenuation.
	acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the Planning and Zoning Division and	according to timeframes outlined in the plan		Confirm that a special inspection deposit has been submitted
	feasible noise attenuation will be achieved. This plan shall be based on the final design of the project. A third- party peer review, paid for by the project applicant, may be required to assist the City in evaluating the feasibility and effectiveness of the noise reduction plan submitted by the project applicant. The criterion for approving the plan shall be a determination that maximum feasible noise attenuation will be achieved. A special inspection denosit is required to appure compliance with the noise			Confirm that all applicable measures are being implemented and complied with.
	deposit is required to ensure compliance with the noise reduction plan. The amount of the deposit shall be determined by the Building Official, and the deposit shall be submitted by the project applicant concurrent with submittal of the noise reduction plan. The noise reduction plan shall include, but not be limited to, an			

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	evaluation of implementing the following measures. These attenuation measures shall include as many of the following control strategies as applicable to the site and construction activity:			
	 a) Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; 			
	 b) Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions; 			
	c) Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;			
	 d) Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and 			
	e) Monitor the effectiveness of noise attenuation measures by taking noise measurements.			
Although there would be some increase in traffic noise at the Project site, this noise would be unlikely to generate noise in violation of the City's Noise Ordinance.	SCA Noise-4: Operational Noise-General (Ongoing): Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.	Ongoing, throughout operation of the project.	City of Oakland, CEDA- Building Services Division, Zoning Inspection.	Confirm that all noise- generating operational equipment on the site do not exceed levels pursuant to the applicable performance standards in the Oakland Planning Code and Oakland Municipal Code.
	Utilities and Service	es		
The Project would generate solid waste during construction, but not in such volume that it would significantly	SCA Utilities-1: Waste Reduction and Recycling . The project applicant will submit a Construction & Demolition Waste Reduction and Recycling Plan	Submit plan prior to issuance of demolition, grading, or building	City of Oakland, CEDA, Building Services Division	Review and approve WRRP and ODP requirements;

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reduce the lifespan the regional landfill.	 (WRRP) and an Operational Diversion Plan (ODP) for review and approval by the Public Works Agency. a) (Prior to issuance of demolition, grading, or building permit): Chapter 15.34 of the Oakland Municipal Code outlines requirements for reducing waste and optimizing construction and demolition (C&D) recycling. Affected projects include all new construction, renovations/alterations/modifications with construction values of \$50,000 or more (except R-3), and all demolition (including soft demo).The WRRP must specify the methods by which the development will divert C&D debris waste generated by the proposed project from landfill disposal in accordance with current City requirements. Current standards, FAQs, and forms are available at www.oaklandpw.com/Page39.aspx 	permit; Ongoing	City of Oakland, Public Works, Environmental Services	Confirm implementation of the WRRP and ODP during construction Confirm that the proposed program is implemented and maintained for the duration of the proposed activity or facility
	 of in the Green Building Resource Center. After approval of the plan, the project applicant shall implement the plan. b) (Ongoing): The ODP will identify how the project complies with the Recycling Space Allocation Ordinance, (Chapter 17.118 of the Oakland Municipal Code), including capacity calculations, and specify the methods by which the development will meet the current diversion of solid waste generated by operation of the proposed project from landfill disposal in accordance with current City requirements. The proposed program shall be in implemented and maintained for the duration of the proposed activity or facility. Changes to the plan may be re-submitted to the Environmental Services Division of the Public Works Agency for review and approval. Any incentive programs shall remain fully operational as long as residents and businesses exist at the project site. 			
Utilities located in High Street, Alameda Avenue, Oakport Street, Coliseum Way, Howard Street and Jensen Street would be affected by construction, and relocation of certain utilities would be required.	SCA Utilities-2: Stormwater and Sewer (Prior to completing the final design for the project's sewer service): Confirmation of the capacity of the City's surrounding stormwater and sanitary sewer system and state of repair shall be completed by a qualified civil engineer with funding from the project applicant. The	Submittal prior to completing the final design for the project's sewer service	City of Oakland, CEDA, Building Services Division, Zoning Inspection City of Oakland Public	Review and approve capacity and state of repair for any necessary stormwater and sanitary sewer infrastructure improvements

	Mitigation Measures/ Standard Conditions of		Mitigation Monitoring:	
Environmental Impact	Approval	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure
	project applicant shall be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the proposed project. In addition, the applicant shall be required to pay additional fees to improve sanitary sewer infrastructure if required by the Sewer and Stormwater Division. Improvements to the existing sanitary sewer collection system shall specifically include, but are not limited to, mechanisms to control or minimize increases in infiltration/inflow to offset sanitary sewer increases associated with the proposed project. To the maximum extent practicable, the applicant will be required to implement Best Management Practices to reduce the peak stormwater runoff from the project site. Additionally, the project applicant shall be responsible for payment of the required installation or hook-up fees to the affected service providers.		Works Department, Sewer and Stormwater Division	Confirm that BMPs to reduce stormwater runoff are implemented.

Dowling Associates















AM

РM

Metro Traffic Data Inc.

310 N. Irwin Street - Suite 20 Hanford, CA 93230

800-975-6938 Phone/Fax www.metrotrafficdata.com Prepared For:

Debbie Yueh

Dowling Associates Inc. 180 Grand Avenue, Suite 250 Oakland, CA 94612

510-839-1742

LOCATION	International Boulevard @ 42nd Avenue
COUNTY	Alameda

COLLECTION DATE 4/23/2009

LONGITUDE 122°12'58.33"W

WEATHER Clear

Clear

LATITUDE 37°46'22.62"N

		North	bound			South	bound	Eastbound					Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	4	101	12	х	13	59	5	х	34	104	2	х	9	58	43	х
7:15 AM - 7:30 AM	2	137	17	х	26	72	13	х	31	114	4	х	8	75	40	х
7:30 AM - 7:45 AM	7	179	39	х	27	98	9	х	52	175	1	х	10	84	54	х
7:45 AM - 8:00 AM	4	191	52	х	42	112	7	х	29	211	4	х	16	101	31	х
8:00 AM - 8:15 AM	9	195	75	х	35	115	13	х	40	219	8	х	16	117	26	х
8:15 AM - 8:30 AM	5	172	73	х	40	92	6	х	38	239	3	х	25	115	32	х
8:30 AM - 8:45 AM	8	157	56	х	39	85	10	х	27	186	5	х	26	113	38	х
8:45 AM - 9:00 AM	10	168	35	х	32	118	9	х	34	205	9	х	24	120	31	х
TOTAL	49	1300	359	x	254	751	72	x	285	1453	36	x	134	783	295	x
	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks

Time	Left	Inru	Right	Trucks												
4:00 PM - 4:15 PM	31	187	11	х	36	172	28	х	49	75	19	х	7	79	51	х
4:15 PM - 4:30 PM	33	193	13	х	29	198	36	х	51	93	33	х	10	79	40	х
4:30 PM - 4:45 PM	38	168	8	х	43	201	30	х	57	94	23	х	8	91	36	х
4:45 PM - 5:00 PM	39	203	16	х	37	213	25	х	51	89	22	х	10	61	23	х
5:00 PM - 5:15 PM	29	163	13	х	41	237	26	х	45	86	24	х	9	67	27	х
5:15 PM - 5:30 PM	29	174	14	х	49	196	16	х	60	109	24	х	7	84	43	х
5:30 PM - 5:45 PM	38	129	12	х	35	211	21	х	48	91	25	х	5	100	31	х
5:45 PM - 6:00 PM	42	161	14	х	39	223	23	х	40	89	23	х	11	68	41	х
TOTAL	279	1378	101	x	309	1651	205	x	401	726	193	x	67	629	292	x

		North	bound		Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:45 AM - 8:45 AM	26	715	256	х	156	404	36	х	134	855	20	х	83	446	127	х
4:15 PM - 5:15 PM	139	727	50	x	150	849	117	х	204	362	102	х	37	298	126	х



Page 1 of 3

Metro Traffic Data Inc.

Metro Traffic Data Inc. 310 N. Irwin Street - Suite 20

Hanford, CA 93230 800-975-6938 Phone/Fax

www.metrotrafficdata.com

Prepared For:

Debbie Yueh

Dowling Associates Inc. 180 Grand Avenue, Suite 250 Oakland, CA 94612

510-839-1742

LOCATION	International Boulevard @ 42nd Avenue	
		_

COUNTY Alameda

LONGITUDE 12292'58.33"W

COLLECTION DATE 4/23/2009

WEATHER Clear

LATITUDE 37°46'22.62"N

	Nort	hbound E	Bikes	N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	1	0	0	0	2	0	3	0	14	0	1	0	3
7:15 AM - 7:30 AM	0	0	0	2	0	0	0	0	0	1	0	24	0	0	0	6
7:30 AM - 7:45 AM	0	0	0	1	0	1	0	2	0	4	0	9	0	5	0	13
7:45 AM - 8:00 AM	0	0	0	1	0	0	0	0	0	2	0	16	0	2	0	7
8:00 AM - 8:15 AM	0	0	0	1	0	1	0	3	0	2	0	20	0	6	0	8
8:15 AM - 8:30 AM	0	0	0	1	0	0	0	2	0	5	0	17	0	3	0	11
8:30 AM - 8:45 AM	0	0	0	2	0	1	0	6	0	2	0	8	0	0	0	11
8:45 AM - 9:00 AM	0	0	0	1	0	0	0	1	0	1	0	6	0	1	0	10
TOTAL	0	0	0	10	0	3	0	16	0	20	0	114	0	18	0	69
	Nort	hbound E	Bikes	N.Leg	Sou	thbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	stbound E	Bikes	W.Leg

			JINCO	IN.LOG	000	unbound L	JIKUS	U.LUG	Las		INCO	L.LOG	1103		inco	W.Log
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
4:00 PM - 4:15 PM	0	2	0	20	0	0	0	18	0	0	0	1	0	0	0	2
4:15 PM - 4:30 PM	0	0	0	18	0	5	0	14	0	0	0	0	0	0	0	2
4:30 PM - 4:45 PM	0	0	0	20	0	4	1	16	0	0	0	4	0	0	1	2
4:45 PM - 5:00 PM	0	1	0	10	0	1	0	17	0	0	0	3	0	0	0	1
5:00 PM - 5:15 PM	0	4	0	15	0	2	0	13	0	0	0	1	0	0	0	2
5:15 PM - 5:30 PM	0	3	0	18	0	6	0	19	0	0	0	1	0	0	0	3
5:30 PM - 5:45 PM	0	2	0	16	0	3	0	25	0	1	0	0	0	0	0	3
5:45 PM - 6:00 PM	0	2	0	18	1	4	0	7	0	0	0	0	0	0	0	0
TOTAL	0	14	0	135	1	25	1	129	0	1	0	10	0	0	1	15

Page 2 of 3



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Metro Traffic Data Inc. 310 N. Irwin Street - Suite 20

Hanford, CA 93230

800-975-6938 Phone/Fax www.metrotrafficdata.com Prepared For:

Debbie Yueh

Dowling Associates Inc. 180 Grand Avenue, Suite 250 Oakland, CA 94612

510-839-1742

LOCATION	International Boulevard @ High Street
COUNTY	Alameda

COLLECTION DATE 4/23/2009

LONGITUDE 122°12'53.38"W

WEATHER Clear

	CI	ea	

LATITUDE _____ 37°46'20.45"N

		North	bound			South	bound			East	bound		Westbound				
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	
7:00 AM - 7:15 AM	20	101	11	х	8	51	7	х	7	54	1	х	13	72	15	х	
7:15 AM - 7:30 AM	31	135	9	х	11	69	9	х	8	47	6	х	14	87	22	х	
7:30 AM - 7:45 AM	22	204	13	х	9	96	10	х	9	61	7	х	8	107	18	х	
7:45 AM - 8:00 AM	29	225	22	х	9	97	10	х	17	61	7	х	14	127	15	х	
8:00 AM - 8:15 AM	16	232	19	х	10	121	8	х	20	70	9	х	20	96	31	х	
8:15 AM - 8:30 AM	25	202	14	х	9	105	5	х	13	76	7	х	18	107	25	х	
8:30 AM - 8:45 AM	20	179	20	х	9	100	12	х	13	64	10	х	23	100	23	х	
8:45 AM - 9:00 AM	25	203	20	х	15	124	5	х	12	67	7	х	16	94	17	х	
TOTAL	188	1481	128	х	80	763	66	х	99	500	54	х	126	790	166	х	
		North	bound			South	bound			East	oound		Westbound				
												_					

Time	Left	Thru	Right	Trucks												
4:00 PM - 4:15 PM	19	184	29	х	17	176	6	х	22	122	8	х	14	61	22	х
4:15 PM - 4:30 PM	33	190	32	х	15	210	11	х	14	118	19	х	22	87	23	х
4:30 PM - 4:45 PM	19	174	27	х	16	203	10	х	16	104	16	х	22	71	23	х
4:45 PM - 5:00 PM	23	207	33	х	16	212	11	х	22	124	16	х	20	67	25	х
5:00 PM - 5:15 PM	14	181	39	х	13	232	10	х	13	118	15	х	26	74	24	х
5:15 PM - 5:30 PM	20	197	24	х	11	188	10	х	22	124	9	х	15	87	17	х
5:30 PM - 5:45 PM	16	145	39	х	9	208	11	х	11	105	11	х	28	66	20	х
5:45 PM - 6:00 PM	20	165	25	х	16	215	11	х	15	119	14	х	19	80	25	х
TOTAL	164	1443	248	x	113	1644	80	x	135	934	108	x	166	593	179	x

		North	bound			South	bound			Eastb	ound		Westbound				
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	
7:45 AM - 8:45 AM	90	838	75	х	37	423	35	x	63	271	33	х	75	430	94	х	
4:15 PM - 5:15 PM	89	752	131	х	60	857	42	х	65	464	66	х	90	299	95	x	



M100 -111 <u>Metro Traffic Data Inc.</u>

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Hanford, CA 93230

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Debbie Yueh

Dowling Associates Inc. 180 Grand Avenue, Suite 250 Oakland, CA 94612

510-839-1742

LOCATION	International Boulevard @ High Street

LONGITUDE 12292'53.38"W

COUNTY Alameda COLLECTION DATE 4/23/2009

WEATHER Clear

	Cle	

LATITUDE 37°46'20.45"N

	Nor	hbound E	Bikes	N.Leg	Sou	thbound I	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	stbound E	Bikes	W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	1	0	2	0	0	0	7	0	2	0	23	0	2	0	1
7:15 AM - 7:30 AM	0	0	0	9	0	0	0	15	0	0	0	14	0	0	0	6
7:30 AM - 7:45 AM	0	1	0	4	0	0	0	6	0	4	0	9	0	2	0	4
7:45 AM - 8:00 AM	0	1	0	3	0	0	0	8	0	1	0	14	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	6	0	0	0	9	0	0	0	7	0	0	0	0
8:15 AM - 8:30 AM	0	1	0	7	0	0	0	11	0	1	0	6	0	1	0	1
8:30 AM - 8:45 AM	0	0	0	7	0	0	0	7	0	0	0	10	0	0	0	1
8:45 AM - 9:00 AM	0	1	0	2	0	0	0	10	0	0	0	12	0	0	0	1
TOTAL	0	5	0	40	0	0	0	73	0	8	0	95	0	5	0	14
	Nor	hbound E	Bikes	N.Leg	Sou	thbound I	Bikes	S.Leg	Eas	stbound B	ikes	E.Leg	Wes	stbound E	Bikes	W.Leg
	1 11		D : 14	Dede	1 6		D ¹ I 4	Dede	1 6		D	Dede			D ¹ 1 4	Dede

	14011		JINGS	IN.LOG	000		JIKUS	U.LUG	Las	Libound D	INCO	L.LOG	1103		inco	W.Log
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
4:00 PM - 4:15 PM	0	0	0	4	0	1	0	18	0	2	0	17	0	4	0	5
4:15 PM - 4:30 PM	0	1	0	0	0	1	0	13	0	3	0	18	0	0	0	9
4:30 PM - 4:45 PM	0	0	0	2	0	0	0	26	0	1	0	26	0	3	0	4
4:45 PM - 5:00 PM	1	0	0	4	0	1	0	26	0	1	0	11	0	1	0	5
5:00 PM - 5:15 PM	0	1	0	3	0	0	0	17	0	0	0	23	0	3	0	4
5:15 PM - 5:30 PM	0	1	0	2	0	1	0	17	0	1	0	21	0	3	0	1
5:30 PM - 5:45 PM	0	1	0	1	0	1	0	27	0	0	0	14	0	3	0	7
5:45 PM - 6:00 PM	0	0	0	2	0	3	0	25	0	1	0	10	0	3	0	6
TOTAL	1	4	0	18	0	8	0	169	0	9	0	140	0	20	0	41



COLLECTION DATE

AM

РМ

Metro Traffic Data Inc. 310 N. Irwin Street - Suite 20

Hanford, CA 93230

800-975-6938 Phone/Fax www.metrotrafficdata.com

4/28/2009

Prepared For:

Debbie Yueh

Dowling Associates Inc. 180 Grand Avenue, Suite 250 Oakland, CA 94612

510-839-1742

LOCATION	San Leandro Street @ High Street	LATITUDE	37%46'14.19"N
COUNTY	Alameda	LONGITUDE	122°13'1.65"W

WEATHER

		North	bound			South	bound			Easth	bound			West	bound	
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	24	58	6	х	5	44	18	х	19	61	8	х	11	99	14	х
7:15 AM - 7:30 AM	36	101	9	х	2	55	20	х	20	62	10	х	13	92	14	х
7:30 AM - 7:45 AM	32	148	10	х	8	62	34	х	21	75	16	х	9	144	14	х
7:45 AM - 8:00 AM	27	164	7	х	4	66	32	х	21	95	17	х	18	126	9	х
8:00 AM - 8:15 AM	20	220	15	х	3	69	24	х	28	78	9	х	12	110	16	х
8:15 AM - 8:30 AM	33	179	8	х	3	85	26	х	30	87	16	х	14	95	17	х
8:30 AM - 8:45 AM	22	136	13	х	9	75	32	х	22	78	16	х	12	100	19	х
8:45 AM - 9:00 AM	27	105	11	х	5	75	26	х	22	91	13	х	18	106	14	х
TOTAL	221	1111	79	x	39	531	212	x	183	627	105	x	107	872	117	х

		North	bound			South	bound			Eastl	bound		Westbound				
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	
4:00 PM - 4:15 PM	17	111	11	х	5	114	19	х	22	140	22	х	11	87	9	х	
4:15 PM - 4:30 PM	21	115	20	х	13	118	33	х	16	105	16	х	13	92	14	х	
4:30 PM - 4:45 PM	22	119	22	х	10	134	27	х	29	119	20	х	13	62	17	х	
4:45 PM - 5:00 PM	23	117	17	х	10	110	34	х	28	100	17	х	20	93	19	х	
5:00 PM - 5:15 PM	24	141	11	х	8	126	23	х	20	116	22	х	12	84	15	х	
5:15 PM - 5:30 PM	24	143	20	х	13	133	32	х	21	127	16	х	12	82	15	х	
5:30 PM - 5:45 PM	19	115	24	х	16	144	32	х	21	124	27	х	13	109	20	х	
5:45 PM - 6:00 PM	29	100	27	х	7	156	30	х	24	110	19	х	10	103	10	х	
TOTAL	179	961	152	x	82	1035	230	x	181	941	159	x	104	712	119	x	

		North	bound			South	bound			Eastl	bound			West	bound	
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:30 AM - 8:30 AM	112	711	40	х	18	282	116	x	100	335	58	х	53	475	56	x
5:00 PM - 6:00 PM	96	499	82	х	44	559	117	х	86	477	84	х	47	378	60	х



Page 1 of 3

... -.... <u>Metro Traffic Data Inc.</u>

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Prepared For:

Debbie Yueh

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510-839-1742

LOCATION	San Leandro Street @ High Street	LATITUDE	37º46'14.19"N
		-	

LONGITUDE 122°13'1.65"W

WEA

COLLECTION DATE	4/28/2009

COUNTY Alameda

ATHER	Clear	
		1

	Nort	hbound E	Bikes	N.Leg	Sou	thbound I	Bikes	S.Leg	Eas	stbound B	ikes	E.Leg	Wes	stbound B	likes	W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	1	0	2	0	0	0	7	0	2	0	2	0	0	0	1
7:15 AM - 7:30 AM	0	0	0	4	0	1	0	16	0	1	0	0	0	0	0	2
7:30 AM - 7:45 AM	0	0	0	1	0	1	0	10	0	0	0	2	0	0	0	2
7:45 AM - 8:00 AM	0	1	0	3	0	3	0	10	0	1	0	1	0	0	0	0
8:00 AM - 8:15 AM	0	1	0	2	0	0	1	7	0	0	0	2	0	0	0	0
8:15 AM - 8:30 AM	0	1	0	2	0	1	2	4	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	1	0	3	0	0	0	1	0	3	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	1	0	5	2	3	0	6	0	0	0	4	0	0	0	3
TOTAL	0	6	0	22	2	9	3	61	0	7	0	11	0	0	0	8
	Nort	Northbound Bikes			Sour	thhound l	Rikes	SLea	Fas	thound B	ikos	FLea	Woo	thound B	likos	WLen

	Nor	hbound E	Bikes	N.Leg	Sou	thbound E	Bikes	S.Leg	Eas	stbound B	ikes	E.Leg	Wes	stbound B	lkes	W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
4:00 PM - 4:15 PM	0	0	0	2	0	0	0	5	0	3	0	0	0	0	0	2
4:15 PM - 4:30 PM	0	0	0	2	0	1	1	3	0	1	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	1	0	1	0	1	0	5	0	1	0	0	0	0	0	2
4:45 PM - 5:00 PM	1	0	0	3	0	2	0	10	1	1	0	1	1	0	0	0
5:00 PM - 5:15 PM	0	1	0	5	0	1	0	7	0	3	0	1	0	0	0	2
5:15 PM - 5:30 PM	0	1	0	1	0	1	0	5	0	1	0	0	0	0	1	0
5:30 PM - 5:45 PM	0	1	0	4	0	2	0	6	0	0	0	0	0	0	0	2
5:45 PM - 6:00 PM	0	3	0	4	0	1	0	4	1	1	0	0	0	0	0	3
TOTAL	1	7	0	22	0	9	1	45	2	11	0	2	1	0	1	11

City of Oakland Transportation Services Division 250 Frank H. Ogawa Plaza, #4344 Oakland CΔ 94612 File Name : TM 42nd Ave and Coliseum Wy (I-880 NB OnRamp) AM 9-28-11

Site Code : 00000000

Start Date : 9/28/2011 Page No : 1

								G	roups	Printed	• Unshi	fted									
		42NI)				COLIS	EUM				42NI)				COLIS	SEUM			
		<u> </u>	o <u>m No</u> i	<u>rth -</u>			<u> </u>	<u>om Ea</u>	st -			<u> </u>	<u>om Sou</u>	<u>th -</u>			<u> </u>	<u>om We</u>	est -		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Tota
07:00 AM	54	80	0	0	134	15	98	0	0	113	0	31	0	0	31	0	0	0	0	0	278
07:15 AM	71	111	0	0	182	20	106	0	0	126	0	39	0	0	39	0	0	0	0	0	347
07:30 AM	60	71	0	0	131	24	122	0	0	146	0	32	0	0	32	0	0	0	0	0	309
07:45 AM	82	95	0	0	177	34	114	0	0	148	0	52	0	0	52	0	0	0	0	0	377
Total	267	357	0	0	624	93	440	0	0	533	0	154	0	0	154	0	0	0	0	0	1311
08:00 AM	77	92	0	0	169	32	105	1	0	138	0	56	0	0	56	0	0	0	0	0	363
08:15 AM	64	103	0	0	167	34	112	0	0	146	0	44	0	0	44	0	0	0	0	0	357
08:30 AM	66	81	0	0	147	24	108	0	0	132	0	49	0	0	49	0	0	0	0	0	328
08:45 AM	51	89	0	0	140	29	114	0	0	143	0	31	0	0	31	0	0	0	0	0	314
Total	258	365	0	0	623	119	439	1	0	559	0	180	0	0	180	0	0	0	0	0	1362
Grand Total	525	722	0	0	1247	212	879	1	0	1092	0	334	0	0	334	0	0	0	0	0	2673
Apprch %	42.1	57.9	0	0		19.4	80.5	0.1	0		0	100	0	0		0	0	0	0		
Total %	19.6	27	0	0	46.7	7.9	32.9	0	0	40.9	0	12.5	0	0	12.5	0	0	0	0	0	



		42ND)				COLIS	SEUM				42NI)				COLIS	EUM			
		Fro	m Nor	rth -			Fr	om Ea	st -			Fre	om Sou	th -			Fre	om We	est -		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 07:	00 AM	I to 08:4	45 AM -	Peak 1	of 1														
Peak Hour for	Entire l	Intersect	tion Be	gins at	07:45 AI	M															
07:45 AM	82	95	0	0	177	34	114	0	0	148	0	52	0	0	52	0	0	0	0	0	377
08:00 AM	77	92	0	0	169	32	105	1	0	138	0	56	0	0	56	0	0	0	0	0	363
08:15 AM	64	103	0	0	167	34	112	0	0	146	0	44	0	0	44	0	0	0	0	0	357
08:30 AM	66	81	0	0	147	24	108	0	0	132	0	49	0	0	49	0	0	0	0	0	328
Total Volume	289	371	0	0	660	124	439	1	0	564	0	201	0	0	201	0	0	0	0	0	1425
% App. Total	43.8	56.2	0	0		22	77.8	0.2	0		0	100	0	0		0	0	0	0		
PHF	.881	.900	.000	.000	.932	.912	.963	.250	.000	.953	.000	.897	.000	.000	.897	.000	.000	.000	.000	.000	.945

City of Oakland Transportation Services Division 250 Frank H. Ogawa Plaza, #4344 Oakland, CA 94612

16.9

29.1

0.1

0.1

21.2

13.7

Total %

File Name : TM 42nd Ave and Coliseum Wy (I-880 NB OnRamp) PM 9-27-11 Site Code : 0000000 Start Date : 9/27/2011 Page No : 1

19.1

Int. Total

Groups Printed- Unshifted 42ND 42ND COLISEUM COLISEUM From North -From East -From South -From West -Start Time Right Thru Left Peds Right Thru Left Peds App. Total Right Thru Left | Peds Right Thru Left Peds App. Total App. Total App. Total 04:00 PM 04:15 PM 04:30 PM 04:45 PM Total 05:00 PM 05:15 PM 05:30 PM 05:45 PM Total Grand Total 39.2 60.8 36.7 63.2 0.1 99.7 0.3 Apprch %



		42ND)				COLIS	SEUM				42NI)				COLIS	EUM]
		Fro	m Nor	th -			Fr	om Ea	st -			Fre	om Sou	th -			Fr	om We	est -		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 04:	00 PM	to 05:4	5 PM - I	Peak 1 o	f 1														
Peak Hour for	Entire l	Intersect	tion Be	gins at	04:45 PM	Л															
04:45 PM	50	89	0	0	139	78	113	1	0	192	0	89	0	0	89	0	0	0	0	0	420
05:00 PM	59	89	0	0	148	64	119	0	0	183	0	76	0	0	76	0	0	0	0	0	407
05:15 PM	62	85	0	0	147	68	123	0	0	191	0	88	0	0	88	0	0	0	0	0	426
05:30 PM	56	94	0	0	150	86	105	0	0	191	0	76	0	0	76	0	0	0	0	0	417
Total Volume	227	357	0	0	584	296	460	1	0	757	0	329	0	0	329	0	0	0	0	0	1670
% App. Total	38.9	61.1	0	0		39.1	60.8	0.1	0		0	100	0	0		0	0	0	0		
PHF	.915	.949	.000	.000	.973	.860	.935	.250	.000	.986	.000	.924	.000	.000	.924	.000	.000	.000	.000	.000	.980



Metro Traffic Data Inc. 310 N. Irwin Street - Suite 20

Hanford, CA 93230

800-975-6938 Phone/Fax www.metrotrafficdata.com Prepared For:

Clear

Debbie Yueh

Dowling Associates Inc. 180 Grand Avenue, Suite 250 Oakland, CA 94612

510-839-1742

LOCATION	High Street @ Coliseum Way	LATITUDE	37º46'6.53"N
COUNTY	Alameda		12213'11.84"W

COLLECTION DATE 4/23/2009

AM

РМ

		North	bound			South	bound			Easth	ound			West	bound	
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	80	36	76	х	0	0	0	х	25	52	81	х	3	91	19	х
7:15 AM - 7:30 AM	58	57	130	х	0	0	0	х	22	76	107	х	0	106	19	х
7:30 AM - 7:45 AM	53	68	112	х	0	0	0	х	26	60	91	х	4	149	23	х
7:45 AM - 8:00 AM	45	89	126	х	0	0	0	х	44	106	93	х	1	188	15	х
8:00 AM - 8:15 AM	53	88	104	х	0	0	0	х	36	106	97	х	6	160	21	х
8:15 AM - 8:30 AM	55	44	96	х	0	0	0	х	33	96	111	х	5	114	23	х
8:30 AM - 8:45 AM	53	59	88	х	0	0	0	х	26	93	103	х	3	141	17	х
8:45 AM - 9:00 AM	56	52	114	х	0	0	0	х	28	87	104	х	2	132	22	х
TOTAL	453	493	846	X	0	0	0	x	240	676	787	X	24	1081	159	x
		Northbound				South	bound			East	ound			West	bound	

WEATHER

Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	l eft	Thru	Right	Trucks
	Lon	Timu	nigin	muono	Lon		rugin	Trucko	Lon		rugin	muono	Lon		rugin	muono
4:00 PM - 4:15 PM	51	98	101	x	0	0	0	x	123	103	10	х	2	113	46	х
4:15 PM - 4:30 PM	48	101	120	х	0	0	0	х	114	98	19	х	2	111	20	х
4:30 PM - 4:45 PM	61	120	116	х	0	0	0	х	106	115	25	х	2	138	22	х
4:45 PM - 5:00 PM	46	85	129	х	0	0	0	х	141	107	9	х	0	131	28	х
5:00 PM - 5:15 PM	51	139	147	х	0	0	0	х	114	103	15	х	0	129	29	х
5:15 PM - 5:30 PM	68	144	119	х	0	0	0	х	124	107	7	х	2	130	33	х
5:30 PM - 5:45 PM	66	113	132	х	0	0	0	х	111	109	12	х	0	161	18	х
5:45 PM - 6:00 PM	46	83	104	х	0	0	0	х	100	100	9	х	1	163	25	х
TOTAL	437	883	968	x	0	0	0	x	933	842	106	x	9	1076	221	x

		North	bound			South	bound			Eastl	bound		Westbound				
PEAK HOUR	Left Thru Right Trucks		Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks			
7:30 AM - 8:30 AM	206	289	438	х	0	0	0	х	139	368	392	х	16	611	82	x	
4:45 PM - 5:45 PM	231	481	527	х	0	0	0	x	490	426	43	х	2	551	108	х	



WEATHER Clear

Prepared For:

Debbie Yueh

Dowling Associates Inc. 180 Grand Avenue, Suite 250 Oakland, CA 94612

510-839-1742

	High Street @ Coliseum Way	37º46'6.53"N
COUNTY	Alameda	122°13'11.84"W

Metro Traffic Data Inc.

800-975-6938 Phone/Fax www.metrotrafficdata.com

Hanford, CA 93230

310 N. Irwin Street - Suite 20

COLLECTION DATE 4/23/2009

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<u>Metro Traffic Data Inc.</u>

-

	Nort	hbound E	Bikes	N.Leg Southbound Bikes				S.Leg	Eas	tbound B	ikes	E.Leg	Wes	W.Leg		
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	1	0	0
7:30 AM - 7:45 AM	0	0	0	4	0	0	0	3	0	1	0	1	0	1	0	0
7:45 AM - 8:00 AM	0	0	0	3	0	0	0	3	0	0	0	1	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	3	0	0	0	3	0	0	0	0	0	0	1	0
8:15 AM - 8:30 AM	0	0	0	3	0	0	0	2	0	0	0	2	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	2	0	0	0	3	0	0	0	0	0	1	0	0
8:45 AM - 9:00 AM	0	0	0	1	0	0	0	0	0	3	0	0	0	2	0	0
TOTAL	0	0	1	16	0	0	0	17	0	4	0	4	0	5	1	0

	Nort	thbound E	Bikes	N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left Thru Right F		Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
4:00 PM - 4:15 PM	0	0	0	5	0	0	0	1	0	2	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	5	0	0	0	0	0	0	0	3	0	2	1	0
4:30 PM - 4:45 PM	0	1	1	1	0	0	0	4	0	1	0	1	0	1	0	1
4:45 PM - 5:00 PM	0	0	1	4	0	0	0	6	0	0	0	1	0	1	0	1
5:00 PM - 5:15 PM	0	0	0	5	0	0	0	5	0	2	0	2	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	3	0	0	0	2	0	1	0	0
5:30 PM - 5:45 PM	0	0	0	2	0	0	0	2	0	1	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	4	0	0	0	6	0	2	0	1	0	0	0	0
TOTAL	0	1	2	26	0	0	0	27	0	8	0	10	0	5	1	2

City of Oakland Transportation Services Division 250 Frank H. Ogawa Plaza, #4344 Oakland, CA 94612

File Name : TM 42nd Ave and I-880 SB OffRamp AM 9-27-11 Site Code : 0000000 Start Date : 9/27/2011 Page No : 1

	Groups Printed- Unshifted																					
	42ND RAMP								42NI)												
		Fre	om No	rth -			Fr	om Ea	st -		From South -						From West -					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total	
07:00 AM	0	0	81	0	81	0	0	0	0	0	0	0	0	0	0	0	106	29	0	135	216	
07:15 AM	0	0	94	0	94	0	0	0	0	0	0	0	0	0	0	0	109	46	0	155	249	
07:30 AM	0	0	79	0	79	0	0	0	0	0	0	0	0	0	0	0	135	45	0	180	259	
07:45 AM	0	0	106	0	106	0	0	0	0	0	0	0	0	0	0	0	140	47	0	187	293	
Total	0	0	360	0	360	0	0	0	0	0	0	0	0	0	0	0	490	167	0	657	1017	
08:00 AM	0	0	98	0	98	0	0	0	0	0	0	0	0	0	0	0	109	57	0	166	264	
08:15 AM	0	0	81	0	81	0	0	0	0	0	0	0	0	0	0	0	109	41	0	150	231	
08:30 AM	0	0	102	0	102	0	0	0	0	0	0	0	0	0	0	0	99	35	0	134	236	
08:45 AM	0	0	88	0	88	0	0	0	0	0	0	0	0	0	0	0	128	58	0	186	274	
Total	0	0	369	0	369	0	0	0	0	0	0	0	0	0	0	0	445	191	0	636	1005	
09:00 AM	0	0	76	0	76	0	0	0	0	0	0	0	0	0	0	0	117	47	0	164	240	
Grand Total	0	0	805	0	805	0	0	0	0	0	0	0	0	0	0	0	1052	405	0	1457	2262	
Apprch %	0	0	100	0		0	0	0	0		0	0	0	0		0	72.2	27.8	0			
Total %	0	0	35.6	0	35.6	0	0	0	0	0	0	0	0	0	0	0	46.5	17.9	0	64.4		


		42ND)				RAM	Р				42NI)				RAM	Р			
		Fro	m Noi	rth -			Fr	om Ea	st -			Fre	m Sou	th -			Fr	om We	est -		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 07:	00 AM	l to 09:0	00 AM -	Peak 1 o	of 1														
Peak Hour for	Entire l	Intersec	tion Be	gins at	07:15 AI	M															
07:15 AM	0	0	94	0	94	0	0	0	0	0	0	0	0	0	0	0	109	46	0	155	249
07:30 AM	0	0	79	0	79	0	0	0	0	0	0	0	0	0	0	0	135	45	0	180	259
07:45 AM	0	0	106	0	106	0	0	0	0	0	0	0	0	0	0	0	140	47	0	187	293
08:00 AM	0	0	98	0	98	0	0	0	0	0	0	0	0	0	0	0	109	57	0	166	264
Total Volume	0	0	377	0	377	0	0	0	0	0	0	0	0	0	0	0	493	195	0	688	1065
% App. Total	0	0	100	0		0	0	0	0		0	0	0	0		0	71.7	28.3	0		
PHF	.000	.000	.889	.000	.889	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.880	.855	.000	.920	.909

City of Oakland Transportation Services Division 250 Frank H. Ogawa Plaza, #4344 Oakland, CA 94612

File Name : TM 42nd Ave and I-880 SB OffRamp PM 9-27-11 Site Code : 0000000 Start Date : 9/27/2011 Page No : 1

								G	roups	Printed	Unshi	fted									
		42ND)				RAM	Р				42ND)				RAM	IP			
		Fre	om No	rth -			Fr	om Ea	st -			Fro	m Sou	th -			Fr	om We	est -		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	82	0	82	0	0	0	0	0	0	0	0	0	0	0	135	64	0	199	281
04:15 PM	0	0	75	0	75	0	0	0	0	0	0	0	0	0	0	0	117	84	0	201	276
04:30 PM	0	0	81	0	81	0	0	0	0	0	0	0	0	0	0	0	100	75	0	175	256
04:45 PM	0	0	93	0	93	0	0	0	0	0	0	0	0	0	0	0	125	83	0	208	301
Total	0	0	331	0	331	0	0	0	0	0	0	0	0	0	0	0	477	306	0	783	1114
05:00 PM	0	0	84	0	84	0	0	0	0	0	0	0	0	0	0	0	92	80	0	172	256
05:15 PM	0	0	82	0	82	0	0	0	0	0	0	0	0	0	0	0	126	88	0	214	296
05:30 PM	0	0	103	0	103	0	0	0	0	0	0	0	0	0	0	0	131	71	0	202	305
05:45 PM	0	0	113	0	113	0	0	0	0	0	0	0	0	0	0	0	133	79	0	212	325
Total	0	0	382	0	382	0	0	0	0	0	0	0	0	0	0	0	482	318	0	800	1182
Grand Total	0	0	713	0	713	0	0	0	0	0	0	0	0	0	0	0	959	624	0	1583	2296
Apprch %	0	0	100	0		0	0	0	0		0	0	0	0		0	60.6	39.4	0		
Total %	0	0	31.1	0	31.1	0	0	0	0	0	0	0	0	0	0	0	41.8	27.2	0	68.9	



		42ND)				RAM	Р				42NI)				RAM	Р]
		Fro	m Noi	rth -			Fr	om Ea	st -			Fre	m Sou	th -			Fr	om We	est -		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 04:	00 PM	to 05:4	5 PM - F	Peak 1 o	f 1														
Peak Hour for	Entire l	Intersec	tion Be	gins at	05:00 PN	Л															
05:00 PM	0	0	84	0	84	0	0	0	0	0	0	0	0	0	0	0	92	80	0	172	256
05:15 PM	0	0	82	0	82	0	0	0	0	0	0	0	0	0	0	0	126	88	0	214	296
05:30 PM	0	0	103	0	103	0	0	0	0	0	0	0	0	0	0	0	131	71	0	202	305
05:45 PM	0	0	113	0	113	0	0	0	0	0	0	0	0	0	0	0	133	79	0	212	325
Total Volume	0	0	382	0	382	0	0	0	0	0	0	0	0	0	0	0	482	318	0	800	1182
% App. Total	0	0	100	0		0	0	0	0		0	0	0	0		0	60.2	39.8	0		
PHF	.000	.000	.845	.000	.845	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.906	.903	.000	.935	.909

Phone: (626) 564-1944 Fax: (626) 564-0969

WILTEC

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT:		KIMLEY-HORN ASSOCIATES
PROJECT:		HIGH STREET INTERSECTION COUNTS
DATE:		THURSDAY, APRIL 6, 2006
PERIOD:		6:00 AM TO 9:00 AM
INTERSECTION:	N/S	OAKPORT STREET
	EW	HIGH STREET

SMINICOUR	178									i i i i i i i i i i i i i i i i i i i			
	il il	2	3		5	6	7	3	•	10	11	22	and ma 1
PERIOD	Seri	SBITH	SELT	WBRIT	WBIRH	WELT	NERT	NBUKI	NOLT.	EBRII	EBINE		TROTTAL
600-615	19	116	10	41	20	54	5	0	0	47	48	0	360
615-630	31	147	20	55	31	53	7	0	1	73	68	0	486
630-645	44	203	35	92	32	71	19	2	2	93	86	0	679
645-700	30	199	28	78	57	58	14	0	0	104	105	0	673
700-745	27	211	20	86	56	80	26	1	0	127	112	0	746
715-730	47	197	36	96	69	105	23	1	0	111	104	٥	789
730-745	50	175	21	107	81	99	19	6	1	142	116	0	817
745-800	70	197	37	131	95	106	23	6	1	172	155	0	993
800-815	61	162	23	101	84	90	19	7	3	167	194	0	911
815-830	56	172	23	110	97	82	29	9	1	132	165	· 0	876
830-845	65	131	25	95	71	76	30	8	4	117	161	0	783
B45-900	63	137	22	112	68	62	22	. 7	3	102	128	0	726
HOUR TOTA	S State				an day	So Decesti)	Sec. 1	- 後端		
			3		6	6	$\overline{\eta}$	18 H R &	5. S. M. 19	10	ាំរា	in the second	
TIME	্ৰয়হন	SPIT	SBLT	WERT	WBITH	WELT	NERT	NBITH	NELT	EBRI	EBIRK	BELT	TOTAL
500-700 de	124	665	93	266	140	236	45	2	3	317	307	0	2198
615-715	132	760	103	311	176	262	66	3	3	397	371	0	2584
630-730	148	810	119	352	214	314	82	4	2	435	407	0	2887
645-745	154	782	105	367	263	342	82	8	1	484	437	0	3025
700-800	194	780	114	420	301	390	91	14	2	552	487	0	3345
715-815	228	731	117	435	329	400	84	20	5	592	569		3510
730-8303	237	706	104	449	357	377	90	28	6	613	630	0	3597
745.845	252	662	108	437	347	354	101	30	9	588	675	; 0	3563
leno enn	245	602	2 93	418	320	310	100	31	11	518	648		3296



Phone: (626) 564-1944 Fax: (626) 564-0969

WILTEC

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT:		KIMLEY-HORN ASSOCIATES
PROJECT:		HIGH STREET INTERSECTION COUNTS
DATE:		THURSDAY, APRIL 6, 2006
PERIOD:		4:00 PM TO 7:00 PM
INTERSECTION:	N/S	OAKPORT/ALAMEDA AVENUE
	E/W	HIGH STREET

15 MIN COUN	S		(* *) * * * * * *			4.4.4							
	1 1	2	8	S (2 - 6	5	6	7	8	E C	10	ાંધ	122 Feith Se	TRATIN
PERIOD	SERT	SEIH	SPECT	WERT	U WEITH	<u>. Welr</u>	NERT	NEITH		EBRIN			704
4004156	64	1 <u>31</u>	22	98	93	51	45	9	5	122	154	0	047
446-480	80	163	25	91	110	59	30		8	109	134		
430-445174	62	191	33	86	95	52	48	0	12	109	120		017
445 500	97	206	29	93	122	60	31	6	13	110	150		917
500-515	94	224	18	83	120	64	40	5	4	98	100		075
515-530	72	197	20	76	134	52	32	5	4	122	101		010
530-545	86	215	13	85	130	52	28	5	10	101	193		910
545-600 0.00	87	222	19	103	102	39	24	2	0	97	170		000
600-615	85	274	26	93	124	59	23	3		101	149	0	940 8/1
615-630 A	91	245	15	87	76	52	32	· · 7	<u> </u>	99	133	<u> </u>	818
63646458	101	276	21	96	<u> </u>	64	22	1	4		105	0	601
645-700	94	226	13	79	32	<u> 45</u>	19	3		/4			
HOUR TOTAL	<u>e</u>	\$ 6		la sen D-1		1000 X	ALALAS : Istraction	16 ····································	10 10	17.330 11.00 11.00	in an		
	Ť	2	3	4		6	i i i i i i i i i i i i i i i i i i i	NO THE	्र अन्त क	ener	15-56-	80.5	57657/41
IIIME SCIENCE	SBRI	SBII	SBEI	WBRau	WEINE	WING WE BU				450	559	0	3336
400-500	303	691	109	368	420	222	104	1 20	37	426	537	7 0	3425
415-515 A	333	784	105	353	44/	235	148	1	2 33	439	564		3483
430-530	325	818	3 100	338	4/	220	121	2	30	431	637		3593
445-545	349	842	2 80	337	500	240	10/		7 18	418	657	7 0	3541
500-600	339	858	s <u>7</u> 0	347	400	207	107	7 11	17	421	673	3 0	3598
515-615	330	908	3 /8	30/	490	202	101	/ 1	7 15	398	64	71 0	3564
530-630	345	950	<u> </u>	300	43/	2 202	10		3 9	381	549	9 (3464
545-6451 399	364		/ <u>61</u>	3/5	230	al 220	1 <u>,0</u>	3 1	4 10	356	484	4 (3290
P.I	M. PEAK H	OUR) 330 ↓	908 908	830 P.DM		t ←	- 357 - 830 - 350			Å	2	

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Phone: (626) 564-1944 Fax: (626) 564-0969

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INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT:		KIMLEY-HORN ASSOCIATES
PROJECT:		HIGH STREET INTERSECTION COUNTS
DATE:		THURSDAY, APRIL 6, 2006
PERIOD:		6:00 AM TO 9:00 AM
INTERSECTION:	N/S	HOWARD STREET
	E/W	HIGH STREET

15 MIN COUN	īŜ		17 B B						- <u>(</u>	<u>698 a</u> (4.
	1	2 2	8	a. 4		6	\overline{v}	9	9	10	19	2	march
PERIOD	MASBRIT	SBIIH	SELT	NWBRIT	WB IIH	MAVB BI	NBRI	NBIH	<u>NBEU</u>				
600-615 0 20	15	0	27	3	37	0	0	0	0		106		191
615-630	6	0	31	2	55	0	0	0	0	1	122	0	217
630-645	10	1	46	4	73	Û	0	0	0	0	144	2	280
645-700 k St	15	1	48	2	85	3	2	1	0	0	155	2	314
700-715	12	4	63	7	92	1	4	2	2	3	204	10	404
715-7301	10	3	49	3	104	2	2	1	1	1	190	9	375
730-745	15	1	57	5	133	1	1	0	0	0	206	12	431
745-800	20		55	5	169	2	1	0	0	0	214	5	472
800-815	16	0	72	2	156	1	4	0	. 1	1	249	9	5 <u>11</u>
815-830	17	0	55	3	131	0	2	0	1	0	232	10	451
830-845;1234	19	0	74	8	129	0	2	0	0	0	208	13	453
845-900 0.0	27	2	85	9	115	0	3	0	0	1	202	17	461
HOURSTOTA	S	建像染品						N Lines (1997)		1.13 S	5.890 S.		ndial for a start
	Report 4	2	****** 3		5	6	\overline{l}	6	Star (S	10	៍ំំំំំំំំំំំំំំំំំ	12	
TIME .	SERT	SETH	SELT	WVBRIT	WEATH	Walli	িমিটায়া	in Neth	NEUT	ા કરણાં	EDIH	EBUT	ATOTAL
600-700	46	2	152	11	250	3	2	11	0	1	527	7	1002
615-715	43	6	188	15	305	4	6	3	2	4	625	14	1215
630-730	47	9	206	16	354	6	8	4	3	4	693	23	1373
645-745	52	9	217	17	414	7	9	4	3	4	755	i <u>33</u>	1524
700-800	57	9	224	20	498	6	8	3	3	4	814	36	1682
715-815	61	5	233	15	562	6	8	1	2	2	859	35	1789
730-830	68	2	239	15	589	4	e e		2	1	901	36	1865
745-845	72	1	256	18	585	3	5) (2	1	903	3 37	1887
800-900	79		286	22	531	1	11	(2	2	891	49	1876



WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT:		KIM
PROJECT:		HIG
DATE:		тнι
PERIOD:		4:00
INTERSECTION:	N/S	HO
	E/W	HIG

KIMLEY-HORN ASSOCIATES HIGH STREET INTERSECTION COUNTS THURSDAY, APRIL 6, 2006 4:00 PM TO 7:00 PM HOWARD STREET HIGH STREET

15 MINICOUN	S		<u> S. P. S. S. S</u>			9.00 (A.S.)		<u></u>					<u> </u>
ອະນາດທີ	্রান্য জনসল	প্র জাহান্য	ତ୍ର ଜନ୍ମା କ	4	S Ww∋Gnu	G Witen fr	77 Nietest	ि जिल्लानिय	9 NED T) (0)		(2) 1201 - 12	17001741L
400-415	37	3	133	12	101	3	2	0	1	2	102	16	412
415-430	46	7	178	11	170	2	4	2	3	1	77	17	518
430-445	40	1	196		210	2	4	0	0	0	77	12	560
445 500	41	4	178	12	240	1	• 4	1	0	1	86	16	584
500-5154	. 31	2	201	8	245	ď	1	0	0	1	77	7	573
515-530	44	1	236	7	212	1	4	0	0	1	91	10	607
530-545	28	1	133	7	207	0	- 4	1	1	0	109	6	497
545-600	13	2	162	3	180	· 0	3	0	0	0	84	7	454
600-61590	25	4	170	9	215	1	4	1	0	1	67	6	503
615-630	10	1	132	11	193	0	_ 3	2	3	- 2	70	8	435
636-645	26	1	108	8	134	0	2	0	0	0	75	10	364
645-700	17	1	127	4	118	0	3	0	0	0	47	7	324
HOURTOTAL	S				dia at an an an			C. Tast. F.					
	4 A	2	8	\sim	6	6	\overline{v}	3	9	10	(11	12	
TIME	SBRI	Setth	SB-T	WERT	. Weith	WELT	NERT	REAL	T.LEV.	ebrt	EBITH	S P BUT	TOTAL
400-500 0 11	164	15	685	-53	721	8	14	3	4	4	342	61	2074
415-515	158	14	753	49	865	5	<u>1</u> 3	3	3	3	317	52	2235
430-530	156	8	811	45	907	4	13	1	0	3	331	45	2324
445-5451	144	. 8	748	34	904	2	13	2	1	3	363	39	2261
500-600	116	6	732	25	844	1	12	1	1	2	361	30	2131
515-615	110	8	701	26	814	2	15	2	1	2	351	29	2061
530-630	76	8	597	30	795	1	14	4	4	3	330	27	1889
545-645	74	8	572	31	722	<u> 1</u>	12	3	3	3	296	31	1756
600-700	78	7	537	32	660) 1	12	3	3	3	259	31	1626



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Appendix C: Air Quality/Greenhouse Gas

URBEMIS2007, Summary Report for Annual Emissions, Tons/Year.

URBEMIS2007, Summary Report for Summer Emissions, Tons/Year.

Construction-Period Health Risk Assessment

Source: Lamphier-Gregory

11/1/2011 06:11:51 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Users\bruce\AppData\Roaming\Urbemis\Version9a\Projects\42ndHighDetailed.urb924

Project Name: 42ndHigh

Project Location: Alameda County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary	/ Report:

CONSTRUCTION EMISSION ESTIMATE	S

ROG	NOx	<u>CO</u>	<u>SO2</u>	PM10 Dust PM1	0 Exhaust	PM10	PM2.5 Dust PM2	.5 Exhaust	PM2.5	<u>CO2</u>
2013 TOTALS (tons/year unmitigated) 0.13	0.94	0.57	0.00	0.42	0.06	0.48	0.09	0.05	0.14	121.55
2014 TOTALS (tons/year unmitigated) 0.08	0.48	0.36	0.00	0 17	0.04	0.20	0.03	0.03	0.07	57 12

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5	<u>CO2</u>
2013	0.13	0.94	0.57	0.00	0.42	0.06	0.48	0.09	0.05	0.14	121.55
Demolition 04/11/2013-04/24/2013	0.00	0.02	0.01	0.00	0.02	0.00	0.03	0.01	0.00	0.01	3.29
Fugitive Dust	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.01	0.00	0.01	0.00
Demo Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.29
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading 04/25/2013-	0.03	0.32	0.14	0.00	0.18	0.01	0.19	0.04	0.01	0.05	49.12
Mass Grading Dust	0.00	0.00	0.00	0.00	0.18	0.00	0.18	0.04	0.00	0.04	0.00
Mass Grading Off Road Diesel	0.02	0.15	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	16.85
Mass Grading On Road Diesel	0.01	0.16	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	31.50
Mass Grading Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77
Trenching 05/16/2013-06/26/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt 06/27/2013-08/07/2013	0.04	0.21	0.16	0.00	0.00	0.02	0.02	0.00	0.02	0.02	23.46
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Paving Off Road Diesel	0.03	0.20	0.13	0.00	0.00	0.02	0.02	0.00	0.02	0.02	19.08
Paving On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32
Paving Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.06
Demolition 08/15/2013-08/28/2013	0.00	0.02	0.01	0.00	0.02	0.00	0.03	0.01	0.00	0.01	3.29
Fugitive Dust	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.01	0.00	0.01	0.00
Demo Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.29
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading 08/29/2013-	0.02	0.15	0.09	0.00	0.18	0.01	0.19	0.04	0.01	0.04	17.62
Mass Grading Dust	0.00	0.00	0.00	0.00	0.18	0.00	0.18	0.04	0.00	0.04	0.00
Mass Grading Off Road Diesel	0.02	0.15	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	16.85
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77
Trenching 09/19/2013-10/16/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt 10/17/2013-11/27/2013	0.04	0.21	0.16	0.00	0.00	0.02	0.02	0.00	0.02	0.02	23.46
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.03	0.20	0.13	0.00	0.00	0.02	0.02	0.00	0.02	0.02	19.08
Paving On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32
Paving Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.06
Coating 11/28/2013-12/04/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching 11/28/2013-12/18/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition 12/26/2013-01/08/2014	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	1.31
Fugitive Dust	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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2014	0.08	0.48	0.36	0.00	0.17	0.04	0.20	0.03	0.03	0.07	57.12
Demolition 12/26/2013-01/08/2014	0.00	0.01	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00	1.97
Fugitive Dust	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.97
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching 01/09/2014-01/29/2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt 02/13/2014-04/23/2014	0.07	0.38	0.30	0.00	0.00	0.03	0.03	0.00	0.03	0.03	43.41
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.06	0.36	0.25	0.00	0.00	0.03	0.03	0.00	0.03	0.03	35.46
Paving On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.20
Paving Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.75
Fine Grading 04/10/2014-	0.01	0.10	0.06	0.00	0.15	0.00	0.15	0.03	0.00	0.04	11.75
64/23/2014 Fine Grading Dust	0.00	0.00	0.00	0.00	0.15	0.00	0.15	0.03	0.00	0.03	0.00
Fine Grading Off Road Diesel	0.01	0.10	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.24
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
Coating 04/24/2014-05/07/2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching 04/24/2014-05/21/2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 05/22/2014-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

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Phase: Demolition 4/11/2013 - 4/24/2013 - Phase 1 Demo Building Volume Total (cubic feet): 117511.8 Building Volume Daily (cubic feet): 11750.56 On Road Truck Travel (VMT): 163.2 Off-Road Equipment:

Phase: Demolition 8/15/2013 - 8/28/2013 - Phase 2 Demo Building Volume Total (cubic feet): 117511.8 Building Volume Daily (cubic feet): 11750.56 On Road Truck Travel (VMT): 163.2 Off-Road Equipment:

Phase: Demolition 12/26/2013 - 1/8/2014 - Phase 3 Demo Building Volume Total (cubic feet): 117511.8 Building Volume Daily (cubic feet): 11750.56 On Road Truck Travel (VMT): 163.2 Off-Road Equipment:

Phase: Fine Grading 4/10/2014 - 4/23/2014 - Landscaping, etc. Total Acres Disturbed: 3 Maximum Daily Acreage Disturbed: 1.5 Fugitive Dust Level of Detail: Default 20 lbs per acre-day On Road Truck Travel (VMT): 0 Off-Road Equipment: 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Fine Grading 5/22/2014 - 7/2/2014 - Site Cleanup Total Acres Disturbed: 0 Maximum Daily Acreage Disturbed: 0 Fugitive Dust Level of Detail: Default 20 lbs per acre-day On Road Truck Travel (VMT): 0 Off-Road Equipment:

Phase: Mass Grading 4/25/2013 - 5/15/2013 - Phase 1 Grading Total Acres Disturbed: 4.05 Page: 1 11/1/2011 06:11:51 PM Maximum Daily Acreage Disturbed: 1.2 Fugitive Dust Level of Detail: Default 20 lbs per acre-day On Road Truck Travel (VMT): 1043.07 Off-Road Equipment: 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day Phase: Mass Grading 8/29/2013 - 9/18/2013 - Phase 2 Grading Total Acres Disturbed: 4.05 Maximum Daily Acreage Disturbed: 1.2 Fugitive Dust Level of Detail: Default 20 lbs per acre-day On Road Truck Travel (VMT): 0 Off-Road Equipment: 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 5/16/2013 - 6/26/2013 - Phase 1 Misc: sewer, drainage Off-Road Equipment:

Phase: Trenching 9/19/2013 - 10/16/2013 - Phase 2 Misc Off-Road Equipment:

Phase: Trenching 1/9/2014 - 1/29/2014 - Phase 3 Misc Off-Road Equipment:

Phase: Trenching 4/24/2014 - 5/21/2014 - Phase 3 signal installation Off-Road Equipment:

Phase: Trenching 11/28/2013 - 12/18/2013 - Phase 2 Signal and Lighting Off-Road Equipment:

Phase: Paving 6/27/2013 - 8/7/2013 - Phase 1 Road Construction Acres to be Paved: 2.21 Off-Road Equipment:

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4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Paving 10/17/2013 - 11/27/2013 - Phase 2 Roadway Construction Acres to be Paved: 2.21

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Paving 2/13/2014 - 4/23/2014 - Phase 3 Roadway Construction

Acres to be Paved: 3.68

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Architectural Coating 11/28/2013 - 12/4/2013 - Phase 2 Striping Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250 Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250 Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250 Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Phase: Architectural Coating 4/24/2014 - 5/7/2014 - Phase 3 Striping Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250 Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250 Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Users\bruce\AppData\Roaming\Urbemis\Version9a\Projects\42ndHighDetailed.urb924

Project Name: 42ndHigh

Project Location: Alameda County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	<u>CO</u>	<u>SO2</u>	PM10 Dust PM1	0 Exhaust	PM10	PM2.5 Dust	PM2.5	PM2.5	<u>CO2</u>
2013 TOTALS (lbs/day unmitigated)	4.05	42.30	19.28	0.04	24.15	1.77	25.92	5.06	1.63	6.69	6,548.86
2014 TOTALS (lbs/day unmitigated)	5.06	34.19	23.49	0.01	30.02	2.11	32.13	6.27	1.94	8.22	4,085.72

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	<u>CO2</u>
Time Slice 4/11/2013-4/24/2013	0.23	3.39	1.14	0.01	4.96	0.12	5.08	1.03	0.11	1.15	657.05
Active Days: 10 Demolition 04/11/2013-04/24/2013	0.23	3.39	1.14	0.01	4.96	0.12	5.08	1.03	0.11	1.15	657.05
Fugitive Dust	0.00	0.00	0.00	0.00	4.94	0.00	4.94	1.03	0.00	1.03	0.00
Demo Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo On Road Diesel	0.23	3.39	1.14	0.01	0.02	0.12	0.15	0.01	0.11	0.12	657.05
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 4/25/2013-5/15/2013	4.05	42.30	<u>19.28</u>	<u>0.04</u>	<u>24.15</u>	<u>1.77</u>	<u>25.92</u>	<u>5.06</u>	1.63	6.69	<u>6,548.86</u>
Active Davs: 15 Mass Grading 04/25/2013-	4.05	42.30	19.28	0.04	24.15	1.77	25.92	5.06	1.63	6.69	6,548.86
05/15/2013 Mass Grading Dust	0.00	0.00	0.00	0.00	24.00	0.00	24.00	5.01	0.00	5.01	0.00
Mass Grading Off Road Diesel	2.55	20.56	11.10	0.00	0.00	0.99	0.99	0.00	0.91	0.91	2,247.32
Mass Grading On Road Diesel	1.47	21.69	7.27	0.04	0.15	0.78	0.93	0.05	0.72	0.77	4,199.40
Mass Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.14
Time Slice 5/16/2013-6/26/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Active Days: 30 Trenching 05/16/2013-06/26/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 6/27/2013-8/7/2013 Active	2.47	14.15	10.88	0.00	0.01	1.17	1.18	0.00	1.07	1.08	1,564.24
Days: 30 Asphalt 06/27/2013-08/07/2013	2.47	14.15	10.88	0.00	0.01	1.17	1.18	0.00	1.07	1.08	1,564.24
Paving Off-Gas	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	13.60	8.91	0.00	0.00	1.15	1.15	0.00	1.05	1.05	1,272.04

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Paving On Road Diesel	0.03	0.45	0.15	0.00	0.00	0.02	0.02	0.00	0.02	0.02	87.92
Paving Worker Trips	0.06	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.29
Time Slice 8/15/2013-8/28/2013	0.23	3.39	1.14	0.01	4.96	0.12	5.08	1.03	0.11	1.15	657.05
Active Days: 10 Demolition 08/15/2013-08/28/2013	0.23	3.39	1.14	0.01	4.96	0.12	5.08	1.03	0.11	1.15	657.05
Fugitive Dust	0.00	0.00	0.00	0.00	4.94	0.00	4.94	1.03	0.00	1.03	0.00
Demo Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo On Road Diesel	0.23	3.39	1.14	0.01	0.02	0.12	0.15	0.01	0.11	0.12	657.05
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 8/29/2013-9/18/2013	2.58	20.61	12.01	0.00	24.00	0.99	24.99	5.01	0.91	5.92	2,349.46
Active Days: 15 Mass Grading 08/29/2013-	2.58	20.61	12.01	0.00	24.00	0.99	24.99	5.01	0.91	5.92	2,349.46
09/18/2013 Mass Grading Dust	0.00	0.00	0.00	0.00	24.00	0.00	24.00	5.01	0.00	5.01	0.00
Mass Grading Off Road Diesel	2.55	20.56	11.10	0.00	0.00	0.99	0.99	0.00	0.91	0.91	2,247.32
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.14
Time Slice 9/19/2013-10/16/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Active Davs: 20 Trenching 09/19/2013-10/16/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 10/17/2013-11/27/2013	2.47	14.15	10.88	0.00	0.01	1.17	1.18	0.00	1.07	1.08	1,564.24
Active Davs: 30 Asphalt 10/17/2013-11/27/2013	2.47	14.15	10.88	0.00	0.01	1.17	1.18	0.00	1.07	1.08	1,564.24
Paving Off-Gas	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	13.60	8.91	0.00	0.00	1.15	1.15	0.00	1.05	1.05	1,272.04
Paving On Road Diesel	0.03	0.45	0.15	0.00	0.00	0.02	0.02	0.00	0.02	0.02	87.92
Paving Worker Trips	0.06	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.29
Time Slice 11/28/2013-12/4/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Active Days: 5 Coating 11/28/2013-12/04/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching 11/28/2013-12/18/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 12/5/2013-12/18/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Active Days: 10 Trenching 11/28/2013-12/18/2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 12/26/2013-12/31/2013 Active Days: 4	0.23	3.39	1.14	0.01	4.96	0.12	5.08	1.03	0.11	1.15	657.05

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Demolition 12/26/2013-01/08/2014	0.23	3.39	1.14	0.01	4.96	0.12	5.08	1.03	0.11	1.15	657.05
Fugitive Dust	0.00	0.00	0.00	0.00	4.94	0.00	4.94	1.03	0.00	1.03	0.00
Demo Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo On Road Diesel	0.23	3.39	1.14	0.01	0.02	0.12	0.15	0.01	0.11	0.12	657.05
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2014-1/8/2014 Active	0.21	3.02	1.03	<u>0.01</u>	4.96	0.11	5.07	1.03	0.10	1.13	657.05
Davs: 6 Demolition 12/26/2013-01/08/2014	0.21	3.02	1.03	0.01	4.96	0.11	5.07	1.03	0.10	1.13	657.05
Fugitive Dust	0.00	0.00	0.00	0.00	4.94	0.00	4.94	1.03	0.00	1.03	0.00
Demo Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo On Road Diesel	0.21	3.02	1.03	0.01	0.02	0.11	0.13	0.01	0.10	0.11	657.05
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/9/2014-1/29/2014 Active	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Days: 15 Trenching 01/09/2014-01/29/2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 2/13/2014-4/9/2014 Active	2.62	15.07	11.92	0.00	0.01	1.23	1.24	0.01	1.13	1.13	1,736.21
Davs: 40 Asphalt 02/13/2014-04/23/2014	2.62	15.07	11.92	0.00	0.01	1.23	1.24	0.01	1.13	1.13	1,736.21
Paving Off-Gas	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.56	9.90	0.00	0.00	1.21	1.21	0.00	1.11	1.11	1,418.44
Paving On Road Diesel	0.03	0.40	0.14	0.00	0.00	0.01	0.02	0.00	0.01	0.01	87.84
Paving Worker Trips	0.06	0.10	1.88	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.93
Time Slice 4/10/2014-4/23/2014	<u>5.06</u>	34.19	23.49	0.00	<u>30.02</u>	<u>2.11</u>	<u>32.13</u>	<u>6.27</u>	<u>1.94</u>	<u>8.22</u>	4,085.72
Active Davs: 10 Asphalt 02/13/2014-04/23/2014	2.62	15.07	11.92	0.00	0.01	1.23	1.24	0.01	1.13	1.13	1,736.21
Paving Off-Gas	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.56	9.90	0.00	0.00	1.21	1.21	0.00	1.11	1.11	1,418.44
Paving On Road Diesel	0.03	0.40	0.14	0.00	0.00	0.01	0.02	0.00	0.01	0.01	87.84
Paving Worker Trips	0.06	0.10	1.88	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.93
Fine Grading 04/10/2014-	2.44	19.12	11.57	0.00	30.00	0.89	30.89	6.27	0.82	7.08	2,349.51
Fine Grading Dust	0.00	0.00	0.00	0.00	30.00	0.00	30.00	6.27	0.00	6.27	0.00
Fine Grading Off Road Diesel	2.41	19.08	10.74	0.00	0.00	0.89	0.89	0.00	0.82	0.82	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.04	0.84	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.19
Time Slice 4/24/2014-5/7/2014 Active	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating 04/24/2014-05/07/2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Trenching 04/24/2014-05/21/2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 5/8/2014-5/21/2014 Active	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching 04/24/2014-05/21/2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 5/22/2014-7/2/2014 Active	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 05/22/2014-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Demolition 4/11/2013 - 4/24/2013 - Phase 1 Demo Building Volume Total (cubic feet): 117511.8 Building Volume Daily (cubic feet): 11750.56 On Road Truck Travel (VMT): 163.2 Off-Road Equipment:

Phase: Demolition 8/15/2013 - 8/28/2013 - Phase 2 Demo Building Volume Total (cubic feet): 117511.8 Building Volume Daily (cubic feet): 11750.56 On Road Truck Travel (VMT): 163.2 Off-Road Equipment:

Phase: Demolition 12/26/2013 - 1/8/2014 - Phase 3 Demo Building Volume Total (cubic feet): 117511.8 Building Volume Daily (cubic feet): 11750.56 On Road Truck Travel (VMT): 163.2 Off-Road Equipment:

Phase: Fine Grading 4/10/2014 - 4/23/2014 - Landscaping, etc. Total Acres Disturbed: 3 Maximum Daily Acreage Disturbed: 1.5 Fugitive Dust Level of Detail: Default 20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

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1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

- Phase: Fine Grading 5/22/2014 7/2/2014 Site Cleanup Total Acres Disturbed: 0 Maximum Daily Acreage Disturbed: 0 Fugitive Dust Level of Detail: Default 20 lbs per acre-day On Road Truck Travel (VMT): 0 Off-Road Equipment:
- Phase: Mass Grading 4/25/2013 5/15/2013 Phase 1 Grading Total Acres Disturbed: 4.05 Maximum Daily Acreage Disturbed: 1.2 Fugitive Dust Level of Detail: Default 20 lbs per acre-day On Road Truck Travel (VMT): 1043.07 Off-Road Equipment: 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 8/29/2013 - 9/18/2013 - Phase 2 Grading Total Acres Disturbed: 4.05 Maximum Daily Acreage Disturbed: 1.2 Fugitive Dust Level of Detail: Default 20 lbs per acre-day On Road Truck Travel (VMT): 0 Off-Road Equipment: 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 7 hours per day 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day 1 Water Trucks (188 hp) operating at a 0.51 load factor for 8 hours per day

Phase: Trenching 5/16/2013 - 6/26/2013 - Phase 1 Misc: sewer, drainage Off-Road Equipment:

Phase: Trenching 9/19/2013 - 10/16/2013 - Phase 2 Misc Off-Road Equipment:

Phase: Trenching 1/9/2014 - 1/29/2014 - Phase 3 Misc Off-Road Equipment:

Phase: Trenching 4/24/2014 - 5/21/2014 - Phase 3 signal installation Off-Road Equipment:

Page: 1 11/1/2011 06:11:28 PM

Phase: Trenching 11/28/2013 - 12/18/2013 - Phase 2 Signal and Lighting Off-Road Equipment:

Phase: Paving 6/27/2013 - 8/7/2013 - Phase 1 Road Construction Acres to be Paved: 2.21 Off-Road Equipment: 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Paving 10/17/2013 - 11/27/2013 - Phase 2 Roadway Construction

Acres to be Paved: 2.21

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Paving 2/13/2014 - 4/23/2014 - Phase 3 Roadway Construction

Acres to be Paved: 3.68

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Architectural Coating 11/28/2013 - 12/4/2013 - Phase 2 Striping Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250 Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250 Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250 Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Phase: Architectural Coating 4/24/2014 - 5/7/2014 - Phase 3 Striping Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250 Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250 Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250 Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Paving measurements

	length	width	area	cubic yards at 1 foot deep
			166603.41	6170.497
			<u>185934.5</u>	<u>6886.463</u>
			352537.91 sf	13056.96 cy
			8.093156795 acres	
total	staga 1	ctage 2	stage 2	

	total	stage 1	stage 2	stage 3
Demolition weeks	6	2	2	2
Demolition sf	352537.91	117512.64	117512.64	117512.64
Grading weeks	6	3	3	0
Grading acres	8.09	4.05	4.05	0.00
Grading cubic yards	13056.96	6528.48	6528.48	0.00
Paving weeks	22	6	6	10
Paving acres	8.09	2.21	2.21	3.68

342.801162

11751.26367 108.4032456

Construction-Period Health Risk Assessment Calculations for Diesel Particulate Matter (DPM) Cancer Risk, DPM Non-Cancer Hazard and PM 2.5 Exposure

42nd Avenue and High Street Improvement Project

CANCER RISK:

1. URBEMIS Output

Specifics of construction phases were entered into URBEMIS. Default assumptions regarding construction equipment were used, with specifics of construction entered, as shown on the URBEMIS output.

Total exhaust emissions were summed then divided by the total construction period in years. 0.06 + 0.04 / 1.25 years = 0.08 average yearly short tons as the average yearly emissions rate.

2. Screen3

The average yearly emissions rate was converted to micrograms/second/square meter (using a conversion factor of 1 short ton per year = 0.0287475637 g/s) then dividing by the project area (7 acres = 36,422 m²). This emission rate, calculated at 6.3144E-08 g/s/m² was entered into Screen3 with these other parameters:

- Source type: area
- Urban dispersion coefficient
- Source release height: 3 meters
- Search through range of wind conditions: yes
- Simple terrain flat
- Automated distances
- Full meteorology

This resulted in a maximum 1-hour concentration of 1.727 ug/m^3 , which would occur at a distance of 200 meters.

3. Scaling to Annual

GLC = (X1-hour) (Scalar)

Where GLC is the annual average ground level concentration.

The maximum 1-hour concentration from the Screen3 output was then multiplied by the BAAQMD recommended hourly to annual Scalar of 0.1 for the following:

Ground Level Concentration (GLC) = 0.1727 ug/m3

4. Calculate Risk

This GLC was used as the concentration in air ("C air") for calculation of inhalation dose as follows:

Inhalation Dose = $(C air*DBR*A*EF*ED*1x10^{-6})/AT$

DBR = daily breathing rate = 302

A = inhalation absorption rate for DPM = 1

EF = Exposure frequency = 250 days/yr (assuming 5 days a week for 50 weeks for the entire year)

ED = Exposure duration = 1.25 years (full construction period)

AT = Averaging time = 25,550 (for a 70 year cancer risk)

Inhalation Dose = 6.38E-7

And from there calculated the Inhalation Cancer Risk:

Inhalation Cancer Potency factor (for DPM) = 1.1

Inhalation Cancer Risk per million = (Inhalation Dose)*Inhalation Cancer Potency factor*10^6

Inhalation Cancer Risk per million = $(6.38E-7)*1.1*10^{6}$

Inhalation Cancer Risk per million (adult) = 0.702 - compared to Threshold of 10.0

Because an infant could be exposed during the construction, an age sensitivity factor of 10 is used.

Inhalation Cancer Risk * ASF = risk adjusted for age sensitivity

0.702*10 = 7.02

Inhalation Cancer Risk per million (infant) = 7.02 compared to Threshold of 10.0

FOR CHRONIC NON-HAZARD:

Hazard Quotient = C air/REL

REL = DPM inhalation non-cancer chronic (long-term) reference exposure level = 5 ug/m^3

Hazard Quotient = 0.1727 / 5.0

Hazard Quotient = 0.0345 compared to Threshold of 1

FOR PM2.5

The average yearly exhaust emissions rate from URBEMIS was converted to micrograms/second/square meter (using a conversion factor of 1 short ton per year = 0.0287475637 g/s) then dividing by the project area (7 acres = 36,422 m²). This emission rate, calculated at 5.0515E-08 g/s/m² was entered into Screen3 with the same parameters as for PM10 above and scaled to an annual average.

Annual Average PM2.5 concentration of 0.14 ug/m³ compared to the threshold of 0.30 ug/m³

PM2.5		1
URBEMIS Output		1
2013	0.05	1
2014	0.03	1
total PM2.5	0.08	1
Project period	1.25	1
Averaged yearly short tons	0.064	1
conversion short ton per year to g/s	0.028747564	
Averaged Yearly Emission Rate	0.001839844	g/s
Project Area sq ft	392040	
conversion sq ft to sq meters	0.09290304	
project area m2	36421.7078]
emission rate	5.0515E-08	g/s/m2
X1-hr	1.382	ug/m3
Distance	200	m
		1
Scalar	0.1]
]
GLC	0.1382	ua/m3

PM10		
URBEMIS Output		
2012	0.06	
2013	0.04	
total PM10	0.1	
Project period	1.25	
Averaged yearly short tons	0.08	
conversion short ton per year to g/s	0.028747564	
Averaged Yearly Emission Rate	0.002299805	g/s
Project Area sq ft	392040	-
conversion sq ft to sq meters	0.09290304	
project area m2	36421.7078	
emission rate	6.3144E-08	g/s/m2
X1-hr	1.727	ug/m3
Distance	200	m
distance	656.16798	ft
Scalar	0.1	
GLC	0.1727	ug/m3
Cair	0.1727	
DBR	302	
Α	1	
EF	250	
ED	1.25	
AT	25550	
Inhalation Cancer Potency Factor for PM10	1.1	
	0.000001	
Inhalation dose	6.37909E-07	
Inhalation cancer risk	0.701699364	
ASF	10	
Risk with ASF	7.01699364	
	_	
REL	5	
Hazard Quotient	0.03454	

Appendix D: Initial Study/Mitigated Negative Declaration and Environmental Assessment for the Combined Project Study Report/Project Report

October of 2001

CITY OF OAKLAND CFFICE OF THE CITY CLERK

01 SEP 19 FM 12: 31

ORA/COUNCIL

OCT 0 2 2001

TO: Office of the City Manager

ATTN: Robert C. Bobb

FROM: Public Works Agency

DATE: October 2, 2001

RE: RESOLUTION AUTHORIZING APPLICATION AND ACCEPTANCE OF A GRANT FROM THE 2002 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP) FOR 42ND AVENUE AND HIGH STREET ACCESS IMPROVEMENTS TO I-880

SUMMARY

A resolution has been prepared authorizing the City Manager to make application, accept and appropriate Regional Improvement Program Funds to be programmed by the Metropolitan Transportation Commission (MTC) in the 2002 Regional Transportation Improvement Program (RTIP) for improvements to 42nd Avenue and High Street access to the I-880 freeway. The City is requesting the programming of \$3,130,000 for right of way acquisition.

FISCAL IMPACTS

Approval of this resolution will allow the City to accept and appropriate \$3,130,000 for right of way acquisition for the 42nd Avenue and High Street Access Improvement Project. Due to the State's project review and approval timeframes, the 2002 STIP funds will not be expended by the City until Fiscal Year 2003-04. Based upon Council approval received through this resolution, budget appropriation to expend the 2002 STIP funds will be included as part of the City Fiscal Year 2003-05 budget development process.

BACKGROUND

In August, the Alameda County Congestion Management Agency (CMA) informed the City that Metropolitan Transportation Commission (MTC) is requiring all candidate projects for the 2002 State Transportation Improvement Program (STIP) to submit a completed 2002 RTIP application. The application must include a City Council resolution of support. The 42nd Avenue and High Street Access Improvement Project has been submitted for funding in the 2002 STIP and the 2001 CMA Transportation Improvement Program (TIP). A Project Study Report (PSR) has been prepared and is currently under review by Caltrans. The project was originally programmed in the 1998 STIP as amended.

The City was previously awarded \$1 million from the 2000 STIP for the engineering design work. In July of 2001, Caltrans gave the City the authorization to proceed with the plans, specifications and engineering work. Staff will return to Council within the next few months to award the contract for the engineering design work. Completion of the engineering plans will take approximately one year.

ENVIRONMENTAL OPPORTUNITIES

The project will be designed to take advantage of environmental/sustainability opportunities whenever possible.

The improvements will meet all applicable State and Federal regulations regarding accessibility.

KEY ISSUES AND IMPACTS

The project will improve access to I-880 at 42nd Avenue and High Street and Alameda Avenue. It will eliminate bottlenecks at the High Street interchange and facilitate access to the K-Mart complex, the freeway, and the City of Alameda. The project involves the widening and new realignment of local streets, connector roads, and ramps in the vicinity of the interchange. It includes modified traffic signals and intersection improvements.

High Street and 42nd Avenue and Alameda Avenue are parallel cross streets connected by one-way connector roads to the east and west of I-880. The project will extend 42nd Avenue to connect with a realignment of Alameda Avenue, providing a parallel roadway to High Street. High Street will be widened from four to six lanes to provide additional capacity at the intersections with the connector roads. Howard Street will be aligned with Jensen Street to eliminate offset intersections. Right of way acquisition may be required from an estimated 16 parcels, none of which are anticipated to be full parcel takes. There may be impacts to nine businesses. The project will require demolition of buildings on High Street and reconstruction of entrances, parking and landscaping along the remaining business frontages. The impacted businesses are located on High Street, Oakport Street and Alameda Avenue. The remaining parcels impacted are unimproved land or are impacted such that the partial take has little effect on the remainder. Commencement of right of way acquisition will occur after the engineering plans and specifications are drafted. Having the funding in place for the right of way acquisition in 2003 will allow the City to move forward to this next step without having to wait for funding approvals.

Neighborhood meetings were held in both Oakland and Alameda to inform and obtain input from the community. The project was positively received. The environmental documents have been prepared and are under review by Caltrans. On March 7, 2001, a Combined Notice of Finding of No Significant Impact and Mitigated Negative Declaration was published and circulated for public comment. No public comments were received. This resolution also requests that the City Council make certain findings with respect to compliance with the California Environmental Quality Act. Attached is a copy of the environmental report for Council review.

RECOMMENDATION AND RATIONALE

Staff recommends approval of this resolution in order to satisfy final application requirements of MTC and the State and to be prepared for funding in the 2002 STIP.

October 2, 2001

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council approve the resolution.

Respectfully submitted,

LA

CLAUDETTE R. FORD Director, Public Works Agency

Prepared by: Raul Godinez II, P.E. Assistant Director, Public Works Agency Design & Construction Services

Attachment

APPROVED AND FORWARDED TO THE CITY COUNCIL

OFFICE OF THE CITY MANAGER



OAKLAND CITY COUNCIL RESOLUTION NO.______CERCED THE CITY CLERK

INTRODUCED BY COUNCILMEMBER

OT SEP 19 PH 12. 2

> ORA/COUNCIL OCT 0 2 2001

RESOLUTION AUTHORIZING APPLICATION AND ACCEPTANCE OF A GRANT FROM THE 2002 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP) FOR 42ND **AVENUE AND HIGH STREET ACCESS IMPROVEMENTS TO I-880**

WHEREAS, SB 45 (Chapter 622, Statutes 1997) substantially revised the process for estimating the amount of state and federal funds available for transportation projects in the state and for appropriating and allocating the available funds to these projects; and

WHEREAS, as part of that new process, the Metropolitan Transportation Commission (MTC) is responsible for programming projects eligible for Regional Improvement Program funds, pursuant to Government Code Section 14527(b), for inclusion in the Regional Transportation Improvement Program, and submission to the California Transportation Commission, for inclusion in the State Transportation Improvement Program; and

WHEREAS, MTC has requested eligible transportation project sponsors to submit applications nominating projects to be programmed for Regional Improvement Program funds in the Regional Transportation Improvement Program; and

WHEREAS, applications to MTC must be submitted consistent with procedures, conditions, and forms it provides transportation project sponsors; and

WHEREAS, the City of Oakland is a sponsor of transportation projects eligible for Regional Improvement Program funds; and

WHEREAS, the RTIP project nomination sheet of the project application, attached hereto and incorporated herein as though set forth at length, lists the project, purpose, schedule and budget for which the City of Oakland is requesting that MTC program Regional Improvement Program funds for inclusion in the Regional Transportation Improvement Program; and

WHEREAS, Part 2 of the project application, attached hereto and incorporated herein as though set forth at length, includes the certification by the City of Oakland of assurances required by SB 45 in order to qualify the project listed in the RTIP project nomination sheet of the project application for programming by MTC; and

WHEREAS, on March 7, 2001 a Combined Notice of Finding of No Significant Impact and Initial Study/Mitigated Negative Declaration was published and circulated for public review and comment and no comments were received, now, therefore, be it

RESOLVED: That, the City Council, as the final decision-making body of the lead agency, finds and determines, prior to taking action on the Project, that (i) the proposed Initial Study/Mitigated Negative Declaration ("IS/MND") was prepared by the City of Oakland as the lead agency and was

properly circulated for public review and comments; (ii) the proposed IS/MND was independently reviewed and analyzed by the Oakland City Council and reflects the independent judgment of the Council; (iii) the IS/MND is legally adequate and was completed in compliance with the California Environmental Quality Act ("CEQA"); (iv) the IS/MND identifies all potential significant impacts and feasible mitigation measures that would reduce these impacts to less than significant levels; and (v) the Mitigation Monitoring Program is adopted and incorporated into the project; and be it

FURTHER RESOLVED: That, the City Council finds and determines that this Resolution complies with CEQA and the Environmental Review Officer is directed to cause to filed a Notice of Determination with the appropriate agencies; and be it

FURTHER RESOLVED: That the City of Oakland approves the assurances set forth in Part 2 of the project application, attached to this resolution; and be it

FURTHER RESOLVED: That the City of Oakland has reviewed the project and has adequate staffing resources to deliver and complete the project within the schedule set forth in the RTIP project nomination sheet of the project application, attached to this resolution; and be it

FURTHER RESOLVED: That the City of Oakland is an eligible sponsor of projects in the State Transportation Improvement Program; and be it

FURTHER RESOLVED: That the City of Oakland is authorized to submit an application for State Transportation Improvement Program funds for 42nd Avenue/High Street Access Improvements to I-880; and be it

FURTHER RESOLVED: That there is no legal impediment to the City of Oakland making applications for Regional Improvement Program funds; and be it

FURTHER RESOLVED: That there is no pending or threatened litigation which might in any way adversely affect the proposed project, or the ability of the City of Oakland to deliver such project; and be it

FURTHER RESOLVED: That the City Council of the City of Oakland authorizes the City Manager or his designee to apply for, accept, appropriate, and execute and file an application with MTC to program Regional Improvement Program funds into the Regional Transportation Improvement Program, for the projects, purposes and amounts included in the project application attached to this resolution; and be it **FURTHER RESOLVED**: That a copy of this resolution shall be transmitted to MTC in conjunction with the filing of the City of Oakland application referenced herein.

IN COUNCIL, OAKLAND, CALIFORNIA,_____, 20____, 20_____,

PASSED BY THE FOLLOWING VOTE:

AYES- BRUNNER, CHANG, MAYNE, NADEL, REID, SPEES, WAN AND PRESIDENT DE LA FUENTE

NOES-

ABSENT-

ABSTENTION-

ATTEST:

CEDA FLOYD City Clerk and Clerk of the Council of the City of Oakland, California



Data as o	F 8/22/2001
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2002 RTIP Nomination Metropolitan Transportation Commission (MTC) Regional Transportation Improvement Program (RTIP)

	PRO.	ECT IN	FORMATION		- 1748 S. 1			
County (PPN	O) (District) (EA) (Project Title/Name) (50 character maximum)			ı)				
ALAMEDA ALA 01 0001 102	2 04 72584 42nd Av./High St. Access Improvements			s t <u>o</u> I-880	0			
(Implementing Agency)		, (Project spons	sor _)	_			
Oakland		08	kland					
	PR	OJECT	LOCATION					
Route Back Ahead Area		Asse	mbly Districts	State Sen. Districts	ar. Distr			
SR77 Miles 27.4 28 URBANIZED		6				6		
(Primary) KM	11	L 12	13 14		8	√ 9		
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(Secondary) KM	24	28						
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	PROJECT	DELIVE	RYMILESTONE	S	<u>, CCA 1998</u>			
Document Milestones		<u> </u>	Document Typ	Date (mm/dd/yy)				
Project Study Report (PSR) Complete		⊣⊢	PSR - FUI					
Project Schedule (State Eiscal Year beginning, July 1)		 =v	Project Sch	edule (State Fiscal Year beginning July 1)	Juartor			
Stad Emvironmental Studies		-/ 101				02/04		
Final Environmental Document Complete	03 0	n/01	Advertice C	enstruction (Ready to List)	03	06/07		
Benin Design Engineering	03 0	1/02	Start Const	ruction (Award)	04	06/07		
Final Plans, Specs and Estimates	03 0	2/03	Start Rollin	g Stock Acquisition (if applicable)				
Start R/W Activities/Acquisitions	03 0	2/03	Project Con	npletion (Open for Use)	02	08/09		
	PRO	JECT D	ESCRIPTION					
Project Mode Project Type		_	—––	Project Purpose				
Local Road Local	Roads - Pave	ement		Expansion				
Description, Location and Project limits (br	ief - 180 ch	aracter	s)	·				
Located on 42nd Av. & High St. at I-880 in the City of O Howard Street on Alameda Avenue	akland. Ap	orox. lin	nits of construct	ion are 180 meters east and west of I-880	and nea	ir		
Scope of Work (Detailed Description)	<u></u>					— <u>-</u> —_		
Widening and new realignment of local streets, connect and intersection improvements. High St. and 42nd Av.	and Alame	and ram da Av. a	ips in the vicinity re parallel cross	y of the interchange. Includes modified streets connected by one-way connecto	raffic sig r roads t	gnais		
east and west of I-880. The project extends 42nd to co	nnect with	a realig	nment of Alemed	da Avenue, providing a parallel roadway t	o High S	st. High		
St. is widened from 4 to 6 lanes to provide additional c.	apacity at t	he inter	sections with th	e connector roads. Howard St. is aligned	with Je	nsen St.		
to eliminate offset intersections. Right of way acquisiti	on will be r	equired	from an estimat	ted 16 parcels, none of which are anticipation of which are anticipation of which are anticipation of	ated to be	e full		
parking and landscaping along the remaining business	frontages.	The im	pacted business	ies are located on High St., Oakport St. a	nd Alame	eda Av.		
The remaining parcels impacted are unimproved land of	or are impa	cted su	ch that the partia	al take has little effect on the remainder.				
Transportation problem to be addressed / Proje	ect Benefit	<u>s</u>						
1) Improve circulation of local roadways at the I-880/SF	R77 intercha	ange. 2) eration:	Improve access	s for vehicles traveling to and from the ci	ties of Oa	akland		
in identifying acceptable column locations for new Sta	te bridge re	trofit of	1-880 at High St	reet.	ramps. 4	+) ASSISL		
	R	TP INFC	RMATION					
RTP ID: 06-0000-072: RTP Corridor	Inter	state 880)					
Relationship of Project to RTP								
Project in RTP.								
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2002 RTIP Nomination Metropolitan Transportation Commission (MTC) Regional Transportation Improvement Program (RTIP)

				<u> </u>	P	ROJECT INFO	ORMA					18 N. C.	
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	DA	ALA 0	1 0001	1022		04	72584	42n	d Av./Hi	gh St. Acces	ss Impro	ovements to	1-880
	(Implementing Agency)												
Oakland						Oaki	and						
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RTIP Project Application

Part 2: Certification of Assurances

Implementing Agency:City of OaklandProject Title: 42^{nd} Avenue and High Street Access Improvements to I-880Date:September 18, 2001

The implementing agency certifies that the project for which Regional Improvement Program funding is requested meets the following project screening criteria. <u>Please initial each.</u>

- 1. The project is eligible for consideration in the RTIP. Pursuant to Streets and Highways Code Section 164 (e), eligible projects include improving state highways, local roads, public transit, intercity rail, pedestrian, and bicycle facilities, and grade separation, transportation system management, transportation demand management, soundwall projects, intermodal facilities, and safety.
- For the funds requested, no costs have/will be incurred prior to adoption into the STIP by the CTC. <u>}</u>
- 3. A Project Study Report (PSR) or PSR equivalent has been prepared for the project. <u>4</u>?
- 4. The project budget included in Part 2 of the project application reflects current costs updated as of the date of application and escalated to the appropriate year.
- 5. The project is included in a local congestion management program (CMP). (Note: For those counties that have opted out of preparing a CMP in accordance with Government Code Section 65088.3, the project must be consistent with the capital improvement program adopted pursuant to MTC's funding agreement with the countywide transportation planning agency.)
- 7. The project is fully funded. $\mathcal{G}_{\mathcal{I}}$
- 8. For projects with STIP federal funds, the implementing agency agrees to contact Caltrans and schedule and complete a field review within six months of the project being adopted or amended into the STIP. $\Lambda \gamma$
- 9. For STIP construction funds, the implementing agency agrees to send a copy of the Caltrans LPP 01-06 "Award Information for STIP Projects – Attachment A" to MTC and/or the CMA, upon award.
- 10. The implementing agency agrees to be available for an audit of STIP funds, if requested.

The implementing agency also agrees to abide by all rules and regulations applying to the State Transportation Improvement Program (STIP), and to follow all requirements associated with the funds programmed to the project in the STIP. $\frac{47}{2}$

These include, but are not limited to:

- 1. Environmental requirements: NEPA standards and procedures for all projects with Federal funds; CEQA standards and procedures for all projects programmed with State funds.
- 2. California Transportation Commission (CTC) requirements for transit projects, formerly associated with the Transit Capital Improvement (TCI) program. These include rules governing right-of-way acquisition, hazardous materials testing, and timely use of funds.
- 3. Federal Transit Administration (FTA) requirements for transit projects as outlined in FTA regulations and circulars.
- 4. Federal Highway Administration (FHWA) and Caltrans requirements for highway and other roadway projects as outlined in the Caltrans Local Programs Manual.
- 5. Federal air quality conformity requirements, and local project review requirements, as outlined in the adopted Bay Area Conformity Revision of the State Implementation Plan (SIP).

Mitigation Monitoring and Reporting Program 42nd Avenue/Hight Street Access Improvement Project October 2, 2001

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Bicycle Facilities	
Impact:	Bicycle routes may be affected by the realignment of High Street and 42 nd Street in the vicinity of the project
Mitigation:	Bicycle facilities along High Street (or parallel route within the general area) should be included as part of the project. These facilities shall be called out in the final plans and specifications for the project. The Public Works Department shall oversee the review and approval of these plans prior to initiating construction, and also oversee that the facilities are completed prior to completion of the project.
Air Quality	
Impact:	During construction, air quality may be affected by construction activities.
Mitigation:	Implement the City's standard air quality construction control measures, following the Bay Area Air Quality Management District (BAAQMD) guidelines. These measures shall be included in the final plans and specifications for the project. The Public Works Department shall oversee the review and approval of these plans and specifications, and shall monitor compliance during construction of the project.
Hazardous Mater	tiale
Impact:	Contaminated materials, soils or groundwater may be present during excavation and grading activities.
Mitigation:	Plans and specifications for the project shall include a soils and groundwater management plan to assure that if contaminated soils or groundwater is encountered during construction, it shall be managed according to state, regional or local requirements. The Public Works Department shall oversee the review and approval of these plans and specifications, and shall monitor compliance during construction.

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04/ALA/880/KP 43.6/45.4 04/ALA/077/KP 0.15/0.07

Administrative Draft Initial Study/Environmental Assessment for the Combined Project Study Report/Project Report (PSR/PR)

42nd Avenue and High Street Access Improvements Project Located in the City of Oakland in Alameda County

Applicant: City of Oakland Public Works Agency 250 Frank H. Ogawa Plaza, Suite 4300 Oakland, CA 94612

Date: December 18, 2000

ORA/COUNCIL

OCT 0 2 2001

Volume 2 of 2

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CHAPTER 1

PURPOSE AND NEED FOR THE PROJECT

1.1 PROJECT PURPOSE

The purpose of the 42nd Avenue/High Street Access Improvements Project is to:

- Improve circulation of local roadways at the I-880/SR 77 (42nd Avenue) interchange.
- Improve access for vehicles traveling to and from the cities of Oakland and Alameda via 42nd Avenue and High Street from I-880.
- Improve operational capacity for the intersections at the freeway on-ramps and off-ramps.
- Assist in identification of acceptable column locations for the new High Street Overhead, which is currently under design as part of the State Seismic Retrofit Program replacement of the existing High Street Overhead.

The proposed project serves to implement <u>Policy SAF-10</u> of the City of Oakland Esturary Plan which states, "Work with Caltrans, BART, and other Transportation Agencies to upgrade connecting routes between inland neighborhoods, I-880, and local streets, to enhance East Oakland access to the waterfront. The proposed project also implements <u>Policy SAF-10.2</u> of the Esturary Plan, which states, "If feasible, construct an urban diamond interchange at 42nd Avenue, with frontage road connections to Fruitvale Avenue."

1.2 NEED FOR THE PROJECT

The proposed project is needed to accommodate existing and projected traffic conditions in the vicinity of the High Street and 42nd Avenue interchange with I-880. The proposed improvements are needed to facilitate movement of local traffic on and off of I-880 and to destinations both east and west of the existing I-880 freeway.

Three signalized intersections, all of which are on High Street, currently serve the project area. Although, the current level of service (LOS) analysis for AM and PM peak periods ranges between A and D, the estimated maximum queues during the AM and PM peak periods present significant problems at the two intersections serving freeway ramps. The queue extends upstream and blocks other traffic movements, resulting in constricted traffic flows during peak periods. Major queuing also occurs at both northbound and southbound off-ramps in both peak periods.

The proposed project was initiated in coordination with the adjacent seismic retrofit of the High Street overhead structure on I-880, currently under design by Caltrans. The High Street Overhead Structure Seismic Retrofit Project will replace the existing High Street Overhead mainline structures, reconfigure the I-880/High Street/SR77 Interchange with at-grade intersections, and will include an extension of the existing 42nd Avenue beneath the overhead structure.

Caltrans' High Street Overhead Structure Seismic Retrofit Project is being developed to mitigate structural deficiencies for the I-880 overhead only; it is not intended to address access or capacity improvements or improvement to local circulation. However, the High Street Overhead Seismic Retrofit and 42nd Avenue/High Street improvement projects are being developed to be mutually supportive. The extended 42nd Avenue, reconfigured at-grade SR 77 interchange, and the connector ramps for the High Street Overhead Structure Seismic Retrofit Project will tie directly into existing local roadways and the project area for the 42nd Avenue/High Street Access

Improvement Project. The proposed project will provide conjunctive improvements needed to link and optimize traffic circulation between the local roadway network and the reconfigured interchange and associated intersections.

CHAPTER 2

PROJECT DESCRIPTION

2.1 SCOPE OF THIS ENVIRONMENTAL DOCUMENT

This combined Environmental Assessment/Initial Study is a project-specific, focused environmental document prepared for the 42nd Avenue/High Street Access Improvements Project (42nd Avenue/High Street Project.) Required under the 1969 National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) of 1970, the intent of this combined NEPA/CEQA document is to address potential environmental issues associated with the construction and operation of the proposed project.

2.2 LOCATION AND PROJECT LIMITS

The proposed 42nd Avenue/High Street Improvement Project is located within the City of Oakland, along the I-880 corridor in Alameda County (Figure 2.1). The Project Area (Figure 2.2) is limited to the surface streets of 42nd Avenue, High Street, East 8th Street, Alameda Avenue, Oakport Street and Coliseum Way in Oakland.

42nd Avenue (SR77) is an existing four lane divided expressway with curb and gutter. The existing lanes are 3.6 meters (12 feet) wide with a 3-meter (10-foot) median. 42nd Avenue begins just east of Foothill Boulevard and runs west to terminate with ramp connectors at I-880. The southbound on-and off-ramps pass below I-880. 42nd Avenue passes below the northbound I-880 on-ramp and the Union Pacific railroad 40 meters (130 feet) east of I-880. This section of 42nd Avenue is in a deep cut with a retaining wall on the south side of the roadway. The sidewalks are vary in width averaging 0.6-1.0 meters (2-3 feet). There is no on-street parking. The posted speed limit is 72 kph (45 mph).

High Street is a major east-west four-lane arterial connecting the cities of Oakland and Alameda. The existing lanes are 3.6 meters (12 feet) wide with no shoulder. High Street is widened to six lanes below I-880, (two left-turn lanes are added). There is a 2.4-meter (8-foot) sidewalk in both directions on High Street. At the section under I-880, bridge piers are located at the back of curb with a 1.5-meter (5-foot) sidewalk behind the piers. No on-street parking is allowed. The posted speed limit is 56 kph (35 mph).

East 8th Street is a two-lane, two-way frontage road running parallel to I-880 to the west, with curb and gutter and a 1.5-meter (5-foot) sidewalk on the west-side. East 8th Street serves residential and retail commercial (K-Mart) traffic between Fruitvale Avenue and Alameda Avenue. East 8th Street terminates southbound with a right-turn only at Alameda Avenue.

Alameda Avenue is a four-lane roadway with curb and gutter and sidewalk on the north side along the K-Mart parking lot. There are four lanes of pavement on Alameda Avenue at Howard Street with three striped lanes: two westbound, one eastbound. Alameda Avenue runs east-west beginning with a free right turn from the I-880 southbound exit ramp and extending into the City of Alameda.

Oakport Street is a two-lane frontage road that runs parallel to the west side I-880, starting at High Street and extending south to Hegenberger Road. In the vicinity of High Street, Oakport Street is three lanes and carries traffic from High Street to the southbound I-880 on-ramp for a distance of approximately 250 meters (820 feet). The posted speed limit is 40 kph (25 mph).





Oakport Street serves as a frontage road for industrial businesses and is heavily traveled during stadium events at the Oakland Coliseum. There are no curbs, shoulders or sidewalks.

Coliseum Way is a four-lane frontage road with curb and gutter and intermittent paved sidewalk that runs parallel to the east side I-880, starting at High Street and extending south to the Oakland Coliseum. Coliseum Way, in the vicinity of High Street, carries traffic from the northbound I-880 off-ramp for approximately 250 meters (820 feet). Coliseum Way serves as a frontage road for industrial businesses and is heavily traveled during stadium events at the Oakland Coliseum.

Howard Street is a four-lane roadway with curb and gutter and sidewalk that connects Alameda Avenue with High Street. There are two driveway connections on Howard Street for the Pennzoil Carwash and a trucking company.

2.3 PROPOSED PROJECT

The proposed project provides circulation improvements for local roadways at the I-880/SR 77(42nd Avenue) interchange. Specifically, circulation and operational improvements are proposed for 42nd Avenue (SR77), High Street and Alameda Avenue. Re-alignments are proposed for Howard Street, Oakport Street, Coliseum Way and Jensen Street.

The project would improve access for vehicles traveling to and from the Cities of Oakland and Alameda via 42nd Avenue and High Street from I-880. Additionally, the proposed improvements should relieve local traffic congestion and encourage development for the Cities of Oakland and Alameda, and the Port of Oakland.

The City of Oakland has proposed two alternatives for the project as described in the next section.

2.4 **PROJECT ALTERNATIVES**

2.4.1 Split Diamond Alternative

In the vicinity of the proposed project, High Street runs perpendicular to I-880 and parallel to 42nd Avenue (Figure 2-3). High Street would be widened to provide improved capacity at the intersections with the frontage roads and freeway connections. The Split Diamond Alternative would extend 42nd Avenue by a new roadway that parallels High Street and connects to Alameda Avenue. East of I-880, the parallel streets of Howard Street and Jensen Street would be realigned to eliminate an intersection.

The widening of High Street at the intersections of the northbound off-ramp and southbound onramps for the proposed Split Diamond Alternative would increase the operational capacity of the intersections by adding additional lanes as shown on Figure 2.3. Circulation would improve with this additional capacity.

The extension of 42nd Avenue to Alameda Avenue would provide a direct route for the southbound I-880 off-ramp traffic traveling to Alameda, and Alameda traffic heading to the freeway in both the northbound and southbound direction. This addition will improve local circulation.

The Split Diamond Alternative's largest effect will be the widening of High Street under I-880. The proposed width of High Street at this location, [approximately 36.7 meters (120 feet)], may require placement of a pier for the High Street Overhead Seismic Retrofit project in the median of



High Street. The construction staging of High Street would require building the outside lanes first, while traffic uses the existing High Street, then shifting traffic onto the newly completed outer portions of High Street while building the inside lanes and median. The proposed grade would match the existing grade to allow easy detour of traffic to newly completed portions of High Street.

The proposed ramps for northbound and southbound I-880 will align with the existing ramp intersections so that no substantial portion of interchange ramps will have to be re-built.

Landscaping would be provided within the median areas on High Street and portions of 42nd Avenue. Landscaping would also be provided at the edge of sidewalks where new sidewalks would be provided.

2.4.2 42nd Street to High Street Connection Alternative

42nd Avenue and High Street would be re-aligned to form an at-grade intersection (Figure 2.4). The intersection would require dual left and dual right turns for several of the high volume movements. Left-turn queuing would be contained in the spacing between adjacent intersections.

The re-alignment of 42nd Avenue and High Street would require adjustment of the pier locations as currently designed for the High Street Overhead Seismic Retrofit project. Construction staging will be complex; temporary detour routing and temporary pavement will be required to maintain ramp and local traffic movements during construction. It will be necessary that the High Street Overhead Seismic Retrofit project realign all or part of 42nd Avenue to match the 42nd Avenue to High Street Connection Alternative. Otherwise, significant parts of the 42nd Avenue and High Street alignments designed for the High Street Overhead Seismic Retrofit project will require demolition.

The traffic from 42nd and High Street heading to southbound I-880 will have a direct connection via an overhead structure to the on-ramp. This overhead structure would expedite the movement of traffic from local streets to the freeway.

The southbound off-ramp traffic would be realigned to an intersection opposite Howard Street. A left turn at the ramp will direct vehicles to High Street and 42^{nd} Avenue with either a through or left-turn movement. Southbound off-ramp vehicles destined for Oakport Street will have direct access via the bridge over High Street.

The I-880 northbound off-ramp and on-ramp traffic circulation will remain unchanged. The I-880 northbound off-ramp and Coliseum Way will be rebuilt along the same alignment, but shifted slightly to the west.

This alternative would re-align 42nd Avenue west of the existing railroad bridge. High Street would also be re-aligned below I-880 with Alameda Avenue. A high capacity, at-grade intersection would connect the two alignments on the west side of I-880. Revised access to southbound I-880 would be provided from Alameda Avenue by a fly-over ramp and a spur ramp to the same one-way frontage road. Revised access from High Street would be provided by a spur ramp to the same one-way frontage road. The southbound I-880 off-ramp would be re-aligned to intersect with Alameda Avenue. The northbound I-880 on-ramp and off-ramp alignments would be revised slightly but the circulation pattern would be unchanged. Landscaping would be provided within the median areas on High Street and portions of 42nd Avenue. Landscaping would also be provided at the edge of sidewalks where new sidewalks are provided.



2.4.3 Costs and Funding

The Proposed Project would be funded through the sale of local bonds authorized by the Measure B initiative. In addition, State and Federal funding will be used during project design and construction.

The following are preliminary cost estimates for with each alternative:

Alternative: Split Diamond	
<u>Roadway</u> : <u>Right-of-Way</u> :	<u>\$7,000,000</u> <u>\$2,600,000</u>
<u>Total:</u>	<u>\$9,600,000</u>
Alternative: 42 nd to High Street Connection	
<u>Roadway</u> : <u>Structure</u> : <u>Right-of-Way</u> :	\$12,700,000 \$2,600,000 \$3,300,000
<u>Total</u> :	\$18,500,000

2.5 NO-BUILD ALTERNATIVE

The No-Build Alternative would undertake no action to replace the existing High Street and 42nd Avenue access to I-880 and there would be no improvement to local streets or access to Alameda and the Oakland Estuary. There would be no through access to the west side of I-880 via 42nd Avenue as the retrofit of the High Street Overhead proposes only to extend 42nd Avenue beneath the overhead structure. (Refer to Section 2.7.1 for a detailed description of the Caltrans project.) As a result, future improvements to the local streets would be limited by placement of the support structures for the Caltrans I-880 retrofit project (which is assumed to be constructed under this alternative). The opportunity to coordinate with Caltrans and thereby increase project options would be lost and would likely result in increased overall project cost.

2.6 COMPATIBILITY WITH LOCAL AND REGIONAL PLANS

The High Street/42nd Avenue build alternatives are compatible with all local and regional plans, policies, and regulations. The two plans directly applicable to the project are the City of Oakland *Envision Oakland General Plan* and the *Estuary Policy Plan*, dated November 1998, which is an area plan that has been adopted as a part of the General Plan. The *Estuary Plan* is administered by the Port and City of Oakland with the objectives of enhancing recreational opportunities, accommodating economic growth and development in the area of Oakland between Adeline Street, I-880, 66th Avenue and the Estuary Shoreline. Both build alternatives would be compatible with these objectives.

2.6.1 Transportation and General Plans

The High Street/42nd Avenue build alternatives are consistent with the Transportation Elements of both the City of Oakland *General Plan* and the *Estuary Policy Plan*. In particular, the project is consistent with the following policies from the Transportation and Transit Oriented Development Goals section of the General Plan:

- <u>Policy T2.4</u>: Encourage transportation improvements that facilitate economic development.
- <u>Policy T2.5</u>: Link transportation and infrastructure improvements to recreational uses, job centers, commercial nodes, and social services (i.e., hospitals, parks, or community centers).
- <u>Policy T3.2</u>: Promote and participate in both local and regional strategies to manage traffic supply and demand where unacceptable levels of service exist or are forecast to exist.

The project is also consistent with the following policies from the *Estuary Plan* related to Land Use and Regional Circulation, and Local Street Improvements:

- <u>Policy SAF-10</u>: Work with Caltrans, BART, and other Transportation Agencies to upgrade connecting routes between inland neighborhoods, I-880, and local streets, to enhance East Oakland access to the waterfront.
- <u>Policy SAF-10.2</u>: If feasible, construct an urban diamond interchange at 42nd Avenue, with frontage road connections to Fruitvale.
- <u>Policy SAF-6.1</u>: Provide for new commercial activities adjacent to the 42nd Avenue interchange.

Note: San Antonio/Fruitvale (SAF) district is identified in the Estuary Plan.

2.7 RELATED PROJECTS

2.7.1 High Street Overhead Seismic Retrofit Project

The 42nd Avenue/High Street access improvements (Figure 2.5) are being coordinated with Caltrans' seismic retrofit of the High Street Overheads on I-880 (Project 165421), which is currently under design by Caltrans. The Combined Project Study Report/Project Report (PSR/PS) for Caltrans' High Street Overhead Seismic Retrofit Project was approved in December 1999. Meetings held between November 1999 and April 2000 involving the City of Oakland, City of Alameda and Caltrans have been held to discuss issues and coordinate the City of Oakland's project with the Caltrans project.

The High Street Overhead Seismic Retrofit consists of replacing two bridges along I-880, which span an abandoned Union Pacific Railroad rail track, High Street and SR77 (42nd Avenue). The existing ramps and connectors will be replaced with at-grade intersections with the exception of the northbound on-ramp structure, which was previously retrofitted and will remain in place.



At 42nd Avenue, the Caltrans High Street Overhead Seismic Retrofit project would remove the ramp connectors to I-880 and replace them with at-grade intersections. 42nd Avenue will terminate at the I-880 southbound off-ramp.

The Caltrans High Street Overhead Seismic Retrofit project would realign a portion of East 8th Street south of 37th Avenue. The current traffic circulation pattern will remain. The project would also realign Oakport Street further west in order to rebuild the I-880 southbound structure, but the existing number of lanes and circulation will be unchanged. The project does not include the reconstruction or realignment of Coliseum Way.

CHAPTER 3 AFFECTED ENVIRONMENT

3.1 **AESTHETICS**

The highway corridor follows an approximate north/south alignment along the east side of San Francisco Bay. The roadway is predominantly bordered by commercial and industrial development interspersed with residential development. The natural landscape and visual elements in the project area have been altered, obscured or paved over.

Views from the project area include the Oakland hills to the east and the Peninsular Ranges to the west. Significant scenic resources have not been identified in the project area limits.

3.1.1 Visual Quality

The visual quality of the area is generally low to moderate. The views of the foothills to the east are frequently obscured by commercial and industrial development, which prevent the view from forming a distinctive visual pattern. Therefore, the overall vividness (defined at the memorability of a distinct visual pattern) of the project area is considered to be low to moderate.

Commercial and industrial development obscures the majority of the views of distant open space. The intactness of these views, which refers to the integrity of the natural and man-made landscape and the degree to which the natural landscape is free from visual encroachment, is substantially reduced by the existing development.

3.1.2 Viewer Sensitivity

Viewers in the project area include residents of the area and workers in the adjoining businesses. The sensitivity of residential viewers in the project is considered moderate. The visual sensitivity of workers is considered low to moderate because they are primarily focused on their tasks and on the view of the highway while driving.

3.2 SOCIOECONOMICS

3.2.1 Agricultural Resources

There are no agricultural lands or lands subject to the Williamson Act in the project area or its vicinity.

3.2.2 Land Use and Planning

The proposed project area is developed with transportation facilities (I-880 and adjoining arterial roads), commercial and light industrial uses, and one residence. Land within the project area is designated for a variety of uses in the *Oakland General Plan*. The area west of I-880 is designated Heavy Industrial; east of I-880 to Coliseum Way is designated Business Mix; and the area from Coliseum Way to San Leandro Street is designated General Industrial.

The eastern portion of the project area, east of I-880, is developed and used for a combination of construction-related retail and general industry. The western side of the project area, west of

I-880, is also a combination of light industrial and commercial development. One single-family residence is located at the intersection of Jensen and High streets.

The portion of the 42nd Avenue/High Street project area west of I-880 is located within the Port of Oakland Estuary Plan area. The Estuary Plan includes a set of goals and policies related to the area between Adeline Street, the Nimitz Freeway, 66th Avenue and the Estuary shoreline. The portion of the project area within the Estuary Plan boundaries is classified as Light Industry 3 and General Commercial.

3.2.3 **Population and Housing**

The Association of Bay Area Governments (ABAG) projects that the population of the City of Oakland will be 405,300 by the end of year 2000¹ which is an 8 percent increase in the number of residents since 1990 (372,242). The estimated growth rate for the nine-county Bay Area for the period 1990-2000 is 13 percent.

There are no housing developments in the proposed project area or the immediate vicinity of the project construction footprint, however, as noted above, there is one single-family residence at the intersection of High and Jensen streets.

3.2.4 **Public Services**

The Oakland Fire Department provides fire protection, emergency rescue, and medical services in the project area. The nearest fire station, Station 18, is located at 1700 50th Avenue at Bancroft Avenue, which is approximately 1.2 kilometers (0.75 miles) southeast of the point where High Street crosses under I-880. Response time to the project area is estimated to be 3 minutes.² The City of Oakland Police Department does not have an established emergency response time to the project site.³ The nearest school to the project area is a continuing education high school, which is located approximately 0.4 kilometer (0.25 mile) northwest of the project area.

3.2.5 Recreation

No recreational facilities or trails occur within the project area. The park closest to the project limits is the Martin Luther King Junior (MLK Jr.) Regional Shoreline, which is part of the East Bay Regional Parks District. The park is located approximately .40 kilometer (.25 mile) to the southwest of the project area. The Bay Trail, which is a shoreline pedestrian and bicycle trail, planned and developed by ABAG, runs the entire length of the MLK Jr. Regional shoreline.

3.3 **AIR QUALITY**

Air quality is controlled through the attainment and maintenance of ambient air quality standards and enforcement of emission limits. Pursuant to the federal Clean Air Act of 1970 and its subsequent amendments, the U.S. Environmental Protection Agency (EPA) has established national ambient air quality standards for six air pollutants: ozone, carbon monoxide, particulate matter, nitrogen oxides, lead, and sulfur dioxides. In addition to national standards, the project area is also regulated by state standards established by the California Air Resources Board (CARB). Many of these standards are more stringent than the corresponding national standards.

¹ Association of Bay Area Governments, Hing Wong, Planner, April 25th

² City of Oakland Fire Department, Captain Lorenzo Fratiani (Station Captain), Station 18, April 25th, 2000 ³ City of Oakland Police Department, Dispatcher 27-Regina Harris, May 1st, 2000

The San Francisco Bay Area, including the project site, is currently designated as a nonattainment area for ozone on the federal level and for ozone and suspended particulates (PM_{10}) on the state level.

The Bay Area Air Quality Management District (BAAQMD) is the agency responsible for regulating air pollutant emissions within the San Francisco Bay Area Air Basin. Responsible agencies must develop plans that demonstrate how they plan to meet the federal and state standards. The plans concentrate on stationary and mobile source control measures that will reduce the amount of air pollutants being emitted. Some of the control measures (e.g., construction-related measures) can be enforced on specific projects, such as the 42nd Avenue/High Street Project.

The plan that state agencies develop to meet national standards is called the State Implementation Plan (SIP). The BAAQMD has prepared the San Francisco Bay Area Ozone Attainment Plan for the One-Hour National Ozone Standard (Adopted June 1999) and has submitted this plan to the CARB for incorporation into the SIP. The BAAQMD has also developed the 1997 Bay Area Clean Air Plan to document how it plans to meet state standards.

3.4 BIOLOGICAL RESOURCES

3.4.1 Wildlife and Plants

Biological resources in the project area were identified through record searches, literature searches, and field surveys. A comprehensive list of special status wildlife species with the potential to occur in the project area is included in Appendix A as Table A-1. The list of species included in Appendix A was derived from a search of the California Department of Fish and Game Natural Diversity Database (CNDDB).

There were no observations of the special status plant or animal species listed in Table A-1. In addition, habitat, which may support special status species, was not identified in the project area.

The project study area does not support special status species habitats or wetland habitats. There are no creeks, swales or drainages in the project area. Vegetation is limited to ruderal species in the roadway medians and ornamental plantings along East 8th Street. Wildlife observed included morning doves (*Zenaida macroura*) and house finches (*Carpodacus mexicanus*). Plant species observed included ripgut grass (*Bromus diandrus*), fennel (*Foeniculum vulgare*), wild radish (*Raphnus sativus*) and prickly ox tongue (*picris sp*).

The heavily industrial and commercial nature of the project study area makes it highly unlikely that special status species would occur in the project area. The results of the survey confirm that conclusion.

3.5 CULTURAL RESOURCES

The term, "cultural resources," is a more generic term for what are defined under federal environmental laws as "historic properties" and under California environmental laws as "historical resources." These resources can include, but are not limited to, archaeological sites from both prehistoric and historic times, historical places, important or exemplary buildings or engineered structures, modified landscapes, or locations of culturally important community events.

3.5.1 Archival Methods

Background research for this report was conducted to develop a contextual history of the project area and to aid with architectural evaluations. A record search of the California Inventory of Historic Resources was conducted at the Northwest Information Center at Sonoma State University on 12 June 2000, and a record search of the Sacred Lands file was conducted by the Native American Heritage Commission in Sacramento, California on 9 June 2000. Individuals who might have historical information related to the project area were identified by the Native American Heritage Commission; those persons were contacted by letter with a request for information on 16 June 2000. The record search located no previously recorded historical properties or sites within the project area, or within ½ mile of the project area. The record search of the Sacred Land file also located no sites, and no replies to requests for information were received.

Textual sources and historic maps were examined at the Bancroft Library and the Earth Sciences Map Library at the University of California, Berkeley. Historic maps and data were also compiled at the California Room, California State Library, Sacramento. Historic General Land Office maps were also received from the Bureau of Land Management. Maps consulted were:

• Henry Eld map of coastal Alameda, 1841.

- G.F. Allardt Sale Map #10, 1871.
- Thompson and West map of Alameda County, 1878
- Official Map of Alameda County, 1889.
- Map of Alameda County for Board of Supervisors, 1900.
- 1903, 1912, 1925, and 1925 revised 1951 Sanborn Fire Insurance Maps
- Compilation Map of Mexican Rancheros of Alameda and Contra Costa Counties, date unknown
- USGS 7.5' Quad Oakland East
- 1870, 1872, and 1883 GLO maps from the Bureau of Land Management

The Alameda County Historical Society and the Oakland Cultural Heritage Survey were contacted by letter on 12 and 14 June 2000, respectively, for information regarding cultural resources in or near the project area. The Historic Property Survey Report for the High Street Overhead Seismic Retrofit Project (Caltrans 1999) was also consulted.

National Register and California Historical Landmark listings, as of November 2000, were consulted to determine whether previously identified historic properties or districts are located in or adjacent to the APE. No historic sites were located through these searches.

3.5.2 Field Methods

In 1998, much of the project area was previously surveyed for historical resources by Elizabeth Krase, California Department of Transportation Architectural Historian/Associate Environmental Planner (Caltrans 1999). Those portions of the project area not surveyed by Krase were surveyed by Jennifer Hair, M.F.A., Garcia and Associates' historic preservationist and architectural historian on August 20, 2000. The survey included architectural recording and photography. On 9 June 2000 Garcia and Associates archaeologist Christopher D. Dore, Ph.D., RPA conducted an archaeological reconnaissance inspection of the area to supplement the historical map review virtually the entire project area is currently paved or otherwise covered with built elements.

3.5.3 Historical Setting

The project area is set within the pre- and protohistoric territory of the Costanoan Native American linguistic group. Although exact boundaries are unknown, the Costanoan generally occupied lands as far as Martinez to the north and the Monterey Peninsula to the south, and as far to the east as the coastal mountain ranges north and south of Mount Diablo. The name *Costanoan* appears to have been derived from the Spanish term *Costanos*, meaning "coast people" (Kroeber 1925:462). Today, the Costanoan are known as the Ohlone.

The Ohlone began their prehistoric migration into the Bay Area in approximately 500 A.D., over 1250 years before contact with European explorers. In pre-contact California, the Ohlone lived in approximately 50 separate and politically autonomous bands or small tribes. Each tribe had at least one permanent village site, as well as many seasonal camps, used for fishing, hunting or gathering, that were scattered throughout their territory. Tribe populations ranged from 50 to 500 individuals, and were led by a single chief or headman. Based upon historic mission records, the tribe utilizing lands within the project area was probably the Jalquin (Milliken 1995).

Acorns, collected and processed, were the staple of Ohlone diet, though a variety of nuts, seeds, berries and roots were also consumed. Wildlife hunted included blacktail deer, elk, bear, rabbit, squirrel, and sea life such as various fish, clams, mussells, and seals. Dwellings consisted of dome-shaped thatched structures. Dwellings, arranged in a circular manner around an assembly structure or dance house, consisted of domes, thatched structures.

The Spanish established their first permanent settlement at Mission San Diego in 1769. In March 1772, Father Juan Crespi, accompanying the Fages Expedition to the San Francisco Bay Area, authored the first written accounts of Alameda County lands. Subsequent Spanish excursions led to the 1797 establishment of Mission San Jose in Fremont, and the forced acculturation of the Ohlone to Spanish social and religious dogma. Spanish domination of California Indians was supported by the twenty-one missions built along the coast of California.

Mexican independence from Spain in 1822 ushered in a short era of Mexican-rule in California. To encourage in-land settlement, the Mexican government made large land grants to the *Californios*, the Mexican settlers of California. The project area is located on what was once Rancho San Antontio, owned by Luis Maria Peralta.

The United States annexed California following the American victory over Mexico in the 1846-48 Mexican-American War. Gold discovered at Sutter's Mill in 1849 started the California Gold Rush, and the subsequent population surge set the stage for California statehood in 1850.

Oakland was originally platted in 1850, with original city boundaries extending from 1st to 14th street and from Market to Fallon Streets, in what is now downtown Oakland. In 1856 the town of Brooklyn, made up of the former townships of Clinton and San Antonio, was created, and in 1872, Oakland annexed Brooklyn as a township.

Rail service by the San Francisco and Alameda Rail Road Company began in 1864, with a right of way -- which traverses the project area -- purchased by the Central Pacific Railroad in 1869. During the late-nineteenth century, Brooklyn township settlement patterns grew fixed, with middle-class dwellings located east of the railroad tracks, and industry and modest structures located between the railroad and the bay. Lured by the rail lines, more heavy industry, such as the Pacific Cordage Works, the California Cotton Mills and various fruit canning plants grew.

During the early-twentieth century, more industry began to build within the project area. While a dairy and a nursery continued to operate, Standard Oil also maintained a yard, and the California Motor Car Company operated a factory. By the 1920s, as Oakland grew into a major metropolitan center, the project area industry expanded to include the Clorox Chemical Corporation, the H.L. Call Lumber Company, and the Merchants Foundry Company. Following Oakland's dynamic period of growth during and after World War II, the Division of Highways began construction of a route south from the San Francisco Bay Bridge to San Jose. The route highway was completed through the project area in 1949-1950, and classified as State Route 17. In 1984 the roadway was re-designated Interstate Route 880. The area continues to house industrial, commercial and residential uses.

3.5.4 Known Historical Resources

Thirty-four resources in the project area were considered as historical resources/historic properties. These resources were

1. 748 36th Avenue 2. 745 37th Avenue 3. 850 42nd Avenue 4. 3925 Alameda Avenue 5. 4000 Alameda Avenue 6. 4010 Alameda Avenue 7. 500 High Street 8. 555 High Street 9. 574 High Street 10. 600 High Street 11. 615 High Street 12. 718 High Street 13. 720 High Street 14. 743 High Street 15. 750 High Street 16. 751 High Street 17. 752 High Street 18. 760 High Street 19. 900 High Street 20. 4341 Howard Street 21. 4309 Jensen Street 22. 4344 Jensen Street 23. 4445 Jensen Street 24. 4401 Oakport Street 25. 4417 Oakport Street 26. 4545 Oakport Street 27. Bridge 33-0040L 28. Bridge 33-0040R 29. Bridge 33-0145F 30. Bridge 33-0146S 31. Bridge 33-0187Y 32. Bridge 33-186

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33. Pump 33-0186W

34. Southern Pacific Rail Road tracks

- None of these resources met the eligibility criteria for listing on either the California Register of Historical Resources or the National Register of Historic Places.

3.6 GEOLOGY, SOILS, AND SEISMICITY

The project is located in the Coast Ranges geologic/geomorphic province of central and northern California. The Coast Ranges have a general northwest orientation and are characterized by north-northwest trending folds and faults. The province consists of sedimentary, metamorphic, volcanic, and igneous rocks. The San Francisco Bay Region is located within a northwesterly oriented geomorphic feature called the San Francisco Bay-Santa Clara Valley depression.

The San Francisco Bay Area is one of the more seismically active regions of California. The project area's main geologic structures are associated with three major faults: the Calaveras, Hayward and San Andreas faults. The maximum credible earthquake in the project area would occur on the San Andreas Fault at a Richter Scale measurement of approximately 8.25. The Hayward fault zone is approximately 4.8 kilometers (3 miles) east of the project site. The Hayward fault has long been documented as active, with major earthquakes in 1836 and 1868. The other two faults have also been historically active, but are farther from the project: the Calaveras fault lies approximately 24 kilometers (15 miles) east of I-880 and the San Andreas Fault is approximately 27 kilometers (17 miles) west of I-880.

The project area generally consists of alluvial soils that have been formed by years of erosion and sediment transport from the hills. They are characterized by high corrosivity and low erosion potential.

3.7 HAZARDS AND HAZARDOUS MATERIALS

A preliminary site investigation (PSI) was conducted for the 42nd Avenue/High Street Project to identify potential contaminant sources within the project area that may affect the design and construction of the project. The study area for the PSI is the area within the project limits where construction and/or right-of-way acquisition would occur. For purposes of the assessment, hazardous wastes or materials include hazardous substances as regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); hazardous wastes as regulated under the Resource Conservation and Recovery Act (RCRA) and the California Hazardous Waste Control Law; hazardous materials as regulated under the Department of Transportation; and other special wastes regulated under federal, state, and local regulations.

A database search of the project area, conducted by Environmental Data Resources, Inc., revealed that 12 sites were listed within the general vicinity of the project area (Table 3- 1). Seven of the twelve sites, shown on Figure 3.1, were within or adjacent to the project area. Three sites were reported to have on-going environmental activities requiring further document review. These sites are listed below:

- Ekotek Lube, 4299 Alameda Avenue
- Shell Gas Station, 630 High Street
- Exxon Gas Station, 720 High Street

Chapter 3: Affected Environment

TABLE 3-1	<u>: DATABASE S</u>	SEARCH RES	SULTS OF SITES IN ANI	ADJACENT TO 42 ND AVEN	NUE/HIGHSTRE	ET ACCESS IMPROVEMENTS PROJECT	AREA
Site	Address	Within Project Area	Soil Contamination	Groundwater Contamination	Lead Agency	Status	Require Document Revie <u>w</u>
Owens-Illinois, Inc.	3600 Alameda Ave.	Unlikely	None Reported	None Reported	County of Alameda and RWQCB	N/A	No
Lerner Co.	3675 Alameda Ave.	Unlikely	Yes	Yes	RWQCB	Signed off, remedial action completed or deemed unnecessary	No
U.S. Cold Storage	3925 Alameda Ave.	Unlikely	Yes	None Reported	RWQCB	Soil remediation completed	No
Super Kmart	4000 Alameda Ave.	Unlikely	None Reported	None Reported	N/A	N/A	No
Ekotec Lube	4200 Alameda Ave.	Yes	Yes – Petroleum Hydrocarbons and VOCs	Yes – Petroleum Hydrocarbons and VOCs	County of Alameda and RWQCB	Site not closed. On-going environmental activities	Yes
Integrated Environmental Systems	499 High St.	Yes	None Reported	None Reported	N/A	N/A	No
Cobbledick Kibbe	500 High St.	Yes	Yes	Yes	RWQCB	Signed off, remedial action completed or deemed unnecessary.	No
Shell	630 High St.	Yes	Yes – Petroleum Hydrocarbons,	Yes – Petroleum Hydrocarbons,	County of Alameda and RWOCB	Site not closed. On-going environmental activities	Yes
Exxon	720 High St.	Unlikely	Yes – Petroleum Hydrocarbons,	Yes – Petroleum Hydrocarbons,	County of Alameda and RWOCB	Site not closed. On-going environmental activities	Yes
Southern Pacific Railroad Property	744/758 High St.	Unlikely	None Reported	None Reported	RWQCB	N/A	No
American Can Company (also reported as location of current Super Kmart store)	301 E. 8 th St.	Unknown	Yes – Petroleum Hydrocarbons	Yes – Petroleum Hydrocarbons	RWQCB	No further action issued on January 5, 1999 and December 23, 1998	No
Ameron Pole Products Div.	4417 Oakport St.	Unlikely	None Reported	None Reported	N/A	N/A	No
Source: Prelimin	ary Site Investigat	ion Report.	May 1999		·		

Source: Preliminary Site Investigation Report, May 1999

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Of these three sites, the most notable is the 0.32-hectare (0.08-acre) Ekotek Lube site. The site was used for oil recycling from 1925 to 1981. Waste oil received for recycling included oils from automobiles, railroad locomotives, aircraft and electrical transformers. Solvent was also recycled at the facility. The paved site is currently vacant and fenced for safety and security.

Results of the remedial investigation conducted on the site indicated that the primary contaminants in soil and groundwater are petroleum hydrocarbons, benzene, toluene, ethylbenzene, zylenes (BTEX), chlorinated solvents, and PCBs.

In September 1998, the San Francisco Bay Regional Water Quality Control Board (RWCQB) adopted Site Cleanup Requirements Order No. 98-093 for the Ekotek site. The order adopted a risk management plan for the site, including implementing actions and a self-monitoring program. Risk management actions proposed for the site include a passive hydrocarbon recovery system; a pre-redevelopment risk management plan calling for maintaining the paving and fencing on the site; site-specific health and safety worker planning requirements; risk management after site redevelopment; and recordation of an environmental restriction and covenant with the deed of the site.

The Shell and Exxon station sites involve active leaking underground storage tanks (LUSTs). The Shell Station site is designated as a non-attainment zone by the Alameda County Department of Environmental Health. The Exxon Station site is undergoing active remediation and monitoring. Exxon is in the process of proposing closure of the treatment system and proposing a risk-based closure assessment for the site.

In addition to the sites discussed above, aerially deposited lead from automobile exhaust and heavy metals from roadway runoff are likely to occur in the project area.

3.8 HYDROLOGY AND WATER QUALITY

The project area does not cross any waterways with floodplains defined by the Federal Emergency Management Agency (FEMA). The storm-water runoff generated on the roads currently drains into the city's storm water drainage system.

3.9 MINERAL RESOURCES

No strategic or important mineral resources exist within the project area.

3.10 NOISE

There is a single, noise-sensitive residential receptor, (located at the southwest corner of Jensen and High streets) in addition to the industrial and commercial land use in the I-880 High Street/42nd Street project area. The residence is currently subject to traffic noise levels from I-880, which exceed the FHWA/Caltrans Noise Abatement Criteria.

3.11 TRANSPORTATION/TRAFFIC

I-880 is an existing, eight-lane, divided freeway with southbound on-ramps and northbound offramps connecting at-grade with High street. Within Alameda County, I-880 varies from a six-to eight-lane urban freeway, extending from downtown Oakland to the Alameda/Santa Clara County line in the City of Milpitas. The facility is one of the principal means of access for northern and southern areas of Alameda County and the Bay Area, and is a vital highway for the transport of goods and people in the region.

42nd Avenue (SR77) and High Street are urban arterial surface streets. As shown on Figure 2-2, 42nd Avenue begins just east of Foothill Boulevard in Oakland and continues west to terminate with ramp connectors at I-880. 42nd Avenue connects to northbound and southbound I-880 by ramps and frontage roads. High street connects to on-ramps and off-ramp connectors leading to the I-880 Freeway and accommodates local traffic between portions of the City of Oakland on the east and west sides of the I-880 freeway.

3.11.1 Circulation

The project area is currently served by three signalized intersections located at Oakport Street at High Street, Howard Street at High Street, and Coliseum Way at High Street. Operations at these intersections were studied to establish baseline traffic conditions in the project area. As shown in Table 3-2 below, the existing levels of service range from A-D, with a maximum delay of 51.6 seconds.

Time Period	Signal Location	Level of Service	Avg. Total Delay (sec/veh)	Volume/Capacity
AM Peak	Alameda Ave. at High St	C	31.9	0.94
	Howard St. at High St	В	10.6	0.66
	Coliseum Way at High St	С	31.6	0.90
PM Peak	Alameda Ave. at High St.	C –	28.5	0.86
	Howard St. at High St.	А	8.3	0.59
	Coliseum Way at High St	D	51.6	1.00

TABLE 3-2: PROJECT INTERSECTION OPERATIONS

Note: Performance measures based on procedures in 1997 Highway Capacity Manual for signalized intersections.

The estimated maximum (95%) queues occurring during the AM and PM peak periods present significant problems at the two intersections serving freeway on-ramps. Of particular concern is the northbound left turn movement at the intersection of High Street with Coliseum Way. The storage length is 87 meters (285 feet), but in the AM peak hour, the estimated queue length is 177 meters (581 feet) and 204 meters (668 feet) and the PM peak hour. The average resulting delays are 31.6 seconds during the AM peak and 51.6 seconds during the PM peak period. As a result, the queue extends upstream past the Alameda Avenue intersection, causing restricted traffic flows during peak periods.

Major queuing also occurs on both off-ramps during both peak periods. Currently, traffic backs up onto the freeway at the northbound and southbound off-ramps during AM and PM peak periods. The estimated maximum queue for both peak periods is approximately 152 meters (500 feet) for the southbound off-ramp and 121 meters (400 feet) for the northbound off-ramp.

Additionally, single left-turn lanes under the High Street Overhead have deficient storage in both directions, causing backups to the northbound and southbound I-880 traffic on High Street.

3.11.2 Accident Data

Accident data for the project area was obtained from Caltrans' TASAS Table B and AXR 330 records for the period between January 1, 1996 and December 31, 1998. This three-year time period ensures statistically valid accident rates. The 42nd Avenue/High Street Access

Improvement Project extends from Kilo Post (KP) 43.6 to 45.5 on I-880. Accident data is provided for the segment of I-880 between KP 43.6 and 45.5 and the segment of SR-77 (42nd Avenue) between KP 0.16 and 0.72 (International Boulevard [E. 14th Street] and I-880).

During this three-year time period, there were 518 reported accidents in the 1.9 km (1.26-mi.) section of I-880; 4 accidents (1%) involved fatalities, 160 accidents (31%) involved injuries, and 354 accidents (68%) were reported as property damage only. On 42^{nd} Avenue (SR-77), there were only seven reported accidents within the same time period. Four accidents involved injuries and three accidents were reported as property damage only. There were no fatalities.

A summary of the TASAS Table B data is presented below. The accident rates on I-880 in the study area are approximately double the average rates for facilities similar in type and traffic volumes. On southbound SR 77, the rate of total accidents is lower than the average for similar facilities; however the differences are not statistically significant because the sample size is small. Rates and TASAS Table B data are presented in accidents per million vehicle kilometers below.

		Actual ^{2,4}			Average ³		
Location	Fatal	F&I	Total	Fatal	F&I	Total	
I-880 SB-KP 43.597 through KP 45.496	0.000	0.42	1.19	0.004	0.20	0.61	
I-880 NB-KP 43.597 through KP 45.496	0.021	0.41	1.41	0.004	0.20	0.61	
SR 77 SB-KP 0.158 through KP 0.724	0.000	0.69	1.04	0.010	0.67	1.50	
SR 77 NB-KP 0.158 through KP 0.724	0.000	0.00	0.17	0.010	0.67	1.50	

TABLE 3-3: ACCIDENT RATES IN PROJECT A	REA
(January 1, 1996 to December 31, 1998) ¹	

Accidents per Million Vehicle Kilometers)

² Actual rates are for the study segments during the 1/1/96 through 12/31/98 period

^{3.} Average rates are statewide for the facility type.

⁴ Accidents: F&I - Fatal + Injury, Total - Property Damage + F&I

The high accident rates on the freeway are due to several factors: congested conditions during many hours of the day, high truck percentages, large ramp volumes that contribute to a large amount of both merging and weaving maneuvers, lack of inside shoulder and inadequate geometrics. Caltrans' High Street Overhead Seismic Retrofit Project will include improvements to sight distances and shoulder widths, and will improve safety, but accident rates much higher than state wide average are likely to remain because high volumes of traffic occur in areas where merging and weaving takes place. The 42nd Avenue/High Street Access Improvements Project focuses on improvements to intersections, but the provision of additional lanes on High Street will allow for a greater allocation of signal green time to off-ramp traffic, thereby reducing the off-ramp queue. Less complex geometry at the intersections, especially the elimination of shared left-through lanes will increase operational capacity and safety on the local road sections.

3.11.3 Parking

The amount of off street parking that the City of Oakland requires for different property types within the project area is based on the type of zoning district (e.g. light industry 1) in which the property is located, the size of the facility, and the number of residents or employees occupying the facility. Table 3-4 shows the required parking per land use type for lands within the project area.

3.12 UTILITIES AND SERVICE SYSTEMS

The East Bay Municipal Utility District (EBMUD) supplies water and provides wastewater treatment for parts of Alameda and Contra Costa counties, including the project area. Approximately 1.2 million people are served by the District's water system in a 325-square-mile area extending from Crockett on the north, southward to San Lorenzo (encompassing the major cities of Oakland and Berkeley), eastward from San Francisco Bay to Walnut Creek, and south through the San Ramon Valley. The wastewater system serves approximately 600,000 people in an 83-square-mile area of Alameda and Contra Costa counties along the Bay's east shore, extending from Richmond on the north, southward to San Leandro. EBMUD maintains a wastewater interceptor at Oakport and 8th Avenue. In the project area, EBMUD has water and/or gas utilities on Howard Street, Jensen Street, Oakport Street, Coliseum Way, Alameda Avenue, East 8th Street, and High Street. Pacific Bell is the principal telephone company in the area with utilities on Alameda Avenue, High Street, Oakport Street, Coliseum Way, and Howard Avenue. AT&T Cable Services provides cable television lines with utilities on Alameda Avenue, High Street, Howard Street and Jensen Street. Pacific Gas & Electric (PG&E) is responsible for electrical and natural gas utilities located throughout the project area. The City of Oakland has traffic signal and street lighting utilities on Coliseum Way, Oakport Street, and the I-880 on and off ramps. Other utility owners within the project area include Caltrans, Kinder-Morgan (Petroleum Pipeline) and Owest (Fiber Optic Cable). The Kinder-Morgan and Owest utilities are both located within the Canadian Pacific Railroad right-of-way to the east of the project area.

CHAPTER 4

CEQA ENVIRONMENTAL CHECKLIST

EVALUATION OF ENVIRONMENTAL IMPACTS

The attached checklist was used to identify physical, biological, social, and economic factors which might be affected by the proposed project. In some cases, environmental factors listed in the checklist will not be affected because of the nature of the project. In other cases, background studies performed in connection with this project clearly indicate that the project will not affect a particular item. More detailed discussions of the environmental impacts of the project can be found in Chapter 5, Impacts and Mitigation Measures.

"Potentially Significant Impact" is an appropriate determination if there is substantial evidence that an effect is significant. If there is one or more "Potentially Significant Impact" entries when the determination is made, an EIS/EIR is required.

"Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant," in which case a Negative Declaration/Finding of No Significant Impact is appropriate.

Editor's Note: All instances of the word "significant" fall under the California Environmental Quality Act (CEQA) definition only.

ENVIRONMENTAL IMPACTS: I. AESTHETICS

Woul	d the proposal:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?				\boxtimes
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	Substantially degrade the existing visual character or quality of the site and its surrounding?				\boxtimes
d)	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				

II. AGRICULTURE RESOURCES

Evaluation

1

Wou	id the proposal:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
would the proposal:		_	_		
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				
	III. AIR QUALITY				
	<u>Evaluation</u>				
Wat		Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
v ou		_	_		
a)	Conflict with or obstruct implementation of the applicable air quality plan?				
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				
	AIR QUALITY (CONT.)				
-------------	---	--------------------------------------	--	------------------------------------	-------------
-		Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal and state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d)	Expose sensitive receptors to substantial pollutant concentrations?				\boxtimes
e)	Create objectionable odors affecting a substantial number of people?				\boxtimes
	IV. BIOLOGICAL RESOURCES				
	Evaluation	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation	Less Than Significant Impact	No Impact
Woul	Evaluation d the proposal:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would a)	Evaluation d the proposal: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

BIOLOGICAL RESOURCES (CONT.)

Potentially Si

Potentially Significant

t

- Have a substantial adverse effect on c) federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- Conflict with any local policies or e) ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact	Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impac
			\boxtimes
		•	
			\boxtimes

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V. CULTURAL RESOURCES

<u>Evaluation</u>

		Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Wou	ld the proposal:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				\boxtimes
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		\boxtimes		
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			□ .**	\boxtimes
d)	Disturb any human remains, including those interred outside of formal cemeteries?				\boxtimes
	VI. GEOLOGY AND SOILS				
	<u>Evaluation</u>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation	Less Than Significant Impact	No Impact
Wou	ld the proposal:		incorporated		
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				

GEOLOGY	AND SOILS (CONT.)	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Strong seism	ic-related ground shaking?			\boxtimes	
iii)Seismic-relat liquefaction?	ed ground failure, including				
iv)Landslides?					\boxtimes
b) Result in sub loss of topsoi	stantial soil erosion or the				\boxtimes
c) Be located on is unstable, o unstable as a potentially re landslide, late liquefaction o	a geologic unit or soil that r that would become result of the project, and sult in on- or off-site eral spreading, subsidence, or collapse?				
d) Be located or in Table 18-1 Code (1994), life or proper	expansive soil, as defined -B of the Uniform Building creating substantial risks to ty?			\boxtimes	
e) Have soils in supporting th alternative wa where sewers disposal of w	capable of adequately e use of septic tanks or aste water disposal systems are not available for the aste water?				

VII. HAZARDS AND HAZARDOUS MATERIALS

Evaluation

a)

b)

c)

d)

e)

f)

		Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Woı	ild the proposal:		-		
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				\boxtimes
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?		O	[] [9 <i>CC</i> Ra/coun cii DCT 0 2 200	

-	HAZARDS AND HAZARDOUS MATERIALS (CONT.)	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				\boxtimes
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				
	VIII. HYDROLOGY AND WATER QU	JALITY			
	Evaluation	Detentially	Potentially Significant	Constant and the second	
	·	Significant Impact	Unless Mitigation	Less Inan Significant Impact	No Impact
Wou	ld the proposal:	Significant Impact	Unless Mitigation Incorporated	Less Inan Significant Impact	No Impact
Wou a)	Id the proposal: Violate any water quality standards or waste discharge requirements?	Significant Impact	Unless Mitigation Incorporated	Less Inan Significant Impact	No Impact

1

HYDROLOGY AND WATER QUALITY (CONT.)

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?
- e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
- f) Otherwise substantially degrade water quality?
- g) Place housing within100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- j) Inundation by seiche, tsunami, or mudflow?

Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
		\boxtimes
		\boxtimes
	. ,.	
		\boxtimes
		\boxtimes
		\boxtimes
		\boxtimes
	· 🔲	
		\boxtimes
	Significant Impact Unless Mitigation Incorporated	Significant Impact Unless Mitigation IncorporatedLess Than Significant Impact

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IX. LAND USE PLANNING

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-	<u>Evaluation</u>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Wou	ld the proposal:		-		
a)	Physically divide an established community?				\boxtimes
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?				\boxtimes
	X. MINERAL RESOURCES				
	Evaluation	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Wou	ld the proposal:		moorporatoa		
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			· .	
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan other land use plan?				

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XI. NOISE

<u>Evaluation</u>

		Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Wou	ld the proposal result in:		1		
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			□ 	\boxtimes
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				

XII. POPULATION AND HOUSING

Evaluation

		Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Wou	ld the proposal:		•		
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?				
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				
XIII.	PUBLIC SERVICES				
	Evaluation	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any or the public services:			· □	

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PUBLIC SERVICES (CONT.)

· a)

b)

Fire protection?				\boxtimes
Schools?				\boxtimes
Parks?			 .	\boxtimes
Police protection?				\boxtimes
Other public facilities?				\boxtimes
XIV. RECREATION				
<u>Evaluation</u>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse effect on the environment?				

XV. TRANSPORTATION/TRAFFIC

Evaluation

a)

b)

c)

d)

e)

f)

g)

W/		Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
W OU	la the proposal:			_	
a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				
b) [`]	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes
e)	Result in inadequate emergency access?				\boxtimes
f)	Result in inadequate parking capacity?				\boxtimes
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				

XVI. UTILITIES AND SERVICE SYSTEMS

Evaluation

.....

		Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Wou	ld the proposal:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				\boxtimes
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g)	Comply with federal, state, and local statutes and regulations related to solid waste?				\boxtimes

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below selfsustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes

CHAPTER 5 IMPACTS AND MITIGATION MEASURES

This section evaluates the project impacts and, where necessary, proposes mitigation measures to avoid or reduce potential significant (CEQA definition only) environmental impacts. The assessment of potential environmental impacts responds to the CEQA Environmental Checklist in Chapter 4. Cross-references to the CEQA Checklist are listed where applicable for each subsection of this chapter.

The following technical studies were completed during the environmental assessment process and are also available for review at the City of Oakland:

- Air Quality Technical Memorandum, prepared by Parsons Brinckerhoff, April 2000
- Archaeological Survey Report, prepared by Garcia & Associates, December 2000
- <u>Historic Architecture Survey Report</u>, prepared by Garcia & Associates, December 2000
- Historic Property Survey Report, prepared by Garcia & Associates, December 2000
- Preliminary Site Investigation Report, prepared by AGS, Inc., May 1999
- <u>Traffic Operations Report</u>, prepared by CCS, May 2000

5.1 AESTHETICS (CEQA CHECKLIST ITEM I)

5.1.1 Landscaped Areas

<u>Split Diamond Alternative</u>. Some landscaped areas in the project area would be affected by the project alternatives. The Split Diamond Alternative would remove landscaping in the K-Mart parking lot; at the southwest corner of Oakport Street and High Street; and along portions of High Street east of I-880.

<u>42nd Avenue to High Streeet Connection Alternative</u>. The 42nd Avenue to High Street Connection Alternative would remove some perimeter landscaping along the eastern edge of the K-Mart parking lot on East 8th Street, and within the K-Mart parking lot. In addition, eucalyptus trees and other non-native trees located in the right of way adjacent to the western edge of I-880, would be displaced.

<u>No-Build Alternative</u>. Portions of the landscaped areas east of I-880 at 42nd Avenue would be removed as part of the High Street Overhead Seismic Retrofit Project.

Landscaping disturbed or removed in the project area by either build alternative would be replaced in kind as part of the project design. Additional mitigation measures are not required.

5.1.2 Views in the Project Area

Both of the project alternatives would result in the widening of existing roadways and construction of new connector roads. All construction will occur at-grade and will not affect distant views in any direction.

Both of the project alternatives would result in an equivalent look and feet to the existing conditions. The proposed project would not affect vividness (memorability of a distinct visual pattern), which is low to moderate. The project would not affect the intactness of the area (the

integrity of the natural and man-made landscape) which is also low to moderate. The unity (visual continuity) of the project area is considered low and would not be affected by the project.

5.2 SOCIOECONOMICS (CEQA CHECKLIST ITEMS II, IX, XIII AND XIV)

5.2.1 Agricultural Resources

None of the alternatives would have impacts because there are no agricultural lands or lands subject to the Williamson Act in the project area or its vicinity.

5.2.2 Land Use and Planning

This project involves improvements to surface arterial streets that would enhance local connections between the east and west sides of I-880. Improved access would be a beneficial impact to employees and customers of the commercial/industrial properties within the area. In addition, the project would serve to improve access for vehicles traveling to and from the cities of Oakland and Alameda via 42nd Avenue and High Street from I-880. Existing land use designations would not change as a result of the project.

<u>Consistency with Local Policies</u>. The High Street/42nd Avenue build alternatives would not conflict with any land-use-related plans, policies, or regulations that are part of the two plans applicable to the project. The proposed project alternatives are consistent with both City of Oakland *General Plan* and the *Estuary Policy Plan*, particularly with the following objectives and policies from the *Estuary Plan*:

<u>Objective 6-Land Use</u>: Create greater land use continuity between the Estuary waterfront and adjacent inland districts.

Consistent with this objective, the widening of High Street and the extension of 42nd Avenue would improve the safety and number of roadways accessing the waterfront, thereby providing a greater sense of continuance between inland areas and the Estuary.

<u>Objective 1-Regional Circulation and Local Street Network</u>: Improve and clarify regional access to Oakland's waterfront.

Consistent with this objective, the improved freeway interchanges at High Street and 42nd Avenue would enhance region-wide access to the Estuary area.

Objective 4-Regional Circulation and Local Street Network: Strengthen local circulation connections between Oakland neighborhoods and the waterfront.

Consistent with this objective, the project would improve the circulation of an existing connection by changing the High Street alignment and provide a new connection by extending 42nd Avenue to Alameda Avenue.

<u>Policy SAF-10</u>: Work with Caltrans, BART, and other Transportation Agencies to upgrade connecting routes between inland neighborhoods, I-880, and local streets, to enhance East Oakland access to the waterfront.

Consistent with this policy, improved roadways and traffic circulation on 42nd Avenue and High Street would provide inland areas of East Oakland with improved access to the waterfront.

<u>Policy SAF-10.2</u>: If feasible, construct an urban diamond interchange at 42nd Avenue, with frontage road connections to Fruitvale.

Consistent with this policy, the project would provide a direct connection between the 42^{nd} Avenue Interchange and the portion of High Street south of I-880, and allow for the use of High Street north of the freeway as a local connection to the waterfront.

<u>Objective 6-Regional Circulation and Local Street Network</u>: Improve pedestrian and bicycle circulation. ...Links from the (Embarcadero) parkway to upland neighborhoods are proposed along connecting routes, including ...Alameda to High.

The project is inconsistent with the objective for it would not provide a bicycle/pedestrian link from Alameda to High Street. This is one of the routes identified for improved pedestrian/bicycle access from inland areas to the Embarcadero Parkway, which would provide a continuous connection between Oak Street and 66th Avenue.

While neither of the build alternatives includes plans for bicycle or pedestrian facilities such improvements would not be precluded by the project.

5.2.3 Population and Housing

There are no housing developments proposed in the 42nd Avenue/High Street project area or the immediate vicinity of the construction footprint for the build alternatives. The one single-family property, located at 574 High Street, would not be subject to acquisition or a displacement as a result of the project. General growth rates, resident population, and employment in the City of Oakland are not expected to change as a result of the build alternatives, since the project is intended to accommodate planned land development and will not remove a substantial barrier to growth.

5.2.4 Economic Impacts

Split Diamond Alternative. It is anticipated that this alternative would have temporary economic impacts during construction. Eight businesses located along High Street, Alameda Avenue, and East 8th Street may have to close temporarily as project right-of-way is acquired and new roadways and intersections are constructed. In addition, it is possible that some motorists will use the 66th Avenue or Fruitvale interchanges to avoid construction at the High Street and 42nd Avenue Interchanges. This may result in a decrease of drive-by business at these eight and other retail establishments in the vicinity, but as a temporary impact it would not be considered significant (CEQA definition only). Business tax revenues for the City of Oakland would not be significantly (CEQA definition only) affected as a result of these temporary impacts.

<u>42nd Avenue to High Street Connection Alternative</u>. It is anticipated that this project alternative would have temporary economic impacts during the construction phase. Four businesses located along High Street and East 8th Street may have to close temporarily as project right-of-way is acquired and new roadways and intersections are constructed. In addition, it is possible that some motorists will use the 66th Avenue or Fruitvale interchanges to avoid

construction at the High Street and 42nd Avenue interchanges. This may result in a decrease of drive-by business at these four and other retail establishments in the vicinity, but as a temporary impact it would not be considered significant. Business tax revenues for the City of Oakland would not be significantly affected (CEQA definition only) as a result of these temporary impacts.

One business, located at 675 High Street, would be displaced and require relocation. (Refer to Section 5.2.5 for a discussion of relocation impacts.)

<u>No Build Alternative</u>. There would be no construction period impacts to area businesses as a result of the no-build alternative. However, further decline in the access and circulation throughout the 42nd Avenue and High Street interchanges could have a long-term negative impact on the economic viability of businesses in the area. Worsening Level of Service (LOS) in the vicinity of 42nd Avenue and High Street interchanges would cause increased congestion, making access to businesses more difficult. Reduced access, which could reduce the customer base of area businesses, would be inconsistent with the objectives and policies in the City of Oakland *General Plan* and *Estuary Plan* that support economic improvement in the 42nd Avenue and High Street interchange areas.

Both of the build alternatives would accommodate future private land development and related employment opportunities, sales tax revenues, and increased property tax base associated with improvements of access both within and adjacent to the project area. According to the *Estuary Plan*, the portion of Oakland located adjacent to the project area is targeted for continued industrial/commercial development.

5.2.5 Relocation Impacts

Split Diamond Alternative. Additional right-of-way would be required from 15 parcels for the Split Diamond Alternative. Thirteen of these are privately owned and developed and two are occupied by public utilities. None of the businesses would be displaced as a result of property acquisition, however utilities may have to be relocated as a result of construction.

At some locations, right-of-way acquisition would involve a loss of parking or material storage space. The approximated losses in parking are summarized below:

A	Address	Dusiness Time	Existing	Number of	Demonstrates
Assessor s	Address	Business Type	Existing	Number of	Percentage of
Parcel Number			Parking Spaces	Spaces Taken	Total Spaces
APN 033-	3801 E 8^{th}	K-Mart	655	100	15%
2250-018-03	Street				
APN 034-	752 High	Ace Hardware	16	6	38%
2290-007	Street				
APN 033-	743 High	Building and	12	2	15%
2203-006-01	Street	Garden Supply	(approximate)	(approximate)	

TABLE 5-1: PARKING SPACES REMOVED BY EXPANDED PROJECT RIGHT-OF-WAY				
(Split Diamond Alternative)				

<u>Mitigation</u>. The City of Oakland, in consultation with the owners of property where parking spaces will be taken, will replace the lost capacity on site or at a location mutually agreed upon. The acquisition process will be conducted pursuant to the City of Oakland's relocation policies and procedures.

<u>42nd Avenue to High Street Connection Alternative</u>. Additional right-of-way would be required from 10 parcels, all of which are privately owned and developed. One business would be displaced and relocated as a result of property acquisition.

At some locations, right-of-way acquisition would involve a loss of parking or material storage space. The approximated losses in parking are summarized below:

TABLE 5-2: PARKING SPACES REMOVED BY EXPANDED PROJECT RIGHT-OF-WAY					
(42 nd Avenue/High Street Connection Alternative)					
ssessor's	Address	Business Type	Existing	Number of	Percentage of

Assessor's	Address	Business Type	Existing	Number of	Percentage of
Parcel Number			Parking Spaces	Spaces Taken	Total Spaces
APN 033-	3801 E 8 th	K-Mart	655	105	16%
2250-018-03	Street,				
APN 033-	675 High	Paint Supply	6	6	100%
2203-002	Street	Store			(Business
					Displaced)

Mitigation. For the 42nd Avenue to High Street Connection Alternative, the Relocation Office of Housing Development of the Community and Economic Development Agency of the City of Oakland would oversee the relocation of Quality Paints, located at 675 High Street. The Relocation Office, in consultation with Quality Paints, would be responsible for providing advance notice of the move date, determining the level of relocation benefits to be issued, and administering receipt of the benefits.

Regarding the displacement of parking spaces, the City of Oakland, in consultation with the owners of property where parking spaces will be taken, will replace the lost capacity on site or at a mutually agreed upon location. The acquisition and replacement process will be conducted pursuant to the City of Oakland's relocation policies and procedures.

No Build Alternative. The Caltrans High Street Overhead Seismic Retrofit Project would require the acquisition of nine parcels, with three full takes. Existing businesses occupying the three parcels would be assisted in relocating to other suitable properties. The recommended option would not require taking any residential properties. Caltrans' Relocation Assistance Program would provide all rights and services to displaced individuals and businesses in accordance with the Federal Uniform Relocation Act (Public Law 91-646) and the California Relocation Act (Chapter 16, Section 7260 et seq. of the Government Code).

5.2.6 Public Services

Build Alternatives. The proposed build alternatives would not result in changes to the distribution or numbers of businesses or residences which require public services, such as police protection, schools, or parks. There would be no increase in need for public services in the project area and no change in the service ratios from the existing conditions. However, upon completion of the build alternatives, public service providers, such as police and fire departments would have improved access through the project area and to portions of Oakland located east and west of I-880.

No-Build Alternative. The No-Build Alternative would have no affect on the distribution or numbers of businesses or residences that require public services, such as police protection, schools, or parks. There would be no increase in need for public services and no change in the

service ratios from the existing conditions. However, a worsening level of service in the vicinity of the 42nd Avenue and High Street interchanges could reduce response times for emergency of service providers, such as police and fire departments.

5.2.7 Recreation

The project does not include construction or expansion of any new recreational facility or bike/pedestrian lanes.

Editor's Note: The discussion of the need for a bike lane, based on Objective 6 of the Estuary Plan will be discussed with the City of Oakland.

5.3 AIR QUALITY (CEQA CHECKLIST ITEM III)

The air quality-related impacts from this project are expected to be the generation of emissions during construction of the project and during the life of the project due to changes in motor vehicle traffic.

5.3.1 Construction Phase

Construction-related emissions are temporary and vary day-to-day, depending on level of activity. Particulate matter is the pollutant of greatest concern as a result of construction activities. There is the potential for fugitive dust (i.e., particulate matter) to be emitted during project construction due to earth moving, grading, and material hauling operations. Construction of the project would occur on approximately 7 acres for the Split Diamond Alternative and on 15 acres for the 42nd Avenue to High Street Connection Alternative. The BAAQMD does not consider construction emissions of particulate matter to be significant for a project if certain control measures are included in project planning. In general, larger construction areas generate more particulate matter emissions and thus require more control measures.

Specifications for the construction contract will include dust control measures that meet BAAQMD requirements; therefore there will be no significant (CEQA definition only) construction-phase impacts.

<u>Mitigation</u>. The following control measures should be implemented for either one of the build alternatives:

- Water all exposed soil at the construction site at least twice a day.
- Cover haul trucks containing dirt and debris.
- Pave areas as soon as possible.
- Sweep daily all paved access roads, parking areas and staging areas at the construction site.

5.3.2 Operation Phase

<u>Regional Emissions Analysis</u>. Implementation of the proposed access improvements would not likely result in an increase of regional emissions over projected levels without the project. The project is not expected to generate any additional motor vehicle trips. Its main purpose is to improve access for vehicles traveling to and from the cities of Oakland and Alameda via 42nd Avenue and High Street from I-880. In addition, conditions may improve for localized traffic in

the project area that is not using I-880. These improvements in access may actually decrease regional air pollutant emissions as a result of less vehicle queuing and delay.

Localized Carbon Monoxide Analysis. A project located in a federal or state carbon monoxide (CO) non-attainment or maintenance area is required to show that the build alternatives would not generate CO emissions that would produce new CO standard violations, worsen existing violations, or delay timely attainment of CO standards.

A CO analysis for the 42nd Avenue/High Street Access Improvements Project was conducted following guidance provided in the *Transportation Project-Level Carbon Monoxide Protocol* (Protocol) developed by Caltrans and the Institute of Transportation Studies at the University of California, Davis (December 1997). The 42nd Avenue/High Street Access Improvements Project is in an attainment/maintenance area for CO and does not require a microscale CO modeling analysis. Instead, a qualitative discussion is acceptable.

Using the following Protocol criteria, it can be concluded that the project would not worsen localized air quality within the project area:

- The project does not significantly (CEQA definition only) increase the number of vehicles operating in cold start mode (starting a vehicle with a cold engine).
- Increases in traffic volumes as a result of the project do not impact roadway operations in such a way as to significantly (CEQA definition only) impact air quality (See discussion below for specifics).
- The project does not worsen traffic flow (See discussion below for specifics).
- The project does not impact signalized intersections that operate at level of service (LOS) E or F or lead to the worsening of LOS to E or F for a signalized intersection (See discussion below for specifics).

Split Diamond Alternative. In the year 2025, it is predicted that traffic volumes on most streets in the project area under the Split Diamond Alternative would remain the same or be decreased compared to a No-Build situation. There are two roadways (42nd Avenue and the I-880 northbound on-ramp at 42nd Avenue) in which volumes are expected to increase by 100 to 450 vehicles per travel direction. While substantially above the initial five percent screening threshold used in the Protocol to signify a potentially significant increase (CEQA definition only), these increases would not result in significant (CEQA definition only) air quality impacts since the roadways have adequate operational capacity to accept the additional vehicles without worsening traffic flow (i.e., reducing travel speeds) or affecting level of service.

The potential for significant (CEQA definition only) air quality impacts (i.e., CO violations) typically occur at signalized intersections, especially those that operate at LOS E or F. In general, intersections in the project area (except the Coliseum Way/High Street intersection) in the year 2025 will operate at a satisfactory LOS (i.e., LOS C or better). Under the No-Build condition, the intersection of Coliseum Way and High Street will operate at a LOS F during both A.M. and P.M. peak traffic hours. Construction of the Split Diamond Alternative will significantly improve operations at this intersection, resulting in a LOS B. LOS improvement at other intersections will be less pronounced. In many cases the LOS will remain the same, but the average total delay per vehicle will be less.

<u>42nd to High Street Connection Alternative</u>. Evaluation of traffic changes and resulting air pollution effects for this alternative is more complicated than for the Split Diamond Alternative, since the project design is more complex. The 42^{nd} to High Street Connection Alternative redesigns access on the west side of I-880. The intersection of Alameda Avenue becomes more

complex and a new intersection is created where Alameda Avenue, 42nd Avenue, and High Street meet. The existing intersections at 42nd Avenue and the I-880 southbound off-ramp, and Oakport Street and the I-880 southbound off-ramp will be eliminated. It is assumed that increases in traffic volumes at the new or re-designed intersections can be adequately handled, since the project is improving circulation and roadway capacity and the intersections to the west of I-880 will all operate at LOS C or better.

This alternative creates a shift in traffic circulation on the east side of I-880. Traffic volumes are significantly reduced on High Street in the vicinity of the intersection of High Street and Coliseum Way, resulting in a LOS improvement from LOS F (No-Build) to LOS C (Build). However, traffic volumes will be increased on 42nd Avenue in the vicinity of the 42nd Avenue/I-880 northbound on-ramp intersection. Volumes are increased by approximately 100 to 200 percent in the eastbound direction, but this only results in an increase in 400-500 vehicles during peak traffic hours. The intersection of 42nd Avenue/I-880 northbound on-ramp, where the increase will be experienced, will operate at LOS A or B under either a No-Build or Build condition during peak traffic hours. Since there does not appear to be any traffic flow impacts as a result of the increases in traffic volume, it is assumed that air quality will not be significantly (CEQA definition only) affected.

5.3.3 Odors

The BAAQMD has developed a list of facilities known to emit objectionable odors. The type of project which most closely represents, the Interchange Project is not on the list. It is anticipated that exhaust generated during construction and operation of the project would not create a significant (CEQA definition only) amount of odor emissions.

5.4 BIOLOGICAL RESOURCES (CEQA CHECKLIST ITEM IV)

There are no biological resource impacts resulting from the project.

5.5 CULTURAL RESOURCES (CEQA CHECLKIST ITEM V)

While there are no known historical resources/historic properties within the project area, the project may cause adverse changes to the significance of unknown historical resources/historic properties. The project area has potential to contain, currently unknown, archaeological resources from both prehistoric and historical time periods. Portions of archaeological resources could be damaged and destroyed by trenching, drilling, or grading through cultural deposits or by heavy vehicular movement. These impacts are significant impacts but can be reduced to a less-thansignificant level by implementing Mitigation Measure HR-1 or HR-2, and Mitigation Measure HR-3.

5.5.1 Mitigation

Mitigation Measure 1. Identify and evaluate archaeological resources for California Register of Historical Resources eligibility. Mitigation Measure 2 may substitute for Mitigation Measure 1. Archival research has indicated a high probability of the presence of archaeological resources within the project area. Surface survey is an inadequate method for defining and evaluating these resources. A program of subsurface testing, utilizing traditional or remote sensing methods, will be designed and implemented by a Registered Professional Archaeologist. Testing will determine the nature and extent of archaeological deposits. If deposits are located, they will be evaluated according to the eligibility criteria of the California Register of Historical Resources and National Register of Historic Places. If eligible for listing on the either of these registers, measures to mitigate the effects of the project on archaeological resources will be designed and implemented. Avoidance is the preferred method of mitigation. If, however, avoidance is not feasible, alternative methods may be developed. If alternative mitigation includes data collection excavations, these must be conducted according to CEQA Guidelines Section 15126.4

Mitigation must be completed 15 days prior to the initiation of construction. Mitigation will be considered complete when California Department of Park and Recreation Form 523 has been completed for each resource, when Form 523 and a California Register of Historical Resources/National Register of Historic Places eligibility report have been accepted by the California Historical Resources Information System and/or State Historic Preservation Officer for each resource, and, if data recovery is chosen as required mitigation, a data recovery report for each resource is accepted by the California Historical Resources Information System.

Mitigation Measure 2. Monitor ground disturbing project activities. Ground disturbing activities include, at a minimum, trenching, drilling, and grading. Monitoring is required within any project area for which Mitigation Measure 1 has not been completed. Monitors must have a minimum of a bachelor's degree in anthropology or archaeology and two years of professional experience. Monitors must be under direct supervision of a Registered Professional Archaeologist. If cultural resources are located during monitoring, monitors will immediately halt construction and notify the Registered Professional Archaeologist. The Registered Professional Archaeologist will inspect the find and implement Mitigation Measure 1. If the resource contains human remains, the Registered Professional Archaeologist also will implement Mitigation Measure 3.

Mitigation Measure 3: Call the county coroner. If human remains are found at any time during project activities, all work will immediately stop within 250 feet of the find. A Registered Professional Archaeologist will be notified immediately and will, in turn, immediately notify the Alameda County Coroner in compliance with Section 7050.5 of the California Health and Safety Code. Upon the completion of compliance with all relevant sections of the California Health and Safety Code, the Registered Professional Archaeologist will implement Mitigation Measure HR-1.

5.6 GEOLOGY AND SOILS (CEQA CHECKLIST ITEM VI)

5.6.1 Seismicity

The project site is relatively close to two active faults (Hayward, and San Andreas) and would be subjected to strong groundshaking in the event of a major earthquake originating on these faults. The hazards associated with the proposed project would be the same as those that would occur in any seismically active area of California, including the project site under existing conditions.

The proposed project would be designed to meet current seismic safety standards and it would be expected to withstand the maximum credible earthquake. Seismic design criteria intends for the freeway and interchange improvements to be serviceable when subjected to peak acceleration during an earthquake.

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5.6.2 Soils

The proposed project would result in minor changes to existing topography. Some fill would be used to support portions of the proposed ramps. Due to the relatively flat terrain in the project area and the fact that the project would not be located on unstable or expansive soil, there are no environmental effects resulting from construction of the project on local soils.

5.7 HAZARDS AND HAZARDOUS MATERIALS (CEQA CHECKLIST ITEM VII)

Since several hazardous waste sites are located within or immediately adjacent to the project area, further actions are necessary to characterize the known and potential contaminant sources that may be affected by the proposed project. The hazardous sites identified in Section 3.7 have been divided into three categories for recommended future actions (see Table 5-1).

Seven hazardous waste sites are located within or immediately adjacent to the project area (Figure 3-1). Further actions are necessary to characterize the known and potential contaminant sources that may be affected by the proposed build alternatives. The hazardous sites identified in Section 3.7 have been divided into three categories for recommended future actions (see Table 5-3).

HAZARDOUS WASTE SITES			
Recommendation Category	Site Location		
Category A	Ekotek Lube, 4200 Alameda Ave.		
	Exxon Station, 720 High St.		
Category B	Shell Station, 630 High Street		
Category C	Owens Illinois, Inc., 3600 Alameda Avenue		
	Learner Co., 3675 Alameda Ave.		
	United States Cold Storage, 3925 Alameda Ave.		
	Super Kmart, 4000 Alameda Ave.		
	Cobbledick Kibbe, 500 High St.		
	Southern Pacific Railroad property, 744/758 High St.		
	American Can Co., 3801 E. 8 th St.		
	American Pole Products Div., 4417 Oakport St.		

TABLE 5-3: RECOMMENDED CATEGORIES FOR KNOWN AND POTENTIAL HAZARDOUS WASTE SITES

Source: Preliminary Site Investigation Report, May 1999

5.7.1 Category A

The site is listed as an active case and is located within or immediately adjacent to the project area. The site may also contain or be known to have contained one or more underground storage tanks. Therefore, the site poses a potential impact to soil and/or groundwater within the project area.

Mitigation: Prior to right-of-way acquisition of Category A sites, steps will be taken to verify that the site contamination has not impacted the project area, including but not limited to the following actions:

- 1. Performance of a Preliminary Site Assessment;
- 2. Verification of extent of contamination to determine of the source of contamination is included in the area of purchase or if only contaminated material and/or groundwater is involved;

- 3. Location and removal of potential sources of contamination, such as underground storage tanks, piping, etc.;
- 4. Removal of contaminated soil and/or groundwater impacting the project area; and
- 5. Control of contaminated soil and/or groundwater to avoid generation of contaminated spoils during construction.

Acquired right-of-way will be free of hazardous waste. If this is not possible, the estimated cost of cleanup will be deducted from the cost of acquiring the property

5.7.2 Category B

The site is not listed as an active hazardous waste site where characterization, cleanup, and/or monitoring is ongoing. However, the site is known to contain or to have contained one or more underground storage tanks.

Mitigation: Prior to right-of-way acquisition of Category B sites, steps will be taken to see that existing underground storage tanks and associated piping are removed and soil or groundwater contamination, if any is present, is properly evaluated and monitored, or remedied in accordance with state and local laws and regulations.

5.7.3 Category C

The site exhibits low potential for hazardous waste contamination or is too far from the proposed alignment to pose a substantial environmental threat to the right-of-way. A Preliminary Site Assessment is not recommended although the environmental status of the site should be reviewed and verified at the time of right-of-way acquisition.

Mitigation is not required for Category C sites.

5.7.4 Other Actions

There is the potential for transport, use or disposal of hazardous materials during construction.

Aerially deposited lead is generally found in surface soil along ramps and freeways at concentrations above those considered potentially hazardous to human health or the environment. Any soil generated during construction activities would be subject to the soil reuse variance issued by Cal/EPA, Department of Toxic Substances Control (DTSC). Only soils that contain lead within prescribed ranges as specified in the variance may be reused. In accordance with the variance, any lead-affected soil reused in the project right-of-way cannot be placed within 0.7 meter (2.3 feet) of the groundwater table and would be covered with pavement or clean soil. Soil that cannot be reused within the conditions of the variance would be disposed of at an authorized disposal or treatment facility.

Construction activities would be conducted with diesel-powered equipment. It is possible that a limited amount of fueling and maintenance of equipment would be done on-site during construction. Transport, storage, handling, and the use of fuels, lubricants, and other chemicals at the site could create the potential for accidental release of hazardous materials.

A spill and pollution prevention plan would be prepared by the contractor prior to the start of earthwork activities and submitted to Caltrans for review and approval. The plan would include

increase in noise levels. The proposed project would not move noise sources closer to the affected receptor, and would not substantially change traffic volumes in the vicinity of the receptor. While the receptor is impacted by elevated traffic noise levels, the impact is independent of the proposed project and the receptor would not experience direct impact from the project; therefore, noise impacts from the project are not quantitatively evaluated.

5.11 TRANSPORTATION/TRAFFIC (CEQA CHECKLIST ITEM XV)

This section summarizes the traffic operations expected to result from the 42nd Avenue/High Street Interchange Improvement Project. The analysis of traffic operations is based on projected future traffic volumes, the ability of the project to accommodate this volume, and comparisons between the No-Build and build alternatives.

5.11.1 Travel Demand Forecasts

CCS Planning and Engineering generated existing daily and peak hour traffic volumes and projected peak hour volumes for the No-Build and Build Alternatives in the year 2025.

Compared to existing (1999) traffic volumes, the 2025 No-Build volumes are generally 20-30 percent higher with a high of 54 percent westbound at the Howard Street/High Street intersection during the AM peak period and a low of five percent westbound at the Coliseum Way/High Street intersection during the PM peak period.

In comparison to the No-Build Alternative, the Split Diamond alternative is estimated to have an increase in eastbound traffic of 12 percent on High Street in the AM peak and 17 percent in the PM peak. An increase in traffic is also expected for westbound traffic on High Street west of Howard Street during both peak hours.

The 42nd Avenue to High Street Connection Alternative, with improved connections to both Alameda Avenue and High Street, is expected to have traffic increases in both the eastbound and westbound directions on 42nd Avenue, compared to the No-Build alternative.

5.11.2 Traffic Analysis Results

Future traffic operations were analyzed for the No-Build and build alternatives by calculating levels of service for six signalized intersections in the project area. This is a critical element of the interchange improvement project.

5.11.3 Intersection Analysis

The intersections that would be created as part of the project or substantially impacted by it were analyzed for the year 2025. As Table 5-4 shows, if the project is not constructed, the level of service at the intersection of Coliseum Way and High Street would worsen to F by 2025 and eventually cause an extension of the AM and PM peak periods at that intersection. Average total vehicle delay would be 85.6 seconds in the AM peak hour and 142.4 seconds in the PM peak hour. It is anticipated that queues already experiencing problems would significantly increase compared to existing conditions. The largest increases in queue length would occur on the northbound approach to High Street from the off-ramp (81meters (265 feet)) and at the eastbound left and westbound through movements where increases of greater than 30 meters (100 feet) are expected. The increase for the eastbound left turn movement is particularly troublesome, as the queue for this movement already significantly exceeds the available storage length. The No-Build option, therefore, does not provide adequate capacity for forecasts of critical movements.

Level of Service at Signalized Intersections						
Time Period	Signal Location	Level of Service	Avg. Total Delay (sec/veh)	Volume/ Capacity		
AM Peak	Coliseum Way at 42nd St.	A	1.3	0.49		
	SB Off-Ramp at 42nd Ave.	В	15.0	0.55		
	High St. at SB Off-Ramp	C	29.3	0.94		
	Howard at High Street	В	15.2	0.77		
	Coliseum Way at High St.	F	85.6	1.15		
	Alameda Ave. at K-Mart	A	6.6	0.24		
PM Peak	Coliseum Way at 42nd St.	В	10.3	0.63		
	SB Off-Ramp at 42nd Ave.	В	15.1	0.56		
	High St. at SB Off-Ramp	С	24.2	0.86		
	Howard at High Street	C	27.6	0.91		
	Coliseum Way at High St.	F	142.4	1.2		
	Alameda Ave. at K-Mart	A	7.3	0.3		

TABLE 5-4: YEAR 2025 CALTRANS SEISMIC RETROFIT (NO PROJECT) ALTERNATIVE

Note: Performance measures based on procedures in 1997 Highway Capacity Manual for signalized intersections.

Tables 5-5 and 5-6 show expected AM and PM LOS at the six intersections for the year 2025 as a result of the two build alternatives. All intersections are expected to be signalized and operate at acceptable service levels of C or better.

	Level of Service at Signalized Intersections						
Time Period	Signal Location	Level of Service	Avg. Total Delay (sec/veh)	Volume/ Capacity			
AM Peak	NB On-Ramp at 42nd Ave.	A	7.9	0.53			
	SB Off-Ramp at 42nd Ave.	В	17.7	0.62			
	Oakport at SB Off-Ramp	С	20.4	0.89			
	Howard at High Street	A	3.9	0.60			
	Coliseum Way at High St.	В	17.8	0.73			
	Alameda Ave. at K-Mart	A	3.6	0.21			
PM Peak	NB On-Ramp at 42nd Ave.	В	14.4	0.69			
	SB Off-Ramp at 42nd Ave.	В	19.1	0.79			
	Oakport at SB Off-Ramp	С	21.6	0.80			
	Howard at High Street	A	5.8	0.60			
	Coliseum Way at High St.	В	16.1	0.67			
	Alameda Ave. at K-Mart	A	4.4	0.29			

TABLE 5-5: YEAR 2025 ALTERNATIVE B - SPLIT DIAMOND

Note: Performance measures based on procedures in 1997 Highway Capacity Manual for signalized intersections.

	Level of Service at Signalized Intersections					
Time Period	Signal Location	Level of Service	Avg. Total Delay (sec/veh)	Volume/ Capacity		
AM Peak	42nd St. at NB On Ramp	В	13.1	0.56		
	Alameda Ave. at 42nd St.	В	17.6	0.74		
	Alameda Ave. at SB Off-Ramp	С	26.4	0.55		
	SB Off-Ramp at High St.	В	10.3	0.81		
	High St. at Coliseum Way	С	20.3	0.79		
	Alameda Ave. at K-Mart	А	5.7	0.25		
PM Peak	42nd St. at NB On Ramp	А	9.4	0.61		
	Alameda Ave. at 42nd St.	С	22.8	0.88		
	Alameda Ave. at SB Off-Ramp	С	31.0	0.60		
	SB Off-Ramp at High St.	В	12.3	0.81		
	High St. at Coliseum Way	С	18.2	0.77		
	Alameda Ave. at K-Mart	А	7.9	0.47		

TABLE 5-6: 2025 ALTERNTAIVE A: 42nd AVENUE TO HIGH STREET CONNECTION

Note: Performance measures based on procedures in 1997 Highway Capacity Manual for signalized intersections.

5.11.4 Pedestrian And Bicycle Facility Impacts

The No-Build and proposed build alternatives were evaluated for impacts to existing and planned pedestrian and bicycle facilities, changes in pedestrian and bicycle circulation and access, and constraints to development of non-motorized facilities. While neither of the build alternatives include plans for bicycle or pedestrian facilities, such improvements would not be precluded by the project. In addition, the No-Build Alternative would not improve accessibility for pedestrians and bicyclists, however it would not preclude pedestrian/bicycle facilities planned by the city in the future

5.12 UTILITIES AND SERVICE SYSTEMS (CEQA CHECKLIST ITEM XVI)

5.12.1 Build Alternatives

Utilities located in High Street, Alameda Avenue, Oakport Street, Coliseum Way, Howard Street and Jensen Street would be affected by construction of the build alternatives. In addition, relocation of the EBMUD interceptor at Oakport Street and 8th Avenue will be required. Potholing work will be required to verify utility locations. Utility relocation needs will be assessed once the utility lines are identified. The final design of the project will include plans for relocated utilities, in coordination with utility owners.

The proposed project would not affect the operation of water, wastewater treatment, solid waste, or storm water drainage facilities in the project or their capacities. Any increases in usage of these facilities would be minor.

The project would produce some solid waste during construction, but would not generate volumes that would significantly reduce the lifespan of regional landfills. The project would comply with

solid waste regulations. Spoil materials generated during construction activities would be disposed off-site at designated solid waste disposal facilities. If it is determined that soils generated during construction exceed Cal/EPA-prescribed contaminant concentration ranges, the soil would be disposed of at an authorized disposal or treatment facility.

Utility lines within the project construction limits would either be protected or relocated. The majority of the utility relocations would be required because of the proposed improvements included in the project. Therefore, the cost of the relocations would be the responsibility of the project. These costs are included in the cost estimate for the project.

Split Diamond Alternative

<u>AT&T Cable Services</u>: This alternative would require the relocation of approximately 610 meters (2000 feet) of cable along High Street.

<u>Pacific Bell</u>: This alternative would require the relocation of approximately 500 feet of underground duct on Jensen Street, Howard Street, and E 8^{th} Street.

<u>Pacific Gas & Electric (PG&E)</u>: This alternative would require the relocation of approximately 10 electric poles on High Street and 2 poles on Alameda Avenue.

<u>The City of Oakland</u>: This alternative would require the relocation of 17 light poles on High Street, 5 light poles on Alameda Avenue, one pole on Jensen, and three poles on Howard Street.

<u>EBMUD</u>: For water utilities, this alternative would require the relocation of a section of water line along Alameda Avenue that is 500 feet long and 8 inches in diameter. One hydrant relocation would be necessary and ten valve covers will need to be adjusted to grade. For sanitary utilities, 500 feet of sewer line will need to be relocated, two manholes will be adjusted, and 10 manholes will need to be relocated by approximately two feet.

<u>Qwest and Kinder-Morgan</u>: Utilities within the Union Pacific right-of-way would not be impacted.

42nd Avenue to High Street Connection Alternative

<u>Pacific Bell</u>: This alternative would require the relocation of approximately 500 feet of underground duct on High Street.

<u>AT&T Cable Services</u>: This alternative would require the relocation of approximately 274 meters (900 feet) of cable along High Street.

<u>Pacific Gas & Electric (PG&E)</u>: This alternative would require the relocation of 8 electric poles on High Street and 2 poles on Alameda Avenue.

<u>The City of Oakland</u>: This alternative would require the relocation of approximately 25 streetlights along High Street

<u>EBMUD</u>: For water utilities, this alternative would require the relocation of a section of water line along Alameda Avenue that is 500 feet long and 8 inches in diameter. One hydrant relocation would be necessary and ten valve covers will need to be adjusted to grade. For sanitary utilities, 500 feet of sewer line will need to be relocated, two manholes will be adjusted, and five man hole rims. Modification to the pumping station on Oakport could also be required to accommodate this alternative.

<u>Qwest and Kinder-Morgan</u>: Utilities within the Union Pacific right-of-way would not be impacted.

5.12.3 No-Build Alternative

Caltrans estimates that there is the potential need to relocate utilities at about 30 locations within the High Street Overhead Seismic Retrofit Project area, including relocation of the EBMUD interceptor.

5.13 CUMULATIVE IMPACTS

5.13.1 METHODOLOGY

This cumulative effects section identifies past, present, and reasonably anticipated future projects producing related or cumulative impacts on resources (e.g., wetlands and cultural resources) and traffic-related impacts (e.g., noise and air quality), including Caltrans projects and projects proposed by other agencies and developers other than Caltrans.

The analysis provides an assessment of potential impacts that would not occur under a separate action but would occur when the project is combined with other planned and programmed projects. For purposes of this study and based on consultation with project sponsors (City of Oakland, Price-Costco, Incorporated and Caltrans), the following recently approved or planned projects have been included in this analysis:

- <u>High Street Overhead Seismic Retrofit Project (Caltrans)</u>-This project would replace the existing I-880 mainline structures with new, wider structures to meet current seismic standards and reconfigure the SR 77 Interchange with at-grade intersections. No additional traffic capacity would be added. Frontage roads will be reconstructed as required to accommodate the replacement structures. Technical reports were completed to determine whether the project would have biological, socioeconomic, or cultural/historical impacts.
- <u>The Zhone Technologies Project</u> (Zhone Technologies, Inc.)-The project site is located on a 14.65-acre parcel along Oakport Road (west of I-880) between Hassler Way and 66th Avenue in Oakland. The project entails the construction of a corporate research and development campus that consists of four buildings configured in one, two, three and four story heights, totaling approximately 300,000 square feet.
- <u>Coliseum Shoreline Sports Center</u> (Kenneth B. Rawlings, LLC)- The project site is a seven-acre parcel located at the northwest corner of Oakport Street and Hassler Way. The proposed project ("Sports Center") entails the construction of a single 102,000 square-foot structure.

In accordance with CEQA (California Environmental Quality Act), the impacts of the Zhone Technologies and the Sports Center projects were analyzed in separate addendum to the previously certified 1994 EIR completed for the Price-Costco Incorporated project. (An addendum is used for projects that would not result in any new significant (CEQA definition only) effects or effects that would be substantially more severe than those identified in the original EIR).

5.13.2 Evaluation of Cumulative Effects

The projects included in the cumulative impact analysis are located along the I-880 corridor. These projects have been reviewed for potential cumulative impacts in the subject areas for which the High Street/42nd Avenue Interchange Project will require mitigation measures to avoid or limit probable impacts to a less-than-significant level (CEQA definition only): socioeconomics, hazardous wastes and contaminated soils, historic and cultural resources, and water quality/hydrology.

<u>Relocation/Displacements</u>. The 42nd Avenue/ High Street Interchange Project would require additional right-of-way from 11 to 15 commercial parcels and the loss of 110 to 114 off-street parking spaces, depending on which alternative is selected. For the 42nd Avenue to High Street Connection Alternative, 1 of the 11 takes would require the displacement of a business. For both build alternatives, the majority of spaces would be taken from the K-Mart Department Store located at 3801 East 8th Street.

The number of residences and businesses displaced by the High Street Overhead Project would vary depending on the alternative selected. Alternative A wouldn't displace any residences but. would displace 4 businesses and take approximately 95 off-street parking spaces. Alternative B would displace 1 residence, 10 businesses and approximately 107 off-street parking spaces.

Both the Zhone Technologies and Sports Center projects would be constructed on vacant land and would therefore not result in any commercial or residential takes or relocations.

Acquisition and relocation measures implemented in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 will offset partial or total property takes for both projects, including the loss of parking spaces. As a result, the 42nd Avenue/High Street Improvements Project would not contribute to potential cumulative relocation impacts along the I-880 corridor.

<u>Hazardous Wastes and Soil Contamination</u>. Several hazardous waste sites and contaminated soils have been identified within or immediately adjacent to the 42^{nd} Avenue/High Street Improvements Project. The sites have been categorized in order to define known and potential contaminant sources that may be affected by the project.

Implementation of proposed mitigation measures would verify the location and extent of contamination affecting the project area, remove sources of contamination, remove contaminated soil and/or groundwater, and control contaminated soil and/or groundwater to avoid generation or migration of contaminated spoils during construction.

Soils contaminated by aerially deposited lead will be remedied or disposed of in a manner consistent with measures to control LUST cases. And a spill and pollution prevention plan will be prepared to limit the potential for accidental release of equipment-related hazardous materials during construction.

Comprehensive control of project-related hazards and hazardous materials, on a project-byproject basis, will limit the potential for cumulative impacts to a less-than-significant level (CEQA definition only). Water Quality and Hydrology. The 42nd Avenue/High Street project could impact water quality as a result of construction activities, storm water runoff, and spills of hazardous materials. However, project compliance with the NPDES permit and adherence to erosion control measures following Caltrans Standards and Specifications would reduce or eliminate potential constructionrelated impacts.

The other projects included in this analysis could also have impacts to water quality, but similar measures have been established to mitigate the impacts to a less than significant level (CEQA definition only).

Because any potential impacts will be mitigated to a less than significant level (CEQA definition only) for all projects in this analysis, the 42nd Avenue/High Street Improvements project would not result in any cumulative impacts to Water Quality or Hydrology.

<u>Cultural and Historical Resources</u>. It is not anticipated that historically or culturally significant resources (CEQA definition only) will be identified in the Historical Property Survey Report to be completed for the 42nd Avenue/High Street Improvements Project. Surveys conducted for the other projects included in this analysis did not identify any such resources.

Accordingly, it is not anticipated that the 42nd Avenue/High Street Improvements Project would result in any cumulative impacts to culturally or historically significant resources (CEQA definition only).

CHAPTER 6

CONSULTATION AND COORDINATION

Consultation and coordination with the following agencies have occurred during the environmental process.

Association of Bay Area Governments Hingh Wong, Planning Department, Regional Planner

<u>City of Oakland Fire Department</u> Captain Lorenzo Fratiani, Station Captain, Station 18, April 25th, 2000

City of Oakland Police Department,

Regina Harris, Dispatcher # 27, May 1st, 2000

City of Oakland Community & Economic Development Agency Darren Goon, Strategic Planning Roger Rapport, Business Relocation Frank Finelli, Real Estate Services, Redevelopment Division Crescentia Brown, Planner

Views of the community have been sought during the development of the 42nd Avenue/High Street Project. Public open houses were conducted on September 28, 2000 in Oakland and October 26 in Alameda, during which support was received for the Split Diamond Alternative.

CHAPTER 7 REFERENCES

AGS Inc., Draft Preliminary Site Investigation Report, 42nd Avenue and High Street Access Improvements Project, May 1999.

City of Oakland, Envision Oakland-City of Oakland General Plan, Land Use and Transportation Element of the Oakland General Plan, March 1998

City of Oakland and Port of Oakland, Estuary Policy Plan, November 1998

City of Oakland, Oakland General Plan Open Space, Conservation and Recreation Element, Technical Report, Volume 1, Conservation, Open Space, December 1993.

Parsons Transportation Group, High Street Overhead Seismic Retrofit Project Natural Environment Study Report, November, 1998

Parsons Transportation Group, High Street Overhead Seismic Retrofit Project Socioeconomic Study Report, January, 1999

Environmental Science Associates, Coliseum Shoreline Project EIR Addendum II (Coliseum Shoreline Sports Center), January 2000

Environmental Science Associates, Coliseum Shoreline Project EIR Addendum I, November 1999

The Official Website of the City of Oakland: www.oaklandnet.com

APPENDIX A

BIOTIC SURVEY RESULTS

CALIFORNIA DEPARTMENT OF FISH AND GAME NATURAL DIVERSITY DATABASE

Patricia Mosley

April 24, 2000

Steve Noack Parsons Brinckerhoff, Quade & Douglas 303 Second Street, Suite 700 North San Francisco, CA

RE: 42nd Avenue/High Street Improvement Project in the City of Oakland

Dear Mr. Noack,

This letter report summarizes the results of biotic surveys of the 42nd Avenue/High Street Project Area. Surveys were conducted on April 22 and April 24th to identify any special status species habitats or wetland habitats in the vicinity of the above referenced project. Surveys covered the project area Rights-of-Way for both the Split Diamond Alternative and the 42nd Avenue Connection Alternative, both of which are located adjacent to the I-880 corridor. However, the surveys did not include surveys for swallow nests that may occur on the High Street Overhead structure. It is assumed that biotic resources that occur on the overhead structure will be addressed by the California Department of Transportation (Caltrans) as part of the seismic retrofit of the High Street Overhead Seismic Retrofit Project and would be out of scope for the Proposed Project.

PROJECT STUDY AREA

The project study area is adjacent to the I-880 corridor on both east and west sides of the freeway. The I-880 freeway is an overhead structure and the Proposed Project Area traverses the freeway corridor below the overhead structure. There is no development below the overhead structure, but the remaining portions of the project area are primarily developed for industrial and commercial uses. The majority of the project area is paved roadways. However, the railroad rights-of-way located to the east of I-880, the roadway medians along High Street, and the areas directly beneath the I-880 overhead structure remain unpaved.

The unpaved roadway median at the High Street intersection with East 8th appears to have been sprayed: the vegetation is desiccated and there are large patches of bare soil. Bare soil is also dominant beneath the overhead structure where there is likely not enough light to support vegetation. Overall the vegetation in the project area consists of ruderal species including non-native grasses, thistles, cheese weed, clover etc. Additional vegetation included acacia trees planted in the Caltrans right-of-way. Recent landscape plantings occur along east 8th street adjacent to the K-Mart parking lot.

METHODS

Windshield surveys were sufficient for much of the project area with the exception of the railroad rights-of-way and the area directly beneath the I-880 overhead structure. These areas were surveyed on foot to verify the presence or absence of potential jurisdictional wetlands.
Patricia Mosley

RESULTS

The attached table includes a list of the special status species that occur in Alameda County (California Department of Fish and Game, April 2000.) There were no observations of the special status plant or animal species listed in the table. In addition, habitat which may support special status species was not identified in the project area.

The project study area does not support special status species habitats or wetland habitats. There are no creeks, swales or drainages in the project area. Vegetation is limited to ruderal species in the roadway medians and ornamental plantings along East 8th Street. Wildlife observed included morning doves (*Zenaida macroura*,) house finches (*Carpodacus mexicanus*.) Plant species observed included ripgut grass (*Bromus diandrus*,) fennel (*Foeniculum vulgare*) wild radish (*Raphnus sativus*) and pricly ox tongue (*picris sp*.)

The heavily industrial and commercial nature of the project study area make it highly unlikely that special status species would occur in the project area. The results of the survey confirm that conclusion.

Please feel free to call me at (510) 528-5197 if you have any comments or questions.

Sincerely,

Patricia Mosley Senior Biologist Natural Resources Mangement

CALIFORNIA DEPARTMENT OF FISH AND GAME NATURAL DIVERSITY DATABASE

- Special Status Plants, Animals and Natural Communities of Alameda County

Vascular Plants Allium sharsmithae SHARSMITH'S ONION Amsinckia grandiflora LARGE-FLOWERED FIDDLENECK Endangered Endangered Arctostaphylos pallida PALLID MANZANITA Threatened Endangered Astragalus tener var ferrisiae FERRIS'S MILK-VETCH Species of concern Astragalus tener var tener ALKALI MILK-VETCH Atriplex cordulata HEARTSCALE Species of concern Atriplex depressa BRITTLESCALE Atriplex joaquiniana SAN JOAQUIN SALTBUSH Species of concern Balsamorhiza macrolepis var macrolepis BIG-SCALE BALSAMROOT Blepharizonia plumosa ssp plumosa BIG TARPLANT Calochortus pulchellus MT. DIABLO FAIRY-LANTERN Chorizanthe cuspidata var cuspidata SAN FRANCISCO BAY SPINEFLOWER Species of concern Chorizanthe robusta var robusta ROBUST SPINEFLOWER Endangered Cirsium fontinale var campylon MT. HAMILTON THISTLE Species of concern Clarkia concinna ssp automixa SANTA CLARA RED RIBBONS Species of concern Clarkia franciscana PRESIDIO CLARKIA Endangered Endangered Cordylanthus mollis ssp hispidus HISPID BIRD'S-BEAK Species of concern Cordylanthus palmatus PALMATE-BRACTED BIRD'S-BEAK Endangered Endangered Delphinium californicum ssp interius HOSPITAL CANYON LARKSPUR Species of concern Delphinium recurvatum RECURVED LARKSPUR Species of concern Dirca occidentalis WESTERN LEATHERWOOD Eriogonum truncatum MT. DIABLO BUCKWHEAT Eschscholzia rhombipetala DIAMOND-PETALED CALIFORNIA POPPY Species of concern Fritillaria agrestis STINKBELLS Fritillaria falcata TALUS FRITILLARY Species of concern Fritillaria liliacea FRAGRANT FRITILLARY Species of concern Helianthella castanea DIABLO HELIANTHELLA Species of concern Hemizonia parryi ssp congdonii CONGDON'S TARPLANT Species of concern Hesperolinon sp nov "serpentinum" NAPA WESTERN FLAX Holocarpha macradenia SANTA CRUZ TARPLANT Proposed Threatened Endangered Horkelia cuneata ssp sericea KELLOGG'S HORKELIA Species of concern Lasthenia conjugens CONTRA COSTA GOLDFIELDS Endangered Lilaeopsis masonii MASON'S LILAEOPSIS Species of concern Monardella villosa ssp globosa ROBUST MONARDELLA Plagiobothrys glaber HAIRLESS POPCORN-FLOWER Streptanthus albidus ssp peramoenus MOST BEAUTIFUL JEWEL-FLOWER Species of concern Suaeda californica CALIFORNIA SEABLITE Endangered None 1B Tropidocarpum capparideum CAPER-FRUITED TROPIDOCARPUM Species of concern

Snails and Slugs

Helminthoglypta nickliniana bridgesi BRIDGES' COAST RANGE SHOULDERBAND (SNAIL) Species of concern

APPENDIX B

DRAFT PRELIMINARY SITE INVESTIGATION REPORT

42ND AVENUE AND HIGH STREET ACCESS IMPROVEMENT OAKLAND, CALIFORNIA

DRAFT PRELIMINARY SITE INVESTIGATION REPORT

42nd AVENUE AND HIGH STREET ACCESS IMPROVEMENT OAKLAND, CALIFORNIA

AGS Project No. 981103

Prepared for:

CITY OF OAKLAND

Submitted by:

AGS, INC.

May 24, 1999

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APPENDIX

A. RWQCB'S SITE CLEANUP REQUIREMENT ORDERN NO. 98-093, EKOTEK SITE, 4200 ALAMEDA AVENUE, OAKLAND, CALIFORNIA

AGS

1.0 INTRODUCTION

The City of Oakland plans to improve the interchange underneath the California Department of Transportation's (CalTran) proposed reconstruction of the I-880 overcrossing structure at 42nd Avenue. The proposed Oakland's Access Improvement project would replace the existing tight diamond interchange at High Street with a new interchange at 42nd Avenue, about a block north of High Street. The Access Improvement is intended to reduce traffic on High Street and improve local traffic access and circulation. As part of the Access Improvement project, AGS was contracted by the City of Oakland to conduct a preliminary site investigation of the project area, as shown on Figure 1. The purpose of the preliminary site investigation is to identify sites in the project area with environmental issues that may affect the development and evaluation of the conceptual design of the Access Improvement alternatives currently performed by CCS.

The preliminary site investigation includes the following steps:

- Conducting a preliminary database search to identify sites with potential environmental issues
- Reviewing existing environmental documents on sites as deemed necessary in the previous steps
- Performing field investigation if needed. The decision of the need of field investigation was based on the results of the database search and review of the existing environment documents. A decision tree was developed by AGS for this project to assist the evaluation of the need of sampling. The decision tree is shown on Figure 2.

This report presents the results of the preliminary site investigation. Remaining of this report is organized into the following sections:

- Section 2 Database Search
- Section 3 Document Reviews
- Section 4 Conclusions and Recommendations
- Section 5 Limitations
- Section 6 References

2.0 DATABASE SEARCH

This section presents the results of the database search. Database search is the first step to identify sites within the project area that might have environmental impact on the development and evaluation of the conceptual design of the Access Improvement alternatives. AGS contracted Environmental Data Resources, Inc. (EDR) to conduct a database search of the project area. Because there is no specific site property address of the project area and a reference address was required for the database search, the address of the SuperKmart store (located next to the project area) was used as the reference address for the search. A copy of the EDR's report of the database search is available for review at the City of Oakland Department of Public Works office.

Review of the database search indicates that 12 sites located within or adjacent to the project areas were listed in the database. The list of these 12 sites is presented in Table 1. These sites are preliminary located along Alameda Avenue and High Street. As presented in Table 1, three sites were reported to have on-going environmental activities requiring further document review. These sites were:

- Ekotek Lube, 4200 Alameda Avenue
- Shell Gas Station, 630 High Street
- Exxon Service Station, 720 High Street

The remaining nine sites were either no report of contamination, signed off or no further action acceptance by regulatory agencies, or reported that remediation was completed. Therefore, further document review was not required for these nine sites. Based on a telephone discussion with Mr. Barney Chan of the Alameda County Department of Environmental Health Services on April 6, 1999, AGS confirmed that no additional remediation will be required for the sites signed off by the regulatory agencies or reported that remediation was completed. However, appropriate health and safety requirements to address potential exposure of the residual contaminants during site construction should be identified and implemented.

3.0 DOCUMENT REVIEW

On April 6, 1999, AGS submitted a letter to Alameda County Department of Environmental Health Services requesting document review of the following sites:

- Ekotek Lube, 4200 Alameda Avenue
- Shell Gas Station, 630 High Street
- Exxon Service Station, 720 High Street

On April 30, 1999, AGS performed document review of these sites at the Alameda County Department of Environmental Health Services. Results of the document review are discussed below and summarized on Table 2.

<u>Ekotek Lube Site</u>. The former Ekotek Lube site is located at 4200 Alameda Avenue in Oakland, California. The site is about 0.8 acres in size, and is currently owned by Laurence and Diane Webster. The site was used for oil recycling from 1925 and 1981. Waste oil received by the facility primarily consisted of oils from automobiles, railroad locomotives, aircraft, and electrical transformers. Stoddard solvent was also reportedly recycled at the facility until approximately 1978.

The site is located in the East Bay Plain Basin. Soils immediately underlying pavement on- and off-site consist of artificial fill extending to approximately 1.5 to 4 feet below ground surface (bgs). This artificial fill overlays a silty clay extending to a depth of 6 to 15 feet bgs. Located beneath the silty clay is the first water-bearing unit. The first water-bearing unit ranges in thickness from approximately 1 to 5 feet and consists of clayey sands, sandy gravel, and gravely sand. Local groundwater flow direction was reportedly to the south, towards the San Leandro Bay. The depth to groundwater at the site has generally been between 7 and 12 feet bgs.

Various remedial investigation activities were conducted at the site. Results of the remedial investigation indicated that the primary contaminants in soil and groundwater are petroleum hydrocarbons, benzene, toluene, ethylbenzene, and xylenes (BTEX), chlorinated solvents, and PCBs. On July 2, 1998, the site owner submitted a risk management plan to the California Environmental Protection Agency Regional Water Control Board – the San Francisco Bay Region (RWQCB) as the proposed remedy for this site. The risk management plan proposed the following:

- A passive hydrocarbon recovery system
- Pre-redevelopment risk management plan calls for maintaining the integrity of the pavement cover and present fencing to minimize unauthorized access to the Site.

- Risk management during redevelopment includes implementation of site specific health and safety worker planning requirements and safety plans (HASPs), construction impact mitigation measures, minimization of groundwater conduit creation, and soil management protocols.
- Risk management after redevelopment includes maintaining a cap on the site, establishing protocols for future subsurface development, preventing the use of groundwater under the site, and establishing a notification procedure to ensure long-term compliance with the Risk Management Plan.
- Recordation of an Environmental Restriction and Covenant with the deed of the site. Proposed engineering controls include maintenance of a cover or cap over the site, and installation of vapor barriers in the foundations of all future improvements and construction on the site. Institutional restrictions would preclude use of the site as a residence, hospital for humans, and school for persons under 21 years of age or a day care center for children. Use of groundwater for drinking, irrigation, industrial water supply, or any other purpose without the prior written consent of the RWQCB is prohibited.

On September 22, 1998, the RWQCB adopted a Site Cleanup Requirements Order No. 98-093 for this site. The Site Cleanup Requirements Order accepted the Risk Management Plan as the cleanup plan and cleanup standards. In addition, the Site Cleanup Requirements Order also specifies detailed requirement of implementing the Risk Management Plan and self-monitoring program for this site. A copy of the Site Cleanup Requirements Order for this site is included in Appendix A. Based on this information, no further site sampling is recommended. With the exception of implementing appropriate health and safety plan and soil management plan for road improvement construction, no major environmental issue that would impact the conceptual design evaluation was identified.

Shell Gas Station. The Shell Gas Station is located at 630 High Street, Oakland, California. Soil beneath the site consists primarily of 3 to 7 feet of rubble fill underlain by interbedded clay and sand sediments from 12 to 20 feet bgs. The clayey sandy layer is underlain by clay. Depth to groundwater was reportedly from approximately 6 to 12 feet bgs.

During the January 1989 station modernization, soil samples were found to contain high levels of petroleum hydrocarbons, BTEX, and lead. Subsequently, soil excavation and remedial investigation (soil sampling and monitoring well installation and sampling) were performed at the site. Quarterly groundwater monitoring has been conducted at the site since 1989.

1900 ORA/COUNCIL OCT 0 2 2001 On January 30, 1995, Shell submitted a Tier 1 Risk Based Assessment for this site and proposed the use of Non-Attainment Area approach for this site. On February 15, 1995, the Alameda County Department of Environmental Health concurred with the Non-Attainment Area approach. On May 1, 1995, Shell submitted a proposed future action plan and a request to establish a non-attainment zone. The future action plan proposed continued ground water monitoring for three years and implementation of a contingency plan in the event that results of the groundwater monitoring exceed the trigger conditions. Based on the file review, no further site sampling is recommended. With the exception of implementing appropriate health and safety plan and soil management plan for road improvement construction, no major environmental issue that would impact the conceptual design alternatives was identified.

Exxon Gas Station. The Exxon Gas Station is located at 720 High Street, Oakland, California. This site is located outside the approximate location of this Access Improvement Project. The geology of the site was reportedly interbedded layers of silty clay, silt, clayey gravel to gravel, and clayey sand to sand. An upper 6 to 12 feet of silty clay were encountered, which was underlain by saturated clayey gravel or cleyey sand. Groundwater was reported encountered at 8 to 12 feet bgs at the first water-bearing zone whereas groundwater was encountered at 20 to 24 feet bgs in the lower permeable unit below the first water-bearing zone.

In April 1987, four underground storage tanks (USTs) were removed by Exxon's contractor. Five of six soil samples collected during the tank removal contained levels of total volatile hydrocarbons greater than 1,000 parts per million (ppm). Various phases of remedial investigation were subsequently conducted. Results of the remedial investigation indicated that both soil and groundwater at the site were impacted by total petroleum hydrocarbons as gasoline (TPH-g), and TPH as diesel (TPH-d). Also, floating products up to 30 inches were reported measured in three onsite wells. Currently, an air sparging/soil vapor extraction system, and a groundwater extraction and treatment system are operated to remediate the contaminants in soil and groundwater at the site. In addition, a guarterly groundwater monitoring program has been implementing at the site. According to a note found during the file review, Exxon will submit a report on May 30, 1999 to present a proposal of closure of the treatment system, to demonstrate that natural attenuation is appropriate for this site, and to present a risk-based closure assessment for this site. Based on the flow chart as shown on Figure 2, no soil sampling is recommended. Because this site is not located in the project area, this site is not considered to pose environmental issues impacting the development of the conceptual design of the Access Improvement.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the database search and the document review, the following conclusions and recommendations were made:

- No field sampling is required to evaluate environmental issues that may impact the development and evaluation of conceptual design alternatives of the Access Improvement.
- No soil cleanup requirement for contaminated sites located in the project area was identified.
- Groundwater contamination was identified in the project area. However, no active groundwater cleanup requirement was noticed at contaminated sites located within the project area.
- Appropriate health and safety plan, soil sampling and management plan, and waste disposal plan should be prepared and implemented to address potential residual soil and groundwater contaminations to be encountered during access improvement construction. These plans should be submitted to RWQCB and Alameda County Department of Environmental Health for approval prior to construction.
- After the conceptual design of the Access Improvement is selected, AGS recommends that the City of Oakland discusses the Access Improvement Plan with Alameda County Department of Environmental Health and the RWQCB. The purpose of the meeting is to identify agencies' issues that need to be address on the Access Improvement project.

- 6 -

5.0 LIMITATIONS

The approach of this preliminary site investigation is generally based on the Phase 1 environmental audit approach in accordance with the guidelines set forth in the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments. This preliminary site investigation is non-comprehensive in nature and is therefore unlikely to identify all environmental problems or eliminate all risk. The attached report is a qualitative assessment. The scope for this project was presented in the AGS proposal (P981103) dated January 19, 1999, and subsequently approved by the client (City of Oakland). Please note that the AGS scope of work was limited to those items specifically identified in the proposal. Environmental report are beyond the scope of work and are not included in this report.

Land use, site conditions in the project area and other factors change with time. Since site activities and regulations beyond AGS' control could change at any time after the completion of this report, AGS's observations, findings, and interpretations can be considered valid only as of the date of this report submittal.

6.0 **REFERENCES**

Environmental Data Resources, Inc. (1998) "The EDR-Radius Map with GeoCheck, 4000 Alameda Avenue, Oakland, CA 94601" dated December 11, 1998.

Erler & Kalinowski, Inc. (1995) "Preliminary Investigation Report, Former Oil Recycling Site, 4200 Alameda Avenue, Oakland, California" dated September 14, 1995.

Erler & Kalinowski, Inc. (1996) "Demolition and Excavation Report, Former Oil Recycling Site, 4200 Alameda Avenue, Oakland, California" dated August 12, 1996.

Erler & Kalinowski, Inc. (1997) "Additional Off-Site Groundwater Investigation Report, Former Oil Recycling Site, 4200 Alameda Avenue, Oakland, California" dated November 10, 1997.

Erler & Kalinowski, Inc. (1998) "Human Health Risk Assessment, Former Oil Recycling Site, 4200 Alameda Avenue, Oakland, California" dated April, 1998.

Erler & Kalinowski, Inc. (1998) "Risk Management Plan, Former Oil Recycling Site, 4200 Alameda Avenue, Oakland, California" dated June, 1998.

California Environmental Protection Agency Regional Water Quality control Board – San Francisco Region Order No. 98-093 "Adoption of Final Site Cleanup Requirements for Laurence and Diane Webster and Ekotek, Inc. for the property located at 4200 Alameda Avenue, Oakland, Alameda County" dated September 22, 1998.

Alameda County Department of Environmental Health's Letter "Comment on January 30, 1995 Tier 1 Risk Based Assessment for Shell Service Station, 630 High Street, Oakland, CA 94601" dated February 17, 1995.

Weiss Associates (1995a) "Tier 1 Risk Based Assessment for Shell Service Station, 630 High Street, Oakland, CA 94601" dated January 30, 1995.

Blanine Tech Services (1994) "Quarterly Groundwater Smpling Report 941108-G-3, Shell WIC #204-5508-5801, 630 Hight Street, Oakland California, Quarter: 4th Quarter of 1994" dated November 28, 1994.

Weiss Associates (1995b) "Proposed Future Action Plan and Request to Establish a Non-Attainment Zone at Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California" dated May 1, 1995.

Applied GeoSystems (1991a) "Letter Report Results of Soil Sampling for New Underground Storage Tank Pit at Exxon Station No. 7-3006, 720 High Street, Oakland California" dated May 13, 1991.

RESNA (1993) "Limited Record Search at Exxon Station 7-3006, 720 High Street, Oakland California" dated March 24, 1993.

Aplied GeoSystems (1991b) "Report Supplemental Subsurface Environmental Investigation at Exxon Station No. 7-3006, 720 High Street, Oakland, California" dated May 21, 1991.

Exxon Company USA (1999) "Quarterly Groundwater Monitoring and Remediation Status Report, Fourth Quarter 1998" dated February 2, 1999.

TABLE 1

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SUMMARY OF SITES IN AND ADJACENT TO PROJECT AREA 42ND AVENUE AND HIGH STREET ACCESS IMPROVEMENTS CITY OF OAKLAND, CALIFORNIA

		Within					Require
		Project	Soil	Groundwater			Document
Site	Address	Area?	Contamination	Contamination	Lead Agency	Status	Review?
Owens_Illinois Inc	3600 Alameda	Unlikely	None Reported	None Reported	County of	NA	No
	Ave				Alameda and RWQCB		
Learner Company	3675 Alameda	Unlikely	Yes	Yes	RWQCB	Signed off, remedial action	No
	Avenud					completed or deemd unnecessary	
United States Cold Storage	3925 Alameda	Unlikely	Yes	Not reported	RWQCB	Soil remediation completed	No
	Ave						
Super Kmart	4000 Alameda Ave	Unlikely	None Reported	None Reported	NA	NA	No
Ekotek Lube	4200 Alameda	Yes	Yes - Petroleum	Yes - Petroleum	County of	Site not closed, on-going	Yes
	Ave		Hydrocarbons,	Hydrocarbons,	Alameda and	environmental activities	
			and VOCs	and VOCs	RWQCB		
Integrated Environmental	499 High Streeet	Yes	None Reported	None Reported	NA	NA	No
Systems		_					
Cobbledick Kibbe	500 High Street	Yes	Yes	Yes	RWQCB	Signed off, remedial action	No
						completed or deemd	
						unnecessary	
Shell	630 High Street	Yes	Yes - Petroleum	Yes - Petroleum	County of	Site not closed, on-going	Yes
			Hydrocarbons	Hydrocarbons	Alameda and	environmental activities	
					RWQCB		
Exxon Service Station	720 High Street	Unlikely	Yes - Petroleum	Yes - Petroleum	County of	Site not closed, on-going	Yes
			Hydrocarbons	Hydrocarbons	Alameda and	environmental activities	
			-		RWQCB		
Southern Pacific Railroad	744/758 High	Unlikely	None Reported	None Reported	RWQCB	NA	No
Propery	Street	_]
American Can Company (Also	3801 East 8th	Unknown	Yes - Petroleum	Yes - Petroleum	RWQCB	No Further Action issued on	No
reported as location of current	Street		Hydrocarbons	Hydrocarbons		January 5 and December 23,	
SuperKmart store)						1997	
Ameron Pole Prods Div	4417 Oakport St	Unlikely	None Reported	None Reported	NA	NA	No

TABLE 2

1

SAMPLING REQUIREMENT FOR SITES IN AND ADJACENT TO PROJECT AREA 42ND AVENUE AND HIGH STREET ACCESS IMPROVEMENTS CITY OF OAKLAND, CALIFORNIA

Site	Addross	Within Project Area?	Soil	Groundwater		Statue	Additional
Owens_Illinois Inc	3600 Alameda Ave	Unlikely	None Reported	None Reported	County of Alameda and RWQCB	NA	No
Learner Company	3675 Alameda Avenud	Unlikely	Yes	Yes	RWQCB	Signed off, remedial action completed or deemd unnecessary	No
United States Cold Storage	3925 Alameda Ave	Unlikely	Yes	Not reported	RWQCB	Soil remediation completed	No
Super Kmart	4000 Alameda Ave	Unlikely	None Reported	None Reported	NA	NA	No
Ekotek Lube	4200 Alameda A∨e	Yes	Yes - Petroleum Hydrocarbons, and VOCs	Yes - Petroleum Hydrocarbons, and VOCs	County of Alameda and RWQCB	Fianl Cleanup Order adopted on 9/98. Contamination delineation completed. The Cleanup Order approved on-going groundwater monitoring and risk management plan as accepted remediation plan.	No
Integrated Environmental Systems	499 High Streeet	Yes	None Reported	None Reported	NA	NA	No
Cobbledick Kibbe	500 High Street	Yes	Yes	Yes	RWQCB	Signed off, remedial action completed or deemd unnecessary	No
Shell	630 High Street	Yes	Yes - Petroleum Hydrocarbons	Yes - Petroleum Hydrocarbons	County of Alameda and RWQCB	In 2/17/95, Alameda County Health Care Services approved on Non- Atainment Area approach, and on- going groundwater monitoring at this site.	No
Exxon Service Station	720 High Street	Unlikely	Yes - Petroleum Hydrocarbons	Yes - Petroleum Hydrocarbons	County of Alameda and RWQCB	On-going remediation includes SVE and product removal. Propsing RBCA closure with natural attenuation. On-going groundwater remediation	No

TABLE 2

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SAMPLING REQUIREMENT FOR SITES IN AND ADJACENT TO PROJECT AREA 42ND AVENUE AND HIGH STREET ACCESS IMPROVEMENTS CITY OF OAKLAND, CALIFORNIA

Site Southern Pacific Pailroad Property	Address 744/758 High	Within Project Area? Unlikely	Soil Contamination None Reported	Groundwater Contamination None Reported	Lead Agency RWQCB	Status NA	Additional Sampling? No
American Can Company (Also reported as location of current SuperKmart store)	3801 East 8th Street	Unlikely	Yes - Petroleum Hydrocarbons	Yes - Petroleum Hydrocarbons	RWQCB	No Further Action issued on January 5 and December 23, 1997	No
Ameron Pole Prods Div	4417 Oakport St	Unlikely	None Reported	None Reported	NA	NA	No



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APPENDIX A

RWQCB'S SITE CLEANUP REQUIREMENT ORDERN NO. 98-093 EKOTEK SITE 4200 ALAMEDA AVENUE OAKLAND, CALIFORNIA



San Francisco Bay Regional Water Quality Control Board

1515 Clay Street Suite 1400 Oakland, CA 94612 (510) 622-2300 FAX (510) 622-2460 SE SEP 25 PH 3: 17



SEP 2 2 1998 Date: File No. 2223.09 (DCL) SLIC No. 01S0132

CERTIFIED MAIL NO. RETURN RECEIPT REQUESTED

Laurence and Diane Webster c/o Mike Webster P.O. Box 92918 Long Beach, CA 90805

Ekotek, Inc. c/o William Wick Crosby, Heafey, Roach & May 1999 Harrison Street Oakland, CA 94612-3573

Subject: Adoption of Site Cleanup Requirements for the Former Ekotek Lube Site, 4200 Alameda Avenue, Oakland, Alameda County

Dear Lady and Gentlemen:

Enclosed is a copy of Board Order No. 98-093. This Order contains final site cleanup requirements for the subject site. The Order was adopted by the Board at its meeting of September 16, 1998.

Please contact Derek Lee of my staff at (510) 622-2374 if you have any questions.

Sincerely

Loretta K. Barsamian Executive Officer

Enclosure: Board Order No. 98-093 cc w/ enc: Mailing List

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 98-093

ADOPTION OF FINAL SITE CLEANUP REQUIREMENTS FOR:

LAURENCE AND DIANE WEBSTER AND EKOTEK, INC.

for the property located at

4200 ALAMEDA AVENUE OAKLAND ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Board), finds that:

- 1. Site Location: The former Ekotek Lube site (the "Site") is located at 4200 Alameda Avenue in Oakland, Alameda County. The Site is about 0.8 acres in size. It is bordered on the west by Alameda Avenue, on the east-southeast by East 8th Street. The former American National Can Company site, now the location for a Super K-Mart, lies to the north. The distance to the Bay is more than 1500 feet.
- 2. Site History: The Site was used for oil recycling from 1925 to 1981. It has been known by various names including "Bonus International, Inc.", "Bayside Oil Company", "Fabian Oil Refining Company", "Economy Refining & Service Company", "Economy Byproducts & Economy Service Company", and "Ekotek Lube, Inc." Waste oil received by the facility primarily consisted of oils from automobiles, railroad locomotives, aircraft, and electrical transformers. Stoddard solvent was also reportedly recycled at the facility until approximately 1978.

Ekotek bears no relationship to any of the previous operators/owners of the Site. At this time, none of the parties previously associated with the Site could be located.

Laurence and Diane Webster purchased the Site from Ekotek, Inc. in 1983 but have never operated on-site.

3. Named Dischargers: Laurence and Diane Webster are named as dischargers because they have owned the Site since 1983 and intend to develop it and implement the necessary actions specified in this Order. Ekotek, Inc., formerly known as Ekotek Lube, Inc., is named as a discharger because it owned the Site from 1978 to 1983 and operated an oil-recycling facility on-site for three years. Ekotek, Inc. will be responsible for compliance only if the Board or Executive Officer finds that other named dischargers have failed to comply with the requirements of this order.

If additional information is submitted indicating that other parties caused or permitted any waste to be discharged on the Site where it entered or could have entered waters of the state, the Board will consider adding that party's name to this order.

- 4. **Regulatory Status:** This site is currently not subject to Board order.
- 5. Site Hydrogeology: The Site is located in the East Bay Plain Basin. Soils immediately underlying pavement on- and off-site consist of artificial fill extending to approximately 1.5 to 4 feet below ground surface (bgs). This artificial fill overlays a silty clay that extends to a depth of 6 to 15 feet bgs. Contained within this silty clay are 1 to 2 feet thick discontinuous lenses of clayey gravel and silty sand.

Located beneath the silty clay is the first water-bearing unit. This first waterbearing unit ranges in thickness from approximately 1 to 5 feet and consists of clayey sands, sandy gravel, and gravely sand. Below this first water-bearing unit are clays and silty clays that extend to the maximum depth explored (i.e. 50 feet bgs). Interbedded in these clays and silts are thin discontinuous sand lenses. The thickest of these discontinuous sand lenses was encountered between 38 and 40 feet bgs and are 1 to 1.5 feet thick. These discontinuous sand lenses are considered the next deeper permeable unit.

Local groundwater flow direction is to the south, towards the San Leandro Bay. The depth to groundwater on-site has generally been between 7 and 12 feet bgs.

6. **Remedial Investigation:** The former processing area was located on the eastern part of the Site. It consisted of an oily water sump and some underground storage tanks. There was also an above-grade tank farm on the western part of the Site.

The preliminary investigation conducted in July 1995 consisted of 10 soil borings. Five of the borings were converted into groundwater monitoring wells, MW-1 to MW-5. The main pollutants discovered were petroleum hydrocarbons and associated VOCs, chlorinated solvents, and PCBs. TPH-gasoline up to 4100 ppm, TPH-diesel up to 11,000 ppm, TPH-motor oil up to 15,000 ppm, and PCBs up to 27 ppm have been detected in the soil. The historic maximum concentrations detected in groundwater are 160,000 ppb of TPH-gasoline, 850,000 ppb of TPHdiesel, 800,000 ppb of TPH-motor oil, 630 ppb of benzene, and 5200 ppb of vinyl chloride.

Off-site soil and groundwater investigations were conducted in February 1996 and June 1997. Waste oil as separate phase hydrocarbons was found in the upper

layer of groundwater as far as 50 feet from the Site. The petroleum hydrocarbons discovered were predominantly high molecular weight, with carbon chain lengths between C_{16} and C_{36} , and should therefore be rather immobile. TPH was detected in two of the soil samples taken and most likely represented TPH in the saturated zone that had sorbed to soils. BTEX, other VOCs, and metals were either not detected or below applicable California Maximum Contaminant Levels.

In the absence of any identified source for the off-site pollution and in light of its proximity to the Site, the off-site pollution is subject to the same cleanup plans as specified in this Order for the on-site pollution.

7. Interim Remedial Measures: Demolition of the majority of the aboveground tanks was performed in October and November 1995. Demolition of the remaining above-grade structures and removal of underground tanks and appurtenances (e.g., pipelines, sumps, catch basin, utilities) were conducted between March and July 1996. The Site was then graded and covered with two inches of asphalt and sloped to drain to gutters along Alameda Avenue and East 8th Street.

Oil liquids, debris, and other materials which were visually distinct from on-site soils were tested and determined to be non-RCRA hazardous wastes, prior to disposal at an approved facility. Some of the soils excavated were allowed to be worked back into the Site as part of the grading process.

Shallow soil samples were taken in the areas of the former under- and aboveground tanks. The results contribute to some of the historic maximum pollutant concentrations found on-site, as shown above.

8. Adjacent Sites: The American National Can Company (ANCC) site at 3801 East 8th Street in Oakland is adjacent to the Site. The ANCC site formerly housed a can manufacturing facility and is now the location of a K-Mart store. Residual VOCs, SVOCs, and floating product remain on this site after completion of extensive remediation. "No Further Action" letters were issued by the Board on January 5 and December 23, 1997.

ANCC and K-Mart have formally agreed with Ekotek and the Websters that ANCC/K-Mart and Websters/Ekotek should each be responsible for any further investigatory and/or remediation work required on their respective sites, regardless of any possible off-site migration complications. However, the Board is not bound by this private agreement.

9. Feasibility Study: Four remediation strategies for the subsurface hydrocarbons were examined for environmental and economic feasibility in the "Risk Management Plan" (RMP) of July 2, 1998, submitted by ARO, L.L.C., for the Websters. They included excavation, groundwater pump and treat, enhanced bioremediation, and long-term passive recovery. Excavation was shown to be an economically infeasible means of remediation. According to the study, a large percentage of the Site would need to be excavated to address the full scope of the problem. In addition, due to the proximity of the former tank farm and processing area to the adjacent road ways, extensive shoring would be required. ARO estimated that the entire project, including excavation, shoring, and waste disposal, would cost in the range of \$1,800,000. Such costs are substantially in excess of the market value of the property.

A pump-and-treat system is not cost-effective either. The tight soils on-site would require an extensive network of low capacity extraction wells. The slow mass transfer of these relatively insoluble chemicals means that the system would have to be operated and maintained for a lengthy period of time at a substantial cost.

Enhanced in-situ bioremediation would require the introduction of microorganism, trace nutrients, and, usually, oxygen to the subsurface. Unfortunately, due to the tight soils and magnitude of the pollution, this option would prove to be just as inefficient as pump-and-treat. Due to the limited space on-site, ex-situ bioremediation would not be a viable remediation option either.

The feasibility study showed that passive hydrocarbon removal, combined with natural attenuation, is the most cost-effective means of reducing and containing the subsurface pollution. With placement of passive recovery wells on the property boundary and in the former release areas, on-site pollution is expected to stay put and abate in time.

The subsurface of the Site is mostly impacted by heavy-end petroleum hydrocarbons. With their tendency to adsorb to the tight soils such as those present at the Site, extensive migration off-site, if at all, is not expected. The installation of recovery wells on the perimeters should effectively reduce the presence of floating product on the property boundary and minimize spread of the pollution. Moreover, reduction of floating product renders the portion that remains more susceptible to biodegradation, and, in turn, accelerates the entire process of remediation.

The feasibility study did not examine remediation strategies for chlorinated solvents in the groundwater. One particular contaminant of concern is vinyl chloride due to its relatively mobile characteristic.

10. Remediation and Risk Management Plan: The July 2, 1998, RMP describes a passive hydrocarbon recovery system, coupled by risk management for the Site before, during, and after redevelopment. It also proposes the recordation of an Environmental Restriction and Covenant (ERC) with the deed of the Site. The ERC will limit future use of the Site and identify certain restrictions that will apply even to approved uses for the Site.

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Proposed Groundwater Remediation Approach: The proposed remediation approach consists of a series of dual purpose groundwater monitoring/separate phase hydrocarbons recovery wells spaced around the perimeter. Seven on-site and two off-site wells will be constructed. Three of them will be between existing wells MW-1 and MW-4 to cover the former processing area, and three more between MW-4 and MW-3 to address the tank farm area. One new well will be located between MW-1 and MW-2 to monitor upgradient conditions. All five existing wells will be retrofitted for product recovery as well. Nonetheless, if MW-5 is in the way of site improvements, it will be abandoned and replaced with a new well as close to the former location as practical. This well is important because it has historically shown the greatest depth of product on the groundwater table.

Two off-site wells on the corner of East 8th Street and Alameda Avenue will also be installed. These wells are intended to remediate and monitor the off-site subsurface conditions.

All wells will be fitted with a passive product recovery device consisting of a hydrocarbon absorbent polymer. The spent absorbents will be replaced with fresh ones periodically. Groundwater samples will also be taken and monitored on a regular schedule as specified in the Self Monitoring Program. Closure of these wells will be contingent upon a consistent absence of floating product, favorable results from a sound fate and transport study of the Site's pollutants, and confirmation of these results with additional sampling. For the purposes of the Self Monitoring Program, the word "consistent" shall mean two or more consecutive sampling events not less than one year apart. The words "absence of floating product" shall refer to the lack of a visible sheen and no evidence of capture on the passive product recovery device. The premise is that a stable or diminishing plume of dissolved hydrocarbons will be achieved at the point when there is no longer any evidence of free product in the monitoring wells and water quality parameters show evidence of natural attenuation. The existence of a sufficient amount of dissolved oxygen and other inorganic indicators in the groundwater could be used as such evidential support.

b. **Proposed Risk Management Plan:** Pre-redevelopment risk management plan calls for maintaining the integrity of the pavement cover and present fencing to minimize unauthorized access to the Site.

Risk management during redevelopment includes implementation of site specific health and safety worker planning requirements and safety plans (HASP), construction impact mitigation measures, minimization of groundwater conduit creation, and soil management protocols.

a.

The HASPs will be submitted to Alameda County Environmental Health Department prior to commencement of work. The construction impact mitigation measures consist of site security, dust control, storm water runoff control, and decontamination procedures. The RMP also lists precautions to be taken during construction to prevent the creation of groundwater conduits. Lastly, soil management protocols provide guidance for the excavating and handling of soil remaining at the Site.

Risk management after redevelopment includes maintaining a cap on the Site, establishing protocols for future subsurface development, preventing the use of groundwater under the Site, and establishing a notification procedure to ensure long term compliance with the RMP.

c. **Proposed Environmental Restriction and Covenant:** The proposed engineering controls include maintenance of a cover or cap over the Site, installation of vapor barriers in the foundations of all improvements constructed on the Site, and such other measures as may be specified in the RMP, as it may be amended from time to time.

The proposed institutional restrictions would preclude use of the Site as a residence, hospital for humans, and school for persons under 21 years of age or a day care center for children. Use of the groundwater for drinking, irrigation, industrial water supply, or any other purpose without the prior written consent of the Regional Board is prohibited.

11. Risk Assessment: Waterstone Environmental, L.L.C. prepared a Human Health Risk Assessment Report (HHRA) in April 1998 for the Site. The Site is currently fenced and completely covered with asphalt paving. It is assumed that the Site will be redeveloped for commercial uses. Such uses may include but are not limited to restaurants, convenience stores or retail outlets. It is further assumed that the entire Site will be covered with buildings, asphalt parking lots, or planter strips with imported soil.

The two future potential receptors considered are commercial building occupants and maintenance personnel. The exposure pathways evaluated include inhalation of vapors from soil or groundwater to indoor air for commercial building occupants, and soil ingestion, dermal contact with soil and groundwater, dust inhalation of non-volatiles from soil, and inhalation of vapors from soil or groundwater to outdoor air for maintenance personnel.

The estimated risks for these populations are within the acceptable risk range. The total non-carcinogenic hazard index for exposure to COCs in soil and groundwater is 0.04 for future commercial building occupants and 0.06 for future maintenance workers. The total estimated lifetime incremental carcinogenic risk for exposure to COCs is 9.6 x 10° for future commercial building occupants and 5.4 x 10° for future maintenance workers.

For comparison, the Board considers the following risks to be acceptable at remediation sites: a hazard index of 1.0 or less for non-carcinogens, and an excess cancer risk of 10^{-4} or less for carcinogens.

The implementation of institutional and engineering controls such as those listed in the proposed ERC would further minimize the potential of exposure through pathways not considered in the assessment.

Risk management prior to, during, and after redevelopment is necessary in order to ensure the health and safety for construction workers, maintenance personnel, and others that might come into contact with the Site. Appropriate risk management would also prevent the further deterioration of both above- and subsurface environmental conditions.

12. Basis for Cleanup Standards

a. General: State Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," applies to this discharge and requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives.

State Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304," applies to this discharge. This order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

b. Beneficial Uses: The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20, 1995, and November 13, 1995, respectively. A summary of regulatory provisions is contained in 23 CCR 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters.

Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or

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naturally-high contaminant levels. Groundwater underlying and adjacent to the site qualifies as a potential source of drinking water.

The Basin Plan designates the following potential beneficial uses of groundwater underlying and adjacent to the Site:

o Municipal and domestic water supply o Industrial process water supply o Industrial service water supply o Agricultural water supply

At present, there is no known use of groundwater underlying the Site for the above purposes.

- c. Basis for Groundwater Cleanup Standards: The groundwater cleanup standards for the Site are based on applicable water quality objectives and are the more stringent of EPA and California primary maximum contaminant levels (MCLs). Cleanup to this level will result in acceptable residual risk to humans.
- 13. Reuse or Disposal of Extracted Groundwater: Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible.
- 14. **Basis for 13304 Order:** The dischargers have caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.
- 15. **Cost Recovery:** Pursuant to California Water Code Section 13304, the dischargers are hereby notified that the Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this order.
- 16. CEQA: This action is an order to enforce the laws and regulations administered by the Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.
- 17. Notification: The Board has notified the dischargers and all interested agencies and persons of its intent under California Water Code Section 13304 to prescribe site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.

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18. **Public Hearing:** The Board, at a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the dischargers (or their agents, successors, or assigns) shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS

- 1. The discharge of wastes or hazardous substances in a manner which will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.
- 2. Further significant migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.
- 3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of wastes or hazardous substances are prohibited.

B. CLEANUP PLAN AND CLEANUP STANDARDS

- 1. Implement Remediation and Risk Management Plan: The dischargers shall implement the Remediation and Risk Management Plan described in finding 10, as augmented by Tasks C.3 through C.4.
- 2. Groundwater Cleanup Standards: The following groundwater cleanup standards shall be met in all wells identified in the Self-Monitoring Program:

Constituent	Cleanup Standard (ug/l)	Basis
Benzene	1	California MCL
Toluene	150	California MCL
Ethylbenzene	700	California MCL
Xylene	1,750	California MCL
Vinyl Chloride	0.5	California MCL

C. TASKS

1. SUBMITTAL OF A FEASIBILITY STUDY ADDENDUM

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COMPLIANCE DATE: October 15, 1998

Submit an addendum examining available remediation strategies for chlorinated solvents in the groundwater on-site. A detailed explanation supported by sufficient evidence shall be provided if remedial actions for the existing contaminants are concluded to be inappropriate.

2. IMPLEMENTATION OF INSTITUTIONAL CONSTRAINTS

COMPLIANCE DATE:

60 days after Executive Officer approval but no sooner than November 15, 1998

Submit a technical report acceptable to the Executive Officer documenting that the July 2, 1998 proposed Environmental Restriction and Covenant has been implemented.

3. IMPLEMENTATION OF PASSIVE HYDROCARBON RECOVERY

COMPLIANCE DATE:

Within 120 days of completion of site construction but no later than September 15, 1999

Submit a technical report acceptable to the Executive Officer documenting installation of the hydrocarbons recovery wells. This report should also present results of groundwater elevation, floating product recovery, and groundwater analyses for the first quarter.

4. WORKPLAN FOR SOIL SAMPLING

COMPLIANCE DATE: 45 days prior to proposed site improvements/construction

Submit a workplan acceptable to the Executive Officer for sampling of soils intended for excavation during site improvements. The workplan should delineate the soil to be excavated. Sampling method(s) and frequency should be described and justified. The plan should also specify any expected treatment, reuse, and/or disposal of the soils to be removed.

5. COMPLETION OF SOIL SAMPLING AND SITE IMPROVEMENTS

COMPLIANCE DATE:

45 days after the completion of soil sampling/site improvements

Submit a technical report acceptable to the Executive Officer documenting completion of tasks identified in Task 4.

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6. **PROPOSED CURTAILMENT**

COMPLIANCE DATE: 60 days prior to proposed curtailment

Submit a technical report acceptable to the Executive Officer containing a proposal to curtail remediation. Curtailment includes system closure (e.g. well abandonment), system suspension (e.g. cease passive recovery but wells retained for monitoring only), and significant system modification (e.g. closure of individual recovery wells within the network). The report should include the rationale for curtailment.

7. IMPLEMENTATION OF CURTAILMENT

COMPLIANCE DATE: 60 days after Executive Officer approval

Submit a technical report acceptable to the Executive Officer documenting completion of the tasks identified in Task 6.

8. EVALUATION OF NEW HEALTH CRITERIA

COMPLIANCE DATE: 90 days after requested by Executive Officer

Submit a technical report acceptable to the Executive Officer evaluating the effect on the approved cleanup plan of revising one or more cleanup standards in response to revision of drinking water standards, maximum contaminant levels, or other health-based criteria.

9. EVALUATION OF NEW TECHNICAL INFORMATION

COMPLIANCE DATE: 90 days after requested by Executive Officer

Submit a technical report acceptable to the Executive Officer evaluating new technical information which bears on the approved cleanup plan and cleanup standards for this site. In the case of a new cleanup technology, the report should evaluate the technology using the same criteria used in the feasibility study. Such technical reports shall not be requested unless the Executive Officer determines that the new information is reasonably likely to warrant a revision in the approved cleanup plan or cleanup standards.

10. Delayed Compliance: If the dischargers are delayed, interrupted, or prevented from meting one or more of the completion dates specified for the above tasks, the dischargers shall promptly notify the Executive Officer and the Board may consider revision to this Order.

D. **PROVISIONS**

- 1. No Nuisance: The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in California Water Code Section 13050(m).
- 2. **Good O&M**: The dischargers shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.
- 3. **Cost Recovery**: The dischargers shall be liable, pursuant to California Water Code Section 13304, to the Board for all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. If the site addressed by this Order is enrolled in a State Board-managed reimbursement program, reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any disputes raised by the discharger over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.
- 4. Access to Site and Records: In accordance with California Water Code Section 13267(c), the dischargers shall permit the Board or its authorized representative:
 - a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
 - b. Access to copy any records required to be kept under the requirements of this Order.
 - c. Inspection of any monitoring or remediation facilities installed in response to this Order.
 - d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the discharger.
- 5. Self-Monitoring Program: The dischargers shall comply with the Self-Monitoring Program as attached to this Order and as may be amended by the Executive Officer.
- 6. **Contractor / Consultant Qualifications:** All technical documents shall be signed by and stamped with the seal of a California registered

geologist, a California certified engineering geologist, or a California registered civil engineer.

- 7. Lab Qualifications: All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control (QA/QC) records for Board review. This provision does not apply to analyses that can only reasonably be performed on-site (e.g. temperature).
- 8. **Document Distribution**: Copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to the following agency:
 - a. Alameda County Environmental Health Department

The Executive Officer may modify this distribution list as needed.

- 9. **Reporting of Changed Owner or Operator**: Laurence and Diane Webster shall file a technical report on any changes in site occupancy or ownership associated with the property described in this Order.
- 10. Reporting of Hazardous Substance Release: If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, the dischargers shall report such discharge to the Regional Board by calling (510) 286-1255 during regular office hours (Monday through Friday, 8:00 to 5:00).

A written report shall be filed with the Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.

- 11. Secondarily-Responsible Discharger: Within 60 days after being notified by the Executive Officer that other named dischargers have failed to comply with this order, Ekotek, Inc., as the secondarily-responsible discharger, shall then be responsible for complying with this order.
- 12. **Periodic SCR Review**: The Board will review this Order periodically and may revise it when necessary.

- I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on Supt 16, 1998.

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Lorettá K. Barsamian Executive Officer

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

Attachments: Site Map Self-Monitoring Program
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

LAURENCE AND DIANE WEBSTER AND EKOTEK, INC.

for the property located at

4200 ALAMEDA AVENUE OAKLAND ALAMEDA COUNTY

- 1. Authority and Purpose: The Board requests the technical reports required in this Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Board Order No. 98-093 (site cleanup requirements).
- 2. **Monitoring**: The dischargers shall measure groundwater elevations in all monitoring wells and collect and analyze representative samples of groundwater according to the following table:

Well #	Sampling Frequency	Analyses	Well #	Sampling Frequency	Analyses
MW-1	Q*	8015/8240	MW-8**	Q*	8015/8240
MW-2	Q*	8015/8240	MW-9**	Q*	8015/8240
MW-3	Q*	8015/8240	MW- 10**	Q*	8015/8240
MW-4	Q*	8015/8240	MW- 11**	Q*	8015/8240
MW-5	Q*	8015/8240	MW- 12**	Q*	8015/8240
MW-6**	Q*	8015/8240	MW- 13***	Q*	8015/8240
MW-7**	Q*	8015/8240	MW- 14***	Q*	8015/8240

Key: Q = Quarterly

8015/8240 = Modified EPA Method 8015 or equivalent and EPA Method 8240 * The sampling frequency will be quarterly for the first year and semi-annually (March and October) for the second and third years. The dischargers may propose a further reduction to annual monitoring for the fourth and following years, assuming that the data remain stable. Any proposed changes, however, are subject to Executive Officer approval.

****** New on-site recovery/monitoring wells.

3.

*** New off-site recovery/monitoring wells.

- **Quarterly Monitoring Reports:** The dischargers shall submit quarterly monitoring reports to the Board no later than 30 days following the end of the quarter (e.g. report for first quarter of the year due April 30). The due date of the first quarterly monitoring report, however, shall be the time specified in Task C.3 of this Order. The reports shall include:
 - a. Transmittal Letter: The transmittal letter shall discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by the dischargers' principal executive officer or their duly authorized representative, and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.
 - b. Groundwater Elevations: Groundwater elevation data shall be presented in tabular form, and a groundwater elevation map should be prepared for each monitored water-bearing zone. Historical groundwater elevations shall be included in the fourth quarterly report each year.
 - c. Groundwater Analyses: Groundwater sampling data shall be presented in tabular form, and an isoconcentration map should be prepared for one or more key contaminants for each monitored water-bearing zone, as appropriate. The report shall indicate the analytical method used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Historical groundwater sampling results shall be included in the fourth quarterly report each year as well as free product thickness and historical and annual mass removal. The report shall describe any significant increases in contaminant concentrations since the last report, and any measures proposed to address the increases. Supporting data, such as lab data sheets, need not be included (however, see record keeping below).
 - d. Status Report: The quarterly report shall describe relevant work completed during the reporting period (e.g. free product recovery) and work planned for the following quarter.
- 4. Semi-Annual Monitoring Reports: The dischargers shall submit semi-annual monitoring reports to the Board no later than April 30 for the first report and November 30 for the second. These reports should follow the same requirements

specified for the quarterly reports. Moreover, the second semi-annual report is equivalent to the fourth quarterly report in terms of additional conditions to be fulfilled.

- 5. Violation Reports: If the dischargers violate requirements in the Site Cleanup Requirements, then the dischargers shall notify the Board office by telephone as soon as practicable once the dischargers have knowledge of the violation. Board staff may, depending on violation severity, require the dischargers to submit a separate technical report on the violation within five working days of telephone notification.
- 6. Other Reports: The dischargers shall notify the Board in writing prior to any site activities, such as construction or underground tank removal, which have the potential to cause further migration of contaminants or which would provide new opportunities for site investigation. Please see Tasks 3 and 4 of the Site Cleanup Requirements for additional information.
- 7. **Record Keeping**: The dischargers or their agent shall retain data generated for the above reports, including lab results and QA/QC data, for a minimum of six years after origination and shall make them available to the Board upon request.
- 8. SMP Revisions: Revisions to the Self-Monitoring Program may be ordered by the Executive Officer, either on his/her own initiative or at the request of the dischargers. Prior to making SMP revisions, the Executive Officer will consider the burden, including costs, of associated self-monitoring reports relative to the benefits to be obtained from these reports.

I, Loretta K. Barsamian, Executive Officer, hereby certify that this Self-Monitoring Program was adopted by the Board on <u>Sept 16 1998</u>.

Couverne P. Kill Loretta K. Barsamian

Executive Officer

