DRAFT

ENVIRONMENTAL IMPACT REPORT

Arcadia Park Residential Development Project

Prepared for
City of Oakland
Community and Economic Development Agency
250 Frank Ogawa Plaza, Suite 3315
Oakland, CA 94612

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July 1, 2005

CITY OF OAKLAND

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Community and Economic Development Agency
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COMBINED NOTICE OF RELEASE AND AVAILABILITY OF THE DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC HEARING ON THE ARCADIA PARK RESIDENTIAL PROJECT

PROJECT TITLE: Arcadia Park Residential Project

CASE NO.: GPA05-331; RZ05-332; PUD05-335; TTM-7640; ER05-003

PROJECT SPONSOR: Pulte Homes

PROJECT LOCATION: The project site is located near the corner of 98th Avenue and San Leandro Street in East Oakland. The site is approximately 27 acres in size.

DESCRIPTION OF PROJECT: The applicant proposes to construct 366 new residential dwelling units on a site located near the corner of 98th Avenue and San Leandro Street in East Oakland. The project consists of 74 single-family homes, 108 small-lot single-family homes (also known as detached condominiums or urban single-family homes), and 184 attached townhomes. The applicant is seeking to amend to the General Plan land use designation for the site from General Industrial/Transportation to Housing and Business Mix and to rezone the property from the M-30 General Industrial Zone to the R-30 One-Family Residential Zone and the R-50 Medium Density Residential Zone. The applicant is also seeking approval of a Planned Unit Development (PUD) permit and a Tentative Tract Map for subdivision purposes.

ENVIRONMENTAL REVIEW: Based on an Initial Study, it was determined that the project may have significant environmental impacts. A Draft Environmental Impact Report (DEIR) has been prepared for the project pursuant to the requirements of the California Environmental Quality Act (CEQA). The DEIR analyzes potentially significant environmental impacts in the following environmental categories: Transportation and Circulation; Noise; Hazardous and Toxic Substances; and Land Use. The DEIR identifies significant unavoidable environmental impacts related to Transportation and Circulation. The project site has been identified on the Cortese List of Hazardous Waste and Substance Sites as of the date of this Notice. Copies of the DEIR are available for review or distribution to interested parties at no charge at the Community and Economic Development Agency, Planning and Zoning Division, 250 Frank H. Ogawa Plaza, Suite 3315, Oakland, CA 94612, Monday through Friday, 8:30 a.m. to 5:00 p.m.

PUBLIC HEARING: The City Planning Commission will conduct a public hearing on the project on Wednesday, July 20, 2005, at 6:30 p.m. in Hearing Room 1, City Hall, 1 Frank H. Ogawa Plaza.

The City of Oakland is hereby releasing this DEIR, finding it to be accurate and complete and ready for public review. Members of the public are invited to comment on the DEIR and the planning permits. There is no fee for commenting, and all comments received will be considered by the City prior to finalizing the EIR and making a decision on the project. Comments on the DEIR should focus on the sufficiency of the EIR in discussing possible impacts on the environment, ways in which adverse effects might be minimized, and alternatives to the project in light of the EIR's purpose to provide useful and accurate information about such factors. Comments may be made at the public hearing described above or in writing. Please address all written comments to Darin Ranelletti, Planner III, City of Oakland, Community and Economic Development Agency, Planning and Zoning Division, 250 Frank H. Ogawa Plaza, Suite 3315, Oakland, CA 94612. Comments should be received no later than 4:00 p.m. on **August 15, 2005**. If you challenge the environmental document or discretionary planning permits in court, you may be limited to raising only those issues raised at the Planning Commission public hearing described above, or in written correspondence received by the Community and Economic Development Agency on or prior to 4:00 p.m. on **August 15, 2005**. After all comments are received, a Final EIR will be prepared and the Planning Commission will consider certification of the Final EIR and render a decision on the planning permits for the project at a later meeting date to be scheduled. If you have any questions, please telephone Darin Ranelletti at (510) 238-3663.

CLAUDIA CAPPIO
Development Director

Date: July 1, 2005

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Chapter I
EXECUTIVE SUMMARY

A. Introduction

This Draft Environmental Impact Report (EIR) presents an analysis of the proposed Arcadia Park Residential Project (Project). Environmental analysis is required by the California Environmental Quality Act (CEQA) to determine whether a project could have a potentially significant impact upon the environment. In accordance with CEQA, the City of Oakland has analyzed the potential environmental impacts associated with development of the Project and the results of this analysis are summarized in this Draft EIR.

All technical studies and reference materials used to prepare this Draft EIR are available from the City of Oakland, Community and Economic Development Agency.

B. Project Description and Project Objectives

The general purpose of the proposed Arcadia Park Residential Project is to provide high-quality housing in the City of Oakland by constructing 366 attached and detached homes along with 10 distributed parks on 27.5 acres. Specifically, the Project would consist of 74 single-family units, 108 detached condo units (also known as urban single-family units), and 184 town homes.

As shown in Figure 1, the Project is located at the northwest corner of the intersection of 98th Avenue and San Leandro Street. Access to the site would be provided from two access roads along 98th Avenue, and three access roads along 92nd Avenue. The Project site design also includes a series of linear parks which serve a dual purpose of providing open space and also functioning as natural storm water retention features during heavy rain events.

Constructing housing units within the existing infrastructure of an urban area is called in-fill housing. Constructing in-fill housing in the Bay Area would enable homeowners to live near established transportation systems, such as the Bay Area Rapid Transit (BART), Amtrak, and area freeways. The proposed Project would provide in-fill development within an already-developed area near to services and job centers, allowing residents to experience shorter commutes than those living in outlying areas of the region. More specifically, the Project objectives are as follows:

- Developing market-rate residential units at urban densities, which provide ownership opportunities with a variety of housing types and unit sizes that would be available to a range of market-rate household income levels and first time home buyers;
- Expanding Southeast Oakland's market-rate occupied housing stock to encourage local-serving retail development and to attract private construction and mortgage lenders to this sub-market;

- Developing urban infill housing with convenient transportation access near the center of the Bay Area, which would serve to divert housing from outlying areas and reduce long-distance commute traffic and related pollution and improve the City's job/housing balance and accommodate its fair share housing needs;
- Redeveloping and revitalizing underutilized or vacant land within Southeast Oakland to create a vibrant and pedestrian-oriented residential community;
- Providing additional open space within new residential communities in order to give a sense of visual and spatial relief to the residents and the community;
- Providing for the undergrounding of utilities and also providing extensive off-site improvements to existing, old infrastructure with respect to the streetscape, sidewalks, lighting and parking, and
- Constructing financially feasible developments with sufficient flexibility to adjust to market needs and provide reasonable returns on investments so as to secure construction and long-term financing.

C. The Environmental Review Process

Initial Study

The City completed an Initial Study in April 2005 to determine the potential of the Project to generate adverse significant impacts. The Initial Study is included in Appendix A of this Draft EIR and assessed the Project's potential impacts in the following areas: Aesthetics, Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation and Circulation, and Utilities and Service Systems.

Based on the results of the Initial Study, the City of Oakland concluded that the Project would have a potentially significant and unavoidable impact to cumulative traffic levels and that an EIR should be prepared.

Notice of Preparation and Public Scoping Period

On April 4, 2005, the City of Oakland Community and Economic Development Agency (City) published a Notice of Preparation (NOP) of the EIR. As required by CEQA, the City sent the NOP to the State Clearinghouse along with copies of the Initial Study. The City observed a 30-day scoping period in accordance with CEQA Section 15082 to allow members of the public and public agencies to comment on the scope of the proposed analysis.

The City received four comment letters during the 30-day scoping period. Letters were received from the following agencies: California Department of Fish and Game, East Bay Municipal Utility District,

California Department of Toxic Substances Control, and the Alameda Congestion Management Agency. No written comments were received from the public during the scoping period.

The City also held a scoping meeting on April 20, 2005, at which one member of the public gave verbal comments. The written and verbal comments received were considered in the preparation of this Draft EIR. The comment letters received during the scoping period are included in Appendix B of this EIR. The issues raised by the agencies and the member of the public at the scoping hearing are summarized below.

1. CA Department of Fish & Game – the letter asks that the EIR contain a complete assessment of the flora and fauna within and adjacent to the Project site.
2. CA Department of Toxic Substances Control – the letter notes that the Project will require remediation of hazardous materials, and if soil excavation is required the EIR should include an assessment of the impacts associated with excavation, including dust, noise, and transportation impacts.
3. East Bay Municipal Utility District – the letter includes a discussion of the following points:
   - Early coordination with the district is encouraged because of the lead time required for engineering and installation.
   - All soil and groundwater remediation must be completed before EBMUD can install any necessary pipelines.
   - The Project sponsor must submit documentation that the remediation has been completed.
   - The Draft EIR should include a provision to control or reduce the amount of inflow/infiltration to the sanitary sewer collection system.
   - EBMUD would like to meet with the applicant to discuss opportunities for water conservation through conservation programs and best management practices.
4. Alameda County Congestion Management Agency - the letter addresses the following analysis requirements related to the evaluation of transportation impacts. The ACCMA asks that the Draft EIR include the following:
   - results of model runs to evaluate 2010 and 2025 impacts;
   - evaluation of potential impacts to the Metropolitan Transportation System;
   - discussion of funding sources for measures required to mitigate any identified impacts;
   - discussion of the adequacy of project mitigation to meet ACCMA criteria;
   - analysis of potential impacts on CMP transit levels of service; and
   - demand related strategies to reduce peak hour trips.
5. California Department of Transportation (Caltrans) – the letter requests that the EIR include analysis of impacts to State roadways. Caltrans asks that the EIR include the following:
   - A site plan showing ingress, egress, and project access in relation to nearby state highways.

- Project-related trip generation, distribution, and assignment.
- Average Daily Traffic, AM and PM peak hour volumes and levels of service (LOS).
- Schematic illustration of traffic conditions for the project site and vicinity roadways.
- Describe the Project's consistency with the City's General Plan and ACCMA Congestion Management Plan.
- Identify mitigation for Project-related traffic impacts, including cumulative impacts
- Describe trip reduction measures for the Project.

6. Verbal Scoping comment Jackie Castaigne - One member of the public expressed support for the Project and also expressed concern regarding pedestrian safety. She asked that the Draft EIR include a discussion of design features that would enhance pedestrian safety of children and adults, especially at intersections.

Minor Clarifications to the Initial Study based on Planning Commission Scoping Hearing

At the public scoping meeting held on April 20, 2005, the Planning Commission expressed a desire to see additional topic areas addressed in the EIR. In addition to the potential traffic impact identified in the Initial Study, the Planning Commission asked that the EIR also contain a discussion of land use, noise, and hazardous materials. The Planning Commission also expressed the desire to see a discussion of the growth inducing effects of the Project included in the EIR. The discussion of growth-inducing effects is a required component of all EIRs, pursuant to CEQA section 15126.2(d) and is included in Chapter V of this Draft EIR.

The Planning Commission also clarified that it has not taken any formal action on the conversion of existing industrial uses to residential development and asked that the statement on page 41 of the initial study be revised to reflect that the City is currently studying the issues surrounding the conversion of industrial uses to residential uses. This change has been made as shown in the initial study. Text additions to the initial study are shown as underlined text and deletions are shown as strikeout text. The revised initial study is included as Appendix A of this Draft EIR.

Subsequent to the public scoping period, the boundaries of the proposed R-30 zone were revised to apply only to the large-lot single-family homes. The R-50 zone would apply to the detached condos and town home portions of the development

All of these changes are evaluated in this Draft EIR as appropriate.

The Environmental Impact Report

As directed by the Planning Commission, this Draft EIR includes a discussion of the Project's potential effects in the areas of transportation and circulation, noise, hazardous materials, and land use. All other topic areas were analyzed in the Initial Study, which concluded that the Project would not result in any significant and unavoidable impacts in the following areas:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

The purpose of this DEIR is to inform the public, responsible and trustee agencies, and other interested parties of potentially significant environmental effects of the Project. The EIR also identifies ways to minimize significant impacts and describes reasonable alternatives to the Project. Three Project alternatives are analyzed in the draft EIR: No Project (continuation of existing conditions on the site), No Project (redevelopment pursuant to existing zoning), and a Reduced Density Alternative designed to reduce significant unavoidable impacts.

This DEIR will be circulated for a 45-day public comment period. The City will then prepare a Final EIR. Consistent with CEQA Guidelines section 15132, the Final EIR will contain a copy of each comment letter, responses to those comments, and any necessary revisions to the EIR. When the City is satisfied that the Final EIR fully addresses the public comments that were received, it will consider the adequacy and completeness of the Final EIR.

After certification of the Final EIR, the City will consider approval or denial of the proposed Project and any alternative described herein, as described more fully in Section D below. (See CEQA Guidelines, §§ 15090-15093.) If the City approves the Project with findings adopting some or all of the mitigation measures proposed herein, the applicant would be required to adhere to all adopted mitigation measures as set forth in such findings (see CEQA Guidelines, § 15091). Any future changes to the Project may be subject to additional environmental and planning review by the City.

D. The Project Approval Process

After the Final EIR has been certified by the City as adequate and complete (CEQA Guidelines, § 15090), a number of actions need to occur before the proposed Project or an alternative can be formally approved and implemented:

- In taking action on the Project, the City must address and respond to each significant effect identified in the Final EIR. If the City chooses to approve the Project or an alternative despite possible significant environmental effects that might occur, the City must first adopt findings addressing (i) the feasibility of mitigation measures proposed in the Final EIR and, if necessary, (ii) the feasibility of any alternative that would substantially lessen or avoid any significant effect that could not be substantially lessened by the adoption of feasible mitigation measures. (CEQA Guidelines, § 15091(a).)
- The City must adopt a mitigation monitoring and reporting program (MMRP) to facilitate implementation of the mitigation measures. The MMRP will identify a responsible party for implementation, a party responsible for monitoring, and the required timing (e.g., prior to issuance of grading permits, prior to start of construction, prior to occupancy). (CEQA Guidelines, § 15097.)
- Should any significant environmental effects remain despite the adoption of feasible mitigation measures, the City must adopt a "Statement of Overriding Considerations" supported by substantial evidence in the public record that indicates why the City believes that the approved Project's economic, social, or other benefits outweigh such significant environmental effects. (CEQA Guidelines, § 15093.)

E. Summary of Environmental Effects

This EIR includes analyses of the environmental effects of the proposed Project and recommends potentially feasible mitigation measures to mitigate such effects to a level that would not be considered significant.

All potential Project-related impacts would be reduced to a less-than-significant level with the implementation of these mitigation measures, with the exception of traffic impacts at the intersection of 98th Avenue and International Boulevard and 98th Avenue and San Leandro Street.

Table I.1 – Summary of Impacts and Mitigation Measures provides a detailed list of the environmental impacts related to the implementation of the proposed Project (including cumulative impacts, mitigation measures, and the significance of each impact after implementation of mitigation). This table includes all of the mitigation measures that were identified in the Initial Study prepared for the Project. A full discussion of impacts and mitigation measures can be found in Chapter III *Environmental Setting, Impacts and Mitigation*.

F. Environmentally Superior Alternative

With the implementation of the proposed mitigation measures, the proposed Project would result in potentially significant and unavoidable impacts related to transportation and circulation.

The *No Project Alternative (Current Condition)* would avoid the significant traffic impacts, but would not meet any of the Project objectives. Nor would hazardous materials on the site be remediated.

The *New Industrial/Retail Project Alternative* could result in significant environmental impacts depending on the intensity of use proposed. A retail sales development of approximately 300,000 sf, which is allowed under the current zoning and general plan designations, could generate more than four times the number of average daily trips that the proposed Project would generate, leading to many of the same impacts identified in this Draft EIR. Additionally, since no commercial/industrial developer has been identified for the site, it is uncertain when remediation of the site would occur.

The *Reduced Density Alternative* (approximately 100 residential units) would avoid the significant traffic impacts generated by the proposed Project. This alternative would not be as effective in meeting many of the City's objectives for the Project. The economic feasibility of this alternative is compromised by the reduction of over 70 percent of the residential units needed to achieve this goal. The Reduced Density Alternative is the environmentally superior alternative.

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
A. TRANSPORTATION AND TRAFFIC			
Impact Traffic-1: The Project would contribute 166 vehicles to the intersection of International Boulevard and 92nd Avenue during the PM peak hour, causing the intersection to meet the Caltrans peak hour volume warrant.	**Potentially Significant**	**Mitigation Traffic-1:** After 25 percent occupancy of the Project, the Project sponsor shall perform a detailed traffic signal warrant evaluation (i.e., evaluate all eight warrants in the MUTCD) to establish a clear need for a traffic signal subject to City review and approval. If the traffic signal is warranted based on a detailed evaluation, the Project sponsor shall pay for the installation of a traffic signal at this location at that time. If a signal is not warranted based on a detailed evaluation, the Project Sponsor shall conduct another detailed evaluation once the project reaches 90 percent occupancy. If Caltrans does not approve the installation of a traffic signal, this impact would remain significant and unavoidable	**Less Than Significant (If Caltrans does not approve the proposed re-striping, the impact would remain significant and unavoidable)**

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Impact Traffic-2: During the peak construction period, the project would employ a maximum of 125 workers on a daily basis and require a maximum of 50 daily truck trips (25 inbound and 25 outbound) to haul material. This level of activity results in approximately 300 daily trips, 131 AM peak hour trips, and 131 PM peak hour trips[1]. The project sponsor has not yet developed a Traffic Management Plan to address traffic during the construction period, and this is considered a potentially significant impact.	**Potentially Significant**	**Mitigation Traffic-2:** Prior to the issuance of a demolition, grading, or building permit, the Project sponsor shall submit a traffic management plan (TMP) to the City for review and approval. The TMP shall include the following elements: ▪ A map documenting that material and equipment staging and storage locations for all phases of construction will be within the Project site. ▪ A map documenting that worker parking locations for all phases of construction will be within the Project site. ▪ Signage plans relating to any temporary road closures on public streets. ▪ Notification procedures for adjacent businesses, residents, property owners and public safety personnel for all major deliveries, detours, and land and/or street closures that will affect traffic in the vicinity of the Project. ▪ Provisions for monitoring surface streets used for	**Less Than Significant**

[1] Assumes there may be as many as two daily trips associated with each worker (driving to the site in AM peak hour and leaving the site to return home during PM peak hour). As a conservative estimate, 25% of truck trips were assumed to occur during the AM and PM peak hour.

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		truck routes so that any damage and debris attributable to the trucks can be identified and corrected. ▪ Signage plans documenting any detours for bicycle and pedestrian traffic ▪ Routing plans for remediation and/or construction vehicles and remediation and/or construction equipment from the Project site to I-880.	
Impact Traffic-3: Several intersections within the site are not completely perpendicular or are slightly offset. At these locations, vehicles may be unable to clearly determine right-of-way, leading to the potential for accidents.	**Potentially Significant**	**Mitigation Traffic-3:** Implement the traffic control features (stop signs) as noted for intersection shown in Figure 9.	**Less Than Significant**
Impact Traffic-4: The easternmost project driveway on 98th Avenue is offset (not directly across) from the existing Gould Street by about 75 feet. Offset intersections can be dangerous and are an undesirable design due to the vehicle conflicts that are created. Furthermore, the roadway alignment of the easternmost access contributes to a direct connection between 92nd Avenue and 98th Avenue, which can encourage cut-through traffic through the project site to avoid congestion along San Leandro Street.	**Potentially Significant**	**Mitigation Traffic-4:** Restrict the easternmost project driveway access from 98th Avenue to right-turn in/right-turn out movements using raised channelization islands.	**Less Than Significant**

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Impact NOISE 1: The existing noise environment at the project site ranges from 62 dBA to 82 dBA L_{dn} which would cause interior sound levels to be higher than the required 45 dBA $L_{dn.}$ The implementation of mitigation measure NOISE-1 would allow the proposed units to meet the requirements of the California Building Code.	**Potentially Significant**	**Mitigation Measure NOISE-1:** All Exterior walls exposed to a DNL of 60 dBA or greater shall be constructed with a Sound Transmission Class (STC) rating of 47. A qualified acoustical consultant shall review the design as it is developed to refine the specific STC ratings once the building design and site layout have been finalized through City review and approval of final design. Since the windows facing 98th Avenue and San Leandro Street will have to be closed in order to achieve the interior noise criteria, an alternate means of providing outside air to habitable spaces (ventilation or air conditioning) is required for facades exposed to an exterior dNL of 60 dBA or greater.	**Less Than Significant**
Impact NOISE- 2: Construction and remediation noise levels would reach 80 to 90 dBA at a distance of 50 feet. Some activities, such as excavation would exceed these noise levels. The project shall incorporate the adopted City Council construction noise mitigation measures, as shown below in mitigation measure NOISE-2a through d:	**Potentially Significant**	**Mitigation Measure NOISE-2.1** The project sponsor shall require remediation and/or construction contractors to limit standard remediation and/or construction activities as required by the City Building Services Division. Such activities are generally limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, with pile driving and/or other extreme noise generating activities greater than 90 dBA limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday, with no extreme noise generating activity permitted between 12:30 p.m. and 1:30 p.m. No remediation and/or construction activities shall be allowed on weekends until after the building is	**Less Than Significant**

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		enclosed without prior authorization of the Building Services Division, and no extreme noise-generating activities shall be allowed on weekends and holidays. **Mitigation Measure NOISE-2.2:** To reduce daytime noise impacts due to remediation and/or construction activities, the project sponsor shall require construction contractors to implement the following measures: ▪ 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). ▪ Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible 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 where feasible, and	

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible. ▪ 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 other measures to the extent feasible. **Mitigation Measure NOISE-2.3:** To further mitigate potential extreme noise generating construction and remediation impacts, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing remediation or construction, a plan for such measures shall be submitted for review and approval by the City to ensure that maximum feasible noise attenuation will be achieved. These attenuation measures shall include as many of the following control strategies as feasible: ▪ Erect temporary plywood noise barriers around the construction site to shield adjacent uses. ▪ 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	

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		structural requirements and conditions. ▪ Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site. ▪ Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings. ▪ Monitor the effectiveness of noise attenuation by taking noise measurements. **Mitigation Measure NOISE-2.4:** Prior to the issuance of each building permit, along with the submission of construction documents, the project sponsor shall submit to the City Building Services Division a list of measures to respond to and track complaints pertaining to noise generated during the remediation and construction periods. These measures shall include the following elements: ▪ A procedure for notifying the City Building Division staff and Oakland Police Department. ▪ A plan for posting signs on-site pertaining to permitted remediation/construction days and hours and complaint procedures and who to notify in the event of a problem. ▪ A listing of telephone numbers (during regular construction hours and off-hours).	

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		▪ The designation of an on-site remediation/construction complaint manager for the project. ▪ Notification of neighbors within 300 feet of the project remediation/construction area at least 30 days in advance of pile-driving and/or other extreme noise-generating activities about the estimated duration of the activity. ▪ A pre-remediation and pre-construction meeting shall be attended by job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.	
Impact NOISE-3: Although the vibration produced by the BART trains was not found to be perceptible to future residents, the Union Pacific trains could produce vibrations that could be felt in the homes closest to San Leandro Street.	**Potentially Significant**	**Mitigation Measure NOISE-3:** The project sponsor shall retain an acoustical engineer during design to review and provide input to reduce the potential of vibration amplification on upper floors of the residences. Typical recommendations would include minimizing long spans, increasing joist depths, stiffening the structure, etc. Prospective residents shall be made aware of the train line through a full disclosure statement. These recommendations on the final design would be subject to City review and approval. Therefore, this impact	**Less Than Significant**

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		would be less than significant.	
Impact HAZ-1: The proposed project is a residential development that would not include the routine use, transport, or disposal of hazardous materials. No hazardous materials would be stored on-site in support of the proposed development, other than typical residential-related home care products. A Phase I Site Assessment Report was prepared by Geomatrix Consultants in July 2004[2] which identified a number of contaminants related to past uses of the site as the Fleischman's yeast plant and trucking facilities. The contaminants include lead, mercury, petroleum hydrocarbons and underground storage tanks. Geomatrix Consultants conducted additional soil and groundwater sampling at over 50 locations across the site in July[3] 2004 and September[4] 2004, and their subsequent reports recommended actions that should be taken before reconstruction of the site can begin.	**Potentially Significant**	**Mitigation HAZ 1.1:** Prior to the issuing of any grading, demolition, or building permits for the project, a site specific Health and Safety Plan (HSP) shall be prepared by a qualified industrial hygienist. At a minimum, the HSP shall summarize information collected in environmental investigations for the project site, including soil and groundwater quality data; establish soil and groundwater mitigation and control specifications for grading and construction activities, including health and safety provisions for monitoring exposure to construction workers; provide procedures to be undertaken in the event that previously unreported contamination is discovered; incorporate construction safety measures for excavation activities; establish procedures for the safe storage and use of hazardous	**Less Than Significant**

[2] *Phase I Environmental Site Assessment*, Arcadia Park Development, Oakland, California, dated July 2004.
[3] Results of Phase I Soil and Grab Groundwater Investigation, Arcadia Park Development, Oakland, California
[4] Results of Additional Soil Sampling for Lead Characterization 854 92nd Avenue, Arcadia Park Development, Oakland, California

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		materials at the project site, if necessary; provide emergency response procedures; and designate personnel responsible for implementation of the HSP. The HSP shall be designed to prevent potential exposures to construction workers above the established OSHA Permissible Exposure Limits. This plan shall be submitted to the City of Oakland for review and acceptance prior to the issuance of a building permit. **Mitigation HAZ 1.2:** 854 92nd Avenue: The Project sponsor will work with the designated agency to remediate the elevated levels of lead identified during on-site soil sampling. Remediation activities will likely include excavation of lead-affected soil and off-site disposal at an appropriate hazardous waste facility. The Project sponsor shall obtain regulatory closure from the designated agency for this property for the proposed residential reuse of the site. **Mitigation HAZ 1.3:** 860 92nd Avenue: Although the USTs previously received regulatory closure from the ACHCSA, this action was based on continued industrial use of the site. The Project sponsor shall obtain regulatory approval from the designated agency for residential reuse. The	

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		agency may request additional soil, groundwater, or vapor sampling prior to approval for residential use. If sampling is conducted and impacts are identified that may cause a risk to future residents, the Project sponsor will work with the designated agency to remediate or mitigate those impacts. **Mitigation HAZ 1.4:** 921 98th Avenue: The Project sponsor shall receive approval from the designated agency for the proposed residential reuse of the site. This will include addressing issues regarding the USTs that have been closed based on industrial site use and the USTs that have not obtained closure. The agency may request additional soil, groundwater, or vapor sampling prior to approval for residential use. If sampling is conducted and impacts are identified that may cause a risk to future residents, the Project sponsor will work with the designated agency to remediate or mitigate those impacts. Additionally, the deep water well should be properly abandoned under the oversight of the appropriate agency. **Mitigation HAZ 1.5:** 999 98th Avenue: The Project sponsor shall decommission the two sumps located on this property under appropriate regulatory oversight. If required by	

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		the oversight agency, the Project sponsor shall implement additional soil and groundwater testing as directed by the oversight agency to confirm that the sumps have not impacted site soil and groundwater. If impacts to site soil and groundwater are present, the Project sponsor shall work with the designated agency to obtain approval for the proposed residential reuse of the property	
Impact HAZ2: Existing buildings could contain asbestos containing materials or lead-based paint. These materials require removal prior to any demolition activities in accordance with the Bay Area Air Quality Management District's (BAAQMD) Regulation 11, Rule 2.	**Potentially Significant**	**Mitigation HAZ 2** – All asbestos containing materials (ACMs) and lead-based paint shall be removed from the site prior to the start of any demolition activities. The removal of ACMs shall be conducted by a licensed asbestos abatement firm in accordance with the BAAQMD's Regulation 11, Rule 2.	**Less Than Significant**
B. CUMULATIVE IMPACTS			
Impact Traffic-5 The project would cause the intersection of San Leandro Street/98th Avenue to worsen from LOS D under Year 2010 conditions without the project to LOS E.	**Potentially Significant**	**Mitigation Traffic-5:** Prior to project occupancy, the project sponsor shall re-stripe San Leandro Street at 98th Avenue to provide exclusive southbound right-turn lanes. The right-turn lanes should be at least 200 feet in length	**Less Than Significant**
Impact Traffic-6 Under 2010 conditions, the project would contribute more than 4 seconds of average delay to the Intersection of International Boulevard/98th Avenue	**Potentially Significant**	**Mitigation Traffic-6:** Prior to project occupancy, the Project sponsor shall stripe an exclusive 100-foot northbound right-turn lane on International Boulevard.	**Less Than Significant (If Caltrans**

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
			does not approve the proposed re-striping, the impact would remain significant and unavoidable)
Impact Traffic-7 Under 2025 conditions, the project would contribute more than two (2) seconds of average delay to the intersection of San Leandro Street/98th Avenue, and would contribute seven (7) percent of the cumulative traffic increase at the intersection.	**Potentially Significant**	**Mitigation Traffic-7**: Implementation of the proposed restriping on San Leandro Street as part of mitigation measure 5 would reduce the LOS to E (from F) and average delay from 81 (without project) to 60 seconds (with project). However, because the project would continue to contribute more than 5% of the future traffic delay, the impact identified under Criterion 7 would remain significant and unavoidable).	**Significant and Unavoidable**
Impact Traffic-8 Under 2025 conditions, the project would contribute seven (7) seconds of delay to the intersection of International Boulevard/98th Avenue, and would contribute nine (9) percent of the cumulative traffic increase at the intersection.	**Potentially Significant**	**Mitigation Traffic-8:** Implementation of the restriping of a new northbound right-turn lane on International Boulevard as required by Mitigation Traffic-6 would partially mitigate this impact; however, it would remain significant and unavoidable under both the Project and Cumulative scenarios. After the implementation of Mitigation Traffic-6 the intersection would remain at LOS F, meaning that pursuant to	**Significant and Unavoidable (If Caltrans does not approve the proposed re-striping, the**

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		Criterion 7, the Project's contribution to cumulative increases in traffic would continue to be considerable.	**impact would worsen, and would remain significant and unavoidable)**
IMPACTS AND MITIGATION DISCUSSED IN THE INITIAL STUDY			
Impact AIR-1: The project would generate dust during the construction period	**Potentially Significant**	**Mitigation Measure AIR-1:** The following measures should be included in remediation and construction contracts to control fugitive dust emissions: ▪ Water all active construction areas at least twice daily. ▪ Watering or covering of stockpiles of debris, soil, sand or other materials that can be blown by the wind. ▪ Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. ▪ Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. ▪ Sweep daily (preferably with water sweepers) all paved access road, parking areas and staging areas at remediation and construction sites. ▪ Sweep streets daily (preferably with water	**Less Than Significant**

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		sweepers) if visible soil material is carried onto adjacent public streets. ▪ Hydroseed or apply non-toxic soil stabilizers to inactive remediation and construction areas ▪ Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.). ▪ Limit traffic speeds on unpaved roads to 15 mph. ▪ Install sandbags or other erosion control measures to prevent silt runoff to public roadways. ▪ Replant vegetation in disturbed areas as quickly as possible.	
Impact CUL-1: Construction activities associated with the proposed project have the potential to disturb unknown prehistoric or historic archaeological resources. This would be considered a significant impact under CEQA.	**Potentially Significant**	**Mitigation Measure CUL-1:** Pursuant to the recommendation of the California Historical Resources Information System, prior to the issuance of grading permits, the project sponsor shall submit to the City the results of either 1) a pedestrian survey conducted by a qualified archaeologist; or 2) the results of augering conducted by a qualified archaeologist. If evidence of historic-period archaeological resources is encountered, the qualified archaeologist shall prepare a treatment plan for review and approval by the City to direct the excavation and treatment of any remains. The protocols governing the development of a treatment plan are discussed further below. In lieu of steps 1) and 2) above, the project sponsor	**Less than Significant**

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		may also elect to provide an archaeological monitor during ground disturbing activities to identify any remains uncovered during construction. If archaeological deposits are identified, it is recommended that such deposits be avoided by project activities. If such deposits cannot be avoided, they shall be evaluated for their significance. If the resources are not significant, further protection is not necessary. If the resources are significant, adverse effects on them would need to be avoided or such effects mitigated. Prehistoric materials can include flaked-stone tools (e.g. projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat affected rock, ash and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials can include wood, stone, concrete, or adobe footings; walls and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, and other refuse. Project personnel shall not collect or move any cultural material. Fill soils that may be used for construction purposes shall not contain archaeological materials. A report documenting the methods and findings, and providing recommendations as necessary shall be prepared.	**Less than Significant**

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Impact CUL-2 Construction activities associated with the proposed project have the potential to disturb unknown paleontological resources. This would be considered a significant impact under CEQA.		**Mitigation Measure CUL-2:** If deposits of paleontological materials are encountered during project activities, all work within 50 feet of the discovery shall be redirected until a qualified paleontologist can evaluate the finds and make recommendations. If paleontological deposits are identified, it is recommended that such deposits be avoided by project activities. If such deposits cannot be avoided, they shall be evaluated for their significance. If the resources are not significant, further protection is not necessary. If the resources are significant, adverse effects on them would need to be avoided or such effects mitigated.	
Impact CUL-3: The records search indicated that the project area is situated along former Bay marsh margins, an area considered sensitive. In addition, CA-ALA-52, a Native American archaeological site, is located either adjacent or within the immediate vicinity of the project area. Given the environmental setting and the archaeological sensitive nature of the immediate area, there is a moderate potential for Native American sites in the project area. The Center recommends that further archival and field study by an archaeologist is recommended.		**Mitigation Measure CUL-3:** Pursuant to the recommendation of the California Historical Resources Information System, prior to the issuance of grading permits, the project sponsor shall submit to the City the results of either 1) a pedestrian survey conducted by a qualified archaeologist; or 2) the results of augering conducted by a qualified archaeologist. If evidence of human remains are encountered the qualified archaeologist shall prepare a treatment plan for review and approval by the City to direct the excavation and treatment of any remains. The protocols governing the development of a treatment plan are discussed further below.	

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		In lieu of steps 1) and 2) above, the project sponsor may also elect to provide an archaeological monitor during ground disturbing activities to identify any remains uncovered during construction. Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonable suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined whether or not the remains are subject to the coroner's authority. If human remains are encountered, work within 50 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, an archaeologist shall be contacted to evaluate the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendent to inspect the site and provide	

Table I.1 – Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		recommendations for the proper treatment of the remains and associated grave goods. A report documenting the methods and findings, and providing recommendations as necessary, shall be prepared.	
Impact GEO-1: The Geotechnical Investigation completed for the project found that strong ground shaking could be expected at the project site during moderate to severe earthquakes in the general region, which is the situation for virtually all developments in the San Francisco Bay Area.	**Potentially Significant**	**Mitigation Measure GEO-1:** The proposed project shall be built in compliance with all recommendations contained in the Geotechnical Investigation prepared by Lowney Associates dated June 15, 2004.	**Less Than Significant**

Chapter II
PROJECT DESCRIPTION

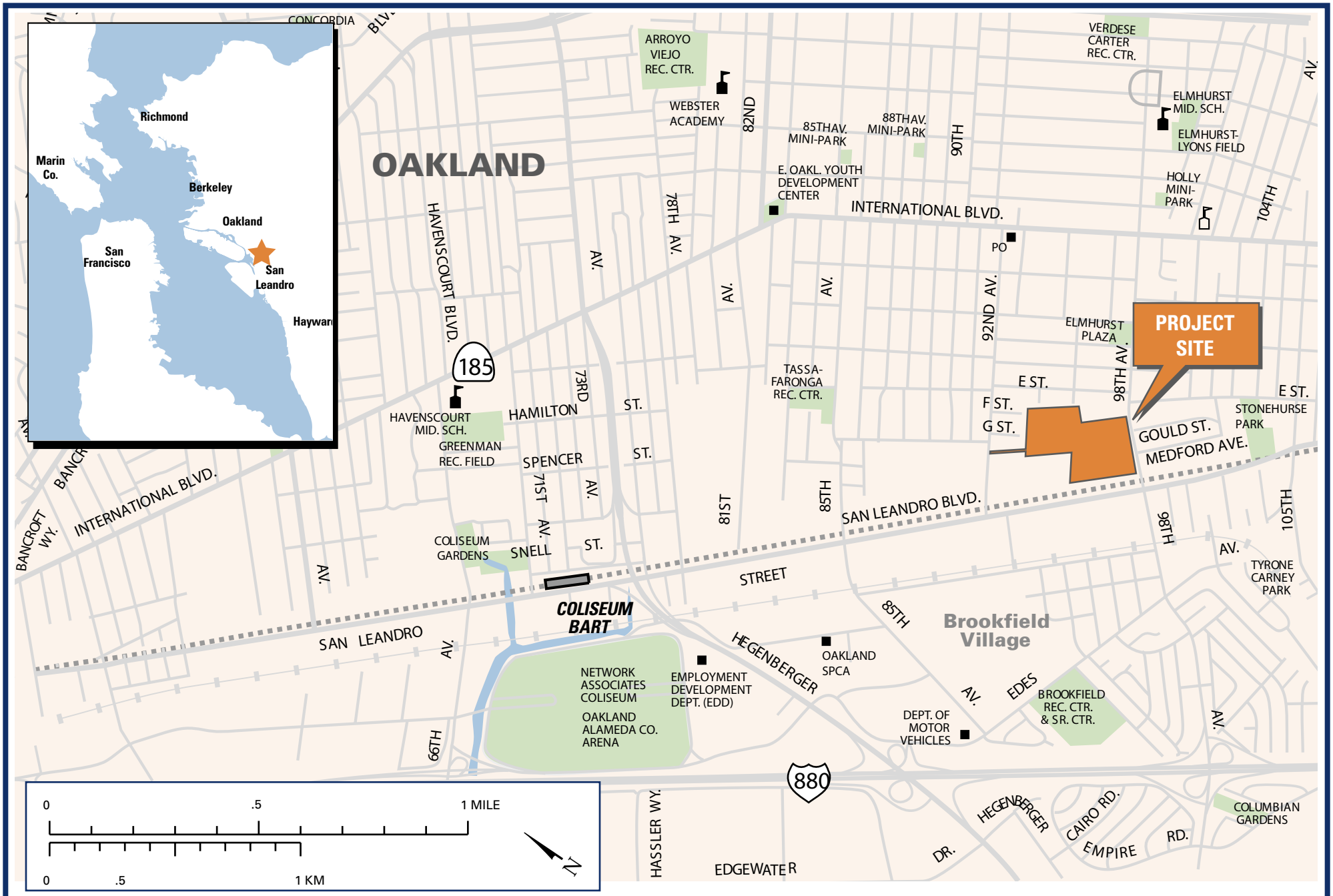
A. Project Site Location, Setting, and Ownership

The Project site is located in the City of Oakland, California, in western Alameda County (Figure 1). The 27.5-acre Project site is located between 92nd Avenue and 98th Avenue along San Leandro Street. Access to the development would be provided from both 92nd and 98th Avenues. The Project site contains five parcels as shown below:

- 044-4989-16 (860 92nd Avenue)
- 044-4989-17 (854 92nd Avenue)
- 044-4989-9-4 (921 San Leandro Street)
- 044-4989-10-2 (999 98th Avenue)
- 044-4989-11-2 (921 98th Avenue)

The property is currently owned by Ron and Marianne Dreisbach; Pulte Home Corporation is the Project sponsor and applicant. Figure 2 provides an aerial view of the Project site and adjacent areas. The surrounding area is developed with residential, commercial, and industrial uses. As shown in Figure 2, the area to the east is an established residential neighborhood. The site is bordered to the west by at-grade railroad tracks, the elevated BART Fremont line, and San Leandro Street. Uses to the north and south along San Leandro Street are primarily industrial, including auto-body shops, light industrial, storage, and warehouses. Uses fronting 98th Avenue range from industrial to commercial/office, and some residential. The parcel boundaries are shown in Figure 3. The existing General Plan Land Use Map designations are shown in Figure 4, while Figure 5 depicts the existing zoning for the Project site and adjacent areas.

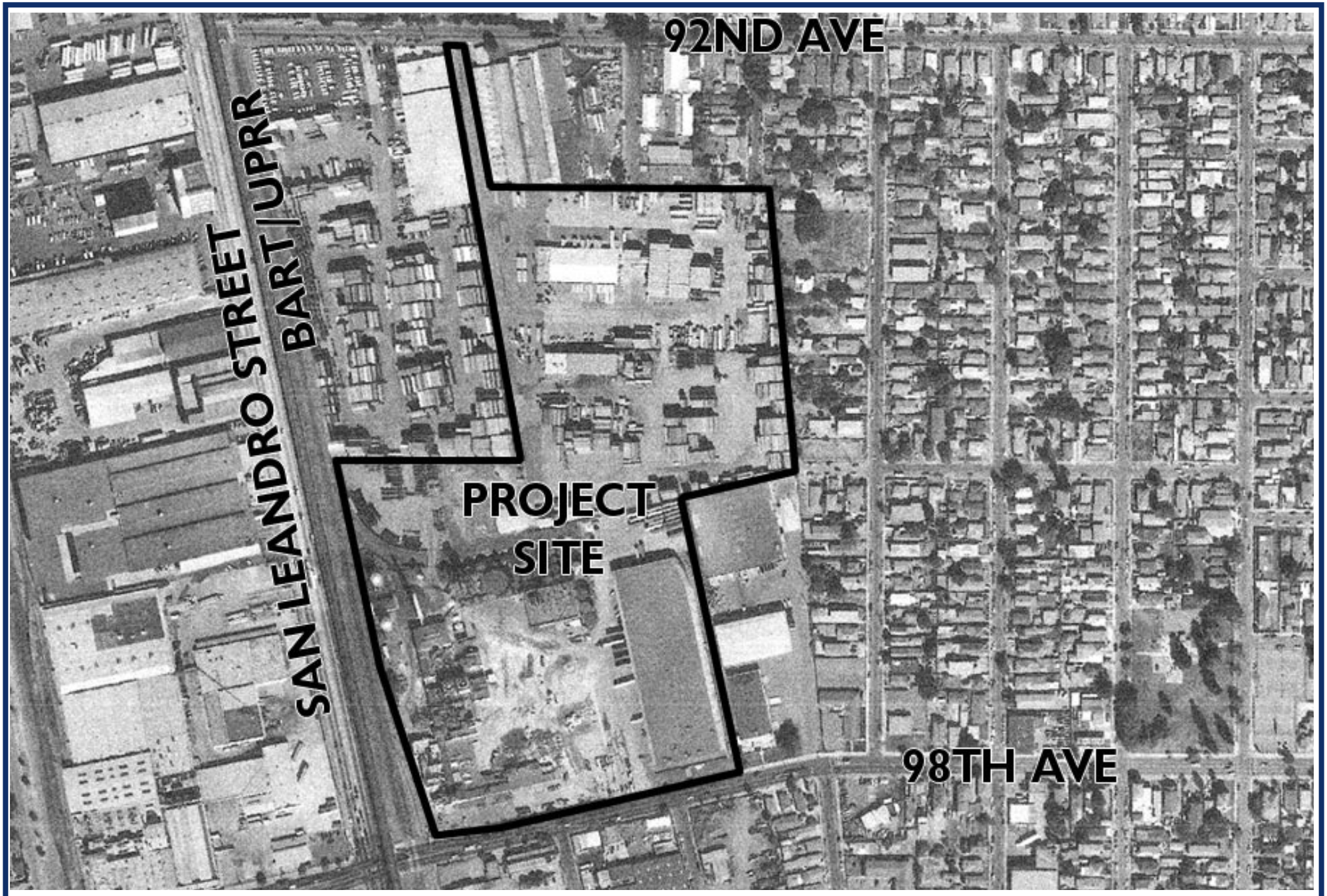
The site is level and covered with impervious surfaces. There are currently five buildings on the proposed Project site, as well as a water tower, tanks, and other remnants of the former use of the site by the Fleischmann Yeast Company. The site is currently used for the temporary storage of shipping containers following the demolition of the former Fleischmann yeast plant in 2003. The existing buildings include an industrial building comprising approximately 90,000 square feet, a brick office building comprising approximately 20,000 square feet, and a metal water tower and a nearby brick maintenance building. The water tower and maintenance building date from at least 1949 and were part of the historical operations of the former Fleishmann's yeast plant, which operated on the site from 1935 to 2003. Also on the site are a large transformer containment area, various storage and shop buildings; stockpiles of materials; sumps, transformers, and pipes; three deep water wells, two of which have been abandoned; and railroad spurs dating from at least 1949. All structures on the site would be demolished or removed from the site as part of the Project.



CirclePoint℠
The *whole* view.

FIGURE 1.

PROJECT LOCATION & VICINITY MAP



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The *whole* view.

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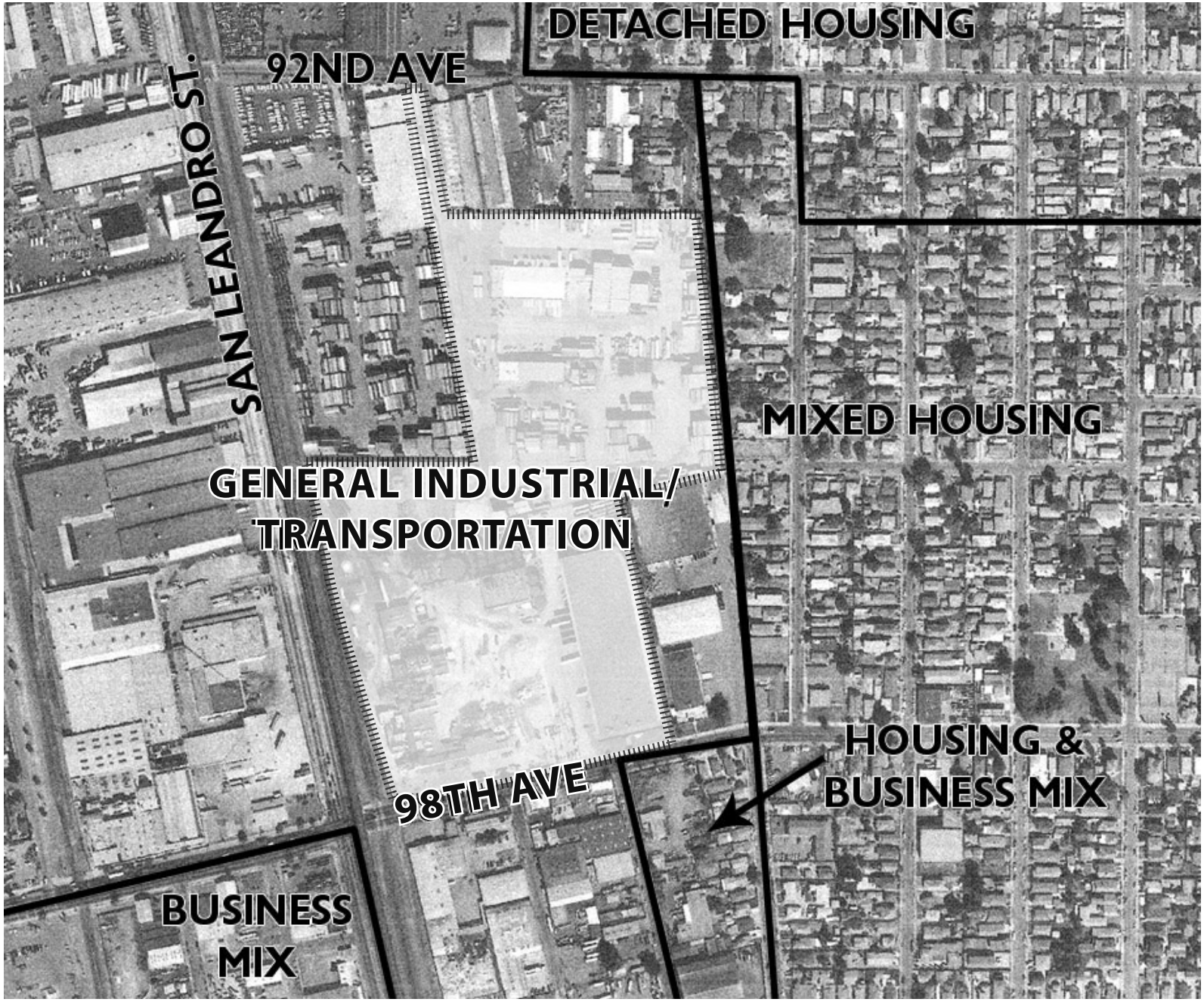
FIGURE 2.
AERIAL VIEW OF PROJECT SITE



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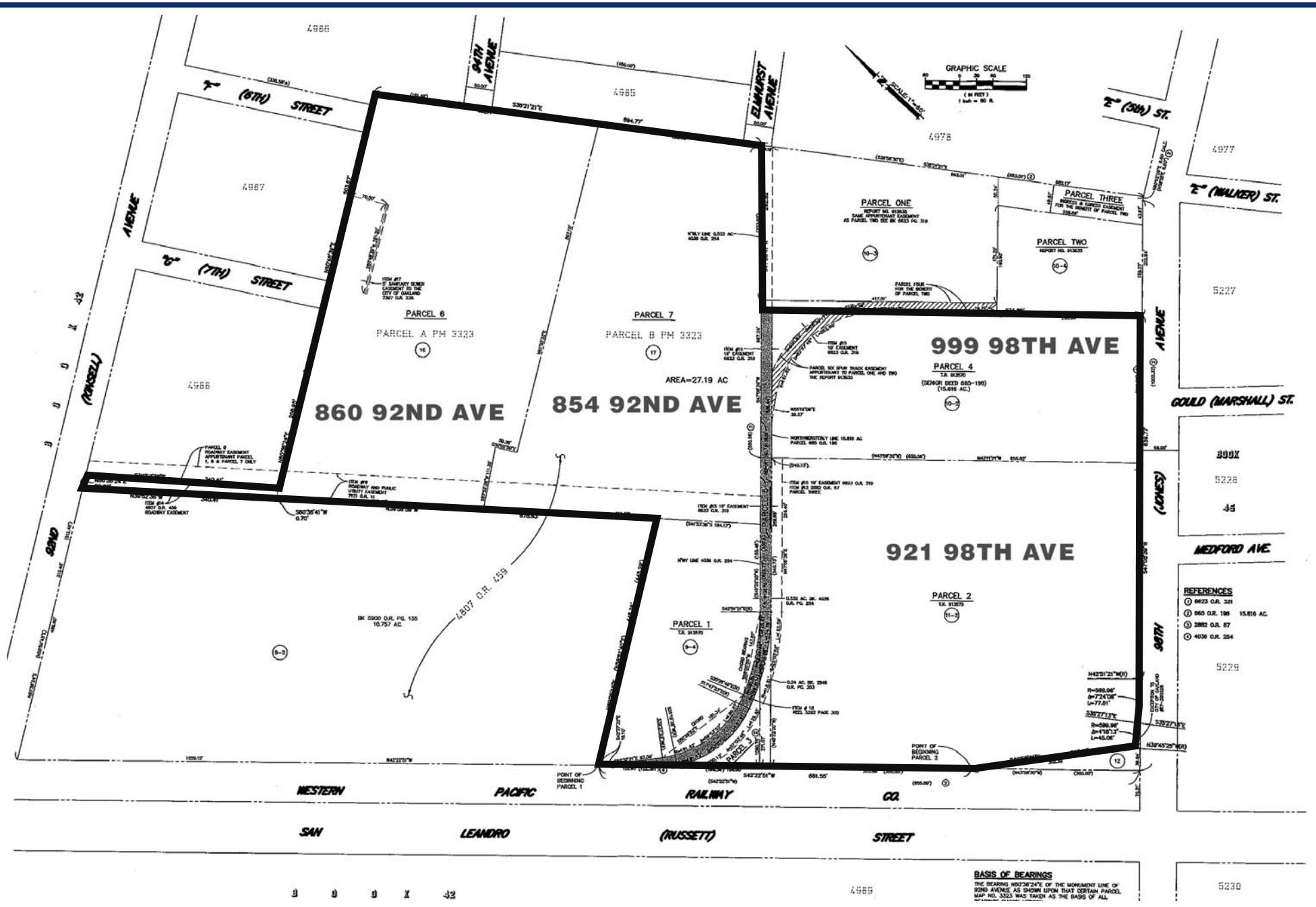
The *whole* view.

north

Project Area

FIGURE 4.

GENERAL PLAN DESIGNATIONS



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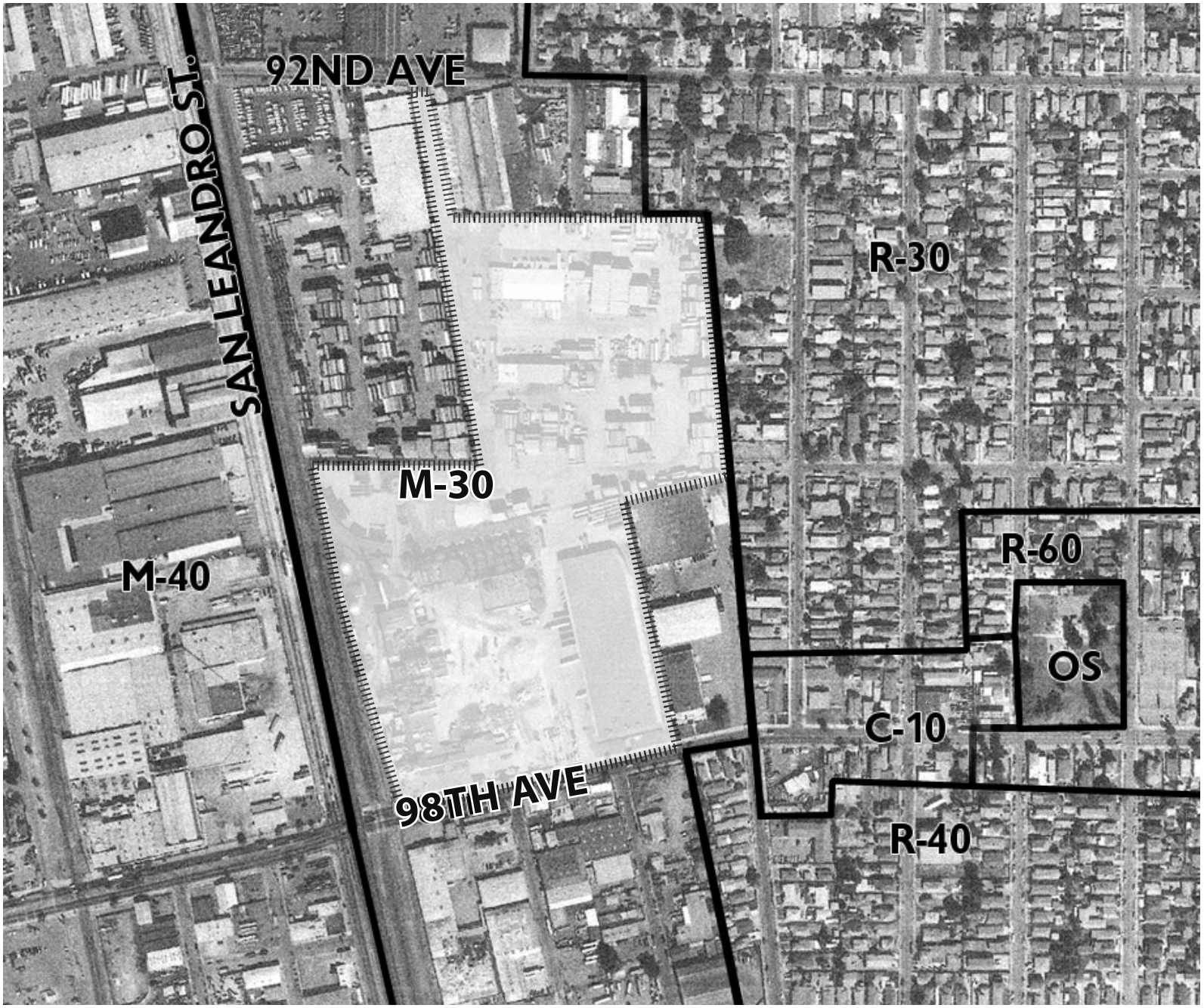
The *whole* view.

FIGURE 3.

PARCEL BOUNDARIES



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The *whole* view.

north

Project Area

FIGURE 5.
EXISTING ZONING

B. Project Characteristics

The Project sponsor has submitted an application for the construction of 366 residential units on an approximately 27.5-acre site: 74 single-family units, 108 detached condo units (also known as urban single-family units), and 184 town homes. The Project would require rezoning portions of the Project site to R-30 One-Family Residential Zone and R-50 Medium Density Residential Zone, and amending the General Plan designation from General Industrial/Transportation to Housing and Business Mix. These designations would be consistent with the proposed uses. The project would also require amending the Land Use Map of the Redevelopment Plan for the Coliseum Redevelopment Project Area from Industrial to Residential for land uses in the project area.

A preliminary site plan for the proposed Project is shown in Figure 6. Proposed zoning and General Plan designations are shown in Figure 7. As shown in the plan, town homes would be located along the San Leandro Street and 98th Avenue frontages of the site, while the single family dwellings would be grouped in the center and northern portions of the site and along the existing residential neighborhood bordering the site to the east. Access to the site would be provided via proposed driveways from both 98th Avenue and 92nd Avenue. The site design includes 10-foot-wide sidewalks and crosswalks at all signalized intersections to facilitate the safe movement of pedestrians and especially children around the site. Figure 12 (see Chapter III.D, Land Use) depicts the typical street frontage along98th Avenue to show the relationship between the street, sidewalks, landscaping strips, and building setbacks.

The proposed Project would encompass all 27.5 acres of the site. The Project would include approximately 1.6 acres of open space area within the development itself that would serve as open space for the residents of the Arcadia Park Project. There would be 6.4 acres of streets and emergency vehicle access.

Table II.1 Project Proposed Parcel Information

	R-30 Development Area	**R-50 Development Area**	
	Single-Family Homes	**Detached Condos (Urban SFD)**	**Townhomes**
Minimum parcel size	2600 s.f.	1999 s.f.	n/a*
Maximum parcel size	3942 s.f.	2893 s.f.	n/a*
Average parcel size	2904 s.f.	2182 s.f.	n/a*
Acreage devoted to this product type	4.93 acres	5.41 acres	4.47 acres
Net density	15 units per acre	20 units per acre	41 units per acre
Total Units	**74**	**108**	**184**

s.f. = square feet

* Townhomes would not have individual parcels/lots.

CirclePoint℠
The *whole* view.

north

FIGURE 6.

CONCEPTUAL SITE PLAN

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The *whole* view.

north

FIGURE 7.

PROPOSED ZONING & GENERAL PLAN DESIGNATIONS

The City requires 2 parking spaces per unit in the R-30 zone and 1 space per unit in the R-50 zone. The Project includes parking spaces in excess of what is required by the City zoning ordinance for a project of this size. The city would require 440 spaces, while the Project would provide 732 covered spaces. The Project site plan will also provide 235 on-street spaces.

Landscaping of the Project site would be developed in accordance with landscaping requirements applicable to residential properties in the City of Oakland. The site plan includes a series of linear parks and yard areas that would function both as green space and water quality enhancement for on-site drainage, as described in more detail below.

The 27.5-acre site is level and is covered by impervious surfaces, resulting in a current storm water run-off rate that approaches 90 percent. The Project sponsor proposes on-site retention of storm water in compliance with Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) Permit issued to the Alameda Countywide Clean Water Program by the San Francisco Bay Regional Water Quality Control Board (RWQCB). These regulations require new developments to detain, retain, or infiltrate runoff to reduce pollutants in storm water discharges to the maximum extent practicable. The NPDES Permit encourages the use of pervious surfaces to allow runoff to reach the underlying soil, and require the submission of a storm water control plan to document the methods proposed to be used to meet the requirements.

The Project design includes numerous linear parks throughout the development that would incorporate undulations capable of retaining storm water during peak flows. The Project would also incorporate manholes and catch basins with filters to separate out sediments. The retention of on-site runoff allows a portion of the storm water run-off to be filtered naturally and drain through soils rather than being captured and funneled directly into the City storm drains. The planned on-site retention and natural filtration of storm water would reduce the volume of storm water leaving the site. It is expected that the amount of storm water generated by the Project would be up to 15 percent less than the volume produced by the existing conditions. These proposed design features and success ratios would be documented in a storm water control plan.

C. Project Objectives

The general purpose of the proposed Arcadia Park Residential Project is to provide high-quality housing in the City of Oakland, specifically, to develop 366 attached and detached homes along with 10 distributed parks on 27.5 acres. Constructing housing units within the existing infrastructure of the Bay Area would enable homeowners to live near established transportation systems, such as the Bay Area Rapid Transit (BART), Amtrak, and area freeways. The proposed Project would provide in-fill development within an already-developed area near to services and job centers, allowing residents to experience shorter commutes that those living in outlying areas of the region. More specifically, the Project objectives are as follows:

- Developing market-rate residential units at urban densities, which provide ownership opportunities with a variety of housing types and unit sizes that would be available to a range of market-rate household income levels and first time home buyers;

- Expanding Southeast Oakland's market-rate occupied housing stock to encourage local-serving retail development and to attract private construction and mortgage lenders to this sub-market;
- Developing urban infill housing with convenient transportation access near the center of the Bay Area, which would serve to divert housing from outlying areas and reduce long-distance commute traffic and related pollution and improve the City's job/housing balance and accommodate its fair share housing needs;
- Redeveloping and revitalizing underutilized or vacant land within Southeast Oakland to create a vibrant and pedestrian-oriented residential community;
- Providing additional open space throughout the development in order to give a sense of visual and spatial relief to the residents and the community;
- Providing for the undergrounding of utilities and also providing extensive off-site improvements to existing, old infrastructure with respect to the streetscape, sidewalks, lighting and parking, and
- Constructing financially feasible developments with sufficient flexibility to adjust to market needs and provide reasonable returns on investments so as to secure construction and long-term financing.

D. Construction Phasing of the Project

Construction of the proposed Project would involve the removal of all structures, shipping containers, and materials from the site. Construction is expected to last approximately 20 months with site preparation starting in April 2006 and construction starting in October 2006. All staging for construction equipment and material would occur on-site. Site preparation and construction activities would be conducted consistent with Occupational Safety and Health Administration (OSHA) and CalOSHA regulations and local requirements to provide for workers and public safety. Health and safety measures would include, but may not be limited to, security fencing, appropriate signage, and restriction of public access to the site. The Project would also require the development of infrastructure (roads, water, sewer, etc.) to serve the proposed units.

CHAPTER III
ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION

A. TRANSPORTATION AND CIRCULATION

1. Introduction

This section evaluates the project's potential effect on traffic congestion at local intersections. The analysis addresses both project-specific impacts and also evaluates cumulative impacts to determine whether the Project's contribution to cumulative increases in traffic would be significant.

The main conclusions of this section are as follows:

The Project would result in the need for a traffic signal at the intersection of International Boulevard and 92nd Avenue resulting in a less-than-significant impact. If Caltrans does not approve the installation of a traffic signal, this impact would remain significant and unavoidable.

The Project would result in significant and unavoidable impacts (both project and cumulative) at the intersection of International Boulevard and 98th Avenue, as well as cumulative impacts to the intersection of San Leandro Street and 98th Avenue. Mitigation identified in this section would reduce the impact, but not to a less-than-significant level, and no other feasible mitigation measures are available to further reduce this potential impact. If Caltrans does not approve the proposed re-striping on International Boulevard, the identified impact would worsen, and would still remain significant and unavoidable

The easternmost Project access drive along 98th Avenue could encourage cut through traffic from 98th to 92nd Avenues. This access drive will be reconfigured to only allow right turns in and out resulting in a less-than-significant impact.

2. Approach and Methodology

This chapter addresses the impact of the Project on the existing transportation, circulation and parking conditions on the surrounding streets and on the Project site. This includes an analysis of potential impacts on local roadway level of service, transit, on-site circulation, and parking. In addition, analyses of the impacts to regional roadways are also included to meet the requirements of the Congestion Management Program. The analysis focuses on physical impacts to the environment (both direct and indirect) that could result from implementation of the Project. This chapter is based on a technical report prepared to analyze the impacts on transportation and circulation entitled "Arcadia Park Residential Transportation Analysis", prepared by Fehr & Peers, May 2005. All technical reports are available for public review between the hours of 8:00 a.m. and 5:00 p.m. at the City of Oakland Community and Economic Development Agency, 250 Frank Ogawa Plaza, Suite 3315, Oakland.

This study evaluates transportation conditions for the following scenarios:

- Existing – Existing conditions based on recent traffic counts.
- Existing Plus Project – Existing plus Project conditions representing near-term conditions subsequent to opening day of the Project.
- Year 2010 Without Project – Year 2010 Without Project conditions representing near-term conditions without the Project, including background growth and traffic from future developments as forecasted by the Year 2010 Alameda County Congestion Management Agency (CMA) travel demand model based on the methodology established by the City of Oakland.
- Year 2010 With Project – Year 2010 With Project conditions representing near-term forecasted conditions plus the Project.
- Cumulative (2025) Without Project – Cumulative Without Project conditions representing long-term conditions without the Project, including background growth and traffic from future developments as forecasted by the Year 2025 Alameda County Congestion Management Agency (CMA) travel demand model based on the methodology established by the City of Oakland.
- Cumulative (2025) With Project – Cumulative With Project conditions representing long-term forecasted conditions plus the Project.

3. Environmental Setting

a. Existing Conditions

Regional Access

Interstate I-880 (I-880) is a north-south eight-lane freeway located west of the Project site. Near the Project vicinity, I-880 has an average daily traffic volume (ADT) of 226,000 vehicles (Caltrans, 2003). Access to the Project site from I-880 is provided via the 98th Avenue interchange.

Interstate 580 (I-580) is an eight-lane east-west freeway located east of the Project site. Near the Project vicinity, I-580 has an average daily traffic volume (ADT) of 166,000 vehicles (Caltrans, 2003). Access to the Project site from I-580 is provided via the 98th Avenue/Golf Links Road interchange.

Local Access

98th Avenue is an east-west four-lane arterial bordering the south side of the Project. The roadway provides an east-west connection between I-880 and I-580. Direct access to the Project site from 98th Avenue will be provided.

San Leandro Street is a four-lane north-south arterial bordering the west side of the Project. Elevated BART tracks run adjacent and parallel to San Leandro Street. It provides a north-south connection between the cities of Oakland and San Leandro.

92nd Avenue is a two-lane east-west roadway bordering the north side of the Project. Direct access to the Project site from 92nd Avenue will be provided. International Boulevard is a four-lane north-south arterial located to the east of the Project. Access to the Project site from International Boulevard is provided via 92nd Avenue and 98th Avenue.

Figure 8 shows the local streets and intersections in relation to the site.

b. Existing Level of Service

The level of service (LOS) is a qualitative assessment of motorists' and passengers' perceptions of traffic conditions. The LOS is generally described in terms of travel time and speed, freedom to maneuver, traffic interruptions, comfort and convenience. The LOS applies quantifiable traffic measures such as average speed, intersection delays, and volume-to-capacity ratios to approximate driver satisfaction. These measures differ by roadway type because the user's perceptions and expectations vary by roadway type. Individual levels of service are designated by letters "A" for most favorable to "F" for least favorable with each representing a range of conditions.

For intersections, the level of service is defined by the average delay per vehicle in seconds. The delay is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. The criteria are provided in Table III.A.1.

Table III.A.1 Intersection Level of Service Thresholds

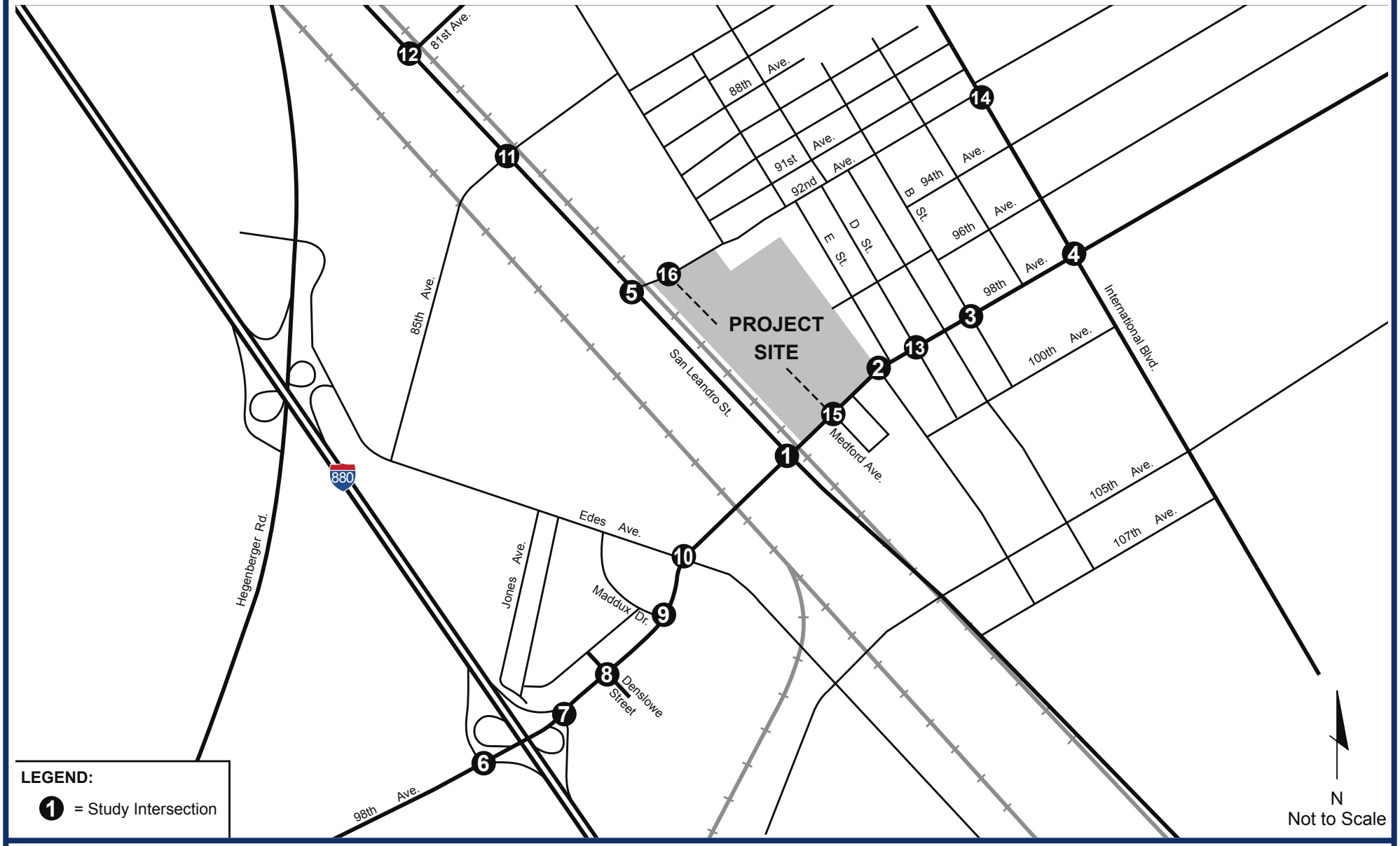
Level of Service	Signalized Intersection Control Delay (sec/veh) [1]	Unsignalized Intersection Control Delay (sec/veh) [1]	General Description
A	0 – 10.0	0 – 10.0	Little to no congestion or delays
B	10.1 – 20.0	10.1 – 15.0	Limited congestion. Short delays
C	20.1 – 35.0	15.1 – 25.0	Some congestion with average delays
D	35.1 – 55.0	25.1 – 35.0	Significant congestion and delays
E	55.1 – 80.0	35.1 – 50.0	Severe congestion and delays
F	> 80.0	> 50.0	Total breakdown with extreme delays

1. Control delay includes initial deceleration, queue move-up time, time stopped, and acceleration

Source: *Highway Capacity Manual* (HCM) – Chapter 16: Signalized Intersections and Chapter 17: Unsignalized Intersections (Transportation Research Board, 2000).

The City Transportation Services Division identified sixteen intersections in the Project vicinity as key intersections.[1] Those intersections directly adjacent to the Project site were considered to be the ones most likely to be impacted by the Project, while those intersections at freeway access points are important intersections for downtown circulation. Weekday morning (7:00 to 9:00 a.m.) and evening (4:00 to 6:00 p.m.) peak period intersection turning movement counts were conducted at the existing study intersections in early December 2004 and in April 2005 on clear days with area schools in normal session. The highest hourly morning and evening volume for

[1] Study intersections were selected where project was expected to contribute 3 percent or more traffic under cumulative conditions.



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The *whole* view.

north

FIGURE 8.

PROJECT STUDY INTERSECTION

each intersection from the counts is called the AM peak hour and PM peak hour volume, respectively. The peak hour data is used as the basis for the intersection operational analysis. The existing LOS at these intersections is shown in Table III.A.2.

Table III.A.2 Existing Peak Hour Intersection LOS Summary

Location	Control[1]	Peak Hour	Delay[2]	LOS[2]
San Leandro Street/98th Avenue	Signal	AM	38	D
		PM	43	D
E Street/98th Avenue	Signal	AM	5	A
		PM	4	A
B Street/98th Avenue	Signal	AM	3	A
		PM	4	A
International Boulevard/98th Avenue	Signal	AM	28	C
		PM	37	D
San Leandro Street/92nd Avenue	Signal	AM	6	A
		PM	7	A
I-880 SB Ramps/98th Avenue	Signal	AM	14	B
		PM	9	A
I-880 NB Ramps/98th Avenue	Signal	AM	16	B
		PM	20	B
Denslowe Street/98th Avenue	Signal	AM	10	A
		PM	5	A
Maddux Drive/98th Avenue	Signal	AM	4	A
		PM	4	A
Edes Avenue/98th Avenue	Signal	AM	25	C
		PM	15	B
San Leandro Street/85th Avenue	Signal	AM	14	B
		PM	20	B
San Leandro Street/81st Avenue	Signal	AM	11	B
		PM	10	A
D Street/98th Avenue	SSSC	AM	1 (NB - 21)	A (C)
		PM	1 (NB - 48)	A (E)
International Boulevard/92nd Avenue	SSSC	AM	3 (EB - 27)	A (D)
		PM	13 (EB - >50)	B (F)
Medford Avenue/98th Avenue	SSSC	AM	0 (NB - 20)	A (C)
		PM	1 (NB - 31)	A (D)

1. Signal = signalized intersection; SSSC = side-street stop-controlled intersection.
2. Signalized intersection level of service based on weighted average control delay per vehicle, according to the *Highway Capacity Manual* (Transportation Research Board, 2000). Side-street stop-controlled level of service based on the weighted average control delay of controlled movements. For side-street stop controlled intersections, the worst side-street movement is presented in parentheses.

Source: Fehr & Peers, 2005.

For signalized intersections, the delay represents the *average* intersection delay per vehicle in seconds; individual approaches may experience longer delays. The LOS and delay for the unsignalized intersections represent the average total delay per vehicle for the intersection, which includes time to move from the back to the front of the queue.

The City's standard for all intersections is LOS "D.". Currently all study intersections operate above the City standard during the AM and PM peak hours, except for the side-street approaches to the D Street/98th Avenue and International Boulevard/92nd Avenue intersections, which currently operate at unacceptable service levels.

c. Transit Facilities

The Project is located in an urban area of Oakland and is well served by the Alameda-Contra Costa Transit District (AC Transit) bus service and Bay Area Rapid Transit (BART): the two transit providers within the study area.

AC Transit Route 98 provides bus service along 98th Avenue. Based on the most recent AC Transit schedule, eight buses provide bus service along 98th Avenue via Route 98 during the AM and PM peak hour. A typical bus has a capacity of 40 passengers. With bus stops at San Leandro Street, Route 98 provides the most direct transit access to the Project site. As of January 2005, buses on Route 98 operate on approximately 15-minute headways on weekdays between 6:00 a.m. and 9:00 p.m. Load information obtained from AC Transit indicates that the maximum load along Route 98 near the Project site was 20 riders in 2004. Other transit routes within a half-mile of the Project site include Route 45 on Edes Avenue and Routes 82 and 82L on International Boulevard.

The Project site is located about midway between the Coliseum/Oakland Airport and San Leandro BART stations. Both BART stations are approximately 1.5 miles from the Project site. The BART system operates from about 4:00 a.m. to 1:00 a.m. on weekdays, 6:00 a.m. to 1:00 a.m. on Saturdays, and 8:00 a.m. to 1:00 a.m. on Sundays. Approximately 24 trains pass through the Coliseum/Oakland Airport and San Leandro BART stations during the AM and PM peak hour. BART's Fremont-Daly City line, Dublin/Pleasanton-Daly City, and Freemont-Richmond lines serve the two BART stations. Based on field observations, each BART train has anywhere between four and nine cars. Based on information provided by BART, each BART car has a capacity of about 67 passengers. Therefore, the minimum capacity of a BART train is about 268 passengers.

d. Bicycle and Pedestrian Facilities

Pedestrian facilities in the study area include sidewalks, pedestrian signals at signalized intersections, and crosswalks. Near the project site, sidewalks are provided on both sides of 98th Avenue and 92nd Avenue. On San Leandro Street, a sidewalk is only provided on the west side. In the project study area, both 98th Avenue and International Boulevard are designated as pedestrian routes in the City of Oakland Pedestrian Master Plan. In the project study area, signalized intersections have pedestrian signal heads and marked crosswalks on all approaches.

No marked bicycle facilities are provided to give direct access to the project site. However, according to the City of Oakland Bicycle Master Plan (BMP), a Class I bike path is proposed along San Leandro Street. Class I bike paths are provided on a paved right of way completely

separated from the street. In the BMP, 98th Avenue is considered a special study corridor where Class II or Class III bicycle facilities are being considered for further evaluation. Class II bicycle lanes—which are striped lanes on the street—are being proposed on International Boulevard. Based on a conversation with the Transportation Services Division2, the BMP is currently being updated. There has been a discussion of eliminating or relocating the Class II bicycle lanes on International Boulevard due to conflicts with roadway configuration and high bus activity.

e. Traffic Signal Warrant Evaluation

Each of the unsignalized study intersections was evaluated for the peak hour traffic signal warrant using the 2003 Manual on Uniform Traffic Control Devices (MUTCD). The intersection of International Boulevard/92nd Avenue barely meets the peak hour traffic signal warrant during the PM peak hour. Although the intersection of D Street/98th Avenue will experience high side street delays, the intersection does not meet the peak hour traffic signal warrant. Although the intersection of D Street/98th Avenue does not meet the peak hour traffic signal warrant, this intersection will be signalized as part of the Citywide Pedestrian Safety Improvement Project.

e. General Plan Policies

The following Oakland General Plan objectives and policies related to transportation are relevant to the proposed Project:

Objective T2: Provide mixed use, transit-oriented development that encourages public transit use and increases pedestrian and bicycle trips at major transportation nodes.

> *Policy T2.1 Encouraging Transit-Oriented Development:* Transit-oriented developments should be encouraged at existing or proposed transit nodes, defined by the convergence of two or more modes of public transit such as BART, bus, shuttle service, light rail, or electric trolley, ferry, and inter-city or commuter rail.

Objective 3: Provide a hierarchical network of roads that reflects desired land use patterns and strives for acceptable levels of service at intersections.

Objective T.4: Increase use of alternative modes of transportation

> *Policy T4.1 Incorporating Design Features for Alternative Travel:* the City will require new development, rebuilding, or retrofitting to incorporate design features in their projects that encourage the use of alternative modes of transportation such as transit, bicycling, and walking.

Objective T6: Make streets safe, pedestrian accessible, and attractive.

> *Policy T6.2 Improving Streetscapes:* The city should make major efforts to improve the visual quality of streetscapes. Design of the streetscape, particularly in neighborhoods and commercial centers, should be pedestrian-oriented and include lighting, directional signs, trees, benches, and other support facilities.

Objective T7: Reduce air pollutants caused by vehicles.

[2] Phone conversation with Yvetteh Ortiz-Rios on June 22, 2005.

4. Impacts and Mitigation

The impacts of the Project were analyzed at the local intersections surrounding the Project site and along regional roadways in the vicinity. The impacts to the local and regional roadway system are described in terms of change in LOS. In addition to the intersection and roadway operations, the impacts of the Project to local traffic and pedestrian circulation were also considered.

a. Significance Criteria

The Project would have a significant impact if any of the following criteria are met:

Criterion 1: At a signalized study intersection, which is located outside the Downtown[3] area, the project would cause the level of service[4] to degrade to worse than LOS D (i.e., E or F).

Criterion 2: At a signalized study intersection, which is located within the Downtown area, the project would cause the LOS to degrade to worse than LOS E (i.e., F).

Criterion 3: At a signalized study 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., F).

Criterion 4: At a signalized study intersection in 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., F).

Criterion 5: At a signalized study intersection for all areas where the level of service is LOS F, the project would cause: (a) the total intersection average vehicle delay to increase by two (2) or more seconds, or (b) an increase in average delay for any of the critical movements of four (4) seconds or more; or (c) the V/C ratio to increase three (3) percent (but only if the delay values cannot be measured accurately).

Criterion 6: At an unsignalized study intersection in all areas, the project would add ten (10) or more vehicles and after project completion satisfy the Caltrans peak hour volume warrant.

Criterion 7: A project's contribution to cumulative impacts is considered "considerable" when the project contributes five (5) percent or more of the cumulative traffic increase as measured by the difference between existing and future cumulative (with project) conditions.

[3] Downtown is defined in the Land Use and Transportation Element of the General Plan (page 67) as the area generally bounded by 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.

[4] LOS and delay calculations for local intersections are based on the *Highway Capacity Manual* (Transportation Research Board, National Research Council, 2000 edition). For CMA intersections (if project proposes a general plan amendment or if an EIR is performed and finds 100 or more peak trips), the 1985 *Highway Capacity Manual* method is used. For state facilities, the Planning Department is consulted for appropriate methods.

Criterion 8: The project would cause a roadway segment on the Metropolitan Transportation System to operate at LOS F or would increase the V/C ratio by more than three (3) percent for a roadway segment that would operate at LOS F without the project.

Criterion 9: The project would substantially increase traffic hazards to motor vehicles due to a design feature (e.g., sharp curves or dangerous intersections) that does not comply with Caltrans design standards or incompatible uses (e.g., farm equipment).

Criterion 10: Result in less than two emergency access routes for streets exceeding 600 feet in length.

Criterion 11: If construction traffic from the project would have a significant, though temporary, impact on the environment or if project construction would substantially affect traffic flow and circulation, parking, and pedestrian safety.

Impacts to Other Transportation Modes

The project would have a significant impact to other transportation modes if any of the following criteria are met:

Criterion 12: The project would 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.

Criterion 13: The project would fundamentally conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle routes).

Criterion 14: The project would substantially increase traffic hazards to bicycles or pedestrians due to a design feature (e.g., sharp curves or dangerous intersections) that does not comply with Caltrans design standards or mixes incompatible uses (e.g., farm equipment).

Criterion 15: The project would generate added transit ridership that would:

- 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 percent over a peak thirty minute peak hour;
- increase the peak hour average ridership on BART by three (3) percent where the passenger volume would exceed the standing capacity of BART trains; and
- 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.

Parking

The City of Oakland does not consider parking a CEQA issue for the purposes of impact analysis. Parking impacts are assessed according to the following:

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.[5] 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 additional 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.

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 transit service, in particular, would be in keeping with the City's "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 EIR analysis evaluates whether the project's estimated parking demand (both project-generated and project-displaced) 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. The analysis compares the proposed parking supply with both the estimated demand and the Oakland Planning Code requirements.

b. Project Generated Traffic

For the purpose of analyzing the impacts of the Project on local intersections, the vehicle trips generated by the Project were estimated and distributed to the local street network.

(1) Trip Generation

Trip generation for the proposed Project was calculated using trip generation data presented in the Institute of Transportation Engineers (ITE), Trip Generation, (7th Edition). The trip generation of the existing land uses was subtracted from the estimated trip generation from the proposed Project

[5] *San Franciscans Upholding the Downtown Plan v. the City and County of San Francisco* (2002) 102 Cal. App.4th 656.

to determine the net increase in trips. The trip generation for the existing land uses was based on actual vehicles counted in the field during the PM peak hour. As shown in Table III.A.3, the Project would result in a net increase of 2,688 daily trips, including 164 AM peak hour and 221 PM peak hour trips throughout the study area.

(2) Existing Plus Project Intersection Operations

Existing Plus Project intersection operations were evaluated for the weekday AM and PM peak hours at the study intersections. Table III.A.4 summarizes the Existing Plus Project intersection analysis results. As shown in Table III.A.4, most of the study intersections will continue to operate at acceptable service levels during both the AM and PM peak hours except the critical side-street approach at three unsignalized study intersections. With the addition of Project traffic, traffic conditions will worsen for the critical side-street approaches to the D Street/98th Avenue, International Boulevard/92nd Avenue, and Medford Avenue/98th Avenue/Project Driveway intersections.

c. No Impact

Criteria 2, 3, 4, 5, and 8 are not applicable to the Existing Plus Project condition, since the Project site is not located within the downtown area, and all local intersections are currently operating at LOS D or better. Cumulative impacts, including Year 2010 and 2025 analysis is presented in Section f. below.

Table III.A.3 Project Trip Generation

Land Use	Daily Trips	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Single-Family/Detached Condo (182 units)	1,804	34	103	137	116	68	184
Townhomes (184 Units)	1,078	14	70	84	66	33	99
Less Existing Trips	*(194)*	*(41)*	*(16)*	*(57)*	*(18)*	*(44)*	*(62)*
Net New Trips	***2,688***	***7***	***157***	***164***	***164***	***57***	***221***

Notes: Trip generation for residential units determined from fitted curve equations for Single-Family (Land Use 210) and Townhomes (Land Use 230) in ITE's, *Trip Generation*, (7th Edition), as presented below:

Single Family:

Daily Equation: Ln(T) = 0.92 Ln(X) + 2.71
AM Equation: T = 0.70 (X) + 9.43 (inbound = 25 percent, outbound = 75 percent)
PM Equation: Ln (T) = 0.90 Ln(X) + 0.53 (inbound = 63 percent, outbound = 37 percent)

Townhomes:

Daily Equation: Ln(T) = 0.85 Ln(X) + 2.55
AM Equation: Ln(T) = 0.80 Ln(X) + 0.26 (inbound = 17 percent, outbound = 83 percent)
PM Equation: Ln (T) = 0.82 Ln(X) + 0.32 (inbound = 67 percent, outbound = 33 percent)

Where: T = trip ends, Ln = natural logarithmic equation, and X = number of dwelling units.

PM peak hour trip generation for existing land uses based on PM peak hour field survey. AM and daily trip generation for existing land uses estimated by applying ITE's Heavy Industrial AM to PM and daily to PM trip generation ratios, respectively.

Source: ITE; Fehr & Peers, 2005.

Table III.A.4 Existing Plus Project Intersection Levels of Service

Intersection	Control[1]	Peak Hour	Existing		Existing Plus Project	
			Delay[2]	LOS[2]	Delay[2]	LOS[2]
San Leandro Street/98th Avenue	Signal	AM	38	D	40	D
		PM	43	D	44	D
E Street/98th Avenue	Signal	AM	5	A	5	A
		PM	3	A	3	A
B Street/98th Avenue	Signal	AM	3	A	3	A
		PM	4	A	4	A
International Boulevard/98th Avenue	Signal	AM	28	C	28	C
		PM	37	D	39	D
San Leandro Street/92nd Avenue	Signal	AM	6	A	7	A
		PM	7	A	8	A
I-880 SB Ramps/98th Avenue	Signal	AM	14	B	14	B
		PM	9	A	9	A
I-880 NB Ramps/98th Avenue	Signal	AM	16	B	16	B
		PM	20	B	22	C
Denslowe Street/98th Avenue	Signal	AM	10	A	10	A
		PM	5	A	5	A
Maddux Drive/98th Avenue	Signal	AM	4	A	4	A
		PM	4	A	4	A
Edes Avenue/98th Avenue	Signal	AM	25	C	25	C
		PM	15	B	15	B
San Leandro Street/85th Avenue	Signal	AM	14	B	14	B
		PM	20	B	20	B
San Leandro Street/81st Avenue	Signal	AM	11	B	11	B
		PM	10	A	10	A
D Street/98th Avenue	SSSC	AM	1 (NB - 21)	A (C)	1 (NB – 23)	A (C)
		PM	1 (NB - 48)	A (E)	1 (NB - >50)	A (F)
International Boulevard/92nd Avenue	SSSC	AM	3 (EB - 27)	A (D)	4 (EB - 35)	A (D)
		PM	13 (EB - >50)	B (F)	19 (EB - >50)	C (F)
Medford Avenue/98th Avenue/ Project Driveway	SSSC	AM	0 (NB - 20)	A (C)	3 (SBL - 45)	A (E)
		PM	1 (NB - 31)	A (D)	3 (SBL - >50)	A (F)
Project Driveway/92nd Avenue	SSSC	AM	n/a	n/a	1 (NB - 10)	A (B)
		PM			1 (NB - 12)	A (B)

1. Signal = signalized intersection; SSSC = side-street stop-controlled intersection.
2. Signalized intersection level of service based on weighted average control delay per vehicle, according to the *Highway Capacity Manual* (Transportation Research Board, 2000). Side-street stop-controlled level of service based on the weighted average control delay of controlled movements. For side-street stop-controlled intersections, the worst side-street movement is presented in parentheses.

Source: Fehr & Peers, 2005.

Parking

As shown in Table III.A.5 below, the City's Parking Code would require a total of 440 spaces for the Project. The Institute of Traffic Engineers estimated demand for a Project of this size would be 602 spaces, based on national surveys presented in the Parking Generation Manual (3rd Edition) published by ITE. The Project proposes a total of 732 spaces (two parking spaces per R-30 unit and one parking space per R-50 unit). The Project would therefore provide 292 more spaces than are required by the City code. Based on the City's parking code and ITE, the Project would provide adequate on-site parking. The City's Municipal Code does not include any requirements for bicycle parking facilities for residential subdivisions.

Table III.A.5 On-Site Parking Evaluation

Land Use	City of Oakland Code		ITE		Proposed Project
	Rate	Required Project Parking	Rate	Demand	Parking Supply
Single Family (74 units)	2 spaces per unit	148	1.83 spaces per unit	334	
Town homes (292 units)	1 space per unit	292	1.46 spaces per unit	268	
Total		**440**		**602**	**732**

Source: Fehr & Peers, 2005.

d. Less Than Significant Impacts

Criteria 1 – *(Intersection Operations)* As shown in Table III.A.4, the addition of trips generated by the Project would not cause any local intersections to operate below the City's LOS D standard. The Project would generate an estimated 2,688 net new trips on a daily basis. As part of the traffic analysis, these daily trips were distributed across the local street network to see if the level of service at any intersection would worsen to an unacceptable level (LOS E or F). The study found that the Project would not result in any unacceptable increases in delay or any unacceptable changes in level of service at any local intersection. Area intersections continue to operate at acceptable levels (LOS D or better) with the Project. (Cumulative impacts of the Project are presented in Section f. below.)

Criterion 10 - *(emergency access routes)* According to the City's significance criteria, the Project results in a significant impact if the design of the Project contains less than two emergency access routes for streets exceeding 600 feet in length. A review of the Project site plan indicates that three internal roadways have only one access. However, all of these roadways are well below 600 feet in length, and would not therefore constitute a significant impact.

The City Fire Department has reviewed the proposed site circulation plan and found the proposed onsite circulation to be acceptable. All internal roadways will have at least 20 feet of unobstructed roadway width, in conformance with Fire Department requirements. The Project would provide four access points along 98th Avenue and 92nd Avenues.

Criterion 12 – *(air traffic patterns)* The Project would have no effect on air traffic patterns. The two and three story residential infill development would be in keeping with the bulk and scale of surrounding development and would not require any changes to existing air traffic patterns.

Criterion 13 – *(alternative transportation)* According to the City's significance criteria, an impact would occur if the Project fundamentally conflicts with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle routes) or if the design of the Project does not support multi-modal transportation modes, including transit, bicycles, and pedestrians. Based on the proposed site plan, the Project does not appear to conflict with adopted plans/policies for alternative transportation.

Based on the site plan dated April 8, 2005 the Project would provide sidewalks on both sides of each internal roadway and provide a planting strip between the road and sidewalk to separate vehicle traffic from pedestrian traffic. Furthermore, the sidewalk would be 5 feet wide, which meets the American with Disability Act (ADA) requirements.

The Project will not interfere with existing pedestrian or transit facilities in the study area. The Project will provide a 10-foot-wide sidewalk along its frontage on 98th Avenue and will not interfere with existing transit stops along 98th Avenue. Although there are no existing bicycle facilities in the study area, the Project will not interfere with the proposed Class I bicycle facility on San Leandro Street.

Criterion 14 - *(Pedestrian Safety)* The Project would increase traffic volumes on the streets directly serving the Project, which may increase the potential for conflicts with pedestrians. The adopted Pedestrian Master Plan (PMP), which is part of the City's General Plan, includes PMP Policy 1.2 Traffic Signals, which recommends use of traffic signals and their associated features (e.g. pedestrian signal heads) to improve pedestrian safety. Near the project site, sidewalks are provided on both sides of 98th Avenue, 92nd Avenue, and San Leandro Street and signalized intersections have pedestrian signal heads and marked crosswalks on all approaches. The traffic control devices and pavement markings would safely accommodate vehicular and pedestrian traffic, and the project would have a less-than-significant impact**.**

Criteria 15 - *(Transit)* The Project would generate demand for transit service that could be accommodated by the existing transit services without exceeding the maximum loads. The anticipated transit ridership associated with the Project was estimated using the ACCMA model The ACCMA model estimates that approximately 76 peak hour transit trips would be generated by the Project site. Of these trips, approximately 12 would be AC Transit trips and the remaining 64 would be BART trips. It is anticipated that these transit trips would access AC Transit via the bus stops along 98th Avenue or drive to the nearest BART stations (Coliseum or San Leandro).

According to the city's significance criteria, an impact would occur to the transit system, either AC Transit or BART, if any of the following three items occur:

- The addition of project transit trips increases 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 percent over a peak 30-minute peak hour.

- The addition of project transit trips increases the peak hour average ridership on BART by three (3) percent where the passenger volume would exceed the standing capacity of BART trains.
- The addition of project transit trips increases the peak hour average ridership at a BART station by three (3) percent where average waiting time at fare gates would exceed one (1) minute.

Based on the most recent BART schedule, 24 trains serve the Coliseum and San Leandro BART stations during the AM and PM peak hour. When the 64 BART trips generated by the proposed Project are distributed among 24 BART trains, an increase of less than three passengers per train would result. Based on field observations, each BART train has anywhere between four and nine cars. Based on information provided by BART, each BART car has a capacity of about 67 passengers. Therefore, the minimum capacity of a BART train is about 268 passengers. An increase of three (3) passengers per train represents about one (1) percent of the BART capacity. Therefore, the Project would not result in a noticeable increase in BART usage, and the Project impact is less than significant.

Based on the most recent AC Transit schedule, eight (8) buses provide bus service along 98th Avenue via Route 98 during the AM and PM peak hour. The 12 AC Transit trips distributed among eight (8) buses results in an increase of less than two (2) passengers per bus. A typical bus has a capacity of 40 passengers. An increase of 2 passengers per bus represents about 5 percent of a bus capacity. Load information obtained from AC Transit indicates that the maximum load along Route 98 near the Project site was 20 riders in 2004. The additional trips generated by the Project do not cause any AC Transit bus lines to exceed 125 percent; therefore, the Project impact with respect to AC transit is less than significant.

e. Potentially Significant Project-related Impacts

The Project in and of itself would result in several potentially significant impacts. As discussed below, all of the Project-related impacts can be mitigated to a less-than-significant level. (Cumulative transportation impacts are discussed in Section f.)

Impact Traffic-1: *(Criterion 6 – Traffic signal warrant)* At the intersection of International Boulevard and 92nd Avenue, the Project at full build-out would contribute 32 vehicles during the AM peak hour and 44 vehicles during the PM peak hour, causing the intersection to meet the peak hour traffic signal warrant. The traffic signal warrant is triggered in part when the project would add more than ten vehicles to an intersection. This threshold would be reached once the project achieves 25 percent occupancy.

> **Mitigation Traffic-1:** Once the project reaches 25 percent occupancy, the Project sponsor shall perform a detailed traffic signal warrant evaluation (i.e., evaluate all eight warrants in the MUTCD) to establish a clear need for a traffic signal subject to City and Caltrans review and approval. If the traffic signal is warranted based on a detailed evaluation, the Project sponsor shall pay for the installation of a traffic signal at that time.[6] If a signal is not

[6] The peak hour traffic signal warrant analysis is intended to examine the general correlation between existing traffic levels and the need to install a new traffic signal. The peak hour traffic signal warrant is a sub-set of the standard traffic signal warrants recommended in the Federal Highway Administration *Manual on Uniform Traffic Control Devices* and associated State guidelines.

warranted based on a detailed evaluation, the Project Sponsor shall conduct another detailed evaluation once the project reaches 90 percent occupancy.

Significance after mitigation: Implementation of the proposed mitigation would ensure that the intersection operates at an acceptable level of service. If Caltrans does not approve the installation of a traffic signal, this impact would remain significant and unavoidable.

Impact Traffic-2: (*Criterion 11 – Construction traffic)* During the peak construction period, the Project would employ a maximum of 125 workers on a daily basis and require a maximum of 50 daily truck trips (25 inbound and 25 outbound) to haul material. Traffic would also be generated by remediation and demolition activities, which are considered as part of construction traffic. This level of activity results in approximately 300 daily trips, 131 AM peak hour trips, and 131 PM peak hour trips[7]. The Project sponsor has not yet developed a Traffic Management Plan to address traffic during the construction period, and this is considered a potentially significant impact.

Mitigation Traffic-2: Prior to the issuance of a demolition, grading, or building permit, the Project sponsor shall submit a traffic management plan (TMP) to the City for review and approval. The TMP shall include the following elements:

A map documenting that material and equipment staging and storage locations for all phases of construction will be within the Project site.

- A map documenting that worker parking locations for all phases of construction will be within the Project site.
- Signage plans relating to any temporary road closures on public streets.
- Notification procedures for adjacent businesses, residents, property owners and public safety personnel for all major deliveries, detours, and land and/or street closures that will affect traffic in the vicinity of the Project.
- Provisions for monitoring surface streets used for truck routes so that any damage and debris attributable to the trucks can be identified and corrected.
- Signage plans documenting any detours for bicycle and pedestrian traffic
- Routing plans for remediation and/or construction vehicles and remediation and/or construction equipment from the Project site to I-880.

This warrant analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured, rather than forecast, traffic data and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely upon the warrants, since the installation of signals can lead to certain types of collisions. The City of Oakland should undertake regular monitoring of actual traffic conditions and accident data, and conduct a timely re-evaluation of the full set of warrants in order to prioritize and program the intersection for signalization.

[7] Assumes there may be as many as two daily trips associated with each worker (driving to the site in AM peak hour and leaving the site to return home during PM peak hour). As a conservative estimate, 25 percent of truck trips were assumed to occur during the AM and PM peak hour.

Significance after mitigation: Less than significant. Implementation of the proposed mitigation would prevent ensure appropriate routes for construction traffic and provide for safe passage by pedestrians.

Impact Traffic-3: *(Criterion 9 – Hazards related to a design feature)* Several intersections within the site are not completely perpendicular or are slightly offset. At these locations, vehicles may be unable to clearly determine right-of-way, leading to the potential for accidents.

The internal street system generally consists of roadways intersecting at 90 degrees. However, some intersections within the site are not completely perpendicular or are slightly offset. At these locations, determining right-of-way through proper traffic control devices will be crucial to avoid vehicle conflicts and provide smooth traffic circulation. As shown on Figure 9, two-way stop control is recommended at most locations, while all-way stop control is recommended at two locations. At locations where two-way stop control is recommended, engineering judgment was used to determine which traffic to stop. In general, stop control was placed at locations where the number of vehicles stopping would be minimized, which is typically the street with the lowest volume. The recommendation to provide all-way stop control at two locations was not based on volume but rather safety reasons. According to the MUTCD, all-way stop control should be considered at locations where a driver, after stopping, cannot see conflicting traffic and is not able to safely negotiate the intersection unless conflicting traffic is also required to stop. At the intersections where all-way stop control is recommended, the intersections are slightly skewed or offset such that it may be difficult to see and determine right-of-way.

> **Mitigation Traffic-3:** Implement the traffic control features (stop signs) as noted for intersection shown in Figure 9.

Significance after mitigation: Less than significant. Implementation of the proposed mitigation would provide for safe navigation through the Project site.

Impact Traffic-4: *(Criterion 9 – Hazards related to a design feature)* The easternmost Project driveway on 98th Avenue is offset (not directly across) from the existing Gould Street by about 75 feet. Offset intersections can be dangerous and are an undesirable design due to the vehicle conflicts that are created. Furthermore, the roadway alignment of the easternmost access contributes to a direct connection between 92nd Avenue and 98th Avenue, which can encourage cut-through traffic through the Project site to avoid congestion along San Leandro Street.

To help improve project access, the project will provide a separate outbound left-turn and right-turn lane and an eastbound left-turn inbound lane. This intersection is located approximately 400 feet to the east of the railroad tracks on 98th Avenue. The maximum eastbound left-turn inbound volume is anticipated to be 52 vehicles during the PM peak hour. The maximum eastbound left-turn vehicle queue is estimated to be 100 feet which will not back-up on to the railroad tracks.

The project driveway across from Medford avenue/98th Avenue would be come the primary egress from the Project site.

CirclePoint℠
The *whole* view.

north

FIGURE 9.

CIRCULATION & SITE ACCESS RECOMMENDATIONS

Mitigation Traffic-4: Restrict the easternmost project driveway access from 98th Avenue to right-turn in/right-turn out movements using raised channelization islands.

Significance after mitigation: Less than significant. Implementation of the proposed mitigation would prevent cut-through traffic and provide safe turning movements for vehicles exiting and entering the Project site.

f. Cumulative Analysis

This section presents the results of the cumulative analysis, which focuses on both Year 2010 and Year 2025 intersection operations. These two scenarios are discussed separately below and impacts and mitigation measures related to each time period are called out where applicable. Based on information provided by the City, the intersection of D Street/98th Avenue will be signalized in the immediate future by the City as part of the Citywide Pedestrian Safety Improvement Project.

Year 2010 Cumulative Conditions

The Year 2010 intersection levels of service with and without the Project are shown in Table III.A.6. As shown in the table, the following intersections are expected to operate at unacceptable service levels:

With and Without the Proposed Project

- International Boulevard/98th Avenue (PM peak hour)
- International Boulevard/92nd Avenue (AM and PM peak hour; side-street approach)
- Medford Avenue/98th Street/Project Driveway (AM and PM peak hour; Project driveway)

With the Project

- San Leandro Street/98th Avenue (PM peak hour)

San Leandro Street/98th Avenue

Impact Traffic-5: (C*riterion 1)* – The Project would cause the intersection of San Leandro Street/98th Avenue to worsen from LOS D under Year 2010 conditions without the Project to LOS E.

The intersection of San Leandro Street/98th Avenue is expected to operate at LOS D in Year 2010. Pursuant to Criterion 1, a project would have a significant impact if it causes the level of service at a local intersection operating at LOS D to worsen to LOS E or lower.

Widening this intersection to provide additional capacity would be infeasible because of the intersection's proximity to the concrete columns supporting the BART tracks and other surrounding uses would make such improvements difficult and costly. However, capacity could be added to this intersection through re-striping. Currently, San Leandro Street provides two 12-foot travel lanes in each direction with a 12-foot left-turn lane. San Leandro Street in this area is approximately 76 feet wide curb-to-curb with no raised median. Parking is permitted on the west side and while no parking is permitted on the east side adjacent to the elevated BART tracks, an 8

foot striped shoulder is provided on the east side near 98th Avenue. An exclusive southbound right-turn lane could be provided on San Leandro Street through re-striping and eliminating some on-street parking to make use of the entire curb-to-curb street width. With a curb-to-curb width of 76 feet, San Leandro Street could provide two curb lanes that are 14 feet wide and four standard 12 foot travel lanes. During field observations, only one parked vehicle was observed on San Leandro Street near 98th Avenue.

The analysis indicates a 95th percentile vehicle queue of about 175 feet for the southbound right-turn movement. To avoid vehicle queue spillback from the southbound right-turn lane to the southbound through lane, it is recommended that the southbound right-turn lane provide at least 200 feet of vehicle storage.

Mitigation Traffic-5: Prior to project occupancy, the project sponsor shall re-stripe San Leandro Street at 98th Avenue to provide exclusive southbound right-turn lanes. The right-turn lanes should be at least 200 feet in length. Prior to implementation of this measure, the applicant shall consult with the City regarding additional methods to optimize the operations of the intersection as part of the SMART Corridors Program.

Significance after mitigation: Less than significant. Implementation of the proposed mitigation would allow the intersection continue to operate at LOS D in the Year 2010. The proposed mitigation will not interfere with the planned Class I off-street bike path that is proposed along San Leandro Street.

Table III.A.6 Year 2010 Intersection Levels of Service

Intersection	Control[1]	Peak Hour	Year 2010 Without Project		Year 2010 With Project	
			Delay[2]	LOS[2]	Delay[2]	LOS[2]
San Leandro Street/98th Avenue	Signal	AM	41	D	43	D
		PM	52	D	56	E
E Street/98th Avenue	Signal	AM	4	A	4	A
		PM	3	A	3	A
B Street/98th Avenue	Signal	AM	3	A	3	A
		PM	4	A	4	A
International Boulevard/98th Avenue	Signal	AM	31	C	32	C
		PM	59	E	63	E
San Leandro Street/92nd Avenue	Signal	AM	8	A	8	A
		PM	14	B	17	B
I-880 SB Ramps/98th Avenue	Signal	AM	14	B	14	B
		PM	9	A	9	A
I-880 NB Ramps/98th Avenue	Signal	AM	16	B	16	B
		PM	21	C	22	C
Denslowe Street/98th Avenue	Signal	AM	10	B	10	A
		PM	5	A	5	A
Maddux Drive/98th Avenue	Signal	AM	3	A	3	A
		PM	4	A	4	A
Edes Avenue/98th Avenue	Signal	AM	31	C	31	C
					17	B

Intersection	Control[1]	Peak Hour	Year 2010 Without Project		Year 2010 With Project	
			Delay[2]	LOS[2]	Delay[2]	LOS[2]
		PM	17	B		
San Leandro Street/85th Avenue	Signal	AM PM	13 44	B D	13 44	B D
San Leandro Street/81st Avenue	Signal	AM PM	11 11	B B	11 11	B B
D Street/98th Avenue	Signal	AM PM	5 2	A A	5 2	B A
International Boulevard/92nd Avenue	SSSC	AM PM	3 (EB - 28) 26 (EB - >50)	A (D) D (F)	4 (EB - 36) 35 (EB - >50)	A (E) D (F)
Medford Avenue/98th Avenue/ Project Driveway	SSSC	AM PM	0 (NB - 21) 1 (NB - >50)	A (C) A (F)	4 (SBL - >50) 6 (SBL - >50)	A (F) A (F)
Project Driveway/92nd Avenue	SSSC	AM PM	n/a	n/a	1 (NB - 11) 1 (NB - 14)	A (B) A (B)

1. Signal = signalized intersection; SSSC = side-street stop-controlled intersection.

Signalized intersection level of service based on weighted average control delay per vehicle, according to the *Highway Capacity Manual* (Transportation Research Board, 2000). Side-street stop-controlled level of service based on the weighted average control delay of controlled movements. For side-street stop-controlled intersections, the worst side-street movement is presented in parentheses.

Source: Fehr & Peers, 2005.

International Boulevard/98th Avenue

Impact Traffic-6: *(Criterion 3)* Under 2010 conditions, the Project would contribute more than four (4) seconds of average delay to the Intersection of International Boulevard/98th Avenue.

The intersection of International Boulevard/98th Avenue is anticipated to operate at LOS E during the PM peak hour without the proposed Project and traffic operations will worsen with the addition of Project traffic. Pursuant to Criterion 3, for intersections operating at LOS E, a significant impact is identified when a Project would add more than four (4) seconds to the total intersection average delay. With the proposed Project, the total intersection average vehicle delay will increase by slightly over 4 seconds. This is considered a significant impact.

This intersection is located in a built-out area with businesses on all four corners. Based on field observations, no feasible opportunities exist for widening to add additional capacity to the intersection. According to field measurements, the northbound curb lane on International Boulevard is about 24 feet wide. On the northbound curb lane, two driveways provide access to the ARCO gas station and a short-term parking space is located between the driveways. Although a right-turn lane could be striped on the northbound approach, it conflicts with the current BMP which proposes to stripe Class II bicycle lanes on International Boulevard. As indicated under existing conditions, the BMP is currently being updated and there is a possibility

that the proposed Class II bicycle lanes on International Boulevard will be eliminated or relocated.

The analysis indicates a 95th percentile vehicle queue of about 120 feet for the northbound right-turn movement during the PM peak hour. However, a northbound right-turn lane longer than 100 feet would likely result in the elimination of more than one on-street parking space. Therefore, a 100-foot northbound right-turn lane is recommended

> **Mitigation Traffic-6:** Prior to project occupancy, the Project sponsor shall stripe an exclusive 100-foot northbound right-turn lane on International Boulevard. The design shall be subject to review and approval by the City and by Caltrans. Prior to implementation of this measure, the applicant shall consult with the City regarding additional methods to optimize the operations of the intersection as part of the SMART Corridors Program.

Significance after mitigation: Potentially significant and unavoidable. If the mitigation is implemented, the Project would contribute less than 4 seconds of average delay to the intersection operations and the impact would be mitigated to a less-than-significant level. However, if the proposed Class II lanes are not eliminated from International Boulevard (as currently being considered) then the mitigation would be infeasible and the impact would remain significant and unavoidable. Also, if Caltrans does not approve the re-striping, this impact would remain significant and unavoidable

International Boulevard/92nd Avenue

The Project would add more than ten (10) vehicles to the intersection of International Boulevard/92nd Avenue, causing the intersection to meet the Caltrans peak hour traffic signal warrant.

This impact was already identified as a Project specific impact (Traffic-1). The implementation of Mitigation Traffic-1 would effectively mitigate this cumulative impact. Implementation of a traffic signal at this intersection would allow it to operate at LOS A during both the AM and PM peak periods. If Caltrans does not approve the installation of a traffic signal, this impact would remain significant and unavoidable.

The Project would also add more than ten (10) vehicles to the intersection of the Project driveway with 98th Avenue and Medford Avenue. However the Caltrans signal warrant requires that a total of 150 vehicles must utilize an approach to an intersection in order to qualify for a signal, while a maximum of 38 vehicles would be expected to utilize the Medford Avenue approach and 115 vehicles would be expected too utilize the Project driveway approach. Therefore a significant impact is not identified at this location and no mitigation is required.

The effect of the proposed mitigation on the operation of the affected intersections is shown in Table III.A.7

Table III.A.7 Year 2010 With Project Mitigated Intersection Levels of Service

Intersection	Control[1]	Peak Hour	Year 2010 With Project		Year 2010 With Project Mitigated	
			Delay[2]	LOS[2]	Delay[2]	LOS[2]
San Leandro Street/98th Avenue	Signal	AM	43	D	41	D
		PM	56	E	46	D
International Boulevard/98th Avenue	Signal	AM	34	C	31	C
		PM	63	E	61	E
International Boulevard/92nd Avenue	SSSC	AM	4 (EB - 36)	A (E)	5 [3]	A
		PM	35 (EB - >50)	D (F)	6 [3]	A

1. Signal = Signalized intersection; SSSC = Side-street stop-controlled intersection
2. Signalized intersection level of service based on weighted average control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000. Side-street stop level of service based on the weighted average control delay of controlled movements. For side-street stop controlled intersections, the worst side-street movement is presented in parentheses.
3. With a traffic signal.

Source: Fehr & Peers, 2005.

Peak Hour Traffic Signal Warrant Analysis – Year 2010

Each of the unsignalized study intersections was evaluated for the peak hour traffic signal warrant using the 2003 MUTCD. Detailed calculations are presented in Appendix G.

Pursuant to Significance Criterion 6, a significant impact would only be identified if the project resulted in both the addition of ten (10) or more vehicles to an intersection **and** the intersection would satisfy the Caltrans peak hour volume warrant. The traffic signal warrant requires that at least 150 vehicles must utilize an approach to the intersection during one hour.

International Boulevard/92nd Avenue

The intersection of International Boulevard/92nd Avenue will meet the peak hour traffic signal warrant during the PM peak hour without the proposed project. With the addition of project traffic, the intersection of International Boulevard/92nd Avenue will meet the peak hour traffic signal warrant during the AM and PM peak hours.

Medford Avenue/98th Avenue/Project Driveway

Under 2010 conditions, more than ten (10) vehicles would be added to this intersection; however the intersection would not meet the peak hour traffic signal warrant. A maximum of 38 and 115 vehicles would be expected to utilize the Medford Avenue and Project driveway approaches to 98th Avenue, respectively.

Year 2025 Cumulative Conditions

The Year 2025 intersection levels of service with and without the Project are shown in Table III.A.8. As shown in the table, the following intersections are expected to operate at unacceptable service levels:

With and Without the Proposed Project

- San Leandro Street/98th Avenue
- International Boulevard/98th Avenue (PM peak hour)
- International Boulevard/92nd Avenue (AM and PM peak hour; side-street approach)

With the Proposed Project

- Medford Avenue/98th Street/Project Driveway (AM and PM peak hour; Project driveway)

Table III.A.8 Cumulative (2025) Plus Project Intersection Levels of Service

Intersection	Control[1]	Peak Hour	Cumulative		Cumulative Plus Project	
			Delay[2]	LOS[2]	Delay[2]	LOS[2]
San Leandro Street/98th Avenue	Signal	AM	50	D	51	D
		PM	81	F	83	F
E Street/98th Avenue	Signal	AM	5	A	5	A
		PM	4	A	4	A
B Street/98th Avenue	Signal	AM	3	A	3	A
		PM	4	A	4	A
International Boulevard/98th Avenue	Signal	AM	39	D	40	D
		PM	89	F	96	F
San Leandro Street/92nd Avenue	Signal	AM	11	B	11	B
		PM	26	C	32	C
I-880 SB Ramps/98th Avenue	Signal	AM	15	B	15	B
		PM	22	C	23	C
I-880 NB Ramps/98th Avenue	Signal	AM	22	C	24	C
		PM	28	C	32	C
Denslowe Street/98th Avenue	Signal	AM	11	B	11	B
		PM	6	A	6	A
Maddux Drive/98th Avenue	Signal	AM	3	A	3	A
		PM	4	A	4	A
Edes Avenue/98th Avenue	Signal	AM	39	D	41	D
		PM	32	C	32	B
San Leandro Street/85th Avenue	Signal	AM	15	B	15	B
		PM	71	E	71	E*
San Leandro Street/81st Avenue	Signal	AM	13	B	13	B
		PM	12	B	12	B
D Street/98th Avenue	Signal	AM	5	A	5	B
		PM	3	A	3	A
International Boulevard/92nd Avenue	SSSC	AM	4 (EB - 47)	A (E)	8 (EB - >50)	A (F)
		PM	54 (EB - >50)	D (F)	69 (EB - >50)	E (F)
Medford Avenue/98th Avenue/ Project Driveway	SSSC	AM	0 (NB - 24)	A (C)	8 (SBL - >50)	A (F)
		PM	1 (NB - >50)	A (F)	6 (SBL - >50)	A (F)

Intersection	Control[1]	Peak Hour	Cumulative		Cumulative Plus Project	
			Delay[2]	LOS[2]	Delay[2]	LOS[2]
Project Driveway/92nd Avenue	SSSC	AM PM	N/A	N/A	1 (NB - 12) 1 (NB - 14)	A (B) A (B)

* This intersection would operate at LOS E without the project and there would be no increase in seconds of delay; therefore this is not considered a significant impact.

1. Signal = signalized intersection; SSSC = side-street stop-controlled intersection.
2. Signalized intersection level of service based on weighted average control delay per vehicle, according to the *Highway Capacity Manual* (Transportation Research Board, 2000). Side-street stop-controlled level of service based on the weighted average control delay of controlled movements. For side-street stop-controlled intersections, the worst side-street movement is presented in parentheses.

Source: Fehr & Peers, 2005.

San Leandro Street/98th Avenue

The intersection of San Leandro Street/98th Avenue is expected to operate at LOS F in Year 2025. Pursuant to Criterion 5, a project would have a significant impact if it causes the average delay at the intersection to worsen by two (2) seconds or more. Pursuant to Criteria 7, a project's contribution to the cumulative increase in traffic would be "considerable" when the project contributes five (5) percent or more of the cumulative traffic increase.

Widening this intersection to provide additional capacity would be infeasible because of the intersection's proximity to the concrete columns supporting the BART tracks and the surrounding uses make it difficult and costly. However, capacity could be added to this intersection through re-striping. Currently, San Leandro Street provides two 12-foot travel lanes in each direction with a 12-foot left-turn lane and is approximately 76 feet wide curb-to-curb with no raised median. Parking is permitted on the west side and while no parking is permitted on the east side adjacent to the elevated BART tracks, an 8 foot striped shoulder is provided on the east side near 98th Avenue. An exclusive southbound right-turn lane could be provided on San Leandro Street through re-striping and eliminating some on-street parking to make use of the entire curb-to-curb street width. With a curb-to-curb width of 76 feet, San Leandro Street could provide two curb lanes that are 14 feet wide and four standard 12 foot travel lanes. During field observations, only one parked vehicle was observed on San Leandro Street near 98th Avenue.

The analysis indicates a 95th percentile vehicle queue of about 200 feet for the southbound right-turn movement. To avoid vehicle queue spillback from the southbound right-turn lane to the southbound through lane, it is recommended that the southbound right-turn lane provide at least 200 feet of vehicle storage.

Impact Traffic-7: (C*riteria 5 and 7)* – Under 2025 conditions, the Project would contribute more than two (2) seconds of average delay to the intersection of San Leandro Street/98th Avenue, and would contribute seven (7) percent of the cumulative traffic increase at the intersection

> **Mitigation Traffic-7**: Implementation of the proposed restriping on San Leandro Street as part of mitigation measure 5 would reduce the LOS to E (from F) and average delay from 81 (without project) to 60 seconds (with project). However, because the project would

continue to contribute more than 5% of the future traffic delay, the impact identified under Criterion 7 would remain significant and unavoidable.

Additional mitigation, such as widening of this intersection to provide additional capacity would be infeasible because of the intersection's proximity to the concrete columns supporting the BART tracks and the surrounding uses make it difficult and costly.

Significance after mitigation: Significant and unavoidable pursuant to Criterion 7. Implementation of the proposed restriping mitigation would reduce the average delay that the Project causes to less than two (2) seconds, but because the intersection would continue to operate at LOS E with the Project contributing more than five (5) percent of the future traffic growth, the cumulative impact identified under Criterion 7 would remain significant and unavoidable).

International Boulevard/98th Avenue

The intersection of International Boulevard/98th Avenue is anticipated to operate at LOS F during the PM peak hour without the proposed Project and traffic operations will worsen with the addition of Project traffic. Pursuant to Criterion 5, a project would have a significant impact if it causes the average delay at the intersection to worsen by two (2) seconds or more. Pursuant to Criteria 7, a project's contribution to the cumulative increase in traffic would be "considerable" when the project contributes five (5) percent or more of the cumulative traffic increase.

Impact Traffic-8: *(Criteria 5 and 7)* – Under 2025 conditions, the Project would contribute seven (7) seconds of delay to the intersection of International Boulevard/98th Avenue, and would contribute nine (9) percent of the cumulative traffic increase at the intersection.

Mitigation Traffic-8: Implementation of the restriping of a new northbound right-turn lane on International Boulevard as required by Mitigation Traffic-6 would partially mitigate this impact; however, it would remain significant and unavoidable under both the Project and Cumulative scenarios. After the implementation of Mitigation Traffic-6 the intersection would remain at LOS F, meaning that pursuant to Criterion 7, the Project's contribution to cumulative increases in traffic would continue to be considerable. This mitigation would reduce the Project's contribution to the delay to approximately two (2) seconds, but would not fully address the impact pursuant to Criterion 5.

Significance after mitigation: Significant and unavoidable pursuant to Criteria 5 and 7. With the implementation of the mitigation, the Project would still contribute 2 seconds of average delay to the intersection. Since the intersection would continue to operate at an unacceptable level (LOS F) and 5 percent traffic threshold would be exceeded, the Project's contribution to the cumulative traffic increase would also continue to be considerable. Furthermore, if Caltrans does not approve the re-striping, then the impact would worsen, and would still remain significant and unavoidable.

International Boulevard/92nd Avenue

The Project would add more than ten (10) vehicles to the intersection of International Boulevard/92nd Avenue, causing the intersection to meet the Caltrans peak hour traffic signal warrant in both the AM and PM peak periods. The Project's contribution to cumulative traffic

growth is estimated to be eight (8) percent. Pursuant to both Criteria 6 and 7, this would be considered a significant impact.

The need for a traffic signal was already identified in Impact Traffic-1. The implementation of Mitigation Traffic-1 would effectively mitigate this cumulative impact. Implementation of a traffic signal at this intersection would allow it to operate at LOS A during both the AM and PM peak periods. If Caltrans does not approve the installation of a traffic signal, this impact would remain significant and unavoidable.

Project Driveway/98th Avenue and Medford Avenue

The Project would add more than ten (10) vehicles to the intersection of the Project driveway with 98th Avenue and Medford Avenue. However the Caltrans signal warrant requires that a total of 150 vehicles must utilize an approach to an intersection in order to qualify for a signal, while a maximum of 40 vehicles would be expected to utilize the Medford Avenue approach and 115 vehicles would be expected too utilize the Project driveway approach. Therefore, a significant impact is not identified at this location and no mitigation is required.

San Leandro Street/85th Avenue

The intersection of San Leandro Street/85th Avenue would operate at LOS E without the project in Year 2025. The projected delay at the intersection in the PM peak hour would be 71 seconds with or without the Project. Pursuant to criterion 7, the project would not contribute more than 5 percent of the cumulative traffic growth at the intersection in the PM peak hour, and would not therefore result in a significant impact.

Alameda County CMA Analysis (Less than Significant Impact)

As shown in Tables III.A.10 and III.A.11 under both the 2010 and 2025 scenarios, the Project would not cause a roadway segment on the Metropolitan Transportation System to operate at LOS F or increase the V/C ratio by more than three (3) percent for a roadway segment that would operate at LOS F without the Project. In the 2010 scenario, all roadway segments (except I-880 south of the 98th Avenue Interchange and Hegenberger Road, west of San Leandro) would operate at LOS E or better. Under the 2025 scenario, the Project would not increase the V/C ratio by more than three (3) percent.

Table III.A.9 Cumulative (2025) With Project Mitigated Intersection LOS

Intersection	Control[1]	Peak Hour	Cumulative With Project		Cumulative With Project Mitigated	
			Delay[2]	LOS[2]	Delay[2]	LOS[2]
San Leandro Street/98th Avenue	Signal	AM	51	D	48	D
		PM	83	F	60	E
International Boulevard/98th Avenue	Signal	AM	40	D	37	D
		PM	96	F	91	F
International Boulevard/92nd Avenue	SSSC	AM	8 (EB - >50)	A (F)	9 [3]	A
		PM	69 (EB - >50)	E (F)	12 [3]	B

1. Signal = Signalized intersection; SSSC = Side-street stop-controlled intersection
2. Signalized intersection level of service based on weighted average control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000. Side-street stop level of service based on the weighted average control delay of controlled movements. For side-street stop controlled intersections, the worst side-street movement is presented in parentheses.
3. With a traffic signal.

Source: Fehr & Peers, 2005.

Table III.A.10 Year 2010 MTS LOS Analysis - PM Peak Hour

Roadway Segment	Direction	Capacity[1]	Without Project			With Project			Increase in V/C ratio
			Volume	V/C	LOS	Volume	V/C	LOS	
I-880, north of 98th Street Interchange	NB	8,800	7,039	0.80	C	7,043	0.80	D	0.1%
	SB	8,800	8,096	0.92	E	8,108	0.92	E	0.1%
I-880, south of 98th Street Interchange	NB	8,800	7,837	0.89	D	7,859	0.89	D	0.3%
	SB	8,800	8,909	1.01	F	8,917	1.01	F	0.1%
I-580, north of Golf Links Road Interchange	EB	8,800	7,752	0.88	D	7,788	0.89	D	0.5%
	WB	8,800	7,546	0.86	D	7,560	0.86	D	0.2%
I-580, south of Golf Links Road Interchange	EB	8,800	7,961	0.90	E	7,963	0.90	E	0.0%
	WB	8,800	7,766	0.88	D	7,771	0.88	D	0.1%
International Boulevard, north of 92nd Street	NB	1,600	751	0.47	A	758	0.47	A	1.0%
	SB	1,600	1,200	0.75	C	1,220	0.76	C	1.7%
International Boulevard, south of 98th Street	NB	1,600	867	0.54	A	894	0.56	A	3.1%
	SB	1,600	1,221	0.76	C	1,231	0.77	C	0.8%
Hegenberger Road, west of San Leandro	EB	3,200	2,998	0.94	E	2,999	0.94	E	0.0%
	WB	3,200	1,317	0.41	A	1,317	0.41	A	0.0%
Hegenberger Road, east of International Boulevard	EB	1,600	2,117	1.32	F	2,118	1.32	F	0.0%
	WB	1,600	913	0.57	A	915	0.57	A	0.2%

a. Roadway capacities assumed to be 2,200 vphpl for freeway segments and 800 vphpl for the arterial street corridors.

Source: Fehr & Peers, 2005.

Table III.A.11 Year 2025 MTS LOS Analysis - PM Peak Hour

Roadway Segment	Direction	Capacity[1]	Without Project			With Project			Increase in V/C ratio
			Volume	V/C	LOS	Volume	V/C	LOS	
I-880, north of 98th Street Interchange	NB	8,800	7,305	0.83	D	7,309	0.83	D	0.1%
	SB	8,800	8,161	0.93	E	8,173	0.93	E	0.1%
I-880, south of 98th Street Interchange	NB	8,800	8,082	0.92	E	8,104	0.92	E	0.3%
	SB	8,800	9,337	1.06	F	9,345	1.06	F	0.1%
I-580, north of Golf Links Road Interchange	EB	8,800	7,965	0.91	E	8,001	0.91	E	0.5%
	WB	8,800	7,850	0.89	D	7,864	0.89	D	0.2%
I-580, south of Golf Links Road Interchange	EB	8,800	8,183	0.93	E	8,185	0.93	E	0.0%
	WB	8,800	8,099	0.92	E	8,104	0.92	E	0.1%
International Boulevard, north of 92nd Street	NB	1,600	801	0.50	A	808	0.51	A	0.9%
	SB	1,600	1,383	0.86	D	1,403	0.88	D	1.4%
International Boulevard, south of 98th Street	NB	1,600	992	0.62	B	1,019	0.64	B	2.7%
	SB	1,600	1,487	0.93	E	1,497	0.94	E	0.7%
Hegenberger Road, west of San Leandro	EB	3,200	3,488	1.09	F	3,489	1.09	F	0.0%
	WB	3,200	1,627	0.51	A	1,627	0.51	A	0.0%
Hegenberger Road, east of International Boulevard	EB	1,600	2,355	1.47	F	2,356	1.47	F	0.0%
	WB	1,600	1,041	0.65	B	1,043	0.65	B	0.2%

a. Roadway capacities assumed to be 2,200 vphpl for freeway segments and 800 vphpl for the arterial street corridors.

Source: Fehr & Peers, 2005.

Bus Rapid Transit (BRT) Analysis

AC Transit is preparing an environmental impact report (EIR) on a project to implement bus rapid transit (BRT) along the length of International Boulevard in Oakland. The BRT project assumes that two travel lanes will be converted to bus only lanes and therefore has the potential to create significant traffic impacts on International Boulevard as well as parallel arterials. At the request of City of Oakland, Fehr & Peers performed some analysis to determine the potential impacts of the BRT Project at the study intersections. It is important to recognize that a full discussion of impacts and mitigation will be presented in the BRT EIR and that the evaluation presented in this study is for informational purposes only. The proposed project is not dependent on the approval or disapproval of the BRT project.

The study intersections chosen for the BRT evaluation are along San Leandro and International Boulevard. These study intersections were chosen as they were anticipated to be the only study intersections along these two corridors likely impacted by the BRT project. The specific impacts foreseen from the BRT project include: 1) the elimination of a travel lane along International

Boulevard; and 2) the shifting of through traffic from International Boulevard to San Leandro Street. Analysis of the BRT project is included in Appendix C.

CHAPTER III

ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

B. Noise

1. Introduction

This section describes the existing noise setting and evaluates the noise potentially created by the Project. The analysis addresses two main issues: 1) whether noise generated by the project would cause sound levels in the area to increase, and 2) whether the existing noise generated by surrounding uses would present an incompatible environment for the intended residential use. The analysis considers both construction-period noise as well as noise generated during operation of the project once construction is complete.

The main conclusions of this section are as follows:

- Construction noise could present a temporary impact to surrounding residences.
- Traffic noise and noise from BART and Union Pacific trains could affect interior sound levels within the proposed residences.
- Vibration from passing Union Pacific trains could be felt inside the proposed residences along San Leandro Street.
- The Project would incorporate sufficient mitigation measures to reduce all potential noise and vibration impacts to an acceptable level.

2. Approach and Methodology

Information in this section is based on a technical study entitled *98th Avenue Residential Development Feasibility Noise and Vibration Study*, prepared by Charles Salter Associates (March 2005), which measured existing noise levels and analyzed construction phase noise impacts and noise levels which would exist at the project after construction. Terminology, standard practices and assumptions of noise analysis are described throughout the section. All technical reports are available for public review between the hours of 8:00 a.m. and 5:00 p.m. at the City of Oakland Community and Economic Development Agency, 250 Frank Ogawa Plaza, Suite 3315, Oakland.

a. Fundamental Concepts of Environmental Acoustics

Definition of Noise

Noise may be defined as unwanted sound, which is generally found to be objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than lower pitched signals. Loudness is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10-decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities.

There are several methods of characterizing sound. The most commonly used in California is the A-weighted sound level or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.
Representative outdoor and indoor noise levels in units of dBA are shown in Table III.B.1.

Table III.B.1 Typical Noise Level in the Environment

External Noise Sources		**Internal Noise Sources**
Common Outdoor Noise Source	**Noise Level (dBA)**	
	120 dBA	
Jet fly-over at 300 meters		Rock concert
	110 dBA	
Pile driver at 20 meters	100 dBA	
		Night club with live music
	90 dBA	

External Noise Sources Common Outdoor Noise Source	Noise Level (dBA)	Internal Noise Sources
Freight train pass by at 8 meters Large truck pass by at 15 meters		
	80 dBA	Noisy restaurant
		Garbage disposal at 1 meter
Gas lawn mower at 30 meters	70 dBA	Vacuum cleaner at 3 meters
Commercial/Urban area daytime		Normal speech at 1 meter
Suburban expressway at 90 meters	60 dBA	
Suburban daytime		Active office environment
	50 dBA	
Urban area nighttime		Quiet office environment
	40 dBA	
Suburban nighttime		
Quiet rural areas	30 dBA	Library
		Quiet bedroom at night
Wilderness area	20 dBA	
Most quiet remote areas	10 dBA	Quiet recording studio
Threshold of human hearing	0 dBA	Threshold of human hearing

Source: Charles Salter Associates, 2005.

Typical Measurement scales for defining noise

Several methods exist for describing the level of sound. The methods range from measuring an instantaneous noise to calculating an average over a 24-hour period. The following list presents the commonly used methods for describing sound:

L_{eq} (one hour average) – The L_{eq} is a measurement of the average sound level occurring during a one hour period. The L_{eq} measures the hour during which the highest hourly average level of sound occurs. To identify the highest hourly L_{eq}, measurements are taken throughout a 24-hour period and then the data is reviewed to establish which hour produced the highest average level of sound. This hour then becomes the $L_{eq.}$

L_{dn} (24-hour average) – The L_{dn} is a measurement of the average sound level occurring during a 24-hour period. To calculate the L_{dn}, a series of continuous measurements (i.e., measurements recorded every second) are taken throughout a 24-hour period. The L_{dn} measurement also includes a 10 decibel penalty for all sound occurring after 10 p.m. and before 7 a.m., since the sensitivity to noise increases during the evening and especially at night when excessive noise interferes with the ability to sleep. For instance, if a sound level is measured at 45 dBA at 11 p.m., a reading of 55 dBA is used in the calculation of the 24-hour average. The L_{dn}, or day/night average sound level, is therefore a measure of the cumulative noise exposure in a community.

CNEL (24-hour average) The Community Noise Exposure Level is similar to the L_{dn}, although it adds a 5 dB penalty to sound occurring between 7 p.m. and 10 p.m. The CNEL is generally higher than the $L_{dn.}$

L_{max} – The L_{max} is the highest sound reading taken during a measurement period.

L_{min} – The L_{min} is the lowest sound reading taken during a measurement period.

Definition of Ground-Borne Vibration

Vibrations generated by trains can be annoying to persons living along the rail alignment. Vibrations could also interfere with processes such as precision manufacturing. In the noise study prepared for this project, the vibration spectrum is presented in terms of the root mean square (RMS) velocity level in decibels.[1] The measured vibration levels are presented in each one-third octave band whose center frequency ranges from 4 hertz (Hz) to 100 Hz.[2]

The amount of vibration that is impacted into the ground is a function of the speed and weight of the train, the roundness of the wheels, the type of track and the presence of switches. The distance one is from the track is an important factor in determining anticipated vibration levels. The rate of dissipation of vibration in the ground varies depending on the characteristics of the ground. Typical attenuation rates range from 3-10 VdB per doubling of distance. The vibration velocity varies with the speed of the train at a rate roughly proportional to 6 VdB per doubling or halving of the speed of the train.

b. Local, State, and Federal Regulations

The City of Oakland regulates noise generated by proposed construction activities, and also assess whether a site is appropriate for the intended use given the existing level of sound in the vicinity. This EIR analysis is based on the City's Noise Ordinance (Planning Code Section 17.120.050 and section 8.18.020) and Final Draft CEQA Thresholds/Criteria of Significance.

The California Building Code regulates interior noise for multi-family residential dwellings.

The Federal Transit Administration provides vibration impact criteria for properties that could be affected by train activity.

Local Regulations

The City's interior noise goals are consistent with State of California standards found in the California Building Code (CBC). The CBC requires an interior noise level no higher than a DNL[3] of 45 dBA. Projects exposed to an exterior DNL of 60 dB or greater require an acoustical analysis showing that the proposed design will limit interior noise levels to the required interior level.

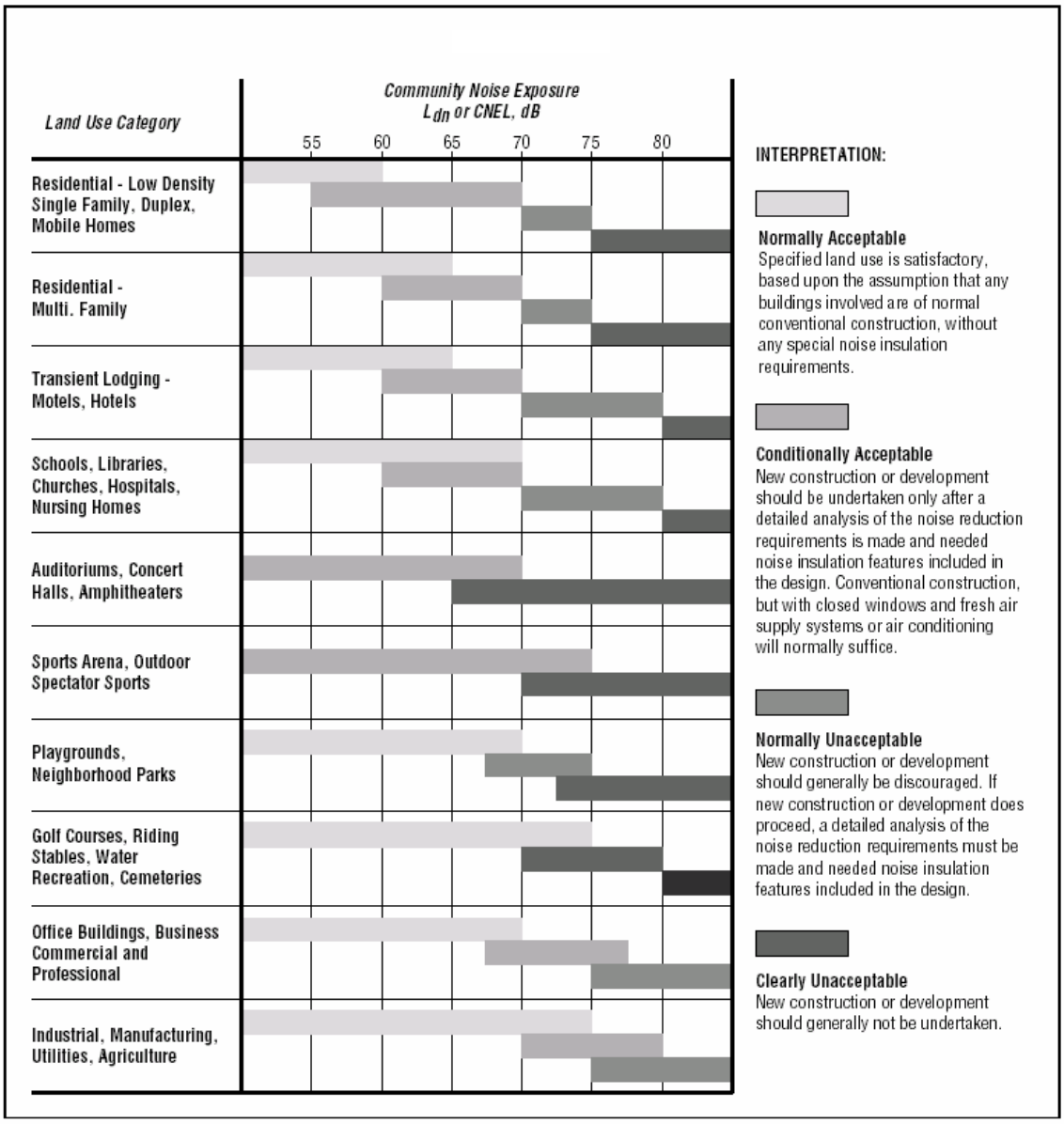
[1] The reference velocity is 1 x 10^{-6} inches/second RMS, which equals 0 VdB, and 1 inch/second equals 120 VdB. Although not a universally accepted notation, the abbreviation "VdB" is used in this document for vibration decibels to reduce the potential for confusion with sound decibels.

[2] Hertz measures the frequency of sound waves per second. Average human hearing ranges from 0 Hz to 20 kHz.

[3] Day-Night Average Sound Level (DNL) – A descriptor established by the U.S. Environmental Protection Agency to describe the average day-night level with a penalty applied to noise occurring during the nighttime hours (10:00 p.m. to 7:00 a.m.) to account for the increased sensitivity of people during sleeping hours.

The City of Oakland's General Plan Noise Element, defines the acceptable noise levels for various types of land uses. As shown in Table III.B.2, the city defines areas where the Ldn is up to 65 dBA as "normally acceptable" for multi-family uses, while areas where the Ldn is up to 70 dBA as "conditionally acceptable." New construction in areas where the Ldn is between 70 and 75 dBA should only proceed when a detailed analysis has been undertaken and appropriate noise insulation features have been incorporated into the project design.

Table III.B.2 – Land Use Compatibility



The City also has guidelines regarding the level of sound that is acceptable during construction. As shown in Table III.B.3, the maximum sound levels during construction vary according to whether the activity takes place on a weekday or weekend end, and whether the adjacent land use is residential, commercial, or industrial in nature.

Table III.B.3 City of Oakland Construction Noise Standards at Receiving Property Line

Receiving Land Use	Maximum Allowable Noise Level (dBA)1	
	Weekdays 7 a.m.-7 p.m.	Weekends 9 p.m.-8 p.m.
Less than 10 days		
Residential	80	65
Commercial, Industrial	85	70
More than 10 Days		
Residential	65	55
Commercial, Industrial	70	60

Source: City of Oakland, 1996b.

Notes: 1) If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level.

State Regulations

The California Building Code (Appendix Chapter 12) contains acoustical requirements for interior sound levels in habitable rooms for multi-family residential structures. The California Building Code requires an interior noise level no higher than DNL of 45 dBA. Projects exposed to an exterior DNL of 60 dBA, or greater, require an acoustical analysis showing that the proposed design will limit interior levels to the prescribed allowable interior level. Additionally, if windows must be in the closed position to meet the interior standard, the design must include ventilation or air-conditioning to provide a habitable interior environment. The project proposes air conditioning systems for both multi-family and single family residential units.

Federal Ground-Borne Vibration Impact Criteria

The City of Oakland and State of California do not have specific criteria regarding train vibration. However, the Federal Transit Administration has published guidelines for assessing the impact of vibration on residential projects. The criteria for environmental impact from ground-borne vibration and noise are based on the maximum levels for a single event. The criteria presented in III.B.4 account for variation in project types as well as the frequency of events, which differ widely among transit projects.

Most experience is with the community response to ground-borne vibration from rail rapid transit systems with typical headways in the range of 3 to 10 minutes and each vibration event lasting less than 10 seconds. It is intuitive that when there will be fewer events each day it should take higher vibration levels

to evoke the same community response. The criteria account for this by distinguishing between projects with frequent and infrequent events. A frequent event is defined as more than 70 events per day. The rail line adjacent to the project site is a spur-line and no train activity has been observed along the track. The UPRR estimated that one train per day passes by the project site, although no train activity was observed during the 72-hour noise measurement made in May 2004.

The project would fall into the infrequent event category. As shown in III.B.4 Land Use Category 2, the criterion for residential uses along a line experiencing infrequent events is 80 VdB.

Table III.B.4 Land Use Categories for Vibration Impact

Land Use Category	Ground-Borne Vibration Impact Levels (VdB re 1 micro inch/second)	
	Frequent Events[a]	Infrequent Events[b]
1: Buildings where low ambient vibration is essential for interior operations.	65 VdB[c]	65 VdB[c]
2: Residences and buildings where people normally sleep.	72 VdB	80 VdB
3: Institutional land uses with primarily daytime uses.	75 VdB	83 VdB

Source: U.S. Department of Transportation, *Transit Noise and Vibration Impact Assessment,* April 1995
[a] Frequent events are defined as more than 70 vibration events per day. Most rapid transit projects fall into this category.
[b] Infrequent events are described as fewer than 70 vibration events per day. This category includes most commuter rail systems.
[c] This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels.
[d]Vibration-sensitive equipment is not sensitive to ground-borne noise.

3. Environmental Setting

a. Existing Land Uses

The area surrounding the project site is developed with residential, commercial, and industrial uses. As shown in Figure 2, the area to the east is an established residential neighborhood. The site is bordered to the west by at-grade UPRR railroad tracks, the elevated BART Fremont line, and San Leandro Street. Uses to the north and south along San Leandro Street are primarily industrial, including auto-body shops, light industrial, storage, and warehouses. Uses fronting 98th Avenue range from industrial to commercial/office, and residential. Vehicular traffic is the major noise source, from cars passing along both 98th Avenue and San Leandro Street as well as from BART light rail trains.

b. Existing 24-Hour Average (Ldn)

Measurement Locations

As shown in Figure 10 – Noise Measurement Locations, measurements were conducted at three locations in the project area:

- Monitor 1 was located at the northwest end of F Street off of 92nd Avenue at twelve feet above grade on a power pole.

CirclePoint℠
The *whole* view.

north

FIGURE 10.

NOISE MONITORING LOCATIONS

- Monitor 2 was located at the northeast corner of the project site, approximately 25 feet northwest of the 98th Avenue centerline at fifteen feet about grade on a power pole.
- Monitor 3 was placed at the southeast corner of the project site approximately 35 feet northwest of the 98th Avenue centerline and 100-feet northeast of San Leandro Street (under the elevated BART line).

Noise was monitored continuously for 72 hours between May 22nd and May 25th, 2004. The measurements were conducted using Larson Davis model 700 integrating sound level meters (CSA Meters B, D, and H) calibrated before and after measurement survey using a Bruel and Kjaer 4231 calibrator.

24-Hour Average (Ldn)

The range for the 24-hour average sound level in the project area was determined to be 62 to 82 dBA, depending on the setback and exposure to the surface streets, as shown in Table III.B.5. The survey measured noise from traffic and from six BART pass-bys. The results of the measurements show that no trains passed by the project site on the freight tracks during the measurement period, since trains would be required to sound their horn at both 92nd and 98th Avenues.

Table III.B.5 Existing Sound Levels at the Project Site

Monitor	Location	Maximum Measured DNL
1	At the northwest end of F Street off of 92nd Avenue at twelve feet above grade on a power pole	62 dBA
2	At the northwest corner of the project site, approximately 25 feet northwest of the 98th Avenue centerline at fifteen feet about grade on a power pole.	81 dBA
3	At the southeast corner of the project site approximately 35 feet northwest of the 98th Avenue centerline and 100-feet northeast of San Leandro Street (under the elevated BART line.)	82 dBA

Source: Charles Salter Associates, March 2005.

Existing Ground-borne Vibration

The noise study determined that ground-borne vibration in the project area resulting from BART pass-bys was below the threshold of human perception. The UPRR line has sporadic activity. The UPRR estimated that one train per day passes by the project site, although no train activity was observed during the 72-hour noise measurement made in May 2004.

4. Impacts and Mitigation

a. Standards of Significance

The proposed project would have a significant impact if any of the following criteria are met:

Criterion 1 Exposure of persons to or generate noise levels in excess of standards established in the Oakland General Plan or applicable standards of the other agencies (e.g. OSHA).

Criterion 2 Violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding operational noise.

Criterion 3 Violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding construction noise, except if an acoustical analysis is performed and all feasible mitigation measures imposed, including the standard City of Oakland noise measures adopted by the Oakland City Council on January 16, 2001.

Criterion 4 Violation of the City of Oakland Noise Ordinance (Oakland Municipal Code Section 8.18.020) regarding nuisance of persistent construction-related noise.

Criterion 5 Creation of a vibration which is perceptible without instruments by the average person at or beyond any lot line containing vibration-causing activities not associated with motor vehicles, trains, and temporary construction or demolition work, except activities located within the (a) M-40 zone or (b) M-30 zone more than 400 feet from any legally occupied residential property (Oakland Planning Code Section 17.120.060).

Criterion 6 Generation of interior Ldn or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories and long-term care facilities (and may be extended by local legislative action to include single family dwellings) per California Noise Insulation Standards (CCR Part 2, Title 24).

Criterion 7 Result in a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Criterion 8 Conflict with state land use compatibility guidelines for all specified land uses for determination of acceptability of noise [Source: State of California, Governor's Office of Planning and Research, General Plan Guidelines, 2003 (Appendix C, Figure 2)].

Criterion 9 Be located within an airport land use plan and would expose people residing or working in the project area to excessive noise levels.

Criterion 10 Be located within the vicinity of a private airstrip and would expose people residing or working in the project area to excessive noise levels.

The following section presents the project's potential impacts relative to each of these criteria.

b. No Impact

Criterion 7 *(5 dBA permanent increase in ambient noise levels):* The proposed residential use of the site would not result in an increase in the ambient noise levels in the project vicinity. The proposed residential use would be less intrusive than the existing industrial use of the site. It would be compatible with the residential uses to the east and would not increase noise levels at the industrial properties to the north. Existing uses to the west and south are located across San Leandro Street and 98th Avenue respectively, each of which generate the dominant noise source in the project vicinity.

c. Less Than Significant Impacts

Criterion 2 ***(****Violation of the City of Oakland Noise Ordinance regarding operational noise):* The City's operational noise guidelines are based on the level of sound that a proposed project would produce at a receiving property line. The threshold varies depending on whether the adjacent use is residential, commercial, or manufacturing in nature. The threshold is based on the number of minutes that a certain sound threshold would be exceeded within a given hour of the day or night. For residential uses the accepted day time sound level ranges from 20 minutes of sound at 60 dBA to 1 minute of sound at 75 dBA. The night time threshold ranges from 20 minutes of sound at 45 dBA to 1 minutes of sound at 60 dBA.

The intended residential use of the site would not normally result in any activities that would exceed these established thresholds for adjacent residential properties.

Criteria 9 and 10 *(proximity to a public or private airport):* The project is located 1.5 miles from the Oakland Airport. The level of sound in the immediate vicinity from motor vehicles and BART is the predominant source of noise for the project site, and existing airline noise does not represent a significant additional noise source. In addition, the measurement of L_{dn}, the 24-hour average sound level already accounts for airport noise.

d. Potentially Significant Impacts

Criterion 1 (Exposure of persons to or generate noise levels in excess of standards established in the Oakland General Plan),

Criterion 6 (Generation of interior Ldn or CNEL greater than 45 dBA for multi-family dwellings, etc.), and

Criterion 8 (Conflict with state land use compatibility guidelines for all specified land uses).

Each of the criteria listed above relates to the compatibility of the project site for the intended residential use. The intention of the criteria is to protect future residents from noise levels that are above what is recommended as acceptable for exterior and interior activity. The Project proposes residential units adjacent to the major thoroughfares of San Leandro Street and 98th Avenue. The units facing these roadways will require additional sound attenuation to ensure that the interior sound levels conform to local and state standards. Building practices commonly employed to achieve sound reduction include the use of higher rated building materials that provide a greater level of sound reduction. The units facing the interior of the site would be shielded by the buildings themselves, but will also be analyzed to ensure that each

building face exposed to a decibel level greater than 60 dB is designed such that interior sound levels meet local and state standards. Since the windows facing 98th Avenue and San Leandro Street will have to be closed in order to achieve the interior noise criteria, an alternate means of providing outside air to habitable spaces (ventilation or air conditioning) is required for facades exposed to an exterior dNL of 60 dBA or greater.

Regarding exterior use areas, the project itself would provide shielding from the higher sound levels produced by traffic along San Leandro Street and 98th Avenue. The proposed multi-family units along San Leandro Street and 98th Avenue would shield the interior of the site and attenuate much of the existing ambient noise produced by existing motor vehicle traffic. Estimated sound levels in the main outdoor use areas would be between 62 to 69 dB, which would be consistent with City of Oakland guidelines for residential uses.

Impact Noise -1 *(Criterion 1 — Exposure of persons to or generate noise levels in excess of standards established in the Oakland General Plan)***:** The existing noise environment at the project site ranges from 62 dBA to 82 dBA L_{dn} which would cause interior sound levels to be higher than the required 45 dBA $L_{dn.}$ The implementation of mitigation measure NOISE-1 would allow the proposed units to meet the requirements of the California Building Code.

> **Mitigation Measure Noise -1:** All Exterior walls exposed to a DNL of 60 dBA or greater shall be constructed with a Sound Transmission Class (STC) rating of 47. A qualified acoustical consultant shall review the design as it is developed to refine the specific STC ratings once the building design and site layout have been finalized through City review and approval of final design.

Significance after mitigation: Less than significant. Implementation of the proposed mitigation would ensure that interior noise levels meet local and state standards.

Criteria 3 and 4 *(Violation of the City of Oakland Noise Ordinance regarding construction noise):* The City of Oakland Noise Ordinance thresholds for construction noise is broken down into two sections: noise to be generated for less than 10 days, and noise to be generated for more than 10 days.

Less than 10 days. For residential properties, remediation and construction noise levels at the receiving property line on weekdays (7:00 a.m. to 7:00 p.m.) shall not exceed 80 dBA (85 dBA for commercial and industrial areas). The maximum remediation and construction noise level for weekends (9:00 a.m. to 8:00 p.m.) is 65 dBA in residential areas and 70 dBA for commercial and industrial areas.

More than 10 days. The threshold for weekday hours (7:00 a.m. to 7:00 p.m.) is 65 dBA for residential areas and 70 dBA for commercial and industrial areas. The corresponding threshold for weekends (9:00 a.m. to 8:00 p.m.) is 55 dBA for residential areas and 60 dBA for commercial and industrial areas.

Impact Noise – 2 *(Criteria 3 and 4 — Violation of the City of Oakland Noise Ordinance regarding construction noise)***:** Construction and remediation noise levels would reach 80 to 90 dBA at a distance of

50 feet. Some activities, such as excavation would exceed these noise levels. The project shall incorporate the adopted City Council construction noise mitigation measures, as shown below in mitigation measure NOISE-2a through d:

Mitigation Measure Noise -2.1 The project sponsor shall require remediation and/or construction contractors to limit standard remediation and/or construction activities as required by the City Building Services Division. Such activities are generally limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, with pile driving and/or other extreme noise generating activities greater than 90 dBA limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday, with no extreme noise generating activity permitted between 12:30 p.m. and 1:30 p.m. No remediation and/or construction activities shall be allowed on weekends until after the building is enclosed without prior authorization of the Building Services Division, and no extreme noise-generating activities shall be allowed on weekends and holidays.

Mitigation Measure Noise-2.2: To reduce daytime noise impacts due to remediation and/or construction activities, the project sponsor shall require construction contractors to implement the following measures:

- 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).
- Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible 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 where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.
- 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 other measures to the extent feasible.

Mitigation Measure Noise-2.3: To further mitigate potential extreme noise generating construction and remediation impacts, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing remediation or construction, a plan for such measures shall be submitted for review and approval by the City to ensure that maximum feasible noise attenuation will be achieved. These attenuation measures shall include as many of the following control strategies as feasible:

- Erect temporary plywood noise barriers around the construction site to shield adjacent uses.

- 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.
- Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site.
- Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings.
- Monitor the effectiveness of noise attenuation by taking noise measurements.

Mitigation Measure NOISE-2.4: Prior to the issuance of each building permit, along with the submission of construction documents, the project sponsor shall submit to the City Building Services Division a list of measures to respond to and track complaints pertaining to noise generated during the remediation and construction periods. These measures shall include the following elements:

- A procedure for notifying the City Building Division staff and Oakland Police Department.
- A plan for posting signs on-site pertaining to permitted remediation/construction days and hours and complaint procedures and who to notify in the event of a problem.
- A listing of telephone numbers (during regular construction hours and off-hours).
- The designation of an on-site remediation/construction complaint manager for the project.
- Notification of neighbors within 300 feet of the project remediation/construction area at least 30 days in advance of pile-driving and/or other extreme noise-generating activities about the estimated duration of the activity.
- A pre-remediation and pre-construction meeting shall be attended by job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

Significance after mitigation: Less than significant. Implementation of the proposed mitigation would ensure that construction period noise would conform to City of Oakland regulations.

Impact Noise-3 *(Criterion 5 — Creation of a vibration impact)***:** Although the vibration produced by the BART trains was not found to be perceptible to future residents, the Union Pacific trains could produce vibrations that could be felt in the homes closest to San Leandro Street.

Mitigation Measure Noise-3: The project sponsor shall retain an acoustical engineer during design to review and provide input to reduce the potential of vibration amplification on upper floors of the residences. Typical recommendations would include minimizing long spans, increasing joist depths, stiffening the structure, etc. Prospective residents shall be made aware

of the train line through a full disclosure statement. These recommendations on the final design would be subject to City review and approval.

Significance after mitigation: Less than significant.

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CHAPTER III
ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

C. HAZARDOUS AND TOXIC SUBSTANCES

1. Introduction

This section evaluates the existing level of contamination at the Project site, related to the past operation of the site by Fleischmann Yeast Company. The analysis addresses two main issues: 1) what sampling and remediation has occurred to date on the property, and 2) what remediation will be required to bring the property to a level appropriate for the intended residential reuse of the site.

The main conclusions of this section are as follows:

- Sampling of soil and groundwater has occurred over a number of years across the four properties.
- The property contains chemicals of concern that will require remediation prior to the initiation of construction activities.
- The proposed residential reuse of the site would not generate any risk of exposure to hazardous materials for future residents or neighboring properties.

The section includes mitigation that is sufficient to reduce all potential impacts related to hazardous materials to an acceptable level.

2. Approach and Methodology

This chapter addresses the potential impacts of the Project related to hazardous and toxic substances. The information in this chapter is based on a Phase I Environmental Site Assessment (ESA; July 2004), a Phase II Soil and Grab Groundwater Investigation report (July 2004), and an Additional Soil Sampling for Lead Characterization report (September 2004). All technical reports are available for public review between the hours of 8:00 a.m. and 5:00 p.m. at the City of Oakland Community and Economic Development Agency, 250 Frank Ogawa Plaza, Suite 3315, Oakland. Geomatrix reviewed previous reports prepared by others and incorporated the information into their work.

The Hazardous and Toxic Substances analysis includes an assessment of the historical and existing land uses on the Project site and its vicinity. The purpose of this assessment is to compile information about activities historically and currently conducted at the site and immediate vicinity that may have affected soil and/or groundwater quality at the Project site.

The Phase I ESA was performed in general accordance with the "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," established by the American Society for Testing and Materials (ASTM) in Method E1527-00. The Phase I ESA includes a review of available information from regulatory agency files and databases, previous consultant's reports, maps, historical land use information, and interviews. A site reconnaissance also was conducted to identify visible evidence of past and current use, storage, disposal, or spillage of hazardous materials on the Project site and adjoining parcels.

Based on results of the Phase I ESA, soil and groundwater samples were collected at several locations on site to determine if hazardous materials are present in the soil or groundwater.

3. Environmental Setting

The site is comprised of four properties: 921 98th Avenue, 999 98th Avenue, 854 92nd Avenue, and 860 92nd Avenue. Each property is discussed separately below.

a. Historical Land Uses

Historical land use information is based on information from previous Phase I reports and Sanborn Fire Insurance Maps from several years between 1925 and 1969.

921 98th Avenue

This property was shown as cultivated fields on the 1925 Sanborn map. On the 1949 Sanborn map, this property was occupied by Standard Brands of California, a yeast and vinegar manufacturer. The property contained a yeast manufacturing plant, a vinegar processing plant, a maintenance shop, a deep well pump house, a boiler house and engine room, a waste storage area, a railroad spur, and an asphalt-paved parking lot (ACC, 2002). Reportedly, the yeast and vinegar plants were constructed circa 1934, with additions to the yeast plant in 1954 and 1964. Margarine processing reportedly also was conducted at the property until 1990. Upon closure of the yeast manufacturing processes (date unknown), the plant was used for storage and distribution of Fleischmann's Yeast products from other facilities. Chemicals reported to be used at the site include aqueous ammonia, phosphoric acid, sodium hypochlorite, and sulfuric acid, which were stored in aboveground storage tanks (ASTs), and oils and waste oils, which were stored in 55-gallon drums. Based on the information reviewed, features or equipment that may have contained or used hazardous materials or wastes at the site include cooling towers, separators, floor drains, electrical transformers, and diesel generators.

999 98th Avenue

This property was shown as cultivated fields on the 1925 Sanborn map. On the 1949 map, it was used by the U.S. Government, but contained few structures. The property was undeveloped on the 1952 Sanborn map. Reportedly, the concrete tilt-up building was constructed in 1952 (AEI, 2002). The building is present on the 1959 Sanborn map and is occupied by General Electric Lamp Division. The building was expanded in 1960 to its current configuration. The building is a warehouse that is divided into three business units, two for material storage and one for cold storage (refrigeration). The occupants of the building have included Bay Area Rapid Transit (BART; storage), Pioneer Packing (box storage), and Fresh Floral Bouquet Company (cutting and distribution of flowers). Reportedly, asbestos abatement was conducted in the building and Freon was not used as a coolant (Basics Environmental, 1997).

854 92nd Avenue

This property was shown as cultivated fields on the 1925 Sanborn map. On the 1949 map, it was used by the U.S. Government, but contained few structures. The property was undeveloped on the 1952 Sanborn map. On the 1959 map, this property was occupied by an office, motor freight station and truck repair shop operated by Western Truck Lines, Ltd. The property features remain the same through the 1969 Sanborn map; however, the operators name changes to Western Gillette Truck Lines on the 1991 map. Historically, the site was a full service facility for marine cargo maintenance, including refrigeration

repair, container and chassis body work, sand blasting, and painting (REED, 1991). In 2000, the site primarily was used for marine cargo container storage (System Operation Services, 2000).

860 92nd Avenue

This property was shown as cultivated fields on the 1925 Sanborn map. On the 1949 map, it was used by the U.S. Government, but contained few structures. The property was undeveloped on the 1952 through 1969 Sanborn maps. The on-site buildings were constructed sometime after 1969. In 1992, the site was used as a Refrigerated Express, Inc., truck terminal facility (Clayton Environmental Consultants, 1992). A fueling island and two diesel underground storage tanks (USTs) existed on site. The site was primarily a truck dock and office building when the lease was acquired by Transamerica Terminal Services in 1995 (REED, 1994).

b. Current Land Uses

(1) Project Site. This section describes the current uses and buildings on the Project site.

921 98th Avenue

There are no current operations associated with this property. This property is divided into two areas by a railroad spur. Most aboveground structures associated with past historical operations at the former Fleischmann's facility have been demolished. At the time the Phase I ESA was performed, the foundations of former buildings, several large stockpiles of crushed brick, crushed concrete, and gravel, and various manholes and storm drains were observed on site. A maintenance building also was present with an adjacent chemical storage (drums and containers with unknown contents) area. A ditch containing an approximately 6-inch-diameter polyvinyl chloride (PVC) pipe intersects the property. Two approximately 8-inch- to 10-inch-diameter steel pipes were observed next to each other, protruding vertically approximately 6 feet above ground surface. One of the pipes was capped with a joint or valve and had a "Well Water" label on it. The other was uncapped and water was flowing from it. The water pooled on the ground and then flowed into a drain located approximately 10 feet away.

999 98th Avenue

This property contains one large building on the eastern portion of the property with loading docks along one side of it. No business activities were observed on site and the building was not accessible during the site reconnaissance for the Phase I ESA. The ground surface of the property is asphalt-paved, except for a strip of land between the building and the eastern property boundary, which is gravel. Several storm drain inlets are located throughout the parcel. A sump and transformers were observed on site.

854 92nd Avenue

This property is occupied by Global Intermodal Systems, and used for freight car maintenance and storage. The ground surface is paved with asphalt or covered with gravel. A large portion of this property was covered by stacked freight containers; surface conditions were not observed where containers were stacked. A vacant office building is located in the center of the property. Attached to this office building is a large shop where maintenance of trucks, forklifts, and freight cars occurs. Storage of maintenance supply chemicals, compressed gases, machine lubricants, oil, chlorine, and hydrogen peroxide were observed on site.

860 92nd Avenue

This property is occupied by Global Intermodal Systems, LLC, which is a container freight operation. The ground surface is paved with asphalt or covered with gravel. The primary office for Global Intermodal Systems is located in the center of this property. Attached to the office is a large building with loading docks that appeared to be used for storage. A large portion of this property was covered by stacked freight containers; surface conditions were not observed where containers were stacked. A maintenance shop was located in the northeast corner of the property. Several 55-gallon drums and small containers of machine lubricants and maintenance chemicals were observed in and near the maintenance shop.

(2) Adjoining Areas. The properties in the surrounding area are primarily light industrial and residential. South of the site are True Green Land Care, Agricultural Bag Manufacturing, Inc., CHK Manufacturing, Inc., and an unknown business. East of 999 98th Avenue and south of 854 92nd Avenue are a vacant building and Pacific Paper Tube, Inc. Plastic storage tanks shaped like cubes containing pink fluid were observed at Pacific Paper Tube, Inc., along the fence adjacent to the site (854 92nd Avenue). The area to the east of 854 and 860 92nd Avenue is residential. To the north of 860 92nd Avenue are residences, Termco Spray Tech, Christian Auto Repair, Super Link Plastics, Inc., and some unknown businesses. To the west of 854 and 860 92nd Avenue and north of 921 98th Avenue is a container storage facility. To the west of 921 98th Avenue is the Union Pacific Railroad tracks, San Leandro Street, and elevated BART tracks. There are no schools located within ¼ mile of the project site.

c. Previous Investigations and Regulatory Status of Site

921 98th Avenue

Two 25,000-gallon diesel USTs were removed in August 1990. In October 1990 eight soil borings were conducted. Three of the eight borings were converted into monitoring wells (MW-1 through MW-3). An additional monitoring well was installed in January 1991 (MW-4). A groundwater extraction and treatment system was installed and groundwater extraction began in February 1992. Separate phase petroleum hydrocarbons (SPPH) identified as diesel were detected in one monitoring well and the extraction well in June 1993. From June 1993 to March 1994, 133 gallons of SPPH were removed by vacuum extraction. A final round of groundwater sampling was conducted in June 1996. Total petroleum hydrocarbons as diesel (TPHd) were reported in the sample from one monitoring well at 38,000 parts per billion (ppb). Approximately 4 inches of SPPH were reported in the well in June 1996. A Remedial Action Completion Certification issued by the Alameda County Health Care Services Agency (ACHCSA) was received by Fleischmann's Yeast on March 6, 1997.

Two former 1,000-gallon gasoline USTs and a formaldehyde UST were discovered during a Phase I Environmental Site Assessment (ACC, 2002). The 2002 ACC Phase I report states that, according to the former plant manager, the formaldehyde UST was filled with sand circa 1979-1980. Investigative activities were conducted by ACC to locate the USTs; a geophysical survey confirmed that the gasoline USTs had been removed. Excavation activities located the formaldehyde UST, which was found to contain approximately 500 gallons of a weak water/formaldehyde mixture (ACC, 2003a). In September 2002, eight exploratory soil borings were advanced to characterize the soil and groundwater for gasoline constituents in the vicinity of the two former and one existing USTs. Eleven soil samples and three grab

groundwater samples were collected and analyzed for total petroleum hydrocarbons quantified as gasoline (TPHg), benzene, toluene, ethylbenzene and total xylenes (BTEX), and methyl tertiary butyl ether (MTBE). TPHg and BTEX were detected in some or all of the soil samples and two of the grab groundwater samples. MTBE was detected in one of the grab groundwater samples. In August 2003, twelve additional exploratory soil borings were conducted (ACC, 2003b). Fourteen soil and seven grab groundwater samples were analyzed for TPHg, BTEX, and MTBE. The results of the additional site investigation were consistent with the earlier site investigation, and ACC concluded that the impact to soil and groundwater in the immediate vicinity of the former UST locations is localized and limited in extent. The ACHCSA has requested that additional investigation be conducted to define the lateral and vertical extent of affected soil and the lateral extent of affected groundwater.

999 98th Avenue

Environmental investigations were not previously conducted at this property. The Regional Water Quality Control Board (RWQCB), Department of Toxic Substances Control (DTSC), and ACHCSA do not have files on this property.

854 92nd Avenue

In April, 2000, six soil borings were conducted and soil samples were collected for chemical analysis (System Operation Services, 2000). Samples collected at 1.5 feet bgs were analyzed for volatile and semivolatile organic compounds (VOCs and SVOCs), and California Title 22 metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc). VOCs and SVOCs were below laboratory reporting limits. Metals were detected and compared to the Total Threshold Limit Concentrations (TTLCs); concentrations were below the TTLCs. The soil samples also were analyzed using the Waste Extraction Test (WET) for selected Title 22 metals. Results were below the respective Soluble Threshold Limit Concentrations (STLCs) for each metal. One boring was advanced to 20 feet bgs to verify depth to groundwater. Groundwater was not encountered at the time of drilling. The Regional Water Quality Control Board (RWQCB), Department of Toxic Substances Control (DTSC), and ACHCSA do not have files on this property.

860 92nd Avenue

In November 1994, soil samples were collected from eight locations around the building on the property. Soil samples and one grab groundwater sample were collected for analysis for TPHg, TPHd, and BTEX; selected soil samples and the grab groundwater sample also were analyzed for other VOCs. Low concentrations of TPHg and TPHd were detected in one of the soil samples. Methylene chloride was detected in the water sample.

In October 1995, two diesel USTs were removed, and in November 1995 the UST pit was overexcavated. In 1996, four borings were drilled to collect soil and grab groundwater samples; one boring was converted to a monitoring well. Samples were analyzed for TPHd, TPHg, BTEX, and MTBE. Four additional borings were drilled in May 1997; two of the borings were converted to monitoring wells. Groundwater sampling was conducted from the wells for four quarters and the case was closed by ACHCSA in January 1999. The ACHCSA noted in its closure summary that up to 490 parts per million (ppm) TPHg, 1,500 ppm TPHd, and 0.18 ppm benzene remain in soil and up to 80 ppb benzene remain in groundwater beneath the site. No information regarding destruction of the wells was found during the June 2004 review of ACHCSA files.

d. Phase I ESA Findings

Based on the data reviewed during this ESA, several Recognized Environmental Conditions (RECs) were identified in association with the site, as defined in ASTM E 1527-00. RECs include the potential for release of chemicals in the areas where they are used or stored and the potential for undetected past releases of chemicals from historical operations. Areas or structures where RECs (potential, known, or historical) were identified during the ESA are described below:

- Staining was observed during the site reconnaissance beneath and in front of transformers at the 999 98th Avenue property and near an aboveground diesel drum at 854 92nd Avenue.
- A formaldehyde UST is located at the former Fleischmann's facility at 921 98th Avenue; based on information provided by Mr. Pelton of the Dreisbach Family Trust on June 2, 2004, the UST is scheduled for removal.
- An opaque blue-green liquid was observed in a sump at 854 92nd Avenue.
- In 1996, approximately 4 inches of SPPH was reported in a monitoring well associated with former diesel USTs at 921 98th Avenue.
- Based on sampling conducted at 921 98th Avenue in August 2003, petroleum hydrocarbons and associated constituents remain in soil and groundwater in the vicinity of the former gasoline USTs. The ACHCSA has requested that additional investigation be conducted to define the lateral and vertical extent of affected soil and the lateral extent of affected groundwater.
- Various chemicals and wastes, such as oils, paints, solvents, and fuels are currently or were historically used and stored at all four of the properties.
- Based on sampling conducted at 860 92nd Avenue in the late 1990s, petroleum hydrocarbons and associated constituents remain in soil and groundwater in the vicinity of the former diesel USTs.

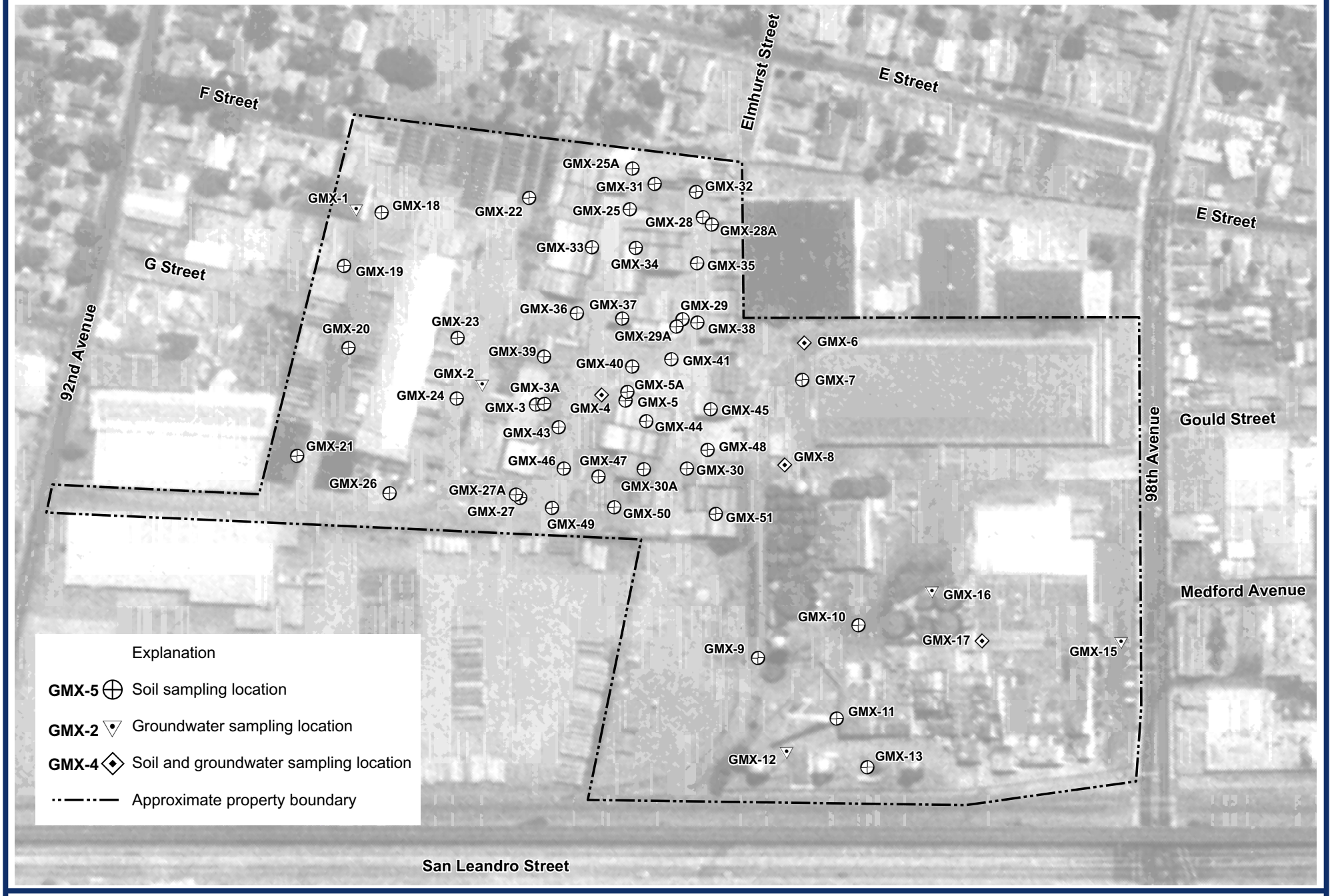
Other features that may need to be addressed prior to or as part of site development include the following:

- One deep water well located at 921 98th Avenue;
- Two sumps containing standing water, one of which was observed to have a sheen, at 999 98th Avenue;
- Transformers, which could have contained oils with polychlorinated biphenyls (PCBs), identified on 921 98th Avenue on historical Sanborn maps;
- A ditch with PVC pipe along the northern boundary of the 921 98th Avenue site; and
- Railroad spurs that have been on site since at least 1949.

e. Groundwater and Soil Investigations

Based on the results of the Phase I ESA, Geomatrix Consultants, Inc., conducted soil and groundwater sampling at all four properties. Soil and/or groundwater sampling was conducted in two phases.

(1) First Sampling. The first sampling was conducted in June and July 2004. A total of 31 borings were conducted at the site; soil samples were collected from 25 of the borings and grab groundwater samples were collected from 9 of the borings (Figure 11). Table III.C.1 presents the targeted features, soil sampling depths, and chemicals found in each sample.



CirclePoint℠
The *whole* view.

north

FIGURE 11.

BORING HOLE LOCATION MAP

Groundwater at this site is present at depths of 8 to 12 feet below ground surface (bgs). The boreholes were drilled to depths of up to 28 feet bgs. A total of 26 soil samples and 9 groundwater samples were collected and submitted for laboratory testing. Results are discussed in item 3 below.

(2) Second Sampling. The second investigation was conducted in August 2004 to further delineate the area and depth of lead-affected soil on the 854 92nd Avenue property. Twenty-seven borings were advanced to depths ranging from 3 to 5 feet bgs (See Figure III.C.2). Results are discussed in item 3 below.

Table III.C.1 Sampling Plan Data

Boring Location ID1	Feature	Potential Environmental Issue	Media	Analyses2	Sample Depth (feet bgs3)
GMX-7	Transformers 999 98th Avenue	Staining	Soil	PCBs TPHd/mo	1
GMX-13	Other Transformers 921 98th Avenue	Past historical use of PCBs	Soil	PCBs TPHd/mo Pb, Hg	1.5
GMX-16	Formaldehyde UST 921 98th Avenue	Formaldehyde	Groundwater	Formaldehyde	
GMX-4	Sump 854 92nd Avenue	Blue-green liquid	Soil	TPHd/mo PCBs PNAs Metals	5
GMX-4			Groundwater	TPHd/mo VOCs Formaldehyde	
GMX-6 GMX-8	Other Sumps 999 98th Avenue	Sheen on one; historical use	Soil	TPHd/mo PCBs PNAs Metals	5
GMX-6 GMX-8			Groundwater	TPHd/mo VOCs	
GMX-15	Former Gas USTs 921 98th Avenue	TPH left in place	Groundwater	VOCs	
GMX-5	Areas of Chemical Storage All Addresses	Potential spillage; storage	Soil	TPHd/mo PNAs PCBs Metals	1.5
			Soil	Pb	3.0
GMX-2 GMX-12			Groundwater	TPHd/mo VOCs	
GMX-3	Maintenance Truck Shops	Potential spillage	Soil	TPHd/mo	1.5

Boring Location ID1	Feature	Potential Environmental Issue	Media	Analyses2	Sample Depth (feet bgs3)
				PNAs Metals	
			Soil	Pb	3
			Soil	Pb	5
GMX-1			Groundwater	TPHd/mo VOCs	
GMX-10	RR Spur	Herbicide usage	Soil	As, Pb, Cr, Ni, Zn PNAs	1.5
GMX-9	Ditch with Piping	Discharge	Soil	TPHd/mo PNAs Metals	1
GMX-17	Historical oil Storage	Potential spillage	Soil	TPHd/mo PNAs PCBs Pb, Hg	2.75
GMX-17			Groundwater	VOCs	
GMX-11	Smoke Stack	Black soil observed	Soil	PNAs Metals	1
GMX-18 through GMX-30	General coverage 854 92nd Avenue 860 92nd Avenue		Soil	Pb, Hg	1 to 3

Source: ESA, 2004.
Notes:

[1] Boring locations shown on Figure 1.
[2] TPHd/mo = total petroleum hydrocarbons quantified in the diesel range and in the motor oil range by EPA Method 8015M
PNAs = polynuclear aromatic hydrocarbons by EPA Method 8270 SIM
PCBs = polychlorinated biphenyls by EPA Method 8082
VOCs = volatile organic compounds by EPA Method 8260B
Metals = California Code of Regulations, Title 22 metals by EPA Method 6000/7000 series
As = arsenic, Pb = lead, Cr = chromium, Ni = nickel, Zn = zinc, Hg = mercury
Formaldehyde by EPA Method 8315
[3] bgs = below ground surface

(3) Results of Sampling. The following section summarizes the chemicals that remain on the four parcels that comprise the Project area. To assess whether any of the chemicals detected in soil or grab groundwater are present at concentrations of potential concern, the analytical results were compared to the RWQCB's Environmental Screening Levels (ESLs) for residential land use.[1] The ESLs are conservative screening levels that correspond to an acceptable risk level and reflect varying combinations of site characteristics including both residential and industrial land uses. Concentrations of compounds detected below corresponding ESLs can be assumed to not pose a significant threat to human health and the environment. Conversely, exceedance of the corresponding ESL does not necessarily indicate that adverse health effects will occur, but suggests that additional evaluation of the potential risks is warranted. To be conservative, residential ESLs for sites at which groundwater is a current or potential source of drinking water were selected as screening criteria. Please refer to Figure 3 for information on the property locations.

854 92nd Avenue: Lead was detected above the ESL (200 mg/kg) in shallow soil samples (1.5 feet below ground surface (bgs) from borings drilled on this property. Lead was not detected above the ESL in deeper soil samples (3 feet bgs) except at one location. The depth of lead impact above the ESL in soil appears to be confined to 3 feet bgs or less.

Petroleum hydrocarbons were detected at levels above ESLs (100 mg/kg for diesel; 500 mg/kg for motor oil) at two boring locations at 1.5 feet bgs, which coincided with elevated lead levels discussed above.

860 92nd Avenue: The former diesel USTs located on this site were removed and the property has received regulatory closure from the ACHCSA which has jurisdiction over UST sites. However, petroleum constituents remain in soil and groundwater in this area.

921 98th Avenue: Two former diesel USTs located on this site were removed and the property owner received regulatory closure from the ACHCSA in March 1997; however, SPPH was still present in the subsurface in November 1996.

Two additional gasoline USTs were removed from the 921 98th Avenue site, but have not received regulatory closure. Previous data indicates elevated benzene concentrations and the presence of SPPH in groundwater.

Mercury and lead were detected above ESLs (2.5 mg/kg for mercury, 200 mg/kg for lead) at one location coinciding with the location of a former smoke stack. The occurrence of lead and mercury appears to be localized.

Petroleum hydrocarbons were detected at levels above ESLs (100 mg/kg for diesel; 500 mg/kg for motor oil) at one boring location at 1.5 feet bgs.

The property also contains a deep water well, transformers, and a ditch along the northern boundary containing PVC pipe.

999 98th Avenue: Two sumps containing standing water were observed on this site, one of which was observed to have a sheen.

[1] California Regional Water Quality Control Board, San Francisco Bay Region, 2003, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final, July.

f. Asbestos-Containing Materials and Lead based Paint Issues

921 98th Avenue

The former yeast and vinegar plants at this property were constructed in 1935 and additions were made in 1954 and 1964 (ACC, 2002); therefore, asbestos and/or lead-based paint may have been present. These building have been demolished and asbestos abatement reportedly was performed. The maintenance building on this property remains and the construction date is sometime between 1925 and 1949; therefore, asbestos and/or lead-based paint may be present.

999 98th Avenue

According to the Alameda County Assessor's office, the building at the site was constructed in 1952 (AEI, 2002); therefore asbestos and/or lead-based paint may be present. According to a Phase I conducted by Dames & Moore in 1995, asbestos was found in tiles and pipe insulation within the office areas (Basics, 1995). According to an interview conducted with a represent of LCB Commercial Real Estate during a Phase I conducted by Basics Environmental in 1995, asbestos abatement had been conducted by an industrial hygienist to meet BART requirements (Basics, 1995). Basics Environmental stated in its report that obvious signs of asbestos-containing materials were not observed during the site reconnaissance. During a Phase I conducted AEI Consultants in 2002, suspected asbestos-containing material was observed and it was recommended that testing be conducted prior to demolition (AEI, 2002).

854 92nd Avenue

The building was constructed some time between 1969 and 1991. Since the construction date is unknown, asbestos and/or lead-based paint may be present.

860 92nd Avenue

The buildings at the site were constructed in the mid 1950s (Clayton, 1992); therefore asbestos and/or lead-based paint may be present. Suspected asbestos-containing materials were observed during a Phase I conducted by Clayton Environmental in 1992 (Clayton, 1992).

3. Impacts and Mitigation

a. Standards of Significance

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

Criterion 1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

Criterion 2 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;

Criterion 3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

Criterion 4 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 create a significant hazard to the public or the environment;

Criterion 5 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 would result in a safety hazard for people residing or working in the project area;

Criterion 6 Be located within the vicinity of a private airstrip, and would result in a safety hazard for people residing or working in the project area;

Criterion 7 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

Criterion 8 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.

b. No Impact

The following discussion relates to Criteria 2, 3, 7, and 8.

Criterion 2 – *(Release of Hazardous Materials into the Environment)* The residential use of the site would not involve hazardous materials and no hazard to the public or environment is foreseen. No construction-period impacts would occur, since mitigation measures III.C.1a through III.C.1d require the remediation of all identified contaminants prior to issuance of grading permits for construction.

Criterion 3 – *(Hazardous Emissions and Handling of Hazardous Materials Within 1/4-mile of a School)* The proposed Project is not located within one-quarter mile of an existing or proposed school.

Criterion 7 – *(Interference with Emergency Response or Evacuation Plan)* The proposed Project would not physically affect any critical arterial roads or otherwise affect an emergency response or emergency evacuation plan. Based on the results of the traffic study, discussed in Section III.A of this Draft EIR, all local intersections would continue to operate at an acceptable level with the Project. The future cumulative traffic impact projected for 2025 at the intersection of 98th Avenue and International Boulevard is related to city wide increases in traffic flow and would occur with or without the Project. The Oakland Fire Department has confirmed that San Leandro Street provides good access to the proposed Project site. It is wide and accessible by way of city streets and freeway exits. The provision of emergency services can therefore be readily provided via other streets and arterials in the vicinity.2

Criterion 8 – *(Expose People to Risks Associated With Wildland Fires)* The proposed Project is located in an urbanized area that is not adjacent to wildlands or subject to wildfires.

c. Less Than Significant Land Use Impacts

The following discussion relates to significance Criteria 5 and 6.

Criteria 5 and 6 – *(Located in the Vicinity of a Private Airstrip/Public Airport)* The proposed Project is located in a developed, urban neighborhood approximately two miles from the North Airport Executive Terminal and runway, approximately three miles from the Oakland International Airport and runway. As

[2] Philip Basada, P.E., Fire Prevention Bureau, *Personal Communication*, February 2005

discussed more fully below, the Project would comply with building height restrictions of the Airport Land Use Policy Plan and would not present a hazard to people residing or working in the area.

The Project site is located within the General Referral Area and the Height Referral Area for Oakland International Airport. Any Project in this area is subject to the following Height Referral Area policies from the Alameda County *Airport Land Use Policy Plan*:

"For an airport runway more than 3,200 feet in length, a sloping surface identifies the airspace above one foot in height for each 100 feet (100:1) horizontally from the nearest point of the nearest runway, up to 20,000 feet."

Alameda County's policy, as stated above, is that for every 100 feet of distance away from the nearest point of the nearest runway, a building is allowed to be constructed up one foot in height. The Project site is located approximately three miles from the runway of the Oakland International Airport (~15,840 feet); therefore, the Project would be limited to buildings of no more than 158 feet in height. The Project proposes single family dwellings of up to 30 feet in height, and multi-family units of up to 38 feet in height. The proposed design would therefore be in compliance with Alameda County restrictions upon building height in the vicinity of a public airport.

d. Significant Land Use Impacts and Mitigation Measures

Impact HAZ 1: *(Criterion 4 - (Listed Hazardous Material Site)* As described in Section B "Environmental Setting" above, the site contains contaminated soils and groundwater. Development of the site will require remediation or mitigation of these conditions.

A Phase I Site Assessment Report was prepared by Geomatrix Consultants, Inc., in July 2004[3] that identified a number of potential environmental concerns (including former USTs) related to past uses of the site as the Fleischman's yeast plant and trucking facilities. Geomatrix Consultants, Inc., conducted soil and groundwater sampling at over 50 locations across the site in July 2004[4] and September 2004,[5] results indicated the presence of lead, mercury, and petroleum hydrocarbons in site soil. Their subsequent reports recommended actions that should be taken before reconstruction of the site can begin.

The hazardous materials technical report prepared for the Project found that the 921 98th Avenue site is identified on the Cortese and LUST lists and the 860 92nd Avenue property is identified on the Cortese, LUST, and CA FID lists. The Cortese list identifies public drinking water wells with detectable concentrations of constituents, hazardous substances sites selected for remedial action, and other release sites. The LUST list is the Leaking Underground Storage Tank database, which contains records of leaking underground storage tank sites. The CA FID list contains records of active and inactive underground storage tank locations listed by the State Water Resource Control Board.

The files kept by the Alameda County Health Care Services Agency were reviewed and contained information regarding the USTs that have been removed from the 921 98th Avenue and 860 92nd Avenue properties. At the 927 98th Avenue property, two former USTs have received regulatory closure, two former USTs have not yet received closure, and one formaldehyde UST remains in place. At the 860 92nd Avenue property, two former USTs have received regulatory closure. The closure letters issued by the

[3] *Phase I Environmental Site Assessment*, Arcadia Park Development, Oakland, California, dated July 2004.
[4] Results of Phase I Soil and Grab Groundwater Investigation, Arcadia Park Development, Oakland, California
[5] Results of Additional Soil Sampling for Lead Characterization 854 92nd Avenue, Arcadia Park Development, Oakland, California

Alameda County Health Services Agency were based on continued use for industrial uses. The Agency may require additional sampling and testing to be done in order to prepare the site for residential development. Implementation of mitigation measures described below would ensure all existing contaminants are remediated to levels consistent with the reuse of the site for residential purposes.

Prior to commencing with development activities, the Project sponsor shall request that a regulatory agency be designated to oversee and approve remediation and mitigation activities. A discussion of the regulatory process is included in Appendix D. The designated agency will have final approval over the remediation conducted at the Project. A worker health and safety plan will be prepared prior to commencement of grading that addresses measures to be taken to reduce exposure of remediation and construction workers to chemicals present in site soil and groundwater. Additionally, a Site Management Plan will be prepared for the Project that describes procedures for handling affected soil and groundwater, if encountered during construction. The following mitigation measures would address potential impacts related to site contaminants pursuant to state guidelines for the intended residential use of the site.

Mitigation HAZ 1a:

The Project sponsor shall work with the designated agency to remediate the elevated levels of lead identified during on-site soil sampling. Remediation activities will likely include excavation of lead-affected soil and off-site disposal at an appropriate hazardous waste facility. The Project sponsor shall obtain regulatory closure from the designated agency for this property for the proposed residential reuse of the site. The regulatory process for this remediation shall occur as outlined in Appendix D of this EIR.

Prior to the issuing of any grading, demolition, or building permits for the project, a site specific Health and Safety Plan (HSP) shall be prepared by a qualified industrial hygienist. At a minimum, the HSP shall summarize information collected in environmental investigations for the project site, including soil and groundwater quality data; establish soil and groundwater mitigation and control specifications for grading and construction activities, including health and safety provisions for monitoring exposure to construction workers; provide procedures to be undertaken in the event that previously unreported contamination is discovered; incorporate construction safety measures for excavation activities; establish procedures for the safe storage and use of hazardous materials at the project site, if necessary; provide emergency response procedures; and designate personnel responsible for implementation of the HSP. The HSP shall be designed to prevent potential exposures to construction workers above the established OSHA Permissible Exposure Limits. This plan shall be submitted to the City of Oakland for review and acceptance prior to the issuance of a building permit.

Mitigation HAZ 1b:

854 92nd Avenue: The Project sponsor will work with the designated agency to remediate the elevated levels of lead identified during on-site soil sampling. Remediation activities will likely include excavation of lead-affected soil and off-site disposal at an appropriate hazardous waste facility. The Project sponsor shall obtain regulatory closure from the designated agency for this property for the proposed residential reuse of the site.

Mitigation HAZ 1c:

860 92nd Avenue: Although the USTs previously received regulatory closure from the ACHCSA, this action was based on continued industrial use of the site. The Project sponsor shall obtain regulatory approval from the designated agency for residential reuse. The agency may request additional soil, groundwater, or vapor sampling prior to approval for residential use. If sampling is conducted and impacts are identified that may cause a risk to future residents, the Project sponsor will work with the designated agency to remediate or mitigate those impacts.

Mitigation HAZ 1d:

921 98th Avenue: The Project sponsor shall receive approval from the designated agency for the proposed residential reuse of the site. This will include addressing issues regarding the USTs that have been closed based on industrial site use and the USTs that have not obtained closure. The agency may request additional soil, groundwater, or vapor sampling prior to approval for residential use. If sampling is conducted and impacts are identified that may cause a risk to future residents, the Project sponsor will work with the designated agency to remediate or mitigate those impacts. Additionally, the deep water well should be properly abandoned under the oversight of the appropriate agency.

Mitigation HAZ 1e:

999 98th Avenue: The Project sponsor shall decommission the two sumps located on this property under appropriate regulatory oversight. If required by the oversight agency, the Project sponsor shall implement additional soil and groundwater testing as directed by the oversight agency to confirm that the sumps have not impacted site soil and groundwater. If impacts to site soil and groundwater are present, the Project sponsor shall work with the designated agency to obtain approval for the proposed residential reuse of the property.

Significance after Mitigation: Less than significant.

Impact HAZ2: (*Criterion 2 – Release of Hazardous Materials into the Environment)* Existing buildings could contain asbestos containing materials or lead-based paint. These materials require removal prior to any demolition activities in accordance with the Bay Area Air Quality Management District's (BAAQMD) Regulation 11, Rule 2.

Mitigation HAZ 2 – All asbestos containing materials (ACMs) and lead-based paint shall be removed from the site prior to the start of any demolition activities. The removal of ACMs shall be conducted by a licensed asbestos abatement firm in accordance with the BAAQMD's Regulation 11, Rule 2.

Significance after Mitigation: Less than significant.

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CHAPTER III

ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

D. LAND USE ANALYSIS

1. Approach and Methodology

The Land Use and Planning analysis includes review of the applicable land use plans and development requirements for the Project site. The City of Oakland's land use plans, policies and regulations that pertain to the Project site are found in the City of Oakland's General Plan (General Plan) and the City of Oakland Zoning Code (Zoning Code).

2. Setting

a. Project Location

The 27.5-acre Project site is located between 92nd Avenue and 98th Avenue along San Leandro Street. Access to the development would be provided from both 92nd and 98th Avenues. The Project site contains four parcels known as 921 98th Avenue; 999 98th Avenue; 854 92nd Avenue; and 860 92nd Avenue. The Project site consists of five parcels: 044-4989-16, 044-4989-17, 044-4989-9-4, 044-4989-11-2, 044-4989-10-2.

The surrounding area is developed with residential, commercial, and industrial uses. As shown in Figure 2, the area to the east is an established residential neighborhood. The site is bordered to the west by at-grade railroad tracks, the elevated BART Fremont line, and San Leandro Street. Uses to the north and south along San Leandro Street are primarily industrial, including auto-body shops, light industrial, storage, and warehouses. Uses fronting 98th Avenue range from industrial to commercial/office, and residential. The parcel boundaries are shown in Figure 3. Land uses are shown in Figure 4, while zoning for the Project site and adjacent areas is illustrated in Figure 5.

b. Existing Improvements

The site is level and covered with impervious surfaces. There are currently five buildings on the proposed Project site, as well as a water tower, tanks, and other remnants of the former use of the site. In addition, the site is used for the temporary storage of shipping containers. The existing buildings include an industrial building comprising approximately 90,000 square feet, a brick office building comprising approximately 20,000 square feet, and a metal water tower and a nearby brick maintenance building. The water tower and maintenance building date from at least 1949 and were part of the historical operations of the former Fleishmann's yeast plant, which operated on the site from 1935 to 2003. Also on the site are a large transformer containment area

various storage and shop buildings; stockpiles of materials; sumps, transformers, and pipes; three deep water wells, two of which have been abandoned; and railroad spurs dating from at least 1949. All structures on the site would be demolished or removed from the site as part of the Project.

c. General Plan Designation

The General Plan land use designation for the site is General Industrial/Transportation, which does not allow for the development of residential uses. The Project therefore conflicts with the current zoning and General Plan designation. As shown in Figure 7, the Project sponsor is requesting a General Plan amendment to Housing and Business Mix. The Housing and Business Mix designation was created by the City to allow for the coexistence of low impact industry and housing where appropriate locations have been identified. The Housing and Business Mix allows for residential uses at a maximum density of 30 units per acre, which would accommodate the proposed use.

d. Redevelopment Plan

The project site is located within the area governed by the Redevelopment Plan for the Coliseum Area Redevelopment Project. The Coliseum Redevelopment project area includes 6,764 acres bounded by 22nd Avenue, International Boulevard, the Oakland-San Leandro city border, and the Oakland International Airport and the Estuary. The Redevelopment Plan was adopted on June 23, 1995 (Ordinance Number 11824 C.M.S.), and later amended on July 22, 1997 (Ordinance Number 12001 C.M.S.) to include an additional 264 acres in the San Antonio district of Oakland. The principal objectives of the Redevelopment Plan include the abatement of physical and economic blight through the redevelopment of vacant and underutilized properties, and the replacement of obsolete infrastructure. An additional objective of the Redevelopment Plan is the assembly of land into parcels suitable for modern, integrated development with improved pedestrian and vehicular circulation in the project area. The current Redevelopment Plan land use designation for the site is Manufacturing, which would have to be amended to residential if this project were approved.

e. Zoning

The Project site is currently zoned M-30 General Industrial. The Project sponsor proposes a zone change to R-30, One-Family Residential Zone, for the portion of the site where single-family detached homes are proposed and to R-50, Medium Density Residential Zone, for the portion of the site where detached condominiums and townhomes are proposed. Section 17.16.010 of the Oakland Municipal Code states that the purpose of the R-30 zone is "to create, preserve, and enhance areas for single-family dwellings in desirable settings for urban living, and is typically appropriate to already developed lower density dwelling areas of the city." Section 17.24.010 of the Oakland Municipal Code states that the purpose of the R-50 zone is "to create, preserve, and enhance areas for apartment living at medium densities in desirable settings, and is typically appropriate to areas of existing medium density residential development."

Development standards applicable to properties in the R-30 zoning district include:

Lot size:	Minimum lot size of 5,000 square feet.
Minimum frontage:	Minimum frontage of 25 feet.
Building height:	Building height maximum of 25 feet, except that the highest portion of a pitched roof on a principal building or other principal facility may extend up to thirty (30) feet if certain provisions of the code are met.
Lot width:	Minimum lot width of 45 feet.
Front yard setback:	Minimum front yard setback of 20 feet.
Side yard setback: *Street Side of Corner Lot*	The minimum side yard width on the street side of every corner lot shall be as prescribed in Section 17.108.060.
Side yard *Interior Lot Line*:	The minimum side yard width along each interior side lot line of every lot shall be five feet
Rear Yard:	The minimum rear yard depth on every lot shall be twenty (20) feet, except as a lesser depth is allowed by Section 17.108.110. For lots which abut an adjoining rear yard, the minimum rear yard depth shall be increased by an additional one-half (0.5) foot of rear yard depth for each additional one foot of lot depth over one hundred (100) feet, up to a maximum rear yard depth of eighty (80) feet.

Development standards applicable to properties in the R-50 zoning district include:

Lot size:	Minimum lot size of 4,000 square feet.
Minimum frontage:	Minimum frontage of 25 feet.
Building height:	Except as otherwise provided in Section 17.108.020, Section 17.108.030, and Chapter 17.128, the maximum height of buildings and other facilities shall be thirty (30) feet.
Lot width:	Minimum lot width of 25 feet.
Front yard setback:	15 feet minimum.
Side yard setback *Street side of corner lot:*	The minimum side yard width on the street side of every corner lot shall be as prescribed in Section 17.108.060.
Side yard *Interior lot line:*	The minimum side yard width along each interior side lot line of every lot shall be four feet.

Rear yard:	The minimum rear yard depth on every lot shall be fifteen (15) feet, except as a lesser depth is allowed by Section 17.108.110.
Courts:	On each lot containing Residential Facilities with a total of two or more living units, courts shall be provided when and as required by Section 17.108.120.

Planned Unit Development (PUD)

The Project sponsor is proposing a planned unit development (PUD) for the Project site. The PUD standards would supersede the zoning standards of the applicable R-30 and R-50 zones. The PUD regulations applicable to the proposed Project are summarized below:

- **Density and Floor-Area Ratio Calculation.** The maximum number of dwelling units in the R-30 zone shall be one unit for each five thousand (5,000) square feet of land area. The maximum number of dwelling units in the R-50 zone shall be one unit for each one thousand and five hundred feet (1,500) square feet of land area.
- **Height in the R-30 Zone.** No building shall exceed fifty (50) feet in height in the R-30 zone except as would otherwise be allowed for some civic and commercial uses.
- **Yards and Courts.** Yards and courts shall be sized to provide the same minimum separation between walls of Residential Facilities or between such facilities and the walls of other facilities. This sizing will be the same regardless of whether the walls are on the same or on separate lots, as is generally required in the R-60 zone for courts between such walls when located on the same lot.
- **Usable Open Space.** Group usable open space shall be provided for Residential Facilities in the minimum amount of two hundred (200) square feet per dwelling unit. In the R-30 zone, private usable open space shall be provided for Residential Facilities in the amount of one hundred (100) square feet per dwelling unit. All required usable open space shall conform to the standards for required usable open space in Chapter 17.126, and private usable open space may be substituted for required group space in the ratio prescribed in said chapter.
- **Undergrounding of Utilities.** In any development primarily designed for or occupied by Residential Activities, all electric and telephone facilities; fire alarm conduits; streetlight wiring; and other wiring, conduits, and similar facilities shall be placed underground by the developer. Electric and telephone facilities shall be installed in accordance with standard specifications of the serving utilities. Street lighting and fire alarm facilities shall be installed in accordance with standard specifications of the Electrical Department.
- **Other Regulations.** The development shall be subject to the regulations generally applying in the zone in which it is located.
- **Developments Divided by Boundaries.** Any development which is divided by a boundary between zones shall be subject as if it were a single lot with respect to calculation of required parking, loading, and usable open space; calculation of

maximum number of living units or floor-area ratio; and distribution of the resulting number of living units or amount of floor area.

The Project as proposed would comply with all applicable requirements of the R-30, R-50 and PUD standards.

3. Project Impacts and Mitigation

The following section describes the potential land use impacts of the proposed Arcadia Park Residential Project. Potential impacts of the Project are evaluated in terms of each of the significance criteria listed below.

a. Standards Of Significance

The Project would have a significant impact if any of the following criteria are met:

Criterion 1 Physically divide an established community;

Criterion 2 Result in a fundamental conflict between adjacent or nearby land uses;

Criterion 3 Fundamentally 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 actually result in a physical change in the environment; or

Criterion 4 Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan adopted for the purpose of avoiding or mitigating an environmental effect and actually result in a physical change in the environment.

b. Less Than Significant Land Use Impacts

Criterion 1 *- (Physically divide an established community)* The Project would not physically divide an established community. The Elmhurst residential neighborhood is located directly to the east of the Project site and the industrial San Leandro corridor is located to the north, south, and west. The proposed residential development would operate as an extension of the existing Elmhurst neighborhood.

Criterion 2 - *(Result in a fundamental conflict between adjacent or nearby land uses)* The City is currently studying the policy issues surrounding the conversion of industrial uses to residential uses along the San Leandro Street corridor. The physical effect of the Project as it relates to conversion of industrial uses to residential development is discussed in Chapter V, section 4. Growth Inducing Impacts.

The Project site is located in the Elmhurst neighborhood along the San Leandro Street corridor, an area that is characterized by a mixture of residential and industrial uses. The Land Use and Transportation Element notes that the area along San Leandro Street includes many locations

where there are conflicts between residential and industrial uses and that both residents and industries suffer from the conflicts over noise, emissions, odor, and glare.

With the demolition of the former Fleischman's yeast plant, the most glaring conflict between the existing residential and industrial uses in the immediate Project vicinity was removed. The proposed development of the site with a mixture of single-family and multi-family uses would be consistent with the established Elmhurst neighborhood to the north and east. The existing residential properties on small lots along E Street share a property line with the Project site and would be particularly enhanced by the continuity of residential uses provided by the proposed Project.

The Project site is located prominently on the corner of two key corridors: 98th Avenue and San Leandro Street. Existing industrial uses are located adjacent to the Project along 92nd Avenue, and are also located across 98th Avenue to the south and across San Leandro Street to the west.

Industrial uses located across 98th Avenue and San Leandro Street

Although the industrial uses located across 98th Avenue and San Leandro Street have the potential to generate noise through truck traffic and loading and unloading, the activities taking place on those sites would be setback across the width of 98th Avenue and San Leandro Street. The elevated BART tracks would also be located between the Project site and the industrial uses to the west. The width of these travel corridors would also be sufficient to minimize shadows from buildings located on those sites and to reduce the perceived bulk of those buildings.

Industrial uses located along 92nd Avenues

The property to the north of the Project at the corner of 92nd Avenue and San Leandro Street is located directly adjacent, and is currently utilized for vehicle storage. This use would not represent a use fundamentally in conflict with the proposed residential use of the site because long-term storage of vehicles would not generate sound levels, odors, glare or safety issues that would be incompatible with the proposed residential uses. Other properties along 92nd Avenue are used for light industrial purposes and the associated activities take place inside the existing buildings, which provide shielding from noise, odor, shadows, and glare. The existing buildings are one and two stories in height, and would not therefore be incompatible in terms of bulk and scale to the proposed residential development, nor would they generate shadows that would interfere with public use areas. The long-term noise measurement taken at northwest end of F Street shows that average sound levels produced by the existing industrial uses (62 decibels) are compatible with the proposed residential use of the site.

Industrial uses along 98th Avenue

Directly adjacent to the Project site is a one to two storey furniture/mattress warehouse building. This light industrial use takes place primarily inside the structure and would not generate substantial noise, shadows, odor or glare that would be incompatible with the proposed residential uses.

The Project would also provide streetscape improvements in the form of landscaping separation from the travel ways of 98th Avenue and San Leandro Street, and would also provide 10-foot-wide sidewalks with landscaped setback for residential buildings to provide a safe and visually enhanced pedestrian experience for area residents, including children making their way to local schools. (Figure 12).

Criterion 3 - *(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 actually result in a physical change in the environment)*

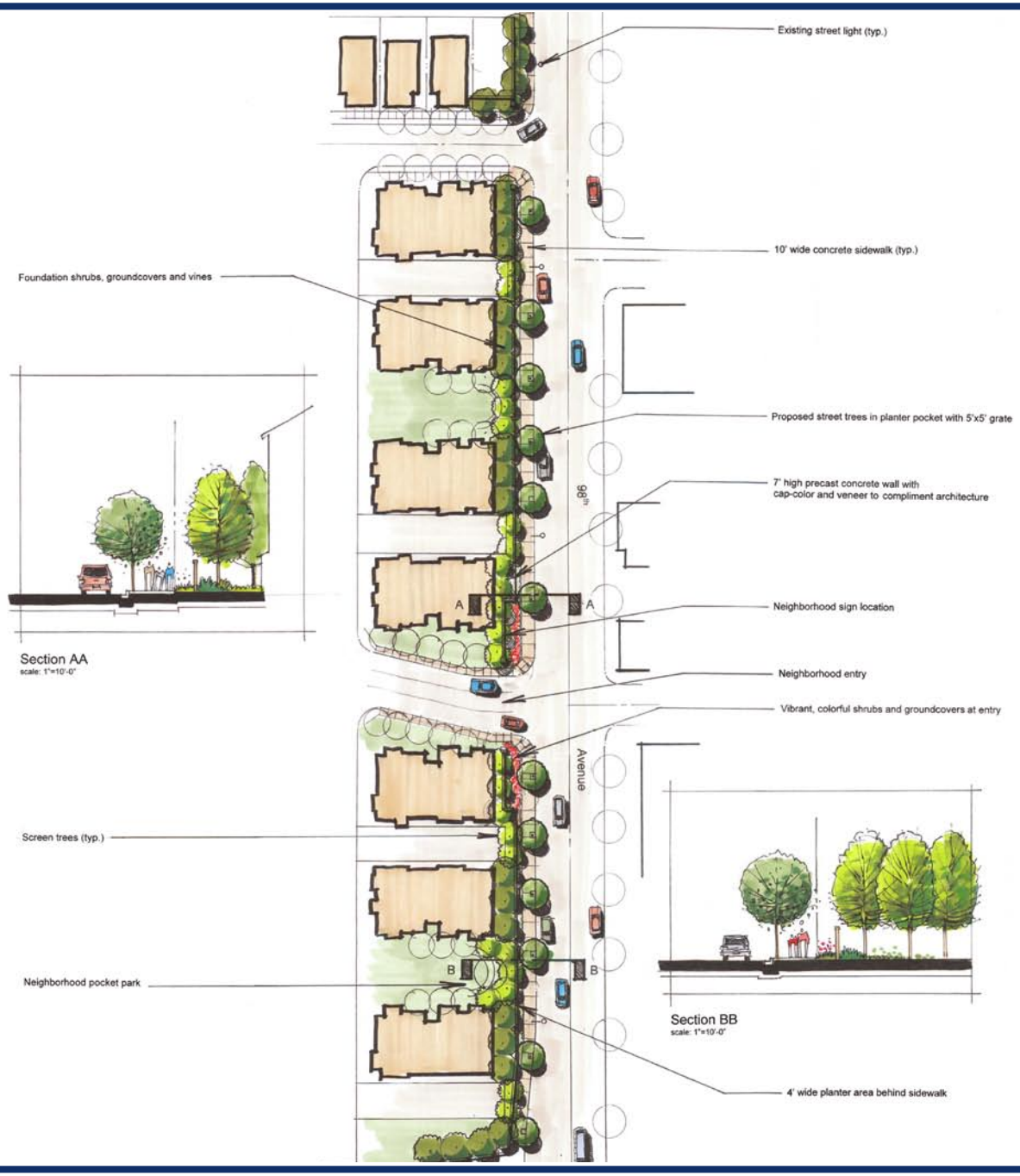
The Project would not conflict with any plans, policies, or regulations adopted for the purpose of avoiding an environmental effect. The project includes conformance with policies and regulations adopted to reduce environmental effects as described below:

Storm water control - Regional Water Quality Control Board's new provision C.3 guidelines – The RWQCB adopted new regulations governing storm water control on new development sites. The guidelines were adopted to require and facilitate reductions in storm water run-off and associated flooding. Section

The project sponsor proposes on-site retention of storm water in compliance with Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) Permit issued to the Alameda Countywide Clean Water Program by the San Francisco Bay Regional Water Quality Control Board (RWQCB). These regulations require new developments to detain, retain, or infiltrate runoff to reduce pollutants in storm water discharges to the maximum extent practicable. The Permit encourages the use of pervious surfaces to allow runoff to reach the underlying soil, and require the submission of a storm water control plan to document the methods proposed to be used to meet the requirements.

The project design includes numerous linear parks throughout the development that would incorporate undulations capable of retaining storm water during peak flows. The project would also incorporate manholes and catch basins with filters to separate out sediments. The retention of on-site runoff allows a portion of the storm water run-off to be filtered naturally through the soils rather than being captured and funneled directly into the City storm drains. The planned on-site retention and natural filtration of storm water would reduce the volume of storm water leaving the site. It is expected that the amount of storm water generated by the project would be up to 15 percent less than the volume produced by the existing conditions. These proposed design features and success ratios would be documented in a storm water control plan.

Remediation of hazardous materials – As discussed in Section III.C of this Draft EIR, mitigation measures III.C.1 a through III.C.1d require conformance with regulations governing the remediation of the existing site contamination to levels consistent with the intended residential development. The project sponsor would under the guidance of the designated state lead agency to implement required remediation strategies in accordance with state and federal regulations.



CirclePoint℠
The *whole* view.

north

FIGURE 12.

VIEW OF 98TH AVENUE FRONTAGE

Construction noise – As discussed in Section III.B of this Draft EIR, the project would be required to implement mitigation to ensure the project's consistency with the city's noise ordinance. The proposed residential development would not generate sound level in conflict with the city's noise ordinance.

Zoning and General Plan Conformance

Residential development is not allowed under the current industrial zoning and General Plan designation of the site, and as such the Project conflicts with the General Plan and Zoning Ordinance.

The Project sponsor is requesting approval of a zoning change to R-30 and R-50 and a General Plan Amendment to Housing and Business Mix, which would accommodate the proposed development as currently designed.

The physical effect of this proposed change would be to allow residential development of the site. This change is considered to be positive in terms of compatibility with surrounding residential uses as described in the paragraphs above under Criterion 2. The change in use would not result in new conflicts with other existing industrial uses to the south and west because of the setbacks provided by San Leandro Street and 98th Avenue.

Associated physical benefits of the Project include remediation of hazardous materials on the site consistent with levels required for residential uses, which are stricter than those required for industrial reuse; the discontinued use of heavy equipment and tractor trailers at the site with the associated emissions and dust they create; and the introduction of additional open space and landscaping to enhance the pedestrian experience along 98th Avenue and San Leandro Street.

The Project would be consistent with the following applicable General Plan Objectives and policies:

> **Objective I (Industry)/C2:** Maximize the usefulness of existing abandoned or underutilized industrial buildings and land.
>
> **Policy I/C2.1:** Pursuing Environmental Clean-up. The environmental cleanup of contaminated industrial properties should be actively pursued to attract new users in targeted industrial and commercial areas.
>
> **Policy I/C2.3:** Providing Vacant or Buildable Sites. Development in older industrial areas should be encouraged through the provision of an adequate number of vacant or buildable sites designated for future development.
>
> **Objective I/C4:** Minimize land use compatibility conflicts in commercial and industrial areas through achieving a balance between economic development values and community values.
>
> **Policy I/C4.1:** Protecting Existing Activities. Existing industrial, residential, and commercial activities and areas which are consistent with long term land use plans for the City should be protected from the intrusion of potentially incompatible land uses.

Objective T (Transportation) 2: Provide mixed use, transit-oriented development that encourages public transit use and increases pedestrian and bicycle trips at major transportation nodes.

Policy T2.1: Encouraging Transit-Oriented Development. Transit-oriented development should be encouraged at existing or proposed transit nodes, defined by the convergence of two or more modes of public transit such as BART, bus, shuttle service, light rail or electric trolley, ferry, and inter-city or commuter rail.

Objective N (Neighborhood) 3: Encourage the construction, conservation, and enhancement of housing resources in order to meet the current and future needs of the Oakland community.

Policy N3.1: Facilitating Housing Construction. Facilitating the construction of housing units should be considered a high priority for the City of Oakland.

Policy N3.2: Encouraging Infill Development. In order to facilitate the construction of needed housing units, infill development that is consistent with the General Plan should take place throughout the City of Oakland.

Objective N5: Minimize conflicts between residential and non-residential activities while providing opportunities for residents to live and work at the same location.

Policy N5.2: Buffering Residential Areas. Residential areas should be buffered and reinforced from conflicting uses through the establishment of performance-based regulations, the removal of non-conforming uses, and other tools.

Housing and Business Mix Designation.

The Housing and Business Mix designation was created by the City to allow for the coexistence of low impact industry and housing where appropriate locations have been identified. The Housing and Business Mix designation allows for residential uses at a maximum density of 30 units per acre, which would accommodate the densities proposed as part of the Project.

The General Plan describes the intent of the Housing and Business Mix designation as follows:

> The classification recognizes the equal importance of both housing and business. This classification is intended to guide a transition from heavy industry to low impact light industrial and other businesses that can co-exist compatibly with residential development. Respect for environmental quality, coupled with opportunities for additional housing and neighborhood-friendly businesses is desired, as well as the transition from industry that generates impacts to residences.

The Project is located within the East Oakland area. As described in the General Plan, key East Oakland Implementation Strategies include reducing blighted areas and land use conflicts. The Land Use and Transportation Element includes the following text related to development in East Oakland:

> The checkerboard nature of existing industrial and residential uses in parts of East Oakland tends to act as a disincentive to owners to repair or improve their properties. Home to many older industrial operations, the area along San Leandro Street between

> High Street and the City of San Leandro includes many locations where there are conflicts between residential and industrial uses. Pockets of industry are interspersed with housing, particularly in the Railroad Avenue area near Pearmain Street. Both residents and industries suffer from conflicts over noise, emissions, toxins, odor, glare, and other impacts associated with other industrial operations.
>
> These long standing blighted areas and land use conflicts are addressed in the Land Use and Transportation Plan by separating heavy industry from housing where possible, and establishing the Housing and Business Mix classification. The Housing and Business Mix classification is used in East Oakland areas where low-impact industry and housing can peacefully coexist.

The Project would be consistent with the objective of providing residential uses in areas where they would not result in new conflicts with existing industrial development. Additionally, the project site is located within the area governed by the Redevelopment Plan for the Coliseum Area Redevelopment Project. The principal objectives of the Redevelopment Plan include the abatement of physical and economic blight through the redevelopment of vacant and underutilized properties, replacement of obsolete infrastructure, and the assembly of land into parcels suitable for modern, integrated development with improved pedestrian and vehicular circulation in the project area. The project would redevelop the underutilized industrial site with modern, integrated housing development. The project would improve physical conditions on the site, replace obsolete infrastructure, and improve pedestrian and vehicular circulation in the project area. The project would therefore be consistent with the goals and objectives of the Redevelopment Plan.

Criterion 4 – *(Fundamentally conflict with any applicable habitat conservation plan or natural communities' conservation plan).* The City has not adopted any habitat conservation plans or natural community conservation plans that are applicable to the Project site.

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Chapter IV
ALTERNATIVES

1. Introduction

This Draft EIR evaluates three project alternatives, including the No Project Alternative scenario:

- No Project Alternative
- New Industrial/Retail Project Alternative
- Reduced Density Alternative

2. Basis for Developing Alternatives

CEQA Guidelines Section 15126.6(a) requires that an EIR include reasonable alternatives to a proposed project in order to assess whether any alternatives would result in fewer significant impacts while allowing most of the basic objectives of the project to be met (see Section II.C for a description of the Arcadia Park Residential Development Project objectives). The alternatives provide a basis of comparison for the proposed project in order to foster informed decision-making.

CEQA also requires that all alternatives analyzed in an EIR must be potentially feasible (CEQA Guidelines Section 15126(d)(1)). Among the factors that must be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, and jurisdictional boundaries.

In accordance with CEQA, three alternatives in addition to the proposed Project have been developed for the Arcadia Park Residential Development Project that could avoid or substantially lessen any significant impacts of the Project. These three alternatives are summarized below.

- *No Project Alternative*: *(Alternative 1).* CEQA Guidelines Section 15126.6(e) requires that a No Project Alternative be evaluated. CEQA Section 15126.6(e)(3)(B) requires that this analysis "compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved." However, this section also states that "If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed…the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing environment." The No Project Alternatives are discussed in Section C.1 of this chapter.

  Under the No Project Alternative, the owner of the project site would not complete all required remediation of hazardous materials and the site would otherwise remain in its current condition for the duration of this analysis period.

- *New Industrial/Retail Project Alternative (Alternative 2):* The New Industrial/Retail Project Alternative would consist of a new industrial or retail project being constructed on the project site consistent with existing zoning and General Plan designations.
- *Reduced Density Alternative (Alternative 3)*: Under this alternative, the residential project would be constructed with a total of approximately 100 residential units, rather than 366 as proposed. The reduction in housing units under Alternative 2 provides a project that would not result in a significant unavoidable traffic impact at the intersection of International and 98th Avenue.

The evaluation of the alternatives uses the same environmental analysis methodology as the analysis of the proposed Project. Environmental issue areas for which potentially significant impacts, and, therefore, mitigation measures were identified such as hazards and hazardous materials, noise, and transportation and traffic are evaluated to determine whether the alternative would result in a greater or lesser impact than the proposed Project. The evaluation of the alternatives is quantitative with respect to those issues for which quantitative analysis is possible and meaningful, but is qualitative for most issue areas.

3. Comparison of Impacts between Project Alternatives

Table IV.1 contains a comparison of the potentially significant impacts related to the proposed Arcadia Park Residential Development Project and its identified alternatives. The potentially significant impacts associated with the proposed project are discussed in Chapter III Environmental Setting, Impacts and Mitigation, and are also discussed in the Initial Study prepared for the Project, located in Appendix A of this EIR. The potential impacts associated with the alternatives are discussed in Section C of this chapter.

Table IV.1 Comparison of Potentially Significant Impacts of Alternatives to Proposed Project

Impact	Proposed Project	Alternative 1: No Project – Current Conditions	Alternative 2: No Project – New Industrial/Retail	Alternative 3: Reduced Density
TRAFFIC-1: Traffic Signal Warrant	LTS w/mitigation	—	+	—
TRAFFIC-2: Construction Traffic	LTS w/mitigation	—	~	—
TRAFFIC-3: Design Features	LTS w/mitigation	—	~	—
TRAFFIC-4: Design Features	LTS w/mitigation	—	~	—
TRAFFIC-5: Cumulative LOS	LTS w/mitigation	—	+	—
TRAFFIC-6: Cumulative LOS	LTS w/mitigation	—	+	—
TRAFFIC-7: Cumulative San Leandro/98th Avenue	SU	—	+	—
TRAFFIC-8:Cumulative International/98th Avenue	SU	—	+	—
NOISE-1: Noise Levels	LTS w/mitigation	—	+	—
NOISE-2: Construction Noise	LTS w/mitigation	—	~	—
NOISE-3: Vibration	LTS w/mitigation	—	—	—
HAZ-1: Listed Site	LTS w/mitigation	+	~	~
HAZ-2: Release of Existing Hazardous Materials	LTS w/mitigation	—	~	~

~ Impact similar to proposed Project
+ Impact greater than proposed Project
— Impact less than proposed Project

Source: CirclePoint, 2005.

C. Discussion of Alternatives

This section includes a discussion of the three project Alternatives: Alternative 1: No Project, Alternative 2: New Industrial/Retail Development, and Alternative 3: Reduced Density.

1. Alternative 1 – No Project

Purpose and Description

CEQA requires the evaluation of the No Project Alternative (CEQA Section 15126.6(e)). The No Project Alternative provides a comparison between the proposed project and a scenario in which the project site remains in its current condition and a proposal of another project as allowed under current General Plan designations and the Zoning Ordinance.

Under the No Project Alternative, no remediation of hazardous materials would occur and the site would otherwise remain in its current condition for the foreseeable future.

Impacts and Mitigation Measures

The No Project Alternative would not result in any of the Project-related impacts identified in the Initial Study or in this EIR.

Traffic. Under the No Project Alternative, the potentially significant impacts associated with the proposed Project related to transportation and traffic would not occur, and the mitigation measures identified for traffic impacts in the Initial Study for this Project and in this EIR would not be necessary.

Noise. There would be no generation of construction noise, increase in noise, or exposure of new residents to vibration under the No Project Alternative and this impact would be less than under the proposed Project.

Hazards and Toxic Substances. Under this alternative, impacts from exposure to hazards and hazardous materials from demolition of the existing buildings would not occur, and the mitigation measures identified in the Initial Study for this Project and in this EIR would not be necessary. However, the No Project Alternative would not result in the beneficial impact of remediation of hazardous materials on the site and the site would continue in its current condition.

Land Use. Similar to the proposed Project, the No Project Alternative would not result in any land use impacts.

However, the No Project Alternative would not meet any of the Project objectives:

- Developing market-rate residential units at urban densities, which provide ownership opportunities with a variety of housing types and unit sizes that would be available to a range of market-rate household income levels and first time home buyers;
- Expanding Southeast Oakland's market-rate occupied housing stock to encourage local-serving retail development and to attract private construction and mortgage lenders to this sub-market;
- Developing urban infill housing with convenient transportation access near the center of the Bay Area, which would serve to divert housing from outlying areas and reduce long-distance commute traffic and related pollution and improve the City's job/housing balance and accommodate its fair share housing needs;
- Redeveloping and revitalizing underutilized or vacant land within Southeast Oakland to create a vibrant and pedestrian-oriented residential community;

- Providing additional open space throughout the development in order to give a sense of visual and spatial relief to the residents and the community;
- Providing for the undergrounding of utilities and also providing extensive off-site improvements to existing, old infrastructure with respect to the streetscape, sidewalks, lighting and parking, and
- Constructing financially feasible developments with sufficient flexibility to adjust to market needs and provide reasonable returns on investments so as to secure construction and long-term financing.

2. Alternative 2 – New Industrial/Retail Development

Purpose and Description

New Industrial/Retail Project Alternative consists of a new industrial or retail project being constructed on the Project site consistent with existing zoning and General Plan designations. The site's current zone district, M-30 General Industrial, and General Plan designation of General Industrial/Transportation allow a very intensive use of the site. Under this current designation, a general retail project could be constructed which could generate up to 12,000 average daily vehicle trips, or an industrial project could be proposed to replace the former use of the site, which was a yeast plant.

Impacts and Mitigation Measures

Traffic. The New Industrial/Retail Project Alternative would result in increased impacts to transportation and traffic. Under this alternative, traffic impacts related to the need for a traffic signal and cumulative LOS would be greater than under the proposed project due to an increase in traffic generated by retail land uses. However, other traffic impacts related to construction traffic and design features would be the same as under the proposed Project.

Noise. Increased traffic generation would result in an increase in noise in the Project vicinity. The New Industrial/Retail Development Alternative would result in fewer vibration impacts due to the retail or industrial uses on the Project site and the lack of residential uses.

Hazards and Toxic Substances. Impacts to hazards and toxic substances would be the same as with the proposed Project, although the timing of such an alternative is unknown and could therefore result in a delay in remediation of existing contamination.

Land Use. Similar to the proposed Project, the New Industrial/Retail Project Alternative would not create any land use impacts.

The New Industrial/Retail Development Alternative would not meet the residential development objectives of the proposed Project:

- Developing market-rate residential units at urban densities, which provide ownership opportunities with a variety of housing types and unit sizes that would be available to a range of market-rate household income levels and first time home buyers;
- Expanding Southeast Oakland's market-rate occupied housing stock to encourage local-serving retail development and to attract private construction and mortgage lenders to this sub-market;

- Developing urban infill housing with convenient transportation access near the center of the Bay Area, which would serve to divert housing from outlying areas and reduce long-distance commute traffic and related pollution and improve the City's job/housing balance and accommodate its fair share housing needs;
- Redeveloping and revitalizing underutilized or vacant land within Southeast Oakland to create a vibrant and pedestrian-oriented residential community;
- Providing additional open space throughout the development in order to give a sense of visual and spatial relieft to the residents and the community;
- Providing for the undergrounding of utilities and also providing extensive off-site improvements to existing, old infrastructure with respect to the streetscape, sidewalks, lighting and parking, and
- Constructing financially feasible developments with sufficient flexibility to adjust to market needs and provide reasonable returns on investments so as to secure construction and long-term financing.

3. Alternative 3 – Reduced Density Alternative

Purpose and Description

Under this alternative, a residential project would be constructed with 100 residential units, rather than the 366 units currently proposed. The Reduced Density Alternative provides a project which would reduce the significant traffic impact to a below-significant level. Potentially significant impacts associated with this alternative would be the same for all other environmental issue areas, except for traffic. The Reduced Density Alternative would not result in a significant and unavoidable impact related to cumulative traffic conditions.

Impacts and Mitigation Measures

Traffic. The Reduced Density Alternative would result in decreased traffic impacts by generating less traffic; thereby, reducing all of the significant traffic impacts to a below-significant level.

Noise. In addition, the Reduced Density Alternative would result in less noise than the proposed Project. However, the Reduced Density Alternative would provide only 27 percent of the housing proposed by the Project and would not provide housing needed by the City to meet housing needs as described in the City's Housing Element.

Hazards. Similar to the Project, the Reduced Density Alternative would result in remediation of hazardous materials on the Project site.

Land Use. The Reduced Density Alternative would not result in any significant land use impacts.

D. Environmentally Superior Alternative

The No Project Alternative would not result in any of the Project-related impacts identified in the Initial Study or in this EIR. It would avoid any increase in noise that would be associated with the proposed

Project even though, with mitigation, those impacts are considered less than significant. It would avoid the significant traffic impact which would result from the proposed Project.

The New Industrial/Retail Project Alternative would result in more impacts to transportation and traffic and could result in increased impacts in the areas of noise. Impacts to the other environmental issue areas would be the same as the proposed Project. It potentially could result in fewer vibration impacts due to the change from a residential to a retail or industrial use. However, neither of these No Project Alternatives would meet any of the Project objectives.

Alternative 3 – Reduced Density Alternative would result in a project than would not generate a significant unavoidable traffic impact. However, Alternative 3 would provide only a portion of the housing units of the Project and therefore would not be as effective as the proposed Project in helping the City supply its fair share portion of housing as required by the Association of Bay Area Governments Fair Share Housing Allocation and as outlined in the City's Housing Element.

The general purpose of the proposed Project is to provide high-quality housing in the City of Oakland, specifically, to develop 366 attached and detached homes along with 10 distributed parks on 27.5 acres. Constructing housing units within the existing infrastructure of the Bay Area would enable homeowners to live near established transportation systems, such as the Bay Area Rapid Transit (BART), Amtrak, and area freeways. The proposed Project would provide in-fill development within an already-developed area near to services and job centers, allowing residents to experience shorter commutes than those living in outlying areas of the region. Alternative 2 would allow the Project sponsor to meet some, but not all of the Project objectives, while reducing the environmental effects associated with the proposed Project. The Reduced Density Alternative would be considered the environmental superior alternative among the alternatives evaluated that meet Project objectives, but would not be as effective as the proposed Project in providing in-fill housing to help meet the City's fair share housing goals as described in the City's Housing Element.

Chapter V
OTHER CEQA CONSIDERATIONS

1. Introduction

CEQA Section 15126 requires that a series of environmental considerations be discussed in an environmental impact report to document the full effect of a project's planning, acquisition, development, and operation. This chapter includes all of the required discussions pursuant to Section 15126.

2. Significant Environmental Effects which Cannot be Avoided

CEQA Section 15126.2(b) requires that the EIR disclose all significant impacts including those that cannot be mitigated to a less-than-significant level, where no feasible mitigation measures exist to further reduce these impacts. As discussed in Chapter III of the EIR, the Project would result in the following significant and unavoidable impacts:

Traffic impacts at the intersection of International and 98th Avenue. The Project would result in a Year 2025 traffic impact at the intersection of International and 98th Avenue, pursuant to the following significance criteria:

- The Project would contribute more than 5 percent of the cumulative traffic increase at the intersection in the Year 2025, which will operate at unacceptable LOS (cumulative impact) ; and
- The Project would result in an increase in average delay at the intersection of more than 2 seconds (Project impact).

Although mitigation is included to address these impacts, the mitigation cannot reduce the impact to a less than significant level. The proposed intersection improvements reduce the average delay to approximately 2 seconds, but not less than 2 seconds. The Project's percentage contribution to cumulative traffic increases cannot be reduced without reducing the total number of residential units proposed. Furthermore, if Caltrans does not approve the proposed re-striping, the identified impact would worsen, and would still remain significant and unavoidable.

Cumulative traffic impacts at the intersection of San Leandro and 98th Avenue. The Project would result in a cumulative (Year 2025) traffic impact at the intersection of San Leandro and 98th Avenue, pursuant to the following significance criterion:

- The Project would contribute more than 5 percent of the cumulative traffic increase at the intersection in the Year 2025, which will operate at unacceptable LOS.

The Project's percentage contribution to cumulative traffic increases cannot be reduced without reducing the number of residential units proposed.

3. Significant Irreversible Environmental Changes

CEQA Section 15126.2(c) requires that an EIR discuss any environmental changes that would be irreversible if the project were implemented. CEQA defines irreversible environmental changes as either irretrievable commitments of resources and/or irreversible damage resulting from environmental accidents.

The Project would involve the construction of new residential structures, parklands, utility infrastructure, roadways, and roadway improvements. Non-renewable resources such as fossil fuels would be required for the remediation of the site, as well as construction and operation of the Project. However, the Project site is located in a heavily developed area of the city and is an infill site. The proposed development of the site would require a zoning change and General Plan Amendment; however, the planned residential use of the site would be less intensive from a traffic generation standpoint than the uses that are allowed by the existing zoning and land use designation.

Since the demolition of the former Fleischmann yeast plant, the site has been underutilized as a container storage site. If the proposed Project is not constructed, the site would eventually be redeveloped with a commercial or industrial use that would be as intensive if not more so than the proposed Project.

The change in use and associated commitment of resources necessary for construction and operation of the Project is irreversible. The visual changes associated with construction of the proposed residential structures would also be irreversible, but would be considered a beneficial impact.

Residential development of the site would not involve the transport, use, or disposal of hazardous materials that could result in an accidental release if not properly managed. The types of hazardous materials to be used would be routine household, commercial and landscaping materials that would be similar to products used in residential neighborhoods across the City.

Remediation of the existing contamination on the site would be completed prior to Project construction, pursuant to the oversight of a designated state agency. The existing contamination would not therefore pose a potential risk pursuant to the environmental accidents cited in CEQA Section 15126.2(c).

4. Growth Inducing Impacts

CEQA Section 15126.2(d) requires that an EIR discuss the ways in which the proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.

Direct Impacts. The Project would result in the conversion of land currently zoned for industrial use to residential development. Approximately 366 new residence and approximately 950 residents would live at the Project site. Oakland has a low vacancy rate and it is likely that the Project residents might be sharing quarters in other parts of the City. However, it is impossible to positively state that Project residents would come from within the City of Oakland; therefore, the Project could contribute to population growth in the City of Oakland. Population projections for the City of Oakland include a

increase in population of approximately 9 percent by 2020. The City's Housing Element of the General Plan also identifies a housing shortfall. The City has set a goal for the development of 7 773 units by the 2006, with a focus on infill housing. In light of this, the Project would facilitate the City's goal of providing more infill housing and would not constitute growth beyond the goals stated in the housing element.

Indirect Impacts. The proposed Project would be located within an industrial corridor along San Leandro Street. As the first residential conversion project along this stretch of San Leandro Street, on a prominent intersection of two main arterial roadways, the Project could create an incentive for additional industrial-zoned properties to be converted to residential uses, especially the adjacent parcels between 98th and 92nd Avenues, as well as properties directly north of 92nd Avenue. The adjacent properties include a vehicle storage yard on the corner of San Leandro Street and 92nd Avenue, several industrial properties along 92nd Avenue between San Leandro Street and E Street, and a light industrial property along 98th Avenue. The conversion of additional properties located immediately to the south of 98th Avenue would not be as likely because the small size of these parcels would not be conducive to residential conversion in the absence of consolidation to create a parcel of sufficient size for subdivision site planning.

The pressure for conversion could occur once developers realize the market potential for in-fill housing units in the area. Additionally, residential land is generally priced higher than industrial land and the success of a residential project in the area could create rising land use values or influence property owners in the area to try to develop their land with more profitable residential uses. With the conversion to residential uses, demand for police and fire services, schools and libraries, parks, and public services and utilities would likely increase.

Conversion of properties from industrial uses to residential uses, while an indirect impact, would have several effects, specifically to traffic, noise, air quality, hazardous materials, and population and housing. The project would generate additional vehicle trips, but would reduce truck traffic in the area. The increase in vehicle trips would potentially increase noise and air quality impacts in the area. However, industrial uses generate noise from truck traffic and on-site activities, which would be eliminated with conversion to residential uses. Conversion of industrial properties would also result in clean up of hazardous materials on these sites, which would be a beneficial effect. Lastly, the construction of residential units would assist the City in meeting its fair share housing allocation and meeting the goals of the City's Housing Element.

Employment. The Project would create temporary construction jobs and could also result in the creation of new service jobs associated with residential development, such as landscape gardening or domestic services. The project would provide housing for people who may currently be commuting from areas further outside the Bay area, and would also provide additional housing closer to existing job centers in Oakland, San Francisco, and other Bay Area communities. The new residents would also result in the need for additional neighborhood serving retail and commercial uses. This effect is not expected to generate the need to expand existing public service capacity since the Project site is located in an urban area that already provides similar services.

Parks and recreation. Residents of the new households would generate demand for additional park and recreation areas, beyond what exists in the area currently.. If the industrial corridor area experiences

further transition from industrial to residential uses, then the need for additional neighborhood serving parks and recreational areas will need to be addressed at a broader level to ensure that lands are set aside such that these needs are met for the community as a whole.

Storm water infrastructure. The city's storm water infrastructure in the area of the Project is old and is currently at or over capacity. However, since each project would be required to meet the new C.3 guidelines of the Regional Water Quality Control Board regarding storm water run-off, including reducing the amount of storm water run-off leaving the site to below current levels, the Project's potential effect on the conversion of industrial development to residential development would not result in adverse effects to storm water infrastructure.

Schools. To the extent that the Project results in the conversion of additional industrial properties to residential uses it would also expand the need for local-serving schools. Each project would be required to pay school impact fees which are set by the state and by the local school district and are designed to cover any needed expansion of classrooms and teachers.

Summary. The Project would result in the introduction of new residential uses into a primarily industrial area. The Project would therefore increase population incrementally, but that increase would be consistent with growth projections fro the City of Oakland, and would also be consistent with goals associated with the encouragement of infill development.

The Project could also result in an incentive for other industrial properties in the immediate vicinity to convert to residential uses, leading to the need for certain other local-serving facilities—such as schools and parks—that are not normally required for industrial development. As stated in CEQA Section 15126.2(d) the discussion of growth inducing effects should not assume that growth is necessarily beneficial, detrimental, or of little significance. As a result, this discussion is provided for information purposes to aid decision makers in considering the potential long-term growth-inducing effects of the proposed Project.

5. Cumulative Impacts

A cumulative impact consists of an impact that is created as a result of the combination of a project together with other projects causing related impacts. In the evaluation of cumulative impacts, CEQA requires that the discussion be guided by the standards of practicality and reasonableness, and should focus on those cumulative impacts to which other projects contribute. In general cumulative impacts are identified using a list of other past, present, and reasonably foreseeable future projects, or using projections for growth contained in an adopted general plan or related planning document.

For the purposes of this analysis, the discussion of potential cumulative traffic impacts utilizes projections for growth from both the City of Oakland and the Association of Bay Area Governments (ABAG) to determine the future impact of the Project in relation to other planned development. Baseline traffic conditions for the cumulative analysis represent long-term conditions without the Project, including background growth and traffic from future developments as forecasted by the Year 2025 Alameda County Congestion Management Agency (CMA) travel demand model based on the methodology established by the City of Oakland. Project conditions were added to the baseline cumulative conditions to project

future with Project cumulative traffic conditions. Traffic conditions under cumulative conditions are analyzed in Chapter III.A.

The spatial boundary for the study of a Project's cumulative impacts varies depending on the resource of concern. For example, impacts related to geology and archeological resources are generally site specific, while air and noise impacts can travel greater distances. Most site specific impacts have too limited a geographical area of influence to compound or interrelate with impacts caused by other projects, with the result that the Project's impacts do not worsen or exacerbate the impacts of those other projects. Under CEQA, a lead agency need not address such impacts in detail, as the project will not contribute to any cumulative impacts with respect to such impact categories. (See CEQA Guidelines, §§ 15130,. (a) ("[w]here a lead agency is examining a project with an incremental effect that is not 'cumulatively considerable,' a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable").

The spatial boundary for the study of impacts related to aesthetics, agriculture, biology, cultural resources, geology and soils, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, and utilities, is confined to the Project site itself. These environmental topics are discussed in the Initial Study for the Project. The nature of proposed residential development project is such that impacts to these resources would not extend beyond the boundaries of the immediate Project area.

With the exception of transportation and circulation, the Initial Study did not identify any potentially significant impacts related to the Project in the areas listed above. The two cumulatively impacted intersections at San Leandro Street/98th Avenue and International Boulevard/98th Avenue are expected to operate at LOS F in 2020 without the Project. As discussed more fully in Section III.A of this Draft EIR, the project would contribute more than 5 percent of the cumulative increase in traffic, which is considered cumulatively considerable under the City's thresholds of significance. The required mitigation would not be sufficient to reduce these impacts to a less than significant level, so the project's impact at these two intersections would remain significant and unavoidable.

REFERENCES

Sources:

- City of Oakland. General Plan.
- City of Oakland Municipal Planning Code
- Air Quality Analysis, Prepared by Don Ballanti, March 2005.
- California Historic Resources Inventory System, located at Sonoma State University.
- Design-Level Geotechnical Investigation, Dreisbach/98th Avenue Parcels, Oakland, California, Prepared by Lowney Associates, June 15, 2004.
- 98th Avenue Residential Development Feasibility Noise and Vibration Study, prepared by Charles Salter Associates, March 2005.
- *Phase I Environmental Site Assessment*, Arcadia Park Development, Oakland, California, dated July 2004.
- Results of Phase I Soil and Grab Groundwater Investigation, Arcadia Park Development, Oakland, California
- Results of Additional Soil Sampling for Lead Characterization 854 92nd Avenue, Arcadia Park Development, Oakland, California
- Transportation Impact Analysis – Arcadia Park Residential, prepared by Fehr & Peers, March 2005.

Personal Communications

- City of Oakland, Park Services Department, February 14, 2005.
- Philip Basada, P.E., Fire Prevention Bureau, Personal Communication, February 2005
- Jennifer McGregor, Engineer, EBMUD, Personal Communication, February 1, 2005
- Paul Figueroa, Lieutenant, City of Oakland Police Department, telephone conversation, February 28, 2005.
- Jennifer McGregor, Engineer, EBMUD, Personal Communication, February 1, 2005.
- David Krueger, Recycling Manager, Waste Management of Alameda County, Personal Communication, February 23, 2005.
- Susan Yee, Service Planning Department, Pacific Gas & Electric Company, Personal Communication, February 14, 2005.
- Gunawan Santoso,Civil Engineer, City of Oakland, Public Works Agency, personal communication
- Northwest Information Center (Center) of the California Historic Resources Inventory System, located at Sonoma State University

APPENDIX A

Initial Study

Revised and Restated INITIAL STUDY

Arcadia Park Residential Development Project

Prepared for
City of Oakland
Community and Economic Development Agency
250 Frank Ogawa Plaza, Suite 3315
Oakland, CA 94612

Prepared by CirclePoint
135 Main Street, Suite 1600
San Francisco, CA 94105

July 1, 2005

Arcadia Park Residential Development Project

This initial study reflects minor revisions to the April 4, 2005 Arcadia Park Residential Development Project Initial Study. New text is shown in ***bold underlined italics*** and deletions are shown as ~~strikeout~~ text.

Project Description:

1. ***Project Title and Number:*** Arcadia Park Residential Development Project (the project), case file number ER05-3

2. ***Lead Agency Name and Address:*** City of Oakland Community and Economic Development Agency, Planning and Zoning Division, 250 Frank H. Ogawa Plaza Suite 3330, Oakland CA 94612

3. ***Contact Person and Phone Number:*** Darin Ranelletti, Planner III, Community and Economic Development Agency, City of Oakland, (510) 238-3663

4. ***Project Location:*** The proposed 27-acre project site is located between 92nd Avenue and 98th Avenue along San Leandro Street in the City of Oakland, Alameda County (Figure 1). Access to the development would be provided from both 92nd and 98th Avenues. The project site contains four parcels known as 921 98th Avenue; 999 98th Avenue; 854 92nd Avenue; and 860 92nd Avenue. The site boundaries are shown in Figures 2 and 3.

5. ***Project Sponsor's Name and Address:*** Amir Massih**,** Pulte Homes Corporation, 6210 Stoneridge Mall Road, 5th Floor, Pleasanton, CA 94588

6. ***General Plan Designation:*** General Industrial/Transportation

7. ***Zoning:*** M-30 General Industrial

8. ***Description of Project:***
   The project sponsor has submitted an application for the construction of up to 400 residential units comprising both single-family residences, ***detached condominiums***, and townhomes. The project will require rezoning the parcels to R-30 One-Family Residential Zone (portion) and R-50 Medium Density Residential Zone (portion), and amending the General Plan designation to Housing and Business Mix. These designations would be consistent with the proposed uses.

   A preliminary site plan for the proposed project is presented as Figure 4. As shown in the plan, the townhomes would line the San Leandro Street and 98th Avenue frontages of the site, while the ***detached condominiums and*** single family dwellings would be grouped in the center and northern

portions of the site and along the existing residential neighborhood that borders the site to the east. Access to the site would be provided via project driveways from both 98th Avenue and 92nd Avenue.

There are currently five buildings on the proposed project site, as well as a water tower, tanks, and other remnants of the former use of the site. In addition, the site is used for the temporary storage of shipping containers. The existing buildings include an industrial building comprising approximately 90,000 square feet, a brick office building comprising approximately 20,000 square feet, and a metal water tower and a nearby brick maintenance building. The water tower and maintenance building date from at least 1949 and were part of the historical operations of the former Fleishmann's yeast plant, which operated on the site from 1935 to 2003. Also on the site are a large transformer containment area, various storage and shop buildings; stockpiles of materials; sumps, transformers, and pipes; three deep water wells, two of which have been abandoned; and railroad spurs dating from at least 1949.

All structures on the site would be demolished or removed from the site as part of the project.

Construction and Site Preparation

Construction of the proposed project would involve the removal of all structures, shipping containers, and materials from the site. Construction is expected to last approximately 20 months with site preparation starting in April 2006 and construction starting in October 2006. All staging for construction equipment and material would occur on-site. Site preparation and construction activities would be conducted consistent with Occupational Safety and Health Administration (OSHA) and CalOSHA regulations and local requirements to provide for workers and public safety. Health and safety measures would include, but may not be limited to, security fencing, appropriate signage, and restriction of public access to the site.

Landscaping

Landscaping of the project site would be developed in accordance with landscaping requirements applicable to residential properties in the City of Oakland. The site plan includes a series of linear parks and yard areas that would function both as green space and water quality enhancement for on-site drainage, as described in more detail below.

Stormwater Drainage

The 27-acre site is level and is covered by impervious surfaces, resulting in a current stormwater run-off rate that approaches 90 percent. The project sponsor proposes on-site retention of stormwater in compliance with Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) Permit issued to the Alameda Countywide Clean Water Program by the San Francisco Bay Regional Water Quality Control Board (RWQCB). These regulations require new developments to detain, retain, or infiltrate runoff to reduce pollutants in stormwater discharges to the maximum extent practicable. The Permit encourages the use of pervious surfaces to allow runoff to reach the underlying soil, and require the submission of a stormwater control plan to document the methods proposed to be used to meet the requirements.

The project design includes numerous linear parks throughout the development that would incorporate undulations capable of retaining stormwater during peak flows. The project would also

incorporate manholes and catch basins with filters to separate out sediments. The retention of on-site runoff allows a portion of the stormwater run-off to be filtered naturally through the soils rather than being captured and funneled directly into the City storm drains. The planned on-site retention and natural filtration of stormwater would reduce the volume of stormwater leaving the site. It is expected that the amount of stormwater generated by the project would be up to 15 percent less than the volume produced by the existing conditions. These proposed design features and success ratios would be documented in a stormwater control plan.

Future site drainage would be directed to existing city storm drains on 92nd Avenue. The City's existing stormwater infrastructure in the project vicinity is already at or over capacity, and the existing storm drain will therefore have to be upsized. The project design incorporates these required improvements.

9. ***Surrounding Land Uses and Setting:*** The surrounding area is developed with residential, commercial, and industrial uses. As shown in Figure 2 the area to the east is an established residential neighborhood. The site is bordered to the west by at-grade railroad tracks, the elevated BART Fremont line, and San Leandro Street. Uses to the north and south along San Leandro Street are primarily industrial, including auto-body shops, light industrial, storage, and warehouses. Uses fronting 98th Avenue range from industrial to commercial/office, and residential.

10. ***Public agencies whose approval is required (e.g. permits, financing approval, or participation agreement):***

The City of Oakland will consider the following discretionary requests as part of the project sponsor's application:

a) General Plan Amendment (from General Industrial/Transportation to Housing and Business Mix);

b) Rezoning (from M-30 General Industrial Zone to R-30 One-Family Residential Zone and R-50 Medium Density Residential Zone);

c) Planned Unit Development permit; and

d) Tentative Tract Map.

e) Redevelopment Plan Amendment

Other agency actions would include the following:

- San Francisco Bay Regional Water Quality Control Board - review and approval of storm water control plan and approval of remediation plans for on-site contamination;
- Alameda County Health Services Agency – approval of remediation plans and excavation for remaining on-site contaminants;
- California Department of Transportation (Caltrans) – review and approval of proposed traffic improvements to International Boulevard (State Route 185).

Environmental Factors Potentially Affected:
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- ☐ Aesthetics
- ☒ Air Quality
- ☒ Cultural Resources
- ☒ Hazards & Hazardous Materials
- ☐ Land Use & Planning
- ☐ Mineral Resources
- ☐ Population & Housing
- ☐ Recreation
- ☐ Utilities & Service Systems
- ☐ Agricultural Resources
- ☐ Biological Resources
- ☐ Geology & Soils
- ☐ Hydrology & Water Quality
- ☒ Noise
- ☐ Public Services
- ☒ Transportation & Circulation
- ☒ Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because the mitigation measures described in the attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared. ☐

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required because of the project's traffic impacts. ☒

I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect has been 1) adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects 1) have been analyzed adequately in an earlier EIR pursuant to applicable standards and 2) have been avoided or mitigates pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project. ☐

Darin Ranelletti
Planner III

Date: 7/1/05

ENVIRONMENTAL IMPACT CHECKLIST

I. Aesthetics

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
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 surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
e) 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)?	☐	☐	☒	☐
f) Cast shadow that substantially impairs the function of a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
collectors?				
g) Cast shadow that substantially impairs the beneficial use of any public or quasi-public park, lawn, garden, or open space?	☐	☐	☐	☒
h) Cast shadow on an historic resource, as defined by CEQA Section 15064.5(a) (see Appendix A for definition), 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 on or eligibility for listing in the National Register of Historic Places, California Register of Historical Resources, Local register of historical resources or a historical resource survey form (DPR Form 523) with a rating of 1-5?	☐	☐	☒	☐
i) 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 provision of adequate light related to appropriate uses?	☐	☐	☐	☒

a. ***No Impact.*** The proposed project is not located in an area that includes a scenic vista. The area is surrounded by industrial and residential uses with BART elevated train tracks and at-grade freight train tracks immediately to the southwest of the site. No impacts would occur to scenic vistas.

b. ***No Impact.*** The project site is currently paved with asphalt and is devoid of scenic resources. The site is the former location of the Fleishmann's yeast plant. The remaining structures associated with the yeast plant include a large smoke stack, water tower, brick building, and a large transformer containment area. Various other storage and shop buildings are located on the site, as well as stock piles of materials, sumps, transformers, pipes and a deep water well. In addition, railroad spurs dating from at least 1949 are found on the site. The proposed project would not damage scenic resources and would have no effect on trees, rock outcroppings, or historic buildings. Please also refer to discussion under Section V. Cultural Resources.

c. ***No Impact***. The project site has low visual quality because it is an asphalt-paved area with tall stacks of shipping containers, which are visible from adjacent residential areas, stockpiles of construction materials, and other ancillary structures and buildings. The proposed project would remove the industrial structures on the site and replace them with residential buildings, perimeter walls, and landscaping. The change would not degrade the visual character or quality of the site or surroundings, but would serve to improve the aesthetics of the area to be more compatible with the adjacent single-family residential area.

d. ***Less Than Significant Impact.*** Exterior lighting such as new street lights would be installed along the new street system installed for the proposed project. The street lights would be similar to those in areas adjacent to the site and would be downward-directed. The proposed residences would include windows but no large areas of reflective materials. Substantial glare would not result from the proposed project.

e. ***Less-Than-Significant Impact.*** The proposed project would introduce vegetation, but only as ornamental landscaping, not intended for large-scale screening of views. No solar collectors are known to exist in the area of the project. It is not anticipated that the landscaping would cast shadows on any existing solar collectors, due to the distance from the project site, across adjacent streets, to nearby structures.

f. ***Less-Than-Significant Impact.*** No buildings using passive solar heat collection or photovoltaic solar collectors are known to exist near the project site. The project proposes single family dwellings of up to 30 feet in height along the existing residential neighborhood along E Street. Buildings of this height would not cast shadows that would affect solar collectors.

g. ***No Impact.*** No public or quasi-public park, lawn, garden, or open space exists adjacent to the project site.

h. ***Less Than Significant Impact.*** As discussed in Section V. Cultural Resources, no known historic resources exist adjacent to the project site. In addition, the multi-family structures ***and detached condominiums*** proposed as part of the project would be no more than 38 feet in height, while the single

family structures would be no more than 30 feet in height. The project is not expected to be able to cast a shadow that would affect surrounding buildings.

i. ***No Impact.*** The project would not require a variance to the policies or regulations in any plans or codes that regulate the provision of adequate light to appropriate uses.

II. Agricultural Resources

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
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 with a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which due to their location or nature, could result in loss of Farmland to non-agricultural use?	☐	☐	☐	☒

a. ***No Impact.*** The project site is in a historically industrial area. The site is paved with asphalt and does not contain any agricultural resources.

b. ***No Impact.*** The project site is currently zoned for industrial uses, and there are no Williamson Act contracts on the land.

c. ***No Impact.*** The project would take place in an industrial and residential area and would not affect farmland.

III. Air Quality

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
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?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Frequently create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
f) Contribute to CO concentrations exceeding the State AAQS of 9 ppm averaged over 8 hours and 20 ppm for 1 hour[**NOTE**: Pursuant to BAAQMD, localized carbon monoxide concentrations should be estimated for projects in which (1) vehicle emissions of CO would exceed 550 lb/day; (2) intersections	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
or roadway links would decline to LOS E or F; (3) intersections operating at LOS E or F will have reduced LOS; or (4) traffic volume increase on nearby roadways by 10% or more unless the increase in traffic volume is less than 100 vehicles per hour]?				
g) Result in total emissions of ROG, NO_x, or PM_{10} of 15 tons per year or greater, or 80 pounds (36 kilograms) per day or greater?	☐	☐	☒	☐
h) Result in potential to expose persons to substantial levels of Toxic Air Contaminants (TAC), such that the probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds 10 in one million?	☐	☐	☒	☐
i) Result in ground level concentrations of non-carcinogenic TACs such that the Hazard Index would be greater than 1 for the MEI?	☐	☐	☒	☐
j) Result in a substantial increase in diesel emissions?	☐	☐	☒	☐
k) FOR CUMULATIVE IMPACTS: Result in any individually significant impact; or Result in a fundamental conflict with the local general plan, when the general plan is consistent with the regional air quality plan. When the	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
general plan fundamentally conflicts with the regional air quality plan, then if the contribution of the proposed project is cumulatively considerable when analyzed the impact to air quality should be considered significant?				

a. ***Less-than-Significant Impact.*** The San Francisco Bay Area Air Basin is currently non-attainment for ozone (state and federal ambient standards) and PM_{10} (state ambient standard). While air quality plans exist for ozone, none exists (or is currently required) for PM_{10}. The Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard[1] is the current ozone air quality plan required under the federal Clean Air Act. The state-mandated regional air quality plan is the Bay Area 2000 Clean Air Plan.[2] These plans contain mobile source controls, stationary source controls and transportation control measures to be implemented in the region to attain the state and federal ozone standards within the Bay Area Air Basin.

A project would be judged to conflict with or obstruct implementation of the regional air quality plan if it would be inconsistent with the growth assumptions, in terms of population, employment or regional growth in Vehicle Miles Traveled. The BAAQMD CEQA Guidelines do provide that if a project requires a General Plan amendment it would have a significant cumulative impact if the project generates more Vehicle Miles Traveled than that anticipated under the previous land use designation. This would be due to inconsistency with the regional air quality plan, which is based on ABAG projections which are in turn based on city/county general plans.

[1] Bay Area Air Quality Management District, Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard, October 24, 2001.

[2] Bay Area Air Quality Management District, Bay Area 2000 Clean Air Plan and Triennial Assessment, December 20, 2000.

The proposed project includes a rezoning of the site and a General Plan amendment changing the land use designation. However, development under the proposed zoning and designation would result in a lower level of vehicle trips, Vehicle Miles Traveled and resulting emissions when compared to the development potential under the existing zoning/designation. The project's proposed 400 residential units would generate an estimated 2,774 average daily trips. Although the current industrial use of the site involves the storage of shipping containers, the existing M-30 zoning of the property allows for general retail sales which would generate a much higher number of trips than the proposed residential use. Based on the size of the parcel (27-acres) and a potential developable area of approximately 300,000 square feet (0.25 of the total area), a retail sales development could result in more than 12,000 average daily trips, while a more conservative light industrial use of the site would result in approximately 2,100 average daily trips. The proposed project's estimated trip generation is within the range that is currently allowed under the existing zoning of the site. Based on BAAQMD guidance, the project would not have a significant air quality impact related to inconsistency with the regional air quality plan.

b. ***Less-Than-Significant Impact.*** The Bay Area Air Quality Management District (BAAQMD) monitors air quality at several locations within the San Francisco Bay Air Basin. The closest multi-pollutant monitoring site to the project site was located (prior to 2004) at 6701 International Boulevard, less than 2 miles north of the project site. A long term monitoring site is located in Oakland on Alice Street. Contaminants monitored at these sites are ozone, carbon monoxide, nitrogen dioxide and sulfur oxide. During the period 2002-2004 no exceedances of any state or federal standard were recorded at these locations. However, exceedances of the state/federal ozone standards were recorded at other monitoring locations within the air basin.

In April 1997 the Port of Oakland initiated a monitoring program to measure PM_{10} and $PM_{2.5}$ in West Oakland. One site was located within Port property and another was located in a residential area of West Oakland near the intersection of Filbert Street and 24th Street. The results of several years of monitoring show that the federal/state ambient standards for $PM_{2.5}$ and federal standards for PM_{10} are met in West Oakland, while the more stringent state standards for PM_{10} are exceeded.

Development projects in the Bay Area are most likely to violate and air quality standard or contribution substantially to an existing or projected air quality violation through generation of vehicle trips. New vehicle trips add to carbon monoxide concentrations near streets providing access to the site. Carbon monoxide is an odorless, colorless poisonous gas whose primary source in the Bay Area is automobiles. Concentrations of this gas are highest near intersections of major roads.

A screening-level form of the CALINE-4 program was used to predict concentrations at two signalized intersections affected by project traffic.[3] Normalized concentrations for each roadway size (2 lanes, 4 lanes, etc.) are adjusted for the two-way traffic volume and emission factor. Calculations were made for a receptor at a corner of the intersection, located at the curb. Emission factors were derived from the California Air Resources Board EMFAC7-2002 computer program based on a 2005 Bay Area vehicle mix.

The screening form of the CALINE-4 model calculates the local contribution of nearby roads to the total concentration. The other contribution is the background level attributed to more distant traffic. The 1-hour background level in 2005 was taken as 5.7 PPM and the 8-hour background concentration was taken as 3.8 PPM. The 1-hour background level in 2025 was taken as 5.2 PPM and the 8-hour background concentration was taken as 3.5 PPM. These backgrounds were estimated using isopleth maps and correction factors developed by the Bay Area Air Quality Management District.

Table 1 shows the results of the CALINE-4 analysis for the peak 1-hour and 8-hour traffic periods in parts per million (PPM). The 1-hour values are to be compared to the federal 1-hour standard of 35 PPM and the state standard of 20 PPM. The 8-hour values in Table 1 are to be compared to the state and federal standard of 9 PPM.

Table 1 shows that existing predicted concentrations near the intersections meet the 1-hour and 8-hour standards. Traffic from the proposed project would increase concentrations by less than 0.1 PPM and concentrations would remain below the most stringent state or federal standards. Since project traffic would not cause any new violations of the 8-hour standards for carbon monoxide, nor contribute substantially to an existing or projected violation, project impacts on local carbon monoxide concentrations are considered to be less-than-significant.

Table 1: Worst-Case Carbon Monoxide Concentrations, in Parts Per Million

Intersection	**Existing (2005)**		**Existing + Project (2005)**		**Cumulative + Project (2025)**	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
San Leandro/ 98th Avenue	10.0	6.8	10.1	6.9	6.0	4.1
International/ 98th Avenue	9.4	6.4	9.5	6.5	6.0	4.1
Most Stringent Standard	20.0	9.0	20.0	9.0	20.0	9.0

[3] Bay Area Air Quality Management District, BAAQMD CEQA Guidelines, 1999.

c. ***Less-Than-Significant Impact.*** To evaluate emissions associated with the project the URBEMIS2002 computer program was employed. URBEMIS-2002 is a program that estimates the emissions that result from various land use development projects. For the purposes of this analysis, all vehicle trips to the project sites were considered to represent new travel within the region. The daily increase in regional emissions from auto travel is shown in Table 2 for reactive organic gases (hydrocarbons) and oxides of nitrogen (two precursors of ozone), carbon monoxide and PM_{10}.

Guidelines for the evaluation of project impacts issued by the Bay Area Air Quality Management District consider emission increases to be significant if they exceed 80 lbs per day for regional pollutants (ROG and NO_X, PM_{10}). The increases in emissions shown in Table 2 are below these thresholds for all three pollutants, so the project would have a less-than-significant impact on regional air quality.

Table 2: Project Regional Emissions in Pounds Per Day

	Reactive Organic Gases	**Nitrogen Oxides**	**PM_{10}[a]**
Project Emissions	34.4	35.0	29.1
BAAQMD Significance Threshold	80.0	80.0	80.0

[a] Despite the establishment of both federal and state standards for $PM_{2.5}$ (particulate matter, 2.5 microns), the BAAQMD has not developed a threshold of significance for this pollutant. For this analysis, $PM_{2.5}$ impacts would be considered significant if project emissions of PM_{10} exceed 80 pounds per day. $PM_{2.5}$ is included, by definition, in PM_{10}.

d. ***Potentially Significant Unless Mitigation Incorporated.*** Development proposals normally have the potential to expose sensitive receptors to substantial pollutant concentrations during construction. The proposed project would require demolition of some existing structures. The physical demolition of existing structures and other infrastructure are construction activities with a high potential for creating air pollutants. In addition to the dust created during demolition, substantial dust emissions could be created as debris is loaded into trucks for disposal.

After removal of existing structures, construction dust would continue to affect local air quality during construction of the project. The project area is currently developed, so construction would not involve site clearing grading and earthmoving, which are the construction activities that generate the greatest amount of emissions. Nevertheless, construction dust could affect local air quality during construction of the project. The effects of construction activities would be increased dustfall and locally elevated levels of PM_{10} downwind of construction activity.

During construction various diesel-powered vehicles and equipment would be in use on the site, and diesel trucks would be used to carry demolition debris from the site. The California Air Resources Board identified particulate matter from diesel-fueled engines as a toxic air contaminant (TAC). CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines.[4] High volume freeways, stationary diesel engines and facilities attracting heavy and constant diesel vehicle traffic were identified as having the highest associated risk.

Health risks from Toxic Air Contaminants are function of both concentration and duration of exposure. Unlike the above types of sources, construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks. Additionally, construction related sources are mobile and transient in nature. Because of its short duration, health risks form construction emissions of diesel particulate would be a less-than-significant impact.

According the *BAAQMD CEQA Guidelines*, emissions of ozone precursors (ROG and NOx) and carbon monoxide related to construction equipment are already included in the emission inventory that is the basis for regional air quality plans, and thus are not expected to impede attainment or maintenance of ozone and carbon monoxide standards in the Bay Area. Thus, the potentially significant effect of construction activities would be increased dustfall and locally elevated levels of PM_{10} downwind of construction activity. Construction dust has the potential for creating a nuisance at nearby properties.

The BAAQMD significance threshold for construction dust impact is based on the appropriateness of construction dust controls. The BAAQMD guidelines provide feasible control measures for construction emission of PM_{10}. If the appropriate construction controls are to be implemented, then air pollutant emissions for construction activities would be considered less-than-significant.

Mitigation Measure III.1:

The following measures should be included in remediation and construction contracts to control fugitive dust emissions:

- Water all active remediation and construction areas at least twice daily.
- Watering or covering of stockpiles of debris, soil, sand or other materials that can be blown by the wind.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at remediation and construction sites.
- Sweep daily (preferably with water sweepers) all paved access road, parking areas and staging areas at remediation and construction sites.

[4] California Air Resources Board, Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, October 2000.

- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.
- Hydroseed or apply non-toxic soil stabilizers to inactive remediation and construction areas.
- Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

Significance After Mitigation: The above measures include all feasible measures for construction emissions identified by the Bay Area Air Quality Management District. According the District threshold of significance for construction impacts, implementation of the measures would reduce construction impacts of the project to a less than significant level***. The measures would also apply to remediation activities and would therefore have a similar effect during period of remediation.***

e. ***Less-than-Significant Impact.*** The project would not involve any new sources of odors, nor place residents near existing odor sources. Project odor impacts would be less-than-significant.

f. Less-than-Significant Impact. See response b above**.**

g. Less-than-Significant Impact. See response c above**.**

h. ***Less-than-Significant Impact.*** The operation of the proposed project would not result in any new sources Toxic Air Contaminants and the project land uses would not be located downwind of near any existing major stationary sources of Toxic Air Contaminants.

The project is bounded on the west by a railroad and major streets adjacent the site do carry diesel truck traffic. The greatest diesel particulate risks are generally associated with stationary diesel engines and locations where diesel engines are allowed to idle for extended periods. Where air districts have developed guidelines for diesel risk assessments for CEQA documents, the identified situations requiring analysis are locations with extended truck idling (truck stops, warehouse/distribution centers, transit centers), ship hotelling at ports and train idling.[5] There are no facilities near the project that involve extended truck idling, and the railroad adjacent the site is lightly used. The project would not have the potential to expose persons to substantial levels of Toxic Air Contaminants.

[5] South Coast Air Quality Management District, Health Risk Assessment Guidelines for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, 2003.

i. ***Less-than-Significant Impact.*** The operation of the proposed project would not result in any new sources of non-carcinogenic Toxic Air Contaminants and the project land uses would not be located downwind of near any existing major stationary sources of non-carcinogenic Toxic Air Contaminants.

j. ***Less-than-Significant Impact.*** As a residential subdivision, the project would generate little or no diesel emissions.

k. ***Less-than-Significant Impact.*** **As discussed in** responses a through i above, the project would not result in any individually significant impacts, nor would it result in a cumulatively considerable increase in any criteria pollutants.

IV. Biological Resources

	Potentially Significant Impact	**Potentially Significant Unless Mitigation Incorporated**	**Less-Than-Significant Impact**	**No Impact**
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse impact on federally protected wetlands as defined by Section 404 of the Clean	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 an established resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
f) Fundamentally conflict with the City of Oakland Tree Preservation and Removal Ordinance (Oakland Municipal Code (OMC) Chapter 12.36) by removal of protected trees under certain circumstance? Factors to be considered in determining significance include: The number, type, size, location and condition of (a) the protected trees to be removed and/or impacted by construction and (b) the protected trees to remain, with special consideration given to native trees.	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
g) Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resource? Although there are no specific, numeric/quantitative criteria to assess impacts, factors to be considered in determining significance include whether there is substantial degradation of riparian and aquatic habitat through: (a) discharging a substantial amount of pollutants into a creek; (b) significantly modifying the natural flow of the water; (c) depositing substantial amounts of new material into a creek or causing substantial bank erosion or instability; or (d) adversely impacting the riparian corridor by significantly altering vegetation or wildlife habitat.	☐	☐	☐	☒

a. ***No Impact.*** The project site is paved with asphalt and no vegetation is present. It has been used for industrial uses for more than fifty years. Project activities would not result in the removal or modification of natural habitat. No candidate, sensitive, or special status species inhabit the project site, and no habitat supporting these species exists on the project site.

b. ***No Impact.*** As stated previously, the project site is paved with asphalt and is located on a historically industrial site. The project would not affect any riparian habitat or other sensitive natural community.

c. ***No Impact.*** The project site is covered by impervious surfaces and no wetlands exist on the project site. Therefore the proposed use would not affect any wetlands.

d. ***No Impact.*** The project site is covered by impervious surfaces and does not provide any habitat that could be occupied by migratory fish or other wildlife.

e. ***No Impact.*** There are no habitat conservation plans or natural community conservation plans applicable to the project site.

f. ***No Impact.*** The site does not contain any protected trees. The City has confirmed that a pine tree located along the San Leandro Street boundary of the site is a Monterey pine, which does not require a permit for removal.[6] The site also contains one almond tree whose trunk is approximately 6 inches in diameter. No permit is required for the removal of trees with trunks that are less than 9 inches in diameter, unless the tree is a coast live oak.

g. ***No Impact***. No creeks exist on the project site, nor would any off-site creeks be affected by the project. The project would not conflict with the City of Oakland Creek Protection Ordinance.

V. Cultural Resources

	Potentially Significant Impact	**Potentially Significant Unless Mitigation Incorporated**	**Less-Than-Significant Impact**	**No Impact**
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? Specifically, a substantial adverse change includes physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be "materially impaired." The significance of an historical resource is "materially impaired" when a project	☐	☐	☒	☐

[6] City of Oakland, Public Works Agency, Tree Division, February 14, 2005.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that convey its historical significance **and** that justify its inclusion on, or eligibility for inclusion on an historical resource list (including the California Register of Historical Resources, the National Register of Historical Resources, Local Register, or historical resources survey form (DPR Form 523) with a rating of 1-5)				
b) Cause a substantial adverse change in the significance of an archeological resource, pursuant to Section 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource, site, or unique geologic features?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

a. ***Less-Than-Significant Impact.*** The project site does not contain any potentially historic structures. The former Fleischmann's yeast plant was demolished in 2003, and the remaining water tower and equipment building that are currently located on the site are considered to be fragments of the original plant and as such their historic integrity has been severely compromised. The City does not consider them to be eligible for the state or national register, and therefore the demolition of these structures would not be considered significant under CEQA[7].

[7] Betty Marvin, City of Oakland Historic Resource Planner. Personal Communication March 2005.

A records search was also completed at the Northwest Information Center (Center) of the California Historic Resources Inventory System, located at Sonoma State University in Rohnert Park. The records search included review of the State of California Office of Historic Preservation records, base maps, historic maps, and existing literature for Alameda County. This research did not indicate the presence of any historic-period buildings or structures.

b. ***Potentially Significant Unless Mitigation Incorporated.*** The records search indicated that there is no indication of historic activity in the project area. Therefore there is a low possibility of identifying historic-period archaeological resources in the project area, but that further archival and field study by an archaeologist is warranted.

The following measure shall be implemented to mitigate potential construction-related impacts to prehistoric and historic archaeological resources:

Mitigation Measure V.1:

Pursuant to the recommendation of the California Historical Resources Information System, prior to the issuance of grading permits, the project sponsor shall submit to the City the results of either 1) a pedestrian survey conducted by a qualified archaeologist; or 2) the results of augering conducted by a qualified archaeologist. If evidence of historic-period archaeological resources are encountered, the qualified archaeologist shall prepare a treatment plan for review and approval by the City to direct the excavation and treatment of any remains. The protocols governing the development of a treatment plan are discussed further below.

In lieu of steps 1) and 2) above, the project sponsor may also elect to provide an archaeological monitor during ground disturbing activities to identify any remains uncovered during construction.

If archaeological deposits are identified, it is recommended that such deposits be avoided by project activities. If such deposits cannot be avoided, they shall be evaluated for their significance. If the resources are not significant, further protection is not necessary. If the resources are significant, adverse effects on them would need to be avoided or such effects mitigated. Prehistoric materials can include flaked-stone tools (e.g. projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat affected rock, ash and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials can include wood, stone, concrete, or adobe footings; walls and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, and other refuse. Project personnel shall not collect or move any cultural material. Fill soils that may be used for construction purposes shall not contain archaeological materials. A report documenting the methods and findings, and providing recommendations as necessary shall be prepared.

Significance after Mitigation: The implementation of Mitigation Measure V.1 as a condition of approval would ensure that impacts to prehistoric and historic archaeological resources during construction of the project would be less than significant.

b. ***Potentially Significant Impact unless Mitigation Incorporated.*** No known paleontological resources are located within or adjacent to the project site. However, construction activities could result in the discovery of paleontological materials during ground-disturbing activities.

Mitigation Measure V.2:

If deposits of paleontological materials are encountered during project activities, all work within 50 feet of the discovery shall be redirected until a qualified paleontologist can evaluate the finds and make recommendations. If paleontological deposits are identified, it is recommended that such deposits be avoided by project activities. If such deposits cannot be avoided, they shall be evaluated for their significance. If the resources are not significant, further protection is not necessary. If the resources are significant, adverse effects on them would need to be avoided or such effects mitigated.

Significance after Mitigation: The implementation of Mitigation Measure V.2 as a condition of approval would ensure that impacts to paleontological resources during construction of the project would be less than significant.

d. ***Potentially Significant Impact unless Mitigation Incorporated.*** The records search indicated that the project area is situated along former Bay marsh margins, an area considered sensitive. In addition, CA-ALA-52, a Native American archaeological site, is located either adjacent or within the immediate vicinity of the project area. Given the environmental setting and the archaeological sensitive nature of the immediate area, there is a moderate potential for Native American sites in the project area. The Center recommends that further archival and field study by an archaeologist is recommended.

Mitigation Measure V.3:

Pursuant to the recommendation of the California Historical Resources Information System, prior to the issuance of grading permits, the project sponsor shall submit to the City the results of either 1) a pedestrian survey conducted by a qualified archaeologist; or 2) the results of augering conducted by a qualified archaeologist. If evidence of human remains are encountered the qualified archaeologist shall prepare a treatment plan for review and approval by the City to direct the excavation and treatment of any remains. The protocols governing the development of a treatment plan are discussed further below.

In lieu of steps 1) and 2) above, the project sponsor may also elect to provide an archaeological monitor during ground disturbing activities to identify any remains uncovered during construction.

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonable suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined whether or not the remains are subject to the coroner's authority.

If human remains are encountered, work within 50 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, an archaeologist shall be contacted to evaluate the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendent to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. A report documenting the methods and findings, and providing recommendations as necessary, shall be prepared.

Significance after Mitigation: The implementation of Mitigation Measure V.2 as a condition of approval would ensure that impacts to human remains during construction of the project would be less than significant.

VI. Geology and Soils

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Would the project expose people or structures to geologic hazards, soils, and/or seismic conditions so unfavorable that they could not be overcome by special design using reasonable construction and maintenance practices? Specifically, would the project expose people or structures to substantial 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 or Seismic Hazards 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 Publications 42 and 117 and PRC §2690 et. Seq.)?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, collapse?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or loss of topsoil, creating substantial risks to life, property, or creeks/waterways?	☐	☐	☐	☒
c) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as it may be revised), creating substantial risks to life or property?	☐	☐	☒	☐
d) Be located above a well, pit, swamp, mound, tank vault, or unmarked sewer line, creating substantial risks to life or property?	☐	☐	☐	☒
e) Be located above landfills for which there is no approved closure and post-closure plan, or unknown fill soils, creating substantial risks to life or property?	☐	☐	☒	☐
f) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
systems where sewers are not available for the disposal of wastewater?				

a.i. ***No Impact.*** A technical report was completed for this project by Lowney Associates, entitled "Design-Level Geotechnical Investigation, Dreisbach/98th Avenue Parcels, Oakland, California," (Geotechnical Investigation) dated June 15, 2004. This report notes that the project site is not located within an Alquist-Priolo Earthquake Fault Zone.

a.ii. **Potentially Significant Unless Mitigation Incorporated.** The Geotechnical Investigation completed for this project identified the project site as being located approximately 2.8 kilometers southwest of the Hayward Fault and approximately 42.8 kilometers northeast of the San Andreas Fault. Other active faults identified in the area were the Calaveras and Concord-Green Valley Faults, which are located approximately 17 and 24 kilometers northeast of the project site. The report found that strong ground shaking could be expected at the project site during moderate to severe earthquakes in the general region, which is the situation for virtually all developments in the San Francisco Bay Area.

Mitigation Measure VI.1:
The proposed project shall be built in compliance with all recommendations contained in the Geotechnical Investigation prepared by Lowney Associates dated June 15, 2004.

Significance After Mitigation: Implementation of mitigation measure VI.1 would ensure that potential impacts related to geotechnical issues are reduced to a less-than-significant level.

a.iii. ***Less-than-Significant Impact.*** The Geotechnical Investigation completed for this project analyzes the impacts that could occur from liquefaction, lateral spreading, subsidence, and collapse. The report finds the site is within a State of California Seismic Hazard Zone for liquefaction. The geotechnical consultant completed a subsurface exploration program and analyzed the soil conditions for the potential liquefaction to occur. The Geotechnical Investigation states that the probability of ground rupture occurring at the site during a seismic event is low, but that some sand layers encountered are theoretically liquefiable. The analysis concluded that there is a moderate to high potential for localized liquefaction during a major earthquake. Settlement estimates indicate that liquefaction-induced settlement on the order of 2 to 3 inches may occur in localized areas across the site. The Geotechnical Investigation states that since there are no open

bodies of water within an appropriate distance from the site, the probability of lateral spreading is low. Implementation of Mitigation Measure VI.1 would ensure that potential impacts related to landslide, lateral spreading, subsidence, liquefaction, or collapse would be reduced to a less-than-significant level.

a.iv. ***No Impact.*** The project site is generally flat, without hills nearby. No impacts from landslides are anticipated.

b. ***No Impact.*** The project site is currently paved with asphalt and would not result in soil erosion or the loss of topsoil.

c. ***Less-than-Significant Impact.*** The geotechnical report states that highly expansive soils were encountered beneath the fills at the project site. This would be considered a significant impact. Implementation of Mitigation Measure VI.1 would ensure that potential impacts related to expansive soils would be reduced to a less-than-significant level.

d. ***No Impact.*** The project site contains demolition debris, pavements, and underground infrastructure from the former uses on the site, including a deep water well. These features would be removed during the site preparation phase of project construction. No impacts are anticipated.

e. ***Less-than-Significant Impact.*** The project would not be constructed above a landfill. The Geotechnical Investigation identified the presence of undocumented fills as one of the primary geological and geotechnical concerns at the site. The report noted that 1 to 4 feet of undocumented fill covers a majority of the site. In addition, several underground storage tanks (USTs) were previously removed from the site and backfilled with imported material. It is not known if these excavations were compacted. Implementation of Mitigation Measure VI.1 would ensure that potential impacts related to uncompacted fill would be reduced to a less-than-significant level.

f. ***No Impact.*** Septic tanks would not be needed for the project. No impact would result.

VII. Hazards and Hazardous Materials

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
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) 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 would result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) Be located within the vicinity of a private airstrip, and would result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant 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?	☐	☐	☐	☒
h) Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

a. ***Potentially Significant Unless Mitigation Incorporated.*** The proposed project is a residential development that would not include the routine use, transport, or disposal of hazardous materials. No hazardous materials would be stored on-site in support of the proposed development, other than typical residential-related home care products.

A Phase I Site Assessment Report was prepared by Geomatrix Consultants in July 2004[8] which identified a number of contaminants related to past uses of the site as the Fleischman's yeast plant and trucking facilities. The contaminants include lead, mercury, petroleum hydrocarbons and underground storage tanks. Geomatrix Consultants conducted additional soil and groundwater sampling at over 50 locations across the site in July[9] 2004 and September[10] 2004, and their subsequent reports recommended actions that should be taken before reconstruction of the site can begin.

The following section summarizes the contaminants that remain on the four parcels that comprise the project area. To assess whether any of the chemicals detected in soil or grab groundwater are present at concentrations of potential concern, the analytical results were compared to the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for residential land use[11]. The ESLs are conservative screening levels that correspond to an acceptable risk level and reflect varying combinations of site characteristics including both residential

[8] *Phase I Environmental Site Assessment*, Arcadia Park Development, Oakland, California, dated July 2004.
[9] Results of Phase I Soil and Grab Groundwater Investigation, Arcadia Park Development, Oakland, California
[10] Results of Additional Soil Sampling for Lead Characterization 854 92nd Avenue, Arcadia Park Development, Oakland, California
[11] California Regional Water Quality Control Board, San Francisco Bay Region, 2003, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final, July.

and industrial land uses. Concentrations of compounds detected below corresponding ESLs can be assumed to not pose a significant threat to human health and the environment. Conversely, exceedance of the corresponding ESL does not necessarily indicate that adverse health effects will occur, but suggests that additional evaluation of the potential risks is warranted. To be conservative, residential ESLs for sites at which groundwater is a current or potential source of drinking water were selected as screening criteria. Please refer to Figure 3 for information on the property locations.

854 92nd Avenue: Lead was detected above the ESL (200 mg/kg) in shallow soil samples(1.5 feet below ground surface (bgs) from borings drilled on this property.. Lead was not detected above ESLs in deeper soil samples (3 feet bgs) except at one location. The vertical extent of lead contamination above ESLs in soil appears to be confined to 3 feet bgs or less.

Petroleum hydrocarbons were detected at levels above ESLs (100 mg/kg for diesel; 500 mg/kg for motor oil) at two boring locations at 1.5 feet bgs, which coincided with elevated lead levels discussed above. Remediation of lead-affected soil in this area will also address the petroleum hydrocarbons.

860 92nd Avenue: The former diesel underground storage tanks (USTs) located on this site were removed and the property has received regulatory closure from the Alameda Environmental Health Care Services Agency (the Agency) which has jurisdiction over underground storage tank sites. However, petroleum constituents remain in soil and groundwater in this area. The Agency may request additional sampling prior to allowing residential development on this site.

921 98th Avenue: Two former diesel underground storage tanks (USTs) located on this site were removed and the property owner received regulatory closure from the Agency; however separate phase product is still present in the subsurface. The Agency may request additional characterization of soil and/or groundwater, soil vapor sampling, and removal of separate phase product.

Two additional gasoline USTs were removed from the 921 98th Avenue site, but have not received regulatory closure. The current property owner has taken responsibility for obtaining closure. Previous data indicates elevated benzene concentrations and the presence of separate phase product in groundwater. The Agency may request additional characterization of soil and/or groundwater, soil vapor sampling, and removal of separate phase product. One formaldehyde UST remains on site. The current property owner has taken responsibility for removing this UST, which is currently in progress.

Mercury and lead were detected above ESLs (2.5 mg/kg for mercury, 200 mg/kg for lead) at one location coinciding with the location of a former smoke stack. The occurrence of lead and mercury appears to be localized.

Petroleum hydrocarbons were detected at levels above ESLs (100 mg/kg for diesel; 500 mg/kg for motor oil) at one boring location at 1.5 feet bgs

The property also contains a deep water well, transformers, and a ditch containing PVC pipe along the northern boundary.

999 98th Avenue: Two sumps containing standing water were observed on this site, one of which was observed to have a sheen.

Prior to commencing with development activities, the project sponsor shall consult with the Regional Water Quality Control Board to address the issues described above. Site data will be evaluated based on site-wide representative chemical concentrations and appropriate remedial measures, if necessary, will be developed. The following mitigation measures would address potential impacts related to site contaminants pursuant to state guidelines for the intended residential use of the site.

Mitigation Measure VII.1a:

854 92nd Avenue: The project sponsor will work with the Regional Water Quality Control Board to remediate the elevated levels of lead identified during on site soil sampling. Remediation activities will include excavation of lead-affected soil and off-site disposal at an appropriate hazardous waste facility. The project sponsor shall obtain regulatory closure from the Regional Water Quality Control Board for this property for the proposed residential reuse of the site. A worker health and safety plan to be reviewed and approved by the Oakland Fire Department will be prepared prior to commencement of grading that addresses measures to be taken to reduce exposure of remediation and construction workers to chemicals present in site soil and groundwater.

Mitigation Measure VII.1b:

860 92nd Avenue: Although the USTs previously received regulatory closure from the Alameda County Health Care Services Agency (Agency), this action was based on continued use of the site for industrial uses. The project sponsor shall obtain regulatory approval from the Agency for residential reuse. A worker health and safety plan to be reviewed and approved by the Oakland Fire Department will be prepared prior to commencement of grading that addresses measures to be taken to reduce exposure of remediation and construction workers to chemicals present in site soil and groundwater.

Mitigation Measure VII.1c:

921 98th Avenue: The project sponsor shall receive approval from the Regional Water Quality Control Board for the proposed residential reuse of the site. Additionally, the deep water well should be properly abandoned under the oversight of the appropriate agency. A worker health and safety plan to be reviewed and approved by the Oakland Fire Department will be prepared prior to commencement of grading that addresses measures to be taken to reduce exposure of remediation and construction workers to chemicals present in site soil and groundwater.

Mitigation Measure VII.1d:

999 98th Avenue: The project sponsor shall decommission the two sumps located on this property under appropriate regulatory oversight. If required by the oversight agency, the project sponsor shall implement additional soil and groundwater testing as directed by the oversight

agency to confirm that the sumps have not impacted site soil and groundwater. If impacts to site soil and groundwater are present, the project sponsor shall work with the Regional Water Quality Control Board to obtain approval for the proposed residential reuse of the property. A worker health and safety plan to be reviewed and approved by the Oakland Fire Department will be prepared prior to commencement of grading that addresses measures to be taken to reduce exposure of remediation and construction workers to chemicals present, if any, in site soil and groundwater.

Significance after Mitigation: The implementation of Mitigation Measures VII.1a, VII.1b, VII.1c, and VII.1d as a condition of approval would ensure that potential impacts related to the use of the site for residential development would be less than significant.

b. ***No Impact.*** As stated above, the residential use of the site would not involve hazardous materials and no hazard to the public or environment is foreseen. No construction-period impacts would occur, since mitigation measures VII.1a through VII.1d require the remediation of all identified contaminants prior to issuance of grading permits for construction.

c. ***No Impact.*** The proposed project is not located within one-quarter mile of an existing or proposed school.

d. ***Less-than-Significant-Impact.*** The hazardous materials technical report prepared for the project found that the site is identified on the Cortese, LUST, and CA FID lists. The Cortese list identifies public drinking water wells with detectable concentrations of constituents, hazardous substances sites selected for remedial action, and other release sites. As noted in the project description, the site does contain three water wells, two of which have been abandoned. The third well will be abandoned as part of development of the site.

The LUST list is the Leaking Underground Storage Tank database, which contains records of leaking underground storage tank sites. A formaldehyde Underground Storage Tank, scheduled for removal, is located at the Fleishmann's facility at 921 98th Avenue.

The CA FID list contains records of active and inactive underground storage tank locations listed by the State Water Resource Control Board. The site does contain inactive storage tanks associated with the former use. The UST's were removed previously and the Alameda County Health Services Agency issued a closure letter for the site based on continued use for industrial uses. The Agency may require additional sampling and testing to be done in order to prepare the site for residential development.

Implementation of mitigation measures VII.1a through VII.1d would ensure all existing contaminants are remediated to levels consistent with the reuse of the site for residential purposes. No additional mitigation would be required.

e. ***Less-than-Significant-Impact.*** The proposed project is located in a developed, urban neighborhood, approximately three miles from the Oakland International Airport and runway. The

airport would not present a hazard to the proposed residential use. Noise impacts associated with the airport are discussed in section XI of this initial study.

The project site is located within the General Referral Area and the Height Referral Area for Oakland International Airport. Any project in this area is subject to the following Height Referral Area policies from the Alameda County *Airport Land Use Policy Plan*.:

> " For an airport runway more than 3,200 feet in length, a sloping surface identifies the airspace above one foot in height for each 100 feet (100:1) horizontally from the nearest point of the nearest runway, up to 20,000 feet;"

Alameda County's policy, as stated above, is that for every 100 feet of distance away from the nearest point of the nearest runway, a building is allowed to be constructed up one foot in height. The project site is located approximately three miles from the runway of the Oakland International Airport (~15,840 feet); therefore, the project would be limited to buildings of no more than 158 feet in height. The project proposes single family dwellings of up to 30 feet in height, and multi-family units of up to 38 feet in height. The proposed design would therefore be in compliance with Alameda County restrictions upon building height in the vicinity of a public airport.

f. ***Less-than-Significant-Impact.*** The proposed project is located approximately two miles from the North Airport Executive Terminal and runway. Similar to the calculation under e. above, the project would comply with the building height restrictions and the private airstrip would not present a hazard to the proposed residential use. Noise impacts associated with the airport are discussed in section XI of this initial study.

g. ***No Impact.*** The proposed project would not physically affect any critical arterial roads or otherwise affect an emergency response or emergency evacuation plan. Based on the results of the traffic study, discussed in Section XV of this Initial Study, all local intersections would continue to operate at an acceptable level with the project. The future cumulative traffic impact projected for 2025 at the intersection of 98th Avenue and International Boulevard is related to city wide increases in traffic flow and would occur with or without the project. The Oakland Fire Department has confirmed that San Leandro Street provides good access to the proposed project site. It is wide and accessible by way of city streets and freeway exits. The provision of emergency services can therefore be readily provided via other streets and arterials in the vicinity.[12]

h. ***No Impact.*** The proposed project is located in an urbanized area that is not adjacent to wildlands or subject to wildfires.

VIII. Hydrology and Water Quality

[12] Philip Basada, P.E., Fire Prevention Bureau, *Personal Communication,* February 2005

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Result in substantial erosion or siltation on- or off-site that would affect the quality of receiving waters?	☐	☐	☒	☐
d) Result in substantial flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems?	☐	☐	☒	☐
f) Create or contribute substantial runoff which would be an additional source of polluted runoff?	☐	☐	☒	☐
g) Otherwise degrade water quality?	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
h) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, that would impede or redirect flows?	☐	☐	☐	☒
i) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
j) Expose people or structures to a significant risk of loss, injury or death involving flooding?	☐	☐	☐	☒
k) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
l) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course, or increasing the rate of amount of flow, of a creek, river, or stream in a manner that would result in substantial erosion, siltation, or flooding both on-or off-site?	☐	☐	☐	☒
m) Fundamentally conflict with elements of the City of Oakland Creek Protection (OMC Chapter 13.16) ordinance intended to protect hydrologic resource? Although there are no specific, numeric/quantitative criteria to assess impacts, factors to be considered in determining significance include whether there is substantial degradation of water quality through (a) discharging a	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
substantial amount of pollutants into a creek; (b) significantly modifying the natural flow of the water or capacity; (c) depositing substantial amounts of new material into a creek or causing substantial bank erosion or instability; or (d) substantially endangering public or private property or threatening public health or safety.				

a. ***Less Than Significant.*** The project would not generate hazardous contaminants and would not violate any water quality standards or waste discharge requirements. The 27-acre site is level and is covered by impervious surfaces, resulting in a current stormwater run-off rate that approaches 90 percent. The project sponsor proposes on-site retention of stormwater in compliance with Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) Permit issued to the Alameda Countywide Clean Water Program by the San Francisco Bay Regional Water Quality Control Board (RWQCB). These regulations require new developments to detain, retain, or infiltrate runoff to reduce pollutants in stormwater discharges to the maximum extent practicable. The Permit encourages the use of pervious surfaces to allow runoff to reach the underlying soil, and require the submission of a stormwater control plan to document the methods proposed to be used to meet the requirements.

The project design includes numerous linear parks throughout the development that would incorporate undulations capable of retaining stormwater during peak flows. The project would also incorporate manholes and catch basins with filters to separate out sediments. The retention of on-site runoff allows a portion of the stormwater run-off to be filtered naturally through the soils rather than being captured and funneled directly into the City storm drains. The planned on-site retention and natural filtration of stormwater would reduce the volume of stormwater leaving the site. It is expected that the amount of stormwater generated by the project would be up to 15 percent less than the volume produced by the existing conditions. These proposed design features and success ratios would be documented in a stormwater control plan.

b. ***Less-than-Significant Impact.*** The project would not utilize groundwater resources. The City of Oakland receives its potable water from the East Bay Municipal Utilities District (EBMUD). EBMUD has indicated that is has available capacity to serve the proposed project.[13]

c. ***Less-than-Significant Impact.*** The project site is currently flat and paved with asphalt and with the project would be paved with roads, driveways, residences and landscaping. The project would not result in erosion or siltation on- or off-site.

d. ***Less-than-Significant Impact.*** The project site is located within Zone C, described as "Areas of minimal flooding" on the Federal Emergency Management Agency (FEMA) Hazard Maps. No impacts are expected.

e. ***Less-than-Significant Impact.*** As discussed above under "a.", it is expected that the amount of stormwater generated by the project would be up to 15 percent less than the volume produced by the existing conditions. The proposed design features and success ratios would be documented in a stormwater control plan. The applicant will continue to work closely with the City's Public Works Agency to ensure that replacement of aging pipes that serve the site on 92nd Avenue are replaced as necessary. No upsizing of pipes is anticipated as part of the project.

f. ***Less-than-Significant Impact.*** As discussed above, the project area's stormwater system is currently over capacity. However, as noted in the project description, the project would include design features such as onsite retention of stormwater in compliance with new NPDES C.3 requirements that would reduce the amount of stormwater run-off from the site below existing levels. As required by mitigation measure VIII.1, the existing storm line in 92nd Avenue would be upsized. With the incorporation of these activities, the project would not create substantial runoff.

g. ***Less-than-Significant Impact***. The project would not substantially degrade water quality. As discussed above, the applicant proposes on-site retention of stormwater in compliance with the new NPDES C.3 requirements. The linear parks planned throughout the development are designed with undulations that would be capable of retaining stormwater during peak flows. The project would also incorporate manholes and catch basins with filters to separate out sediments. The retention of on-site runoff allows a portion of the stormwater run-off to be filtered naturally through the soils rather than being captured and funneled directly into the City storm drains. The planned on-site retention and natural filtration of stormwater would reduce the volume of stormwater leaving the site. It is expected that the amount of stormwater generated by the project would be up to 15 percent less than the volume produced by the existing conditions. These proposed design features and success ratios would be documented in a stormwater control plan.

h. ***No Impact.*** The proposed project site is located within Zone C, described as "Areas of minimal flooding" on the Federal Emergency Management Agency (FEMA) Hazard Maps. No impacts are expected.

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[13] Jennifer McGregor, Engineer, EBMUD, Personal Communication, February 1, 2005

i. ***No Impact***. As stated above, the project site is not located within a 100-year flood hazard area.

j. ***No Impact.*** The project would not expose people or structures to risk from flooding.

k. ***No Impact.*** The Geotechnical Investigation completed for this project by Lowney Associates found that, due to the distance between the project site and the shore of San Francisco Bay, the potential for inundation due to tsunami or seiche is considered to be remote. Inundation by mudflow is considered to be not probable due to the urbanized nature of the project area.

l. ***No Impact***. The project site is currently paved and would not alter the course of a river or stream.

m. ***No Impact.*** The project would not affect any creeks, and, therefore, would not conflict with elements of the City of Oakland Creek Protection ordinance.

IX. Land Use and Planning

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Result in a conflict between adjacent or nearby land uses?	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
c) Fundamentally 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 actually result in a physical change in the environment?	☐	☐	☒	☐
d) Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan and actually result in a physical change in the environment?	☐	☐	☐	☒

a. ***No Impact.*** The project site is located within an existing area mixed with industrial, residential, and commercial uses. The project would add more residences to the existing residential community adjacent to the project site on the northeast and would not physically divide an established community.

b. ***Less-Than-Significant Impact.*** The project site is located in the Elmhurst neighborhood along the San Leandro Street corridor, an area that is characterized by a mixture of residential and industrial uses. The Land Use and Transportation Element notes that the area along San Leandro Street includes many locations where there are conflicts between residential and industrial uses and that both residents and industries suffer from the conflicts over noise, emissions, odor, and glare.

With the demolition of the former Fleischman's yeast plant, the most glaring conflict between the existing residential and industrial uses was removed. The proposed development of the site with a mixture of single-family and multi-family uses would be consistent with the established Elmhurst neighborhood to the north and east. The existing residential properties on small lots along E Street share a property line with the project site and would be particularly enhanced by the continuity of residential uses provided by the proposed project.

In addition to the residential uses to the east, the project site is located prominently on the corner of two key corridors: 98th Avenue and San Leandro Street. Existing industrial uses to the west and south are therefore set back across the width of the existing streets and would not be located directly adjacent to the proposed residences. The property to the north is currently developed as storage for vehicles and would not result in a substantial conflict with the proposed residential use of the site.

The City is ***currently studying the policy issues surrounding the conversion of industrial uses to residential uses.*** ~~considering a broader initiative that would involve the transition of industrial uses along the San Leandro Street corridor to residential uses in recognition of the critical housing need city-wide and the historic conflicts between the industrial and residential uses that currently exist. The project would be consistent with this initiative.~~

c. ***Less-Than-Significant Impact.*** The existing M-30 zoning of the site and its General Plan designation of General Industrial/Transportation does not allow for the development of residential uses. The project therefore conflicts with the current zoning and General Plan designation. As shown in figure 7, the project sponsor is requesting a zoning change to R-30 One-Family Residential Zone for the portion of the site where single-family detached homes are proposed and to R-50 Medium Density Residential Zone for the portion of the site where ***detached condos and*** townhomes are proposed, and a General Plan amendment to Housing and Business Mix. The Housing and Business Mix designation was created by the City to allow for the coexistence of low impact industry and housing where appropriate locations have been identified. The Housing and Business Mix allows for residential uses at a maximum density of 30 units per acre, which would accommodate the proposed use.

The physical effect of this proposed change would be to allow residential development of the site. This change is considered to be positive in terms of compatibility with surrounding residential uses as described above under "b". The change would not result in new conflicts with industrial uses because of the setbacks provided by San Leandro Street and 98th Avenue.

Associated physical benefits of the project include remediation of the site consistent with the stricter residential screening levels, the discontinued use of heavy equipment and tractor trailers at the site with the associated emissions and dust, and the introduction of additional open space and landscaping for the residential uses.

d. ***No Impact.*** There are no habitat conservation plans or natural community conservation plans applicable to the project

X. Mineral Resources

	Potentially Significant Impact	Potentially Significant Unless Mitigation	Less-Than-Significant Impact	No Impact

		Incorporated		
Would the project:				
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 or other land use plan?	☐	☐	☐	☒

a. and b. ***No Impact.*** The proposed project site is has been historically paved and used for industrial activities. The project would not affect the availability of any known mineral resources.

XI. Noise

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
a) Expose persons to or generate noise levels in excess of standards established in the Oakland General Plan or applicable standards of the other agencies (e.g. OSHA)?	☐	☒	☐	☐
b) Violate the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding operational noise?	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
c) Violate the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding construction noise, except if an acoustical analysis is performed and all feasible mitigation measures imposed, including the standard City of Oakland noise measures adopted by the Oakland City Council on January 16, 2001.	☐	☒	☐	☐
d) Violates the City of Oakland Noise Ordinance (Oakland Municipal Code Section 8.18.020) regarding nuisance of persistent construction-related noise?	☐	☒	☐	☐
e) Create a vibration which is perceptible without instruments by the average person at or beyond any lot line containing vibration-causing activities not associated with motor vehicles, trains, and temporary construction or demolition work, except activities located within the (a) M-40 zone or (b) M-30 zone more than 400 feet from any legally occupied residential property (Oakland Planning Code Section 17.120.060)?	☐	☒	☐	☐
f) Generate interior L_{dn} or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories and long-term care facilities (and may be extended by local legislative action to include	☐	☒	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
single family dwellings) per California Noise Insulation Standards (CCR Part 2, Title 24)?				
g) Result in a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project;	☐	☐	☐	☒
h) Conflict with state land use compatibility guidelines for all specified land uses for determination of acceptability of noise [Source: State of California, Governor's Office of Planning and Research, General Plan Guidelines, 2003 (Appendix C, Figure 2)]?	☐	☐	☒	☐
i) Be located within an airport land use plan and would expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
j) Be located within the vicinity of a private airstrip and would expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

a. ***Potentially Significant Unless Mitigation Incorporated.*** The firm Charles M. Salter Associates Inc. prepared a technical analysis of the noise impacts of the proposed project in a report entitled "98th Avenue Residential Development Feasibility Noise and Vibration Study, Oakland, California, dated March 3, 2005. The study included onsite measurements to determine compatibility of project with City policies contained in the General Plan and Municipal Planning Code.

The City's interior noise goals are consistent with State standards found in the California Building Code (CBC). The CBC requires an interior noise level no higher than a DNL[14] of 45 dB. Projects exposed to an exterior DNL of 60 dB or greater require an acoustical analysis showing that the proposed design will limit interior noise levels to the required interior level.

Noise measurements were taken at three locations around the site on May 22 and 25, 2004. The existing noise environment at the project site ranged between a DNL of 62 dB and 82 dB These existing noise levels would result in interior sound levels which would be considered to be a significant impact. The following mitigation measure would be required to reduce potential interior noise to an acceptable level.

Mitigation Measure X.1:
Exterior walls of the residences fronting 98th Avenue and San Leandro Street shall be constructed with a Sound Transmission Class (STC) rating of 47. A qualified acoustical consultant shall review the design as it is developed to refine the specific STC ratings once the building design and site layout have been refined. Since windows must be closed to achieve the interior noise criteria, an alternate means of providing outside air to habitable spaces is required for facades exposed to an exterior dNL of 60 dB or greater.

Significance After Mitigation: With implementation of Mitigation Measure X.1, interior noise exposure of residents would not exceed standards established in the Oakland General Plan and Oakland Municipal Planning Code. The potential noise impact would be Less than Significant.

Regarding exterior use areas, the project itself would provide shielding from the higher sound levels produced by traffic along San Leandro Street and 98th Avenue. The proposed multi-family units along San Leandro Street and 98th Avenue would shield in the interior of the site and attenuate much of the existing ambient noise produced by existing motor vehicle traffic. Estimated sound levels in the main outdoor use areas identified in Figure 3 would be between 62 to 69 dB, which would be consistent with City of Oakland guidelines for residential uses.

b. ***Less Than Significant.*** The proposed residential use of the site would not produce sound levels at adjacent properties that are unacceptable according to City Guidelines. The proposed use would be compatible with the existing residential uses to the east, producing a lower level of sound than the existing industrial use of the site. Existing industrial uses to the north, west, and south, would not be adversely affected by the proposed residential use of the site.

c. ***Potentially Significant Unless Mitigation Incorporated.*** The City of Oakland Noise Ordinance thresholds for construction noise require that construction noise levels at the receiving property line between the weekday hours of 7:00 a.m. and 7:00 p.m. not exceed 80 dBA for residential areas and 85 dBA for commercial and industrial areas for a maximum of ten days. The maximum construction noise level for weekends between 9:00 a.m. and 8:00 p.m. is 65 dBA in residential areas and 70 for

[14] Day-Night Average Sound Level (DNL) – A descriptor established by the U.S. Environmental Protection Agency to describe the average day-night level with a penalty applied to noise occurring during the nighttime hours (10:00 p.m. to 7:00 a.m.) to account for the increased sensitivity of people during sleeping hours.

commercial and industrial areas for a maximum of ten days. If the construction noise is to be continued for more than ten days, the threshold for the weekday hours between 7:00 a.m. and 7:00 p.m is 65 for residential area and 70 for commercial and industrial areas. The corresponding threshold for weekends between the hours of 9:00 a.m. and 8:00 p.m. is 55 for residential areas and 60 for commercial and industrial areas.

It is estimated that the project's construction noise levels would reach 80 to 90 dBA at a distance of 50 feet. Some activities, such as excavation would exceed these noise levels. The project shall incorporate the following City Council adopted construction noise mitigation measures.

Mitigation Measure X.2.
The project sponsor shall require construction contractors to limit standard construction activities as required by the City Building Services Division. Such activities are generally limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, with pile driving and/or other extreme noise generating activities greater than 90 dBA limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday, with no extreme noise generating activity permitted between 12:30 p.m. and 1:30 p.m. No construction activities shall be allowed on weekends until after the building is enclosed without prior authorization of the Building Services Division, and no extreme noise-generating activities shall be allowed on weekends and holidays.

Mitigation Measure X.3.
To reduce daytime noise impacts due to construction, the project sponsor shall require construction contractors to implement the following measures:

- 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).
- Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible 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 where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.
- 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 other measures to the extent feasible.

Mitigation Measure X.4.
To further mitigate potential extreme noise generating construction impacts, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for

review and approval by the City to ensure that maximum feasible noise attenuation will be achieved. These attenuation measures shall include as many of the following control strategies as feasible:

- Erect temporary plywood noise barriers around the construction site to shield adjacent uses.
- 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.
- Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site.
- Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings.
- Monitor the effectiveness of noise attenuation by taking noise measurements.

Mitigation Measure X.5.
Prior to the issuance of each building permit, along with the submission of construction documents, the project sponsor shall submit to the City Building Services Division a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include the following elements:

- A procedure for notifying the City Building Division staff and Oakland Police Department.
- A plan for posting signs on-site pertaining to permitted construction days and hours and complaint procedures and who to notify in the event of a problem.
- A listing of telephone numbers (during regular construction hours and off-hours).
- The designation of an on-site construction complaint manager for the project.
- Notification of neighbors within 300 feet of the project construction area at least 30 days in advance of pile-driving and/or other extreme noise-generating activities about the estimated duration of the activity.
- A preconstruction meeting shall be attended by job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

Significance After Mitigation: Implementation of Mitigation Measures X.2 through X.5 would reduce construction noise impacts to a less-than-significant level.

d. ***Potentially Significant Unless Mitigation Incorporated***. The project's construction activities could result in a persistent nuisance as defined by the City of Oakland Noise Ordinance (Oakland Municipal Code Section 8.18.020). The incorporation of Mitigation Measures X.2 through X.5 above would ensure that the project's potential construction noise nuisance impacts are less than significant.

e. Potentially Significant Unless Mitigation Incorporated. The site is bordered to the west by a Union Pacific rail line and elevated BART tracks. Six BART train passbys were measured during the vibration site survey. Based on the results of this analysis, the vibration produced by BART passbys are considered to be below the threshold of human perception.

The UPRR line has sporadic activity. The UPRR estimated that one train per day passes by the project site, although no train activity was observed during the 72-hour noise measurement made in May 2004.

Neither the City nor the State has specific criteria regarding train vibration. While no ground-borne vibration standards apply for this project, the Federal Transportation Authority (FTA) has published guidelines for assessing the impact of vibration on residential projects. The FTA guideline states that for infrequent train activity (fewer than 70 events per day), the ground velocity due to vibration should not exceed 80 dB (re: 1 micro-inch/second); for more frequent train pass-bys, the criterion is 72 dB. Since the UPRR line is a spur-line the speed of the trains would most likely be moving slowly which would reduce vibration.

Mitigation Measure X.6:

The project sponsor shall retain an acoustical engineer during design to review and provide input to reduce the potential of vibration amplification on upper floors of the residences. Typical recommendations would include minimizing long spans, increasing joist depths, stiffening the structure, etc. Prospective residents shall be made aware of the train line through a full disclosure statement.

Significance After Mitigation: The inclusion of Mitigation Measure X.6 would ensure that potential impacts related to vibration would be less than significant.

f. ***Potentially Significant Unless Mitigation Incorporated.*** A significant noise impact would result from the project due to the interior noise levels estimated. Mitigation Measure X.1 above identified in section X.a. would reduce this impact to a less-than-significant level.

g. No *Impact.* The proposed residential use of the site would not result in an increase in the ambient noise levels in the project vicinity.

h. ***Less Than Significant.*** As discussed in section X.a above, the existing ambient sound levels at the site conflict with the State Land Use Compatibility Guidelines. According to those guidelines, an ambient sound level above 75 dB is considered unacceptable for residential uses.

The project design would provide shielding from the higher sound levels produced by traffic along San Leandro Street and 98th Avenue. The proposed multi-family units along San Leandro Street and 98th Avenue would shield in the interior of the site and would attenuate much of the existing ambient noise created by existing motor vehicle traffic. Estimated sound levels in the main outdoor use areas identified in Figure 3 would be 62 to 69 dB, which would be consistent with City of Oakland guidelines for residential uses.

i. ***Less Than Significant.*** The project is located 1.5 miles from the Oakland Airport. The level of sound in the immediate vicinity from motor vehicles and BART is the predominant source of noise for the project site, and existing air line noise does not represent a significant additional noise source.

j. ***Less Than Significant.*** The L_{dn} already takes airport noise into account, and the level of sound in the immediate vicinity (from cars and BART, and train activity) is the predominant source of noise for the project site. Since your report doesn't currently discuss airport noise, are you OK with this language?

XII. Population and Housing

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in a manner not contemplated in the General Plan, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure), such that additional infrastructure is required but the impacts of such were not previously considered or analyzed?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
elsewhere in excess of that contained in the City's Housing Element?				

a. ***Less-than-Significant Impact.*** The project involves the construction of up to 400 residential units, comprising an estimated 950 new residents. While the project would require a General Plan amendment, this increase in population is within the ABAG projections for the City of Oakland as a whole. Housing is defined as a critical need within the City and the project would assist in meeting the City's goal of constructing 7,773 new housing units between 1999 and 2006, as identified in the Housing Element of the General Plan.

The project will construct necessary roads and utilities to serve the new homes and service providers (PG&E, EBMUD, etc.) have indicated that adequate capacity exits to serve future residents. Section VIII Hydrology and Water Quality identifies that the storm drainage system is over capacity and as required by the mitigation measure VIII.1 the storm line under 92nd Avenue will be upsized to accommodate the proposed uses. The project also includes upsizing of the City's existing storm line under 92nd Avenue. Additional information regarding stormwater management is included in Section VIII of this initial study.

b. ***No Impact.*** The site is currently developed as an industrial site and no housing units would be displaced as a result of the project.

c. ***No Impact.*** The site is currently developed as an industrial site and no people would be displaced as a result of the project.

XIII. Public Services

	Potentially Significant Impact	Potentially Significant 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 of the public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Other public facilities?	☐	☐	☐	☒

a.i. ***Less-than-Significant Impact.*** The City of Oakland Fire Department indicated that it would be able to serve this project without the need to construct a new station and without an increase in response time. There are fire stations within 4 minutes of response time from the closest stations to this project site. Engine 26 is located at 2611 98th Avenue; Engine 29 is located at 1016 66th Avenue; Engine 20 is located at 1401 98th Avenue; and Engine 23 is located at 7100 Foothill Boulevard. The City of Oakland Fire Department has mutual response agreements with surrounding cities for mutual assistance in cases of emergencies which require a larger fire fighting crew.

If the project's residences are three or more stories, overhead power lines and utilities would be required to be placed underground to facilitate the use of fire ladder trucks. Prior to approval, the

fire department would review project plans to determine whether the project would result in any impaired access or inadequacies for hydrant distribution.[15]

a.ii ***Less-than-Significant Impact.*** The City of Oakland Police Department indicated it would be able to serve this project without the need to construct a new station and without an increase in response time. The Police Department does not foresee any significant impact to police services as a result of the project. The Police Station which would serve the project site is the Piedmont Sub station located at the corner of 73rd Avenue and McArthur Boulevard in Oakland.[16]

a.iii ***Less-than-Significant Impact.*** The project would be served by the following schools, which are part of the Oakland Unified School District (OUSD): Stonehurst Elementary School, located at 10315 E Street; James Madison Middle School, located at 400 Capistrano Drive; and Castlemont High School, located at 8601 Macarthur Boulevard. Stonehurst Elementary School serves kindergarten through fifth grade and has a current enrollment of 705 students. James Madison Middle School serves grades sixth through eighth and has an enrollment of 384 students. Castlemont High School serves grades ninth through twelfth and has an enrollment of 1668 students.[17]

The proposed project would generate new students for the schools in the project area. Based on the OUSD's measurement of 0.79 students per household, the project as currently proposed would generate 316 new students. The applicant would be required to pay the State-mandated school impact fees for residential development.

Senate Bill (SB) 50 states that payment of its mandated school impact fees is the exclusive method of mitigating impacts to public schools. Therefore, although development of the Project would result in additional students and increased demand on the school system, payment of the fees mandated under SB 50 is the mitigation measure prescribed by statue, and payment of the fees is deemed appropriate mitigation. No additional mitigation measures are required.

a.i ***No Impact.*** No other public services would be affected by the project.

[15] Philip C. Basada, P.E., Fire Prevention Bureau, City of Oakland Fire Department, Personal Communication, February 23, 2005.
[16] Paul Figueroa, Lieutenant, City of Oakland Police Department, telephone conversation, February 28, 2005.
[17] http://mapstacker.ousd.k12.ca.us

XIV. Recreation

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
a) 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?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a. ***Less-than-Significant Impact.*** The project would increase the use of existing parks and other recreational facilities. According to the City of Oakland Open Space, Conservation and Recreation (OSCAR) Element, which was adopted in 1995, the City has 1.33 local-serving acres of parkland per 1,000 residents. The OSCAR indicates that the local level goal for parkland is 4 acres per 1,000 people.

The Elmhurst neighborhood currently has an estimated 1.73 acres of local-serving park per 1,000 residents, which is more than the city-wide average of 1.33 acres per 1,000 residents. There are five parks within approximately 1-mile of the site: Brookfield Recreation Center, Stonehurst Park (which is shared with an elementary school), Elmhurst Plaza, Holly Mini Park, and Casa Veranga Park.

Of the approximately 2,035 acres of City-owned park and open space, about 1,000 is land-banked passive recreation area, which is not readily usable. In addition, there are 350 acres of golf course land, which is also not readily available as parkland to the general public. Of the remaining approximately 960 net acres, about 611 are City-owned parks.

When evaluating potential impacts to park lands, OSCAR Policy REC 1.2 provides the following guidance:

> Unless overriding considerations exist, allow no net loss of open space within Oakland's urban park system.

The project would not result in a decrease in park space in the local Elmhurst neighborhood. The project would not displace any existing park lands, and would include an estimated 1.6 acres of open space area within the development itself that would serve as open space for the residents of the Arcadia Park Project.

b. ***No impact.*** The project does not involve and would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

XV. Transportation and Traffic

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project 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), or change the condition of an existing street (i.e. street closures, changing direction of travel) in a manner that would substantially impact access or traffic load and capacity of the street system? Specifically, would the project:				
a) at a study, signalized intersection which is located **outside the Downtown**[18] area,	☐	☐	☒	☐

[18] Downtown is defined in the LUTE of the General Plan (page 67) as the area generally bounded by 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.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
cause the level of service (LOS)[19] to degrade to worse than LOS D (i.e., E)?				
b) at a study, signalized intersection which is located **within the Downtown** area, cause the LOS to degrade to worse than LOS E (i.e., F?	☐	☐	☐	☒
c) at a study, signalized intersection **outside the Downtown** area where the level of service is LOS E, cause the total intersection average vehicle delay to increase by four or more seconds, or degrade to worse than LOS E (i.e., F)?	☐	☐	☒	☐
d) at a study, signalized intersection for **all areas** where the level of service is LOS E, cause an increase in the average delay for any of the critical movements of six seconds or more, or degrade to worse than LOS E (i.e., F)?	☐	☐	☒	☐
e) at a study, signalized intersection for **all areas** where the level of service is LOS F, cause (a) the total intersection average vehicle delay to increase by two or more seconds, or (b) an increase in average delay for	☐	☐	☒	☐

[19] LOS and delay calculations for local intersections should be based on the *Highway Capacity Manual*, Transportation Research Board, National Research Council, 2000 edition. For CMA intersections (project proposes a general plan amendment, or if an EIR is performed and there are 100 or more peak trips), use the 1985 *Highway Capacity Manual.*

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
any of the critical movements of four (4) seconds or more; or (c) the volume-to-capacity ("V/C") ratio exceeds three percent (but only if the delay values cannot be measured accurately)?				
f) at a study, unsignalized intersection the project would add ten (10) or more vehicles and after project completion satisfy the peak hour volume warrant	☐	☒	☐	☐
g) contribution to cumulative impacts is be considered "considerable," when the project contributes 5 percent or more of the cumulative traffic increase as measured by the difference between existing and future cumulative (with project) conditions?	☒	☐	☐	☐
h) cause a roadway segment on the Metropolitan Transportation System to operate at LOS F or increase the V/C ratio by more than three percent for a roadway segment that would operate at LOS F without the project?	☐	☐	☒	☐
i) 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?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
j) Substantially increase traffic hazards to motor vehicles, bicycles, or pedestrians due to a design feature (e.g., sharp curves or dangerous intersections) that does not comply with Caltrans design standards or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
k) Result in less than two emergency access routes for streets exceeding 600 feet in length?	☐	☐	☒	☐
l) Fundamentally conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle routes)?	☐	☐	☐	☒
m) Generate added transit ridership that would:				
(1)Increase the average ridership on AC Transit lines by 3 percent at bus stops where the average load factor with the project in place would exceed 125% over a peak thirty minute period;	☐	☐	☒	☐
(2)Increase the peak hour average ridership on BART by 3 percent where the passenger volume would exceed the standing capacity of BART trains; or				
(3)Increase the peak hour average ridership at a BART				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
station by three percent where average waiting time at fare gates would exceed one minute?				
n) Although not evaluated as a CEQA impact, this initial study analyzes whether the project's estimated parking demand (both project-generated and project-displaced) 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 Agency owned/controlled parking and/or legally required off-street parking (non-open-to-the-public parking which is legally required).[20]	☐	☐	☐	☒

[20] 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. 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 additional parking spaces along with measures to lessen parking demand (by encouraging the use of non-auto travel modes) would result

The project would result in a potentially significant and unavoidable cumulative traffic impact as described in this section. Transportation and traffic impacts of the project will be studied further in an Environmental Impact Report to be prepared following a 30-day public scoping period.

b. ***No Impact.*** The project site is not located in the downtown area.

a, c, d., e. ***Less-than-Significant Impact.*** A technical study was completed for the project by Fehr & Peers Associates, Inc. entitled "Report Transportation Impact Analysis – Arcadia Park Residential" dated March, 2005. The project would generate an estimated 2,774 net new trips on a daily basis. As part of the traffic analysis, these daily trips were distributed across the local street network to see if the level of service at any intersection would worsen to an unacceptable level (LOS E or F). The study found that the project would not result in any unacceptable increases in delay or any unacceptable changes in level of service at any local intersection. Area intersections continue to operate at acceptable levels (LOS D or better) with the project. Table 1 shows the Existing plus Project scenario for local intersections.

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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.

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 transit service, in particular, would be in keeping with the City's "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."

TABLE 1
EXISTING (2005) PLUS PROJECT INTERSECTION LEVELS OF SERVICE

Intersection	Control[1]	Peak Hour	Existing		Existing Plus Project	
			Delay[2]	LOS	Delay[2]	LOS
San Leandro Street/98th Avenue	Signal	AM PM	38 43	D D	40 44	D D
E Street/98th Avenue	Signal	AM PM	4 3	A A	4 3	A A
B Street/98th Avenue	Signal	AM PM	3 4	A A	3 4	A A
International Boulevard/98th Avenue	Signal	AM PM	28 37	C D	28 39	C D
San Leandro Street/92nd Avenue	Signal	AM PM	6 7	A A	7 7	A A
I-880 SB Ramps/98th Avenue	Signal	AM PM	14 9	B A	14 9	B A
I-880 NB Ramps/98th Avenue	Signal	AM PM	16 20	B B	16 22	B C
International Boulevard/92nd Avenue	SSSC	AM PM	3 (EB - 27) 13 (EB - >50)	A (D) B (F)	4 (EB - 35) 19 (EB - >50)	A (D) C (F)
Medford Avenue/98th Street/Project Driveway	SSSC	AM PM	0 (NB - 20) 1 (NB - 31)	A (C) A (D)	3 (SBL - >50) 3 (SBL - >50)	A (F) A (F)
Project Driveway / 92nd Avenue	SSSC	AM PM	n/a	n/a	1 (NB - 10) 1 (NB - 12)	A (B) A (B)

a. Signal = Signalized intersection; SSSC = side-street stop-controlled intersection

EB= east bound, SB= south bound. Signalized intersection level of service based on weighted average control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000. Side street stop level of service based on the weighted average control delay of controlled movements. For side street stop-controlled intersections, the worst side street movement is presented in parentheses.

Source: Fehr & Peers, 2005.

f. Potentially Significant Unless Mitigation Incorporated. With the addition of project traffic to existing traffic volumes, delays at the critical side-street approach to the International Boulevard/92nd Avenue intersection increase. The project would add more than ten vehicles to this intersection and the intersection would meet the peak hour traffic signal warrant after project completion during the PM peak hour. This is considered a significant impact.

Mitigation Measure XV.1 :

Following 90% occupancy of the project, the project sponsor shall perform a detailed traffic signal warrant evaluation (i.e., evaluate all eight warrants in the MUTCD) to establish a clear need for a traffic signal. If the traffic signal is warranted based on a detailed evaluation that is subject to review and approval by the City, the project sponsor shall install the traffic signal immediately.[21]

Significance after Mitigation: With a traffic signal, the International Boulevard/92nd Avenue intersection would operate at acceptable LOS A during the AM and PM peak hours.

The unsignalized intersection of the project driveway and 98th Avenue/Medford Avenue, is anticipated to operate at LOS F after project completion. However, this condition is not considered to be significant because although the project would add more than 10 vehicles to this intersection, it would not satisfy the peak hour volume warrant as specified in the thresholds criteria f. The peak hour traffic signal warrant requires that at least 150 vehicles exit the project driveway during one hour, while the maximum number of vehicles that would exit the project site via the Medford Avenue/98th Avenue/Project driveway intersection is estimated to be 115 vehicles during the AM peak hour and 44 during the PM peak hour.

Although the project would not result in a significant impact at this intersection, the project sponsor proposes to include two exclusive outbound lanes (one left-turn and one right-turn) at the main project driveway at 98th Avenue to reduce internal vehicle queuing and minimize vehicle delays.

g. ***Potentially Significant Impact.*** The traffic analysis found that in the cumulative 2025 scenario, the project would contribute more than 5 percent of the cumulative traffic volume increase as measured at three local intersections. The growth projections used in this analysis were based on the Congestion Management Agency model but also included the most recent refinements prepared for the City by Hausrath Economics Group. The project's contribution to cumulative traffic volume would be considered a significant impact. The three intersections and the length of delay are highlighted in bold in Table 2.

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[21] The peak hour traffic signal warrant analysis is intended to examine the general correlation between existing traffic levels and the need to install a new traffic signal. The peak hour traffic signal warrant is a sub-set of the standard traffic signal warrants recommended in the Federal Highway Administration *Manual on Uniform Traffic Control Devices* and associated State guidelines. This analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured, rather than forecast, traffic data and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely upon the warrants, since the installation of signals can lead to certain types of collisions. The City of Oakland should undertake regular monitoring of actual traffic conditions and accident data, and conduct a timely re-evaluation of the full set of warrants in order to prioritize and program the intersection for signalization.

TABLE 2
CUMULATIVE INTERSECTION LEVELS OF SERVICE – YEAR 2025

Intersection	Control[1]	Peak Hour	Cumulative No Project		Cumulative Plus Project	
			Delay[2]	LOS	Delay[2]	LOS
San Leandro Street/98th Avenue	**Signal**	**AM** **PM**	**50** **81.1**	**D** **F**	**51** **83.1**	**D** **F**
E Street/98th Avenue	Signal	AM PM	4 4	A A	4 4	A A
B Street/98th Avenue	Signal	AM PM	3 3	A A	3 3	A A
International Boulevard/98th Avenue	**Signal**	**AM** **PM**	**39** **89.1**	**D** **F**	**40** **96.4**	**D** **F**
San Leandro Street/92nd Avenue	Signal	AM PM	11 23	B C	11 29	B C
I-880 SB Ramps/98th Avenue	Signal	AM PM	15 22	B C	15 23	B C
I-880 NB Ramps/98th Avenue	Signal	AM PM	22 28	C C	24 32	C C
International Boulevard/92nd Avenue	**SSSC**	**AM** **PM**	**11** **(EB - >50)** **54** **(EB - >50)**	**B** **(F)** **D** **(F)**	**22** **(EB - >50)** **69** **(EB - >50)**	**C** **(F)** **E** **(F)**
Medford Avenue/98th Street/Project Driveway	SSSC	AM PM	0 (NB - 24) 1 (NB - >50)	A (C) A (F)	8 (SBL - >50) 6 (SBL - >50)	A (F) A (F)
Project Driveway / 92nd Avenue	SSSC	AM PM	n/a	n/a	1 (NB - 12) 1 (NB - 14)	A (B) A (B)

a. Signal = Signalized intersection; SSSC = side-street stop-controlled intersection

EB= east bound, SB= south bound. Signalized intersection level of service based on weighted average control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000. Side street stop level of service based on the weighted average control delay of controlled movements. For side street stop-controlled intersections, the worst side street movement is presented in parentheses.

Source: Fehr & Peers, 2005.

San Leandro Street/98th Avenue

The intersection of San Leandro Street/98th Avenue is anticipated to operate at LOS F during the PM peak hour without the proposed project and traffic operations will worsen with the addition of project traffic. With the proposed project, the total intersection average vehicle delay will increase by about two seconds. The project's contribution to cumulative traffic growth at this intersection during the PM peak hour is about 7 percent. This is considered a significant impact.

Widening of this intersection to provide additional capacity would be difficult and costly because of the intersection's proximity to the concrete columns supporting the BART tracks and the surrounding uses. However, capacity could be added to this intersection through re-striping. Currently, San Leandro Street is approximately 76 feet wide and does not provide a raised median. No parking is permitted on the east side adjacent to the elevated BART tracks, while parking is allowed on the west side. Exclusive northbound and southbound right-turn lanes could be provided on San Leandro Street through re-striping and eliminating some on-street parking. During field observations, only one parked vehicle was observed on San Leandro Street near 98th Avenue.

Mitigation Measure XV.2 :

Prior to occupancy of the project, the project sponsor shall restripe San Leandro Street at 98th Avenue to provide exclusive northbound and southbound right-turn lanes. The right-turn lanes should be at least 200 feet in length.

Significance After Mitigation: With the proposed recommendation, the San Leandro Street/98th Avenue intersection would improve from LOS F to LOS E during the PM peak hour. According to the thresholds criteria, this would reduce the impact to a less-than-significant level.

International Boulevard/98th Avenue

The intersection of International Boulevard (State Route 185)/98th Avenue is anticipated to operate at LOS F during the PM peak hour without the proposed project and traffic operations will worsen with the addition of project traffic. With the proposed project, the total intersection average vehicle delay will increase by about seven seconds. The project's contribution to cumulative traffic growth at this intersection during the PM peak hour is about 9 percent. This is considered a significant impact.

This intersection is located in a built-out area with businesses on all four corners. Based on field observations, no feasible opportunities exist for widening to add additional capacity to the intersection. According to field measurements, the northbound curb lane on International Boulevard is about 24 feet wide. On the northbound approach at 98th Avenue, two driveways provide access to the ARCO gas station and a short-term parking space is located between the driveways. An exclusive 100-foot northbound right-turn lane could be striped here; this would require elimination of the short-term parking space.

Mitigation Measure XV.3 :

Prior to occupancy of the project and subject to Caltrans review and approval, the project sponsor shall stripe an exclusive 100-foot northbound right-turn lane on International Boulevard.

Significance After Mitigation: Implementation of mitigation measure XV.1 would reduce the intersection average delay by about 5 seconds but the service level would still remain at LOS F. The intersection average delay under Cumulative With Project conditions would be about two seconds higher than it would be under Cumulative Without Project conditions. Since the mitigation would not fully mitigate the project's potential cumulative impact, the impact would remain significant and unavoidable.

A more detailed discussion of this issue will be presented in the Draft EIR. The City will also coordinate with Caltrans during the preparation of the EIR to determine whether Caltrans would be in favor of the proposed restriping. The EIR will present the results of this research and analysis.

International Boulevard/92nd Avenue

The project's contribution to cumulative traffic growth at this intersection during the AM and PM peak hours is about 8 percent. This is considered a significant impact. The implementation of mitigation measure VX.1 which requires a detailed signal warrant evaluation to be conducted to address an impact identified under the existing plus project condition, and contribution towards construction of a traffic signal if required, would reduce this impact to a less-than-significant level.

Project Driveway/98th Avenue/Medford Avenue

The project driveway is expected to operate at LOS F under cumulative traffic conditions. Similar to the discussion included under f. above, this condition is not considered to be significant because the project would not generate a sufficient number of vehicles to require the need for a traffic signal. The project sponsor proposes to include two exclusive outbound lanes (one left-turn and one right-turn) at the main project driveway at 98th Avenue to reduce internal vehicle queuing and minimize vehicle delays.

h. ***Less-than-Significant Impact.*** As shown in Tables 3 and 4, under both the 2010 and 2025 scenarios, the project would not cause a roadway segment on the Metropolitan Transportation System to operate at LOS F or increase the V/C ratio by more than three 3 percent for a roadway segment that would operate at LOS F without the project.

In the 2010 scenario all roadway segments, except I-880 south of the 98th Avenue Interchange and Hegenberger Road, West of San Leandro, would operate at LOS E or better. Under the 2025 scenario, the project would not increase the V/C ratio by more than 3 percent.

TABLE 3
Year 2010 MTS LOS Analysis - PM Peak Hour

Roadway Segment	Direction	Capacity[1]	Without Project			With Project			Increase in V/C ratio
			Volume	V/C	LOS	Volume	V/C	LOS	
I-880, north of 98th Street Interchange	NB	8,800	7,039	0.80	C	7,043	0.80	D	0.1%
	SB	8,800	8,096	0.92	E	8,108	0.92	E	0.1%
I-880, south of 98th Street Interchange	NB	8,800	7,837	0.89	D	7,859	0.89	D	0.3%
	SB	8,800	8,909	1.01	F	8,917	1.01	F	0.1%
I-580, north of Golf Links Road Interchange	EB	8,800	7,752	0.88	D	7,788	0.89	D	0.5%
	WB	8,800	7,546	0.86	D	7,560	0.86	D	0.2%
I-580, south of Golf Links Road Interchange	EB	8,800	7,961	0.90	E	7,963	0.90	E	0.0%
	WB	8,800	7,766	0.88	D	7,771	0.88	D	0.1%
International Boulevard, north of 92nd Street	NB	1,600	751	0.47	A	758	0.47	A	1.0%
	SB	1,600	1,200	0.75	C	1,220	0.76	C	1.7%
International Boulevard, south of 98th Street	NB	1,600	867	0.54	A	894	0.56	A	3.1%
	SB	1,600	1,221	0.76	C	1,231	0.77	C	0.8%
Hegenberger Road, west of San Leandro	EB	3,200	2,998	0.94	E	2,999	0.94	E	0.0%
	WB	3,200	1,317	0.41	A	1,317	0.41	A	0.0%
Hegenberger Road, east of International Boulevard	EB	1,600	2,117	1.32	F	2,118	1.32	F	0.0%
	WB	1,600	913	0.57	A	915	0.57	A	0.2%

a. Roadway capacities assumed to be 2,200 vphpl for freeway segments and 800 vphpl for the arterial street corridors.
Source: Fehr & Peers, 2005.

TABLE 4
Year 2025 MTS LOS Analysis - PM Peak Hour

Roadway Segment	Direction	Capacity[1]	Without Project			With Project			Increase in V/C ratio
			Volume	V/C	LOS	Volume	V/C	LOS	
I-880, north of 98th Street Interchange	NB	8,800	7,305	0.83	D	7,309	0.83	D	0.1%
	SB	8,800	8,161	0.93	E	8,173	0.93	E	0.1%
I-880, south of 98th Street Interchange	NB	8,800	8,082	0.92	E	8,104	0.92	E	0.3%
	SB	8,800	9,337	1.06	F	9,345	1.06	F	0.1%
I-580, north of Golf Links Road Interchange	EB	8,800	7,965	0.91	E	8,001	0.91	E	0.5%
	WB	8,800	7,850	0.89	D	7,864	0.89	D	0.2%
I-580, south of Golf Links Road Interchange	EB	8,800	8,183	0.93	E	8,185	0.93	E	0.0%
	WB	8,800	8,099	0.92	E	8,104	0.92	E	0.1%
International Boulevard, north of 92nd Street	NB	1,600	801	0.50	A	808	0.51	A	0.9%
	SB	1,600	1,383	0.86	D	1,403	0.88	D	1.4%
International Boulevard, south of 98th Street	NB	1,600	992	0.62	B	1,019	0.64	B	2.7%
	SB	1,600	1,487	0.93	E	1,497	0.94	E	0.7%
Hegenberger Road, west of San Leandro	EB	3,200	3,488	1.09	F	3,489	1.09	F	0.0%
	WB	3,200	1,627	0.51	A	1,627	0.51	A	0.0%
Hegenberger Road, east of International Boulevard	EB	1,600	2,355	1.47	F	2,356	1.47	F	0.0%
	WB	1,600	1,041	0.65	B	1,043	0.65	B	0.2%

a. Roadway capacities assumed to be 2,200 vphpl for freeway segments and 800 vphpl for the arterial street corridors.

Source: Fehr & Peers, 2005.

i. ***No Impact.*** The project would not affect air traffic levels.

j. ***Less-than-Significant Impact.*** The project would not increase traffic hazards. The project is designed to meet all requirements for sight distance, access, and circulation.

k. ***Less-than-Significant Impact.*** The project site would be accessible form both 98th and 92nd Avenues.

l. ***No Impact.*** The proposed project would not conflict with policies related to alternative transportation. The project would not alter the existing bus turnout along 98th Avenue.

m. ***Less-than-Significant Impact.*** The traffic study assumed that a maximum of ten percent of the project's trips would be on transit. Therefore, the project would generate 29 transit trips during the PM peak hour. Based on the most recent AC Transit schedule, nine buses serve 98th Avenue during the PM peak hour and based on the most recent BART schedule, 25 trains serve the Colliseum and San Leandro Street BART stations during the PM peak hour. The 29 transit trips distributed among AC Transit and BART, would not result in a noticeable increase in transit usage. No significant impacts would result.

n. ***Potentially Significant Impact Unless Mitigation Incorporated.*** The Planned Unit Development permit will include parking ratios and standards with which the project will be required to conform. The EIR will include a full presentation of the project's estimated demand for parking and the number of parking spaces proposed.

XVI. Utilities and Service Systems

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
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) Exceed water supplies available to serve the project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
environmental effects?				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments and require or result in construction of new wastewater treatment facilities or expansion of existing facilities, construction of which could cause significant environmental effects?	☐	☐	☒	☐
f) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and require or result in construction of landfill facilities or expansion of existing facilities, construction or which could cause significant environmental effects?	☐	☐	☒	☐
g) Violate applicable federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐
h) Violate applicable federal, state and local statutes and regulations relating to energy standards?	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
i) Result in a determination by the energy provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects?	☐	☐	☒	☐

a. ***Less-than-Significant Impact.*** The project would not exceed RWQCB wastewater treatment requirements. Wastewater from the site would be directed to EBMUD for primary and secondary treatment. The sanitary sewer for this project will drain to an 8 - inch main located in 98th Avenue and an 8 inch main located in 92nd Avenue. These two lines are located in separate sub-basins within the City's waste water system. The 98th Avenue line is located in sub-basin 85-102; the 92nd Avenue line is located in sub-basin 85-202. A third sub-basin, accessed by lines located under San Leandro Street is known as 85-101.

Peak wet weather flows from the project are estimated to be 0.24 cubic feet per second (cfs), which translates to 0.1551161 million gallon per day (mgd).[22] Based on these estimates, the City of Oakland Public Works Agency has confirmed that adequate flow allocations is available to accommodate the project as proposed. The Agency recommends that the project flow be divided between the three sub-basins as shown below:

- Sub-basin 85-101 should receive 70 percent of project flows;
- Sub-basin 85-102 should receive 10 percent of project flows; and
- Sub-basin 85-202 should receive 20 percent of project flows.

[22] Regarding the estimated future sanitary sewer flows, the analysis utilized 400 residential units as a conservative estimate and 2.0 persons per housing unit. A standard measure of waste water generation is 100 gallons per person per day. Based on these estimates a total of 80,000 gallons per day (gpd) would be produced at the site, which is equal to 0.12 cubic feet per second (cfs). Using a peak factor of 2 this equals 0.24 cfs.

b. ***Less-Than-Significant Impact.*** The project would not require the construction of new water or wastewater treatment facilities. EBMUD has indicated that there is sufficient capacity to service the project, and as discussed above, the City of Oakland has confirmed that there is available wastewater capacity within sub-basins 85-101, 85-102, and 85-202.

c. ***Less-than-Significant Impact.*** Water for the proposed development would be served by EBMUD's existing water supply. EBMUD's Central Pressure Zone, with a service elevation range between 0 and 100 feet, would serve the proposed development, with site elevations ranging between approximately 20 feet and 25 feet. EBMUD owns and operates 12-inch water distribution pipelines in 92nd Avenue and San Leandro Street, 16-inch pipelines in 98th Avenue, 6-inch pipelines in F Street and G Street, and 4-inch pipelines in Elmhurst Avenue, which provide continuous service to customers in the area. A water main extension would be required to serve the proposed development.[23] Off-site pipeline improvements may be required depending on domestic water demands and fire flow requirements set by the local fire department.

d. ***Less-than-Significant Impact*** As stated above, EBMUD has sufficient water supply to serve the project site.

e. ***Less-than-Significant Impact.*** As discussed above under a. above, the City of Oakland Public Works Agency has confirmed that there is available waste water capacity within the three sub-basins serving the project site to accommodate the project.

f. ***Less-Than-Significant Impact.*** During construction activities, asphalt and soil would need to be removed from the site based on preliminary design. Waste Management of Alameda County presently provides solid waste removal and recycling to the City of Oakland and the project site and would continue to serve the site after project construction. Solid waste from the project site during construction would be transported to the land fill chosen by the construction contractor. Sixty percent of the construction waste taken to the Waste Management of Alameda County's Davis Transfer Facility in San Leandro is recycled. The two landfills in Alameda County, Vasco Road and the Altamont Landfills each have thirty years of capacity remaining. Contaminated soil would be taken directly to the Altamont Landfill. After construction of the project, the residence's solid waste would be transported to the Altamont Landfill. [24]

g. ***Less-Than-Significant Impact.*** The City of Oakland's "Construction and Demolition Debris Recycling Ordinance" is found in Chapter 15.34 of the Oakland Municipal Code. This ordinance requires that all new development resuse or recycle 50% or more of its waste or debris. The project will be required to comply with the requirements of this ordinance.

h. ***Less-Than-Significant Impact.*** The project would comply with all applicable standards relating to energy standards.

[23] Jennifer McGregor, Junior Engineer, EBMUD, Personal Communication, February 1, 2005.
[24] David Krueger, Recycling Manager, Waste Management of Alameda County, Personal Communication, February 23, 2005.

i. ***Less-Than-Significant Impact.*** The proposed residential project would use electricity and natural gas. These utilities are provided by the Pacific Gas and Electric Company (PG&E). PG&E has indicated that it has the capacity to serve the site, but new infrastructure consisting of transformers and other distribution facilities would need to be constructed. The extent and location of these services would be determined by PG&E engineers after the project sponsor submits a formal application.[25] Due to the urban nature of the area, it is unlikely that significant environmental impacts would result from the expansion of existing utility facilities required to serve the project.

XVII. Mandatory Findings of Significance

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
a) Have the potential to degrade 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?	☐	☐	☒	☐
b) 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	☒	☐	☐	☐

[25] Susan Yee, Service Planning Department, Pacific Gas & Electric Company, Personal Communication, February 14, 2005.

projects, the effects of other current projects, and the effects of probable future projects)?				
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a. ***Less-than-Significant-Impact.*** The project would not have the potential to degrade the quality of the environment and would not affect fish or wildlife species. No significant impacts to historic resources were identified.

b. ***Potentially Significant Impact.*** The project would result in traffic impacts that are considered cumulatively considerable pursuant to the City of Oakland's Criteria of Significance Guidelines. This issue will be studied further in an EIR. As discussed throughout this Initial Study, the project would not result in any other cumulative impacts for which this project's contribution is identified as cumulatively considerable.

c. ***Less-than-Significant-Impact***. The project would not result in impacts that would cause substantial adverse effects on human beings, either directly or indirectly.

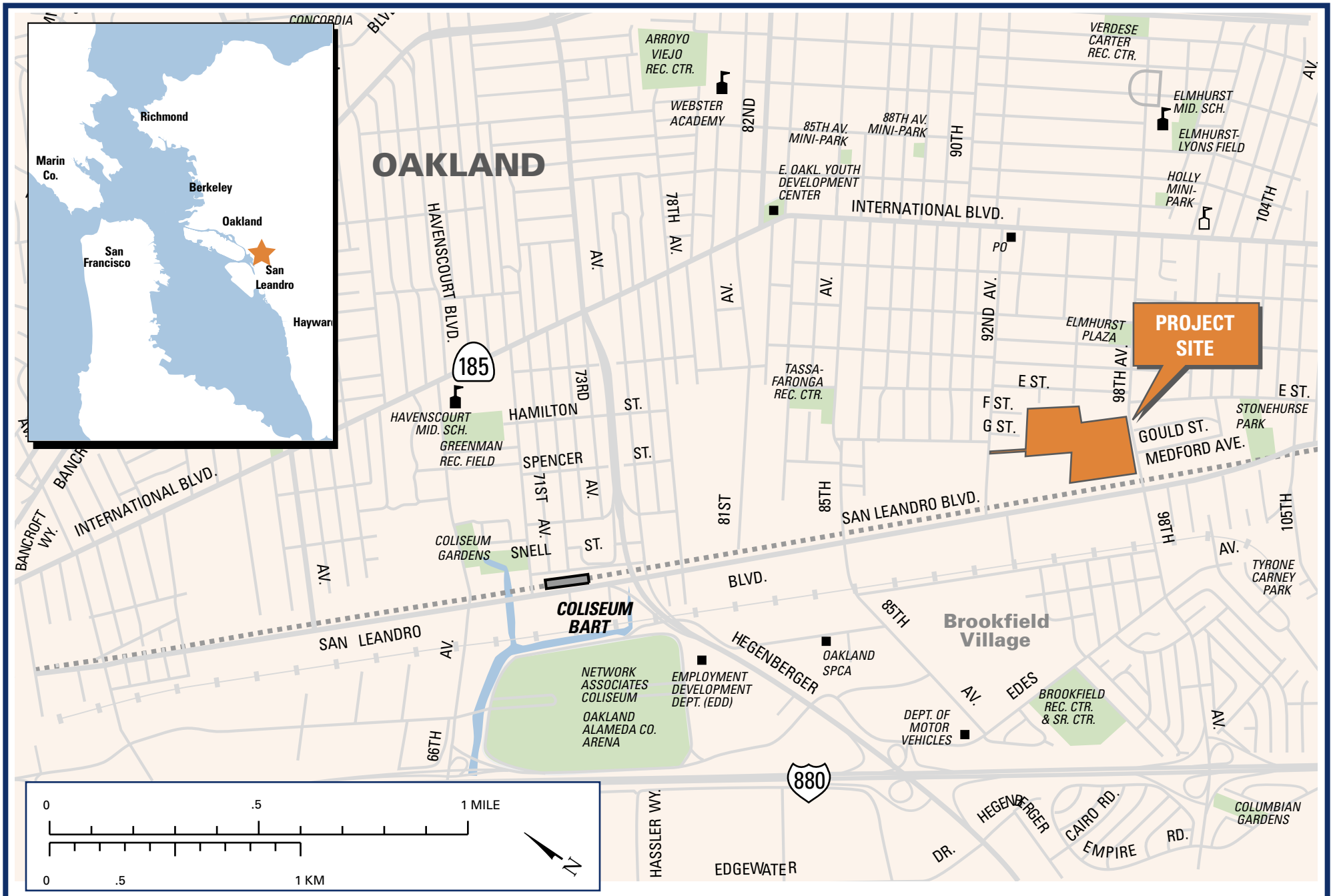
Sources:

- City of Oakland. General Plan.
- City of Oakland Municipal Planning Code
- Air Quality Analysis, Prepared by Don Ballanti, March 2005.
- California Historic Resources Inventory System, located at Sonoma State University.
- Design-Level Geotechnical Investigation, Dreisbach/98th Avenue Parcels, Oakland, California, Prepared by Lowney Associates, June 15, 2004.
- 98th Avenue Residential Development Feasibility Noise and Vibration Study, prepared by Charles Salter Associates, March 2005.
- *Phase I Environmental Site Assessment*, Arcadia Park Development, Oakland, California, dated July 2004.
- Results of Phase I Soil and Grab Groundwater Investigation, Arcadia Park Development, Oakland, California
- Results of Additional Soil Sampling for Lead Characterization 854 92nd Avenue, Arcadia Park Development, Oakland, California
- Transportation Impact Analysis – Arcadia Park Residential, prepared by Fehr & Peers, March 2005.

Personal Communications

- City of Oakland, Park Services Department, February 14, 2005.
- Philip Basada, P.E., Fire Prevention Bureau, Personal Communication, February 2005
- Jennifer McGregor, Engineer, EBMUD, Personal Communication, February 1, 2005
- Paul Figueroa, Lieutenant, City of Oakland Police Department, telephone conversation, February 28, 2005.
- ennifer McGregor, Engineer, EBMUD, Personal Communication, February 1, 2005.
- David Krueger, Recycling Manager, Waste Management of Alameda County, Personal Communication, February 23, 2005.
- Susan Yee, Service Planning Department, Pacific Gas & Electric Company, Personal Communication, February 14, 2005.
- Gunawan Santoso,Civil Engineer, City of Oakland, Public Works Agency, personal communication

- Northwest Information Center (Center) of the California Historic Resources Inventory System, located at Sonoma State University



CirclePoint℠
The *whole* view.

FIGURE 1.

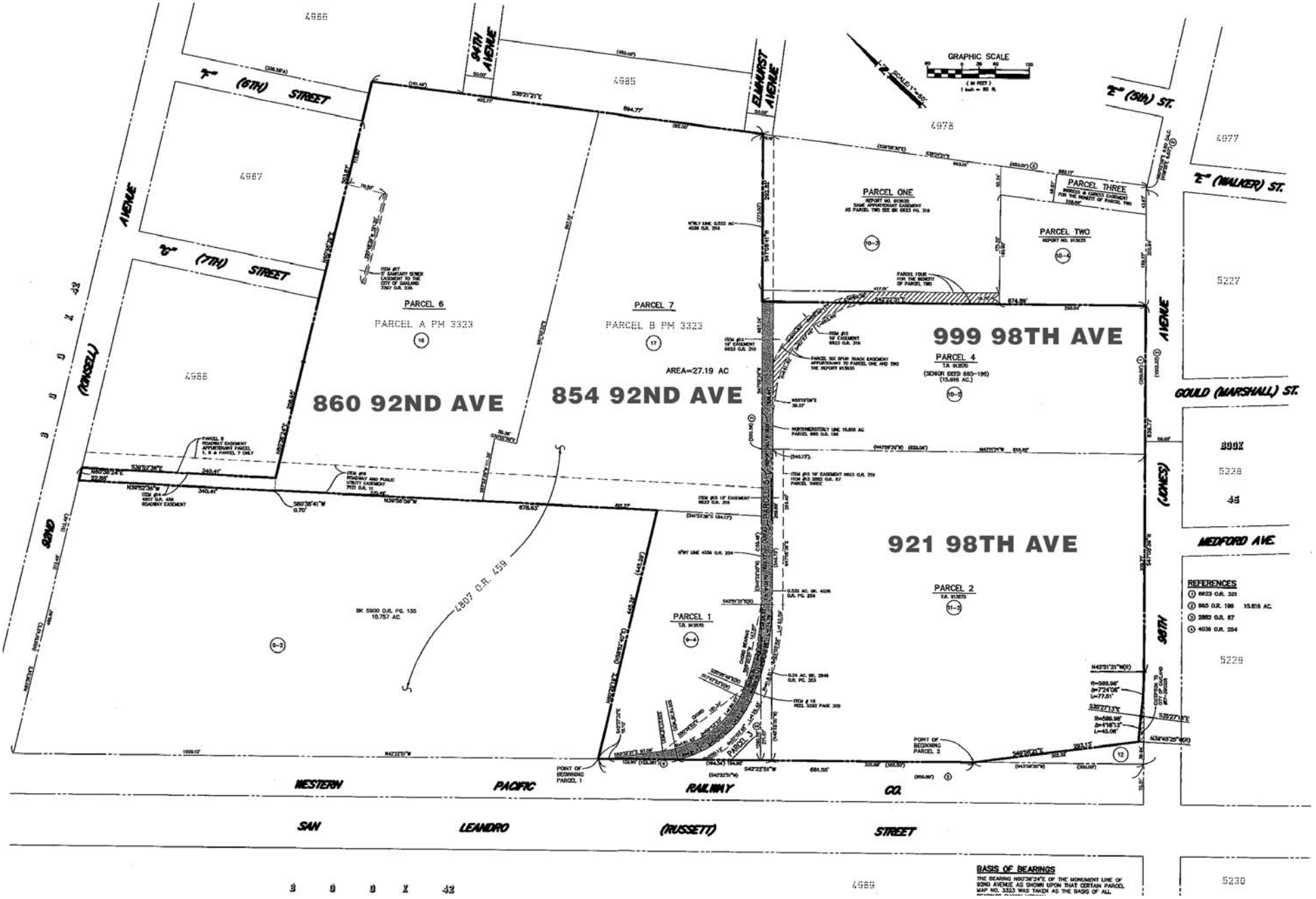
PROJECT LOCATION & VICINITY MAP

CirclePoint℠
The *whole* view.

north

FIGURE 2.

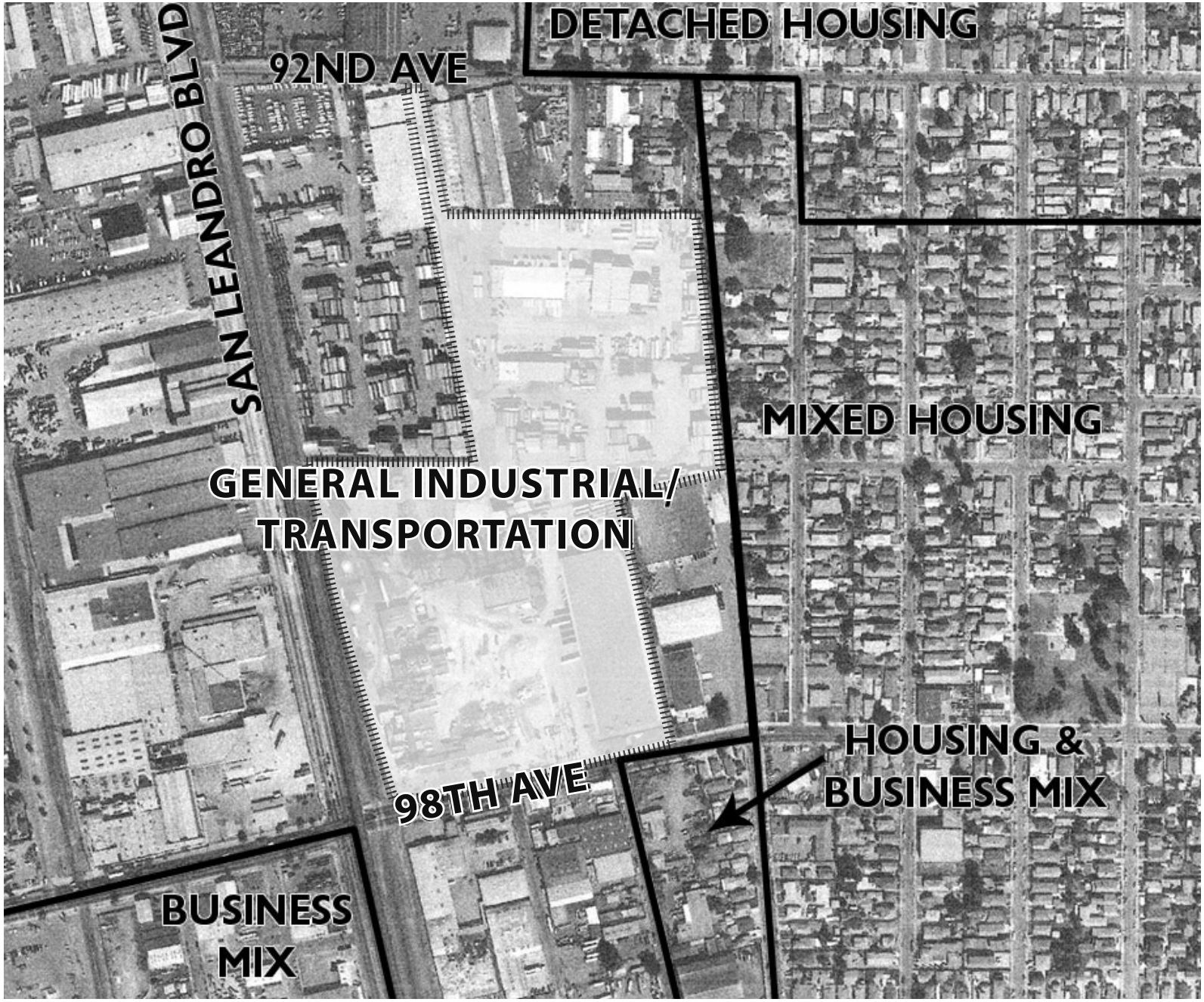
AERIAL VIEW OF PROJECT SITE



CirclePoint℠
The *whole* view.

FIGURE 3.

PARCEL BOUNDARIES



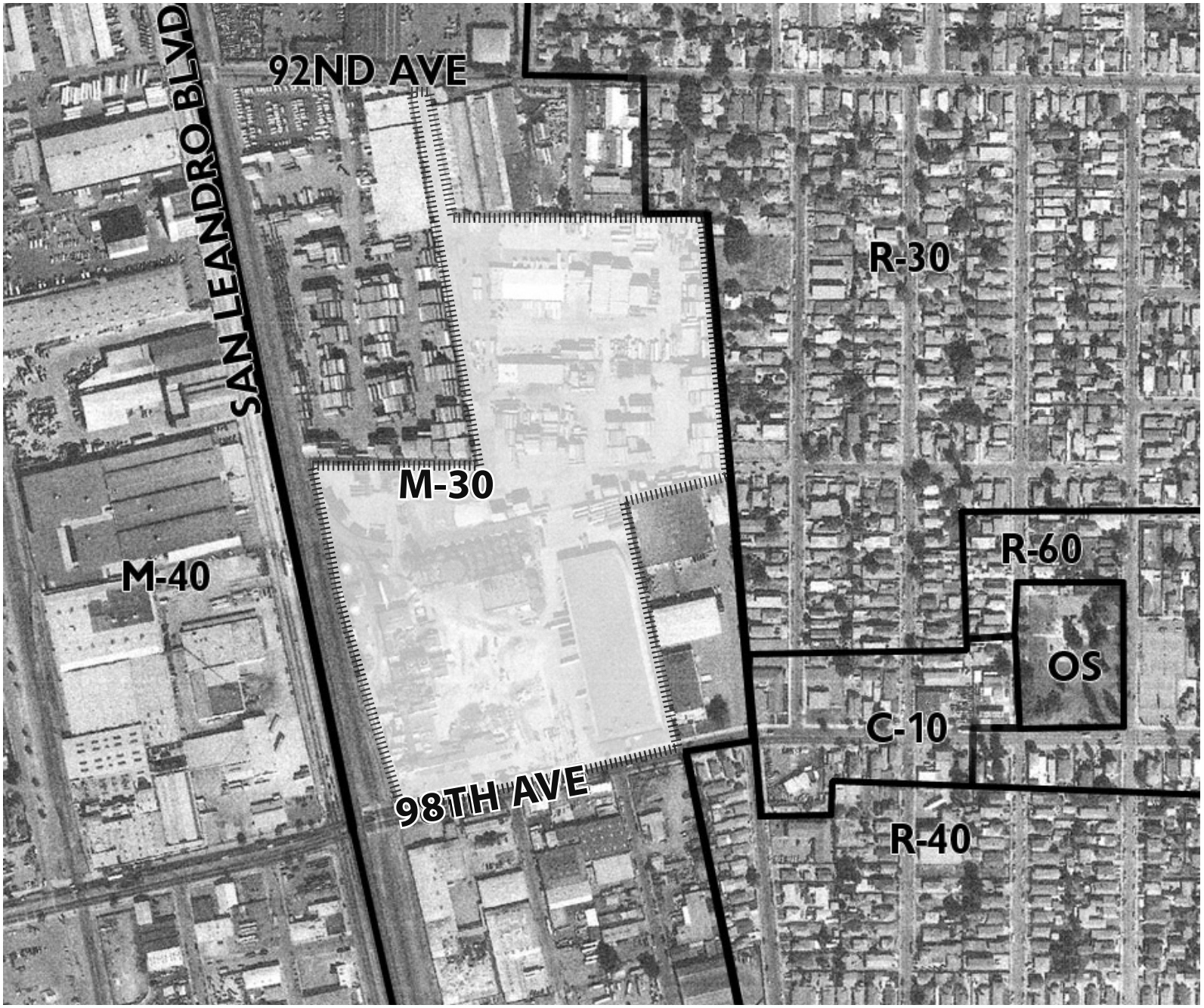
CirclePoint℠
The *whole* view.

north

Project Area

FIGURE 4.

GENERAL PLAN DESIGNATIONS



CirclePoint℠
The *whole* view.

north

Project Area

FIGURE 5.

EXISTING ZONING

CirclePoint℠
The *whole* view.

north

FIGURE 6.

CONCEPTUAL SITE PLAN

CirclePoint℠
The *whole* view.

north

FIGURE 7.

PROPOSED ZONING & GENERAL PLAN DESIGNATIONS

APPENDIX B

Comment Letters Received During Public Scoping Period

CITY OF OAKLAND

Community and Economic Development Agency, Planning & Zoning Services Division
250 Frank H. Ogawa Plaza, Suite 3330, Oakland, California, 94612-2032

NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT

The Oakland Community and Economic Development Agency, Planning and Zoning Division, is preparing a Draft Environmental Impact Report (EIR) for the project identified below, and we are requesting your comments on the scope and content of the EIR. An "Initial Study" has been prepared that identifies areas of probable environmental effects. The Initial Study has determined that all impacts, except for traffic impacts, can be reduced to less than significant levels. The Initial Study and underlying technical studies are available at the Planning and Zoning Division office at the address above.

The City of Oakland is the Lead Agency for this project, which means that the City of Oakland is the public agency with the greatest responsibility for either approving or carrying out the project. This notice is being sent to Responsible Agencies and other interested parties. Responsible Agencies are those public agencies, in addition to the City of Oakland, that also have a role in approving or carrying out the project. Responsible Agencies will rely upon the EIR that has been prepared when considering approvals related to the project. When the Draft EIR is published, it will be sent to all Responsible Agencies and to others who respond to this Notice of Preparation or who otherwise indicate that they would like to receive a copy.

Please send any response you may have regarding this notice so that it is received no later than **May 4, 2005** at **4:00 p.m.** Your response should be directed to Darin Ranelletti, Planner III, via mail to City of Oakland, Community and Economic Development Agency, Planning and Zoning Division, 250 Frank H. Ogawa Plaza, Suite 3330, Oakland, CA 94612, or via facsimile to (510) 238-4730, or via email to dranelletti@oaklandnet.com. Please reference case number ER05-3 in your response. Any questions concerning this notice should be directed to Darin Ranelletti, Planner III, at (510) 238-3663 or dranelletti@oaklandnet.com. Comments may also be provided at the EIR Scoping Session, to be held before the City Planning Commission.

EIR SCOPING SESSION – CITY PLANNING COMMISSION

DATE: **APRIL 20, 2005**

TIME: **6:30 P.M.**

LOCATION: **CITY HALL, 1 FRANK H. OGAWA PLAZA, HEARING ROOM #1**

PROJECT TITLE: Arcadia Park Residential Project

PROJECT LOCATION: The proposed 27-acre project site is located between 92nd Avenue and 98th Avenue along San Leandro Street in the City of Oakland, Alameda County, California. The project site contains the following four parcels: 921 98th Avenue; 999 98th Avenue; 854 92nd Avenue; and 860 92nd Avenue (APNs 044-4989-16/17/9-4/11-2/10-2).

PROJECT SPONSOR: Amir Massih, Pulte Home Corporation

PROJECT DESCRIPTION: The site is currently occupied by industrial uses. The project consists of the removal of all existing uses and the construction of up to 400 residential units comprising both single-family residences and townhomes. The project will require rezoning the parcels to R-30 One-Family Residential Zone (portion) and R-50 Medium Density Residential Zone (portion), and amending the General Plan designation to Housing and Business Mix.

The site is located at the transition between primarily residential uses of the Elmhurst neighborhood to the north and primarily industrial uses along the San Leandro Street corridor to the south. In addition to the single-family residential uses that border the site along E Street, the following other uses are located adjacent to the project

site: auto repair shops, churches, general commercial, warehouse, and storage. In addition to approval of a general plan amendment and zoning change, the proposed project would also require subdivision and Planned Unit Development approvals as well as other possible discretionary permits from the City. The project site has been identified on the Cortes List of Hazardous Waste and Substance Sites as of the date of this Notice.

PROBABLE ENVIRONMENTAL EFFECTS: As detailed in the Initial Study, the proposed project would result in potentially significant traffic impacts. All other impacts would be mitigated to a less-than-significant level. The EIR will limit its discussion to traffic impacts and no other impacts will be further studied in the EIR.

Date: APRIL 4, 2005
File No.: ER05-3

Claudia Cappio
Director of Development
Environmental Review Officer

State of California – The Resources Agency ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

April 6, 2005

Mr. Darin Ranelletti
City of Oakland
Community and Economic Development Agency
Planning and Zoning Division
250 Frank H. Ogawa Plaza, Suite 3330
Oakland, CA 94612

Dear Mr. Ranelletti:

Arcadia Park Residential Project
Oakland, Alameda County
File # ER05-3

The Department of Fish and Game (DFG) has reviewed the document for the subject project. Please be advised this project may result in changes to fish and wildlife resources as described in the California Code of Regulations, Title 14, Section 753.5(d)(1)(A)-(G)[1]. Therefore, if you are preparing an Environmental Impact Report or an Initial Study and Negative Declaration for this project, a de minimis determination is not appropriate, and an environmental filing fee as required under Fish and Game Code Section 711.4(d) should be paid to the Alameda County Clerk on or before filing of the Notice of Determination for this project.

A complete assessment of the flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, and locally unique species and sensitive habitats, should be provided. Rare, threatened and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, Section 15380). The assessment should identify any rare plants and rare natural communities, following DFG's Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities (revised May 8, 2000). The Guidelines are available at www.dfg.ca.gov/whdab/pdfs/guideplt.pdf

[1] http://ccr.oal.ca.gov/. Find California Code of Regulations, Title 14 Natural Resources, Division 1, Section 753

If you have any questions, please contact Mr. Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

Sincerely,

for Scott Wilson
Robert W. Floerke
Regional Manager
Central Coast Region

Department of Toxic Substances Control

Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA

700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Arnold Schwarzenegger
Governor

April 26, 2005

Mr. Darin Ranelletti
City of Oakland
Planning & Zoning Services Division
250 Frank H. Ogawa Plaza, Suite 3330
Oakland, California 94612-2032

Dear Mr. Ranelletti:

Thank you for the opportunity to comment on the Arcadia Park Residential Development Project (Project) Initial Study (IS). The project is a 27-acre site located between 92nd Avenue and 98th Avenue along San Leandro Street. As you may be aware, the California Department of Toxic Substances Control (DTSC) oversees the cleanup of sites where hazardous substances have been released pursuant to the California Health and Safety Code (HSC), Division 20, Chapter 6.8. As a potential resource agency, DTSC is submitting comments to ensure that the environmental documentation prepared for this project to address the California Environmental Quality Act (CEQA) adequately addresses any required remediation activities which may be required to address any hazardous substances release.

The site is currently occupied by industrial uses which consist of five buildings, a water tower, tanks, and other remnants which will all be removed. The project proposes to construct up to 400 residential units comprising both single-family residences and townhomes

The IS indicated that a Phase I Environmental Site Assessment (ESA) prepared for the site in July 2004 identified a number of contaminants which include lead, mercury and petroleum hydrocarbons. The contamination is believed to be related to past uses of the site as the Fleishman's yeast plant and trucking facilities.

These releases of hazardous substances will need to be addressed as part of this project. For example, if the remediation activities include the need for soil excavation, the CEQA document should include: (1) an assessment of air impacts and health impacts associated with the excavation activities; (2) identification of any applicable local standards which may be exceeded by the excavation activities, including dust levels and noise; (3) transportation impacts from the removal or remedial activities; and (4) risk of upset should there be an accident at the Site.

DTSC can assist your agency in overseeing characterization and cleanup activities

through our Voluntary Cleanup Program. A fact sheet describing this program is enclosed. We are aware that projects such as this one are typically on a compressed schedule, and in an effort to use the available review time efficiently, we request that DTSC be included in any meetings where issues relevant to our statutory authority are discussed.

Please contact me at (510) 540-3824 if you have any questions. Thank you in advance for your cooperation in this matter.

Sincerely,

Denise M. Tsuji, Unit Chief
Northern California
Coastal Cleanup Operations Branch

cc: Governor's Office of Planning and Research
State Clearinghouse
P. O. Box 3044
Sacramento, California 95812-3044

Guenther Moskat
CEQA Tracking Center
Department of Toxic Substances Control
P. O. Box 806
Sacramento, California 95812-0806

Mr. Amir Massih
Pulte Home Corporation
6210 Stoneridge Mall Road, 5th Floor
Pleasanton, California 94588

California Environmental Protection Agency
Department of Toxic Substances Control

The Voluntary Cleanup Program

The California Environmental Protection Agency's Department of Toxic Substances Control (DTSC) has introduced a streamlined program to protect human health, cleanup the environment and get property back to productive use. Corporations, real estate developers, local and state agencies entering into Voluntary Cleanup Program agreements will be able to restore properties quickly and efficiently, rather than having their projects compete for DTSC's limited resources with other low-priority hazardous waste sites. This fact sheet describes how the Voluntary Cleanup Program works.

Prior to initiation of the Voluntary Cleanup Program, project proponents had few options for DTSC involvement in cleaning up low-risk sites. DTSC's statutory mandate is to identify, prioritize, manage and cleanup sites where a release of hazardous substances has occurred. For years, the mandate meant that, if the site presented grave threat to public health or the environment, then it was listed on the State Superfund list and the parties responsible conducted the cleanup under an enforcement order, or DTSC used state funds to do so. Because of staff resource limitations, DTSC was unable to provide oversight at sites which posed lesser risk or had lower priority.

DTSC long ago recognized that no one's interests are served by leaving sites contaminated and unusable. The Voluntary Cleanup Program allows motivated parties who are able to fund the cleanup -- and DTSC's oversight -- to move ahead at their own speed to investigate and remediate their sites. DTSC has found that working cooperatively with willing and able project proponents is a more efficient and cost-effective approach to site investigation and cleanup. There are four steps to this process:

- / Eligibility and Application
- / Negotiating the Agreement
- / Site Activities
- / Certification and Property Restoration

The rest of this fact sheet describes those steps and gives DTSC contacts.

October 2002

The Voluntary Cleanup Program

Step 1: Eligibility and Application

Most sites are eligible. The main exclusions are if the site is listed as a Federal or State Superfund site, is a military facility, or if it falls outside of DTSC's jurisdiction, as in the case where a site contains only leaking underground fuel tanks. Another possible limitation is if another agency currently has oversight, e.g., a county (for underground storage tanks). The current oversight agency must consent to transfer the cleanup responsibilities to DTSC before the proponent can enter into a Voluntary Cleanup Program agreement. Additionally, DTSC can enter into an agreement to work on a specified element of a cleanup (risk assessment or public participation, for example), if the primary oversight agency gives its consent. The standard application is attached to this fact sheet.

If neither of these exclusions apply, the proponent submits an application to DTSC, providing details about site conditions, proposed land use and potential community concerns. No fee is required to apply for the Voluntary Cleanup Program.

Step 2: Negotiating the Agreement

Once DTSC accepts the application, the proponent meets with experienced DTSC professionals to negotiate the agreement. The agreement can range from services for an initial site assessment, to oversight and certification of a full site cleanup, based on the proponent's financial and scheduling objectives.

The Voluntary Cleanup Program agreement specifies the estimated DTSC costs, scheduling for the project, and DTSC services to be provided. Because every project must meet the same legal and technical cleanup requirements as do State Superfund sites, and because DTSC staff provide oversight, the proponent is assured that the project will be completed in an environmentally sound manner.

In the agreement, DTSC retains its authority to take enforcement action if, during the investigation or cleanup, it determines that the site presents a serious health threat, and proper and timely action is not otherwise being taken. The agreement also allows the project proponent to terminate the Voluntary Cleanup Program agreement with 30 days written notice if they are not satisfied that it is meeting their needs.

Step 3: Site Activities

Prior to beginning any work, the proponent must have: signed the Voluntary Cleanup Program agreement; made the advance payment; and committed to paying all project costs, including those associated with DTSC's oversight. The project manager will track the project to make sure that DTSC is on schedule and within budget. DTSC will bill its costs quarterly so that large, unexpected balances will not occur.

Once the proponent and DTSC have entered into a Voluntary Cleanup Program agreement, initial site assessment, site investigation or cleanup activities may begin. The proponent will find that DTSC's staff includes experts in every vital area. The assigned project manager is either a highly-qualified Hazardous Substances Scientist or Hazardous Substances Engineer. That project manager has the support of well-trained DTSC toxicologists, geologists, industrial hygienists and specialists in public involvement.

The project manager may call on any of these specialists to join the team, providing guidance, review, comment and, as necessary, approval of individual documents and other work products. That team will also coordinate with other agencies, as appropriate, and will offer assistance in complying with other laws, such as the Resource Conservation and Recovery Act.

Step 4: Certification and Property Restoration

When remediation is complete, DTSC will issue either a site certification of completion or a "No Further Action" letter, depending on the project circumstances. This means "The Site" is now property that is ready for productive economic use.

To learn more about the Voluntary Cleanup Program, contact the DTSC representative in the Regional office nearest you:

Southern California
Tina P. Diaz
1011 North Grandview Avenue
Glendale, California 91201
(818) 551-2862

Central California
Tim Miles
8800 Cal Center Drive
Sacramento, CA 95826-3200
(916) 255-3710

North Coast California
Lyuh Nakashima / Janet Naito
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2737
(510) 540-3839 / (510) 540-3833

Central California - Fresno Satellite
Tom Kovac
1515 Tollhouse Road
Clovis, California 93612
(209) 297-3939

(Revised 10/18/02)

VOLUNTARY CLEANUP PROGRAM APPLICATION

The purpose of this application is to obtain information necessary to determine the eligibility of the site for acceptance into the Voluntary Cleanup Program. Please use additional pages, as necessary, to complete your responses.

SECTION 1 PROPONENT INFORMATION

Proponent Name

Principal Contact Name

Phone ( )

Address

Proponent's relationship to site

Brief statement of why the proponent is interested in DTSC services related to site

SECTION 2 SITE INFORMATION

Is this site listed on Calsites? ☐ Yes ☐ No

If Yes, provide specific name and number as listed

Name of Site

Address City County ZIP

(Please attach a copy of an appropriate map page)

SECTION 2 SITE INFORMATION (continued)

Current Owner

Name _____

Address _____

Phone ( ) _____

Background: Previous Business Operations

Name _____

Type _____

Years of Operation _____

If known, list all previous businesses operating on this property

_____

_____

_____

What hazardous substances/wastes have been associated with the site?

_____

_____

What environmental media is/was/may be contaminated?

☐ Soil ☐ Air ☐ Groundwater ☐ Surface water

Has sampling or other investigation been conducted? ☐ Yes ☐ No

Specify _____

_____

_____

If Yes, what hazardous substances have been detected and what were their maximum concentrations?

_____

_____

_____

SECTION 2 SITE INFORMATION (continued)

Are any Federal, State or Local regulatory agencies currently involved with the site? ☐ Yes ☐ No
If Yes, state the involvement, and give contact names and telephone numbers

Agency	Involvement	Contact Name	Phone

What is the future proposed use of the site? _____

_____

What oversight service is being requested of the Department?

☐ PEA ☐ RI/FS ☐ Removal Action ☐ Remedial Action ☐ RAP ☐ Certification

☐ Other (describe the proposed project) _____

Is there currently a potential of exposure of the community or workers to hazardous substances at the site?

☐ Yes ☐ No If Yes, explain _____

_____

SECTION 3 COMMUNITY PROFILE INFORMATION

Describe the site property (include approximate size) _____

_____

_____

Describe the surrounding land use (including proximity to residential housing, schools, churches, etc _____

_____

_____

Describe the visibility of activities on the site to neighbors _____

_____

_____

SECTION 3 COMMUNITY PROFILE INFORMATION (continued)

What are the demographics of the community (e.g., socioeconomic level, ethnic composition, specific language considerations, etc.)? _____

Local Interest

Has there been any media coverage? _____

Past Public Involvement

Has there been any past public interest in the site as reflected by community meetings, ad hoc committees, workshops, fact sheets, newsletters, etc.? _____

Key Issues and Concerns

Have any specific concerns/issues been raised by the community regarding past operations or present activities at the site? _____

Are there any concerns/issues anticipated regarding site activities?

_____

Are there any general environmental concerns/issues in the community relative to neighboring sites?

Key Contacts

Please attach a list of key contacts for this site, including: city manager; city planning department; county environmental health department, local elected officials; and any other community members interested in the site. (Please include addresses and phone numbers.)

_____

SECTION 4 CERTIFICATION

The signatories below are authorized representatives of the Project Proponent and certify that the preceding information is true to the best of their knowledge.

Proponent Representative	Date	Title
_____	_____	_____

EAST BAY
MUNICIPAL UTILITY DISTRICT

April 27, 2005

Darin Ranelletti, Planner III
City of Oakland
Community and Economic Development Agency
250 Frank H. Ogawa Plaza, Suite 3330
Oakland, CA 94612

Re: Notice of Preparation of a Draft Environmental Impact Report – Arcadia Park Residential Project, Oakland

Dear Mr. Ranelletti:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the Arcadia Park Residential Project in Oakland. EBMUD has the following comments.

WATER SERVICE

As stated on page 69 on the Initial Study, water main extensions would be required to serve the proposed development. Please note that when the development plans are finalized, the project sponsor should contact EBMUD's New Business Office and request a water service estimate to determine costs and conditions for providing water service to the proposed development. Engineering and installation of water mains and services requires substantial lead-time, which should be provided for in the project sponsor's development schedule.

The NOP indicates the potential for contaminated soils or groundwater to be present within the project site boundaries. The project sponsor should be aware that EBMUD will not install pipeline in contaminated soil or groundwater (if groundwater is present at any time during the year at the depth piping is to be installed) that must be handled as a hazardous waste, or that may be hazardous to the health and safety of construction or maintenance personnel wearing Level D personal protective equipment. Nor will EBMUD install piping in areas where groundwater contaminant concentrations exceed specified limits for discharge to sanitary sewer systems or sewage treatment plants.

Project sponsors for EBMUD services requiring excavation in contaminated areas must submit copies of all known, existing information regarding soil and groundwater quality within or adjacent to the project boundary and a legally sufficient, complete and specific written remedial plan establishing the methodology, planning and design of all necessary systems for the removal, treatment, and disposal of all identified contaminated soil and/or groundwater. EBMUD will not design the installation of pipelines until such time as soil

and groundwater quality data and remediation plans are received and reviewed and will not install pipelines until remediation has been carried out and documentation of the effectiveness of the remediation has been received and reviewed. If no soil or groundwater quality data exists or the information supplied by the applicant is insufficient, EBMUD may require the applicant to perform sampling and analysis to characterize the soil being excavated and groundwater that may be encountered during excavation or perform such sampling and analysis itself at the project sponsor's expense. If evidence of contamination is discovered during EBMUD's work on the project site, work may be suspended until such contamination is adequately characterized and remediated as deemed necessary by EBMUD.

WASTEWATER

The proposed project should address the replacement or rehabilitation of the existing sanitary sewer collection system to prevent an increase in inflow/infiltration (I/I). Please include a provision to control or reduce the amount of I/I in the Draft EIR. The main concern is the increase in total wet weather flows, which could have an adverse impact if the flows are greater than maximum allowable flows from the subbasins listed on page 69 of the Initial Study.

WATER CONSERVATION

The proposed project presents an opportunity to incorporate water conservation measures. EBMUD would request that the City of Oakland include in its conditions of approval, a requirement that the project sponsor comply with current Oakland Efficient Landscape Requirements. EBMUD staff would appreciate the opportunity to meet with the project sponsor to discuss water conservation programs and best management practices applicable to the project area. A key objective of this discussion will be to explore timely opportunities to expand conservation via early consideration of EBMUD's conservation programs and best management practices applicable to the project.

If you have any questions concerning this response, please contact David J. Rehnstrom, Senior Civil Engineer, Water Service Planning, at (510) 287-1365.

Sincerely,

William R. Kirkpatrick
Manager of Water Distribution Planning

WRK:NJR:sb
sb05_117.doc

cc: Amir Massih, Pulte Homes Corporation

ALAMEDA COUNTY
CONGESTION MANAGEMENT AGENCY

1333 BROADWAY, SUITE 220 • OAKLAND, CA 94612 • PHONE: (510) 836-2560 • FAX: (510) 836-2185
E-MAIL: mail@accma.ca.gov • WEB SITE: accma.ca.gov

May 4, 2005

Mr. Darin Ranelletti,
Planner III
City of Oakland Community and Economic Development Agency
250 Frank H. Ogawa Plaza, Suite 3330
Oakland, CA 94612

SUBJECT: Comments on the Notice of Preparation for a Draft Environmental Impact Report (DEIR) for the Arcadia Park Residential Project

Dear Mr. Ranelletti:

Thank you for the opportunity to comment on the Notice of Preparation (NOP) for a Draft Environmental Impact Report (EIR) for the Arcadia Park Residential Project. The 27-acre project site is located in four parcels between 92nd Avenue and 98th Avenue along San Leandro Street in the City of Oakland. The site is currently occupied by industrial uses. The project consists of removal of all existing uses and the construction of up to 400 residential units comprising both single-family residences and Townhomes. The project will require rezoning the parcels to R-30 One-Family Residential Zone (portion) and R-50 Medium Density Residential Zone (portion), and amending the General Plan designation to Housing and Business Mix.

The ACCMA respectfully submits the following comments:

- The City of Oakland adopted Resolution No. 69475 on November 19, 1992 establishing guidelines for reviewing the impacts of local land use decisions consistent with the Alameda County Congestion Management Program (CMP). Based on our review of the NOP, the proposed project appears to generate at least 100 p.m. peak hour trips over existing conditions. If this is the case, the CMP Land Use Analysis Program requires the City to conduct a traffic analysis of the project using the Countywide Transportation Demand Model for projection years 2010 and 2025 conditions. Please note the following paragraph as it discusses the responsibility for modeling.

  - The CMA Board amended the CMP on March 26th, 1998 so that local jurisdictions are now responsible for conducting the model runs themselves or through a consultant. The City of Oakland and the ACCMA have signed a Countywide Model Agreement on March 22, 1999. The Countywide model, updated incorporating ABAG's revisions to the employment data for Projections 2002, is available to the local jurisdictions for this purpose. However, before the model can be released to you or your consultant, a letter must be submitted to the ACCMA requesting use of the model and describing the project. A copy of a sample letter agreement is available upon request.

- Potential impacts of the project on the Metropolitan Transportation System (MTS) need to be addressed. (See 2003 CMP Figures E-2 and E-3 and Figure 2). The DEIR should address all potential impacts of the project on the MTS roadway and transit systems. These include I-880, I-580, SR 61, Davis Street, 98th Avenue, Hegenberger Expressway, High Street, San Leandro Street, International Blvd and MacArthur Blvd as well as BART and AC Transit. Potential impacts of the project must be addressed for 2010 and 2025 conditions.
  - Please note that the ACCMA does not have a policy for determining a threshold of significance for Level of Service for the Land Use Analysis Program of the CMP. Professional judgment should be applied to determine the significance of project impacts (Please see chapter 6 of 2003 CMP for more information).
  - In addition, the adopted 2003 CMP requires using 1985 Highway Capacity Manual for freeway capacity standards.

- The CMA requests that there be a discussion on the proposed funding sources of the transportation mitigation measures identified in the environmental documentation. The CMP establishes a Capital Improvement Program (See 2003 CMP, Chapter 7) that assigns priorities for funding roadway and transit projects throughout Alameda County. The improvements called for in the DEIR should be consistent with the CMP CIP. Given the limited resources at the state and federal levels, it would be speculative to assume funding of an improvement unless it is consistent with the project funding priorities established in the Capital Improvement Program (CIP) of the CMP, the federal Transportation Improvement Program (TIP), or the adopted Regional Transportation Plan (RTP). Therefore, we are requesting that the environmental documentation include a financial program for all roadway and transit improvements.

- The adequacy of any project mitigation measures should be discussed. On February 25, 1993 the CMA Board adopted three criteria for evaluating the adequacy of DEIR project mitigation measures:
  - Project mitigation measures must be adequate to sustain CMP service standards for roadways and transit;
  - Project mitigation measures must be fully funded to be considered adequate;
  - Project mitigation measures that rely on state or federal funds directed by or influenced by the CMA must be consistent with the project funding priorities established in the Capital Improvement Program (CIP) section of the CMP or the Regional Transportation Plan (RTP).

  It would be helpful to indicate in the DEIR the adequacy of proposed mitigation measures relative to these criteria. In particular, the DEIR should detail when proposed roadway or transit route improvements are expected to be completed, how they will be funded, and what would be the effect on LOS if only the funded portions of these projects were assumed to be built prior to project completion.

- Potential impacts of the project on CMP transit levels of service must be analyzed. (See 2003 CMP, Chapter 4). Transit service standards are 15-30 minute headways for bus service and 3.75-15 minute headways for BART during peak hours. The DEIR should

address the issue of transit funding as a mitigation measure in the context of the CMA's policies as discussed above.

- The DEIR should also consider demand-related strategies that are designed to reduce the need for new roadway facilities over the long term and to make the most efficient use of existing facilities (see 2003 CMP, Chapter 5). The DEIR could consider the use of TDM measures, in conjunction with roadway and transit improvements, as a means of attaining acceptable levels of service. Whenever possible, mechanisms that encourage ridesharing, flextime, transit, bicycling, telecommuting and other means of reducing peak hour traffic trips should be considered.

- For projects adjacent to state roadway facilities, the analysis should address noise impacts of the project. If the analysis finds an impact, then mitigation measures (i.e., soundwalls) should be incorporated as part of the conditions of approval of the proposed project. It should not be assumed that federal or state funding is available.

Thank you for the opportunity to comment on this Notice of Preparation. Please do not hesitate to contact me at 510/836-2560 ext. 24 if you require additional information.

Sincerely,

Saravana Suthanthira
Associate Transportation Planner

cc: file: CMP - Environmental Review Opinions - Responses - 2005

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Sean Walsh
Director

Notice of Preparation

April 5, 2005

To: Reviewing Agencies

Re: Arcadia Park Residential Project
SCH# 2005042026

Attached for your review and comment is the Notice of Preparation (NOP) for the Arcadia Park Residential Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Darin Ranelletti
City of Oakland
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Associate Planner, State Clearinghouse

Attachments
cc: Lead Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH#	2005042026
Project Title	Arcadia Park Residential Project
Lead Agency	Oakland, City of

Type	NOP Notice of Preparation
Description	The site is currently occupied by industrial uses. The project consists of the removal of all existing uses and the construction of up to 400 residential units comprising both single-family residences and townhomes. The project will require rezoning the parcels to R-30 One-family Residential Zone (portion) and R-50 Medium Density Residential Zone (portion), and amending the General Plan to Housing and Business Mix.

Lead Agency Contact

Name	Darin Ranelletti		
Agency	City of Oakland		
Phone	(510) 238-3663	*Fax*	
email			
Address	250 Frank H. Ogawa Plaza, Suite 3315		
City	Oakland	*State* CA	*Zip* 94612

Project Location

County	Alameda
City	Oakland
Region	
Cross Streets	Between 92nd Avenue and 98th Avenue along San Leandro Street
Parcel No.	044-4989-16/17/9-4/11-2/10-2

Township	*Range*	*Section*	*Base*

Proximity to:

Highways	
Airports	
Railways	
Waterways	
Schools	
Land Use	

Project Issues	Traffic/Circulation
Reviewing Agencies	Resources Agency; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 5; Department of Health Services; Native American Heritage Commission; Public Utilities Commission; California Highway Patrol; Caltrans, District 4; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 2

Date Received	04/04/2005	*Start of Review*	04/04/2005	*End of Review*	05/03/2005

NOP Distribution List

County: Alameda

SCH# 2005042026

Resources Agency

- [■] **Resources Agency**
  Nadell Gayou
- [ ] **Dept. of Boating & Waterways**
  David Johnson
- [ ] **California Coastal Commission**
  Elizabeth A. Fuchs
- [ ] **Colorado River Board**
  Gerald R. Zimmerman
- [ ] **Dept. of Conservation**
  Roseanne Taylor
- [ ] **California Energy Commission**
  Environmental Office
- [ ] **Dept. of Forestry & Fire Protection**
  Allen Robertson
- [ ] **Office of Historic Preservation**
  Wayne Donaldson
- [■] **Dept of Parks & Recreation**
  B. Noah Tilghman
  Environmental Stewardship Section
- [ ] **Reclamation Board**
  DeeDee Jones
- [ ] **Santa Monica Mountains Conservancy**
  Paul Edelman
- [ ] **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- [■] **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou

Fish and Game

- [ ] **Depart. of Fish & Game**
  Scott Flint
  Environmental Services Division
- [ ] **Fish & Game Region 1**
  Donald Koch
- [ ] **Fish & Game Region 2**
  Banky Curtis
- [▨] **Fish & Game Region 3**
  Robert Floerke
- [ ] **Fish & Game Region 4**
  William Laudermilk
- [ ] **Fish & Game Region 5**
  Don Chadwick
  Habitat Conservation Program
- [ ] **Fish & Game Region 6**
  Gabrina Gatchel
  Habitat Conservation Program
- [ ] **Fish & Game Region 6 I/M**
  Tammy Allen
  Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Game M**
  George Isaac
  Marine Region

Other Departments

- [ ] **Food & Agriculture**
  Steve Shaffer
  Dept. of Food and Agriculture
- [ ] **Depart. of General Services**
  Public School Construction
- [ ] **Dept. of General Services**
  Robert Sleppy
  Environmental Services Section
- [■] **Dept. of Health Services**
  Veronica Rameriz
  Dept. of Health/Drinking Water

Independent Commissions,Boards

- [ ] **Coachella Valley Mountains Conservancy**
- [ ] **Delta Protection Commission**
  Debby Eddy
- [ ] **Office of Emergency Services**
  Dennis Castrillo
- [ ] **Governor's Office of Planning & Research**
  State Clearinghouse
- [■] **Native American Heritage Comm.**
  Debbie Treadway
- [■] **Public Utilities Commission**
  Ken Lewis
- [ ] **San Gabriel & Lower LA Rivers**
- [ ] **San Joaquin River Conservancy**
- [ ] **State Lands Commission**
  Jean Sarino
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Business, Trans & Housing

- [ ] **Caltrans - Division of Aeronautics**
  Sandy Hesnard
- [ ] **Caltrans - Planning**
  Terri Pencovic
- [■] **California Highway Patrol**
  John Olejnik
  Office of Special Projects
- [ ] **Housing & Community Development**
  Lisa Nichols
  Housing Policy Division

Dept. of Transportation

- [ ] **Caltrans, District 1**
  Mike Eagan
- [ ] **Caltrans, District 2**
  Don Anderson
- [ ] **Caltrans, District 3**
  Jeff Pulverman
- [▨] **Caltrans, District 4**
  Tim Sable
- [ ] **Caltrans, District 5**
  David Murray
- [ ] **Caltrans, District 6**
  Marc Birnbaum
- [ ] **Caltrans, District 7**
  Cheryl J. Powell
- [ ] **Caltrans, District 8**
  John Pagano
- [ ] **Caltrans, District 9**
  Gayle Rosander
- [ ] **Caltrans, District 10**
  Tom Dumas
- [ ] **Caltrans, District 11**
  Mario Orso
- [ ] **Caltrans, District 12**
  Bob Joseph

Cal EPA

Air Resources Board

- [ ] Airport Projects
  Jim Lerner
  - [ ] Transportation Projects
    Kurt Karperos
  - [ ] Industrial Projects
    Mike Tollstrup
- [ ] **California Integrated Waste Management Board**
  Sue O'Leary
- [ ] **State Water Resources Control Board**
  Jim Hockenberry
  Division of Financial Assistance
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Steven Herrera
  Division of Water Rights
- [■] **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
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Last Updated on 3/11/05

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May 20, 2005

ALA185056
SCH#2005042026

Mr. Darin Ranelletti
City of Oakland
Community and Economic Development Agency
250 Frank Ogawa Plaza, Suite 3330
Oakland, CA 94612-2032

Dear Mr. Ranelletti:

ARCADIA PARK RESIDENTIAL PROJECT (ER05-3) – NOTICE OF PREPARATION

Thank you for including the California Department of Transportation (Department) in the early stages of the environmental review process for the Arcadia Park Residential project. The following comments are based on the Notice of Preparation.

Traffic Analysis
Please include the information detailed below in the Traffic Study to ensure that project-related impacts to State roadway facilities are thoroughly assessed. We encourage the City to coordinate preparation of the study with our office, and we would appreciate the opportunity to review the scope of work. The Department's *"Guide for the Preparation of Traffic Impact Studies"* should be reviewed prior to initiating any traffic analysis for the project; it is available at the following website:
http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf

The Traffic Study should include:

1. Site plan clearly showing project access in relation to nearby state roadways. Ingress and egress for all project components should be clearly identified. State right-of-way (ROW) should be clearly identified.

2. Project-related trip generation, distribution, and assignment. The assumptions and methodologies used to develop this information should be detailed in the study, and should be supported with appropriate documentation.

3. Average Daily Traffic, AM and PM peak hour volumes and levels of service (LOS) on all significantly affected roadways, including crossroads and controlled intersections for existing, existing plus project, cumulative and cumulative plus project scenarios. Calculation of cumulative traffic volumes should consider all traffic-generating developments, both

existing and future, that would affect study area roadways and intersections. *The analysis should clearly identify the project's contribution to area traffic and degradation to existing and cumulative levels of service. Lastly, the Department's LOS threshold, which is the transition between LOS C and D, and is explained in detail in the Guide for Traffic Studies, should be applied to all state facilities.*

4. Schematic illustration of traffic conditions including the project site and study area roadways, trip distribution percentages and volumes as well as intersection geometrics, i.e., lane configurations, for the scenarios described above.

5. The project site building potential as identified in the General Plan. The project's consistency with both the Circulation Element of the General Plan and the Alameda County Congestion Management Agency's Congestion Management Plan should be evaluated.

6. *Mitigation should be identified for any roadway mainline section or intersection with insufficient capacity to maintain an acceptable LOS with the addition of project-related and/or cumulative traffic.* The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should also be fully discussed for all proposed mitigation measures.

7. Special attention should be given to the following trip-reducing measures:
   - Encouraging mixed-use,
   - Maximizing density through offering bonuses and/or credits,
   - Coordinating with AC Transit and BART to increase transit/rail use by expanding routes and emphasizing express service to regional rail stations, and by providing bus shelters with seating at any future bus pullouts,
   - Providing transit information to all future project employees, and
   - Encouraging bicycle- and pedestrian-friendly design.

While the 2000 Highway Capacity Manual (HCM) may not be the preferred level of service methodology, it should be used for analyzing impacts to state facilities, particularly where previous analysis employing alternative methodologies has identified impacts. The residual level of service, assuming mitigation has been implemented, should also be analyzed with HCM 2000.

Encroachment Permit

Please be advised that work that encroaches onto the State ROW requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans, clearly indicating State ROW, must be submitted to the address below. Traffic-related mitigation measures will be incorporated into the construction plans during the encroachment permit process. See the following website link for more information:
http://www.dot.ca.gov/hq/traffops/developserv/permits/

Sean Nozzari, District Office Chief
Office of Permits
California DOT, District 4
P.O. Box 23660
Oakland, CA 94623-0660

Please forward a copy of the environmental document, along with the Traffic Study, including Technical Appendices, and staff report to the address below as soon as they are available.

Patricia Maurice, Associate Transportation Planner
Office of Transit and Community Planning, Mail Station 10D
California DOT, District 4
111 Grand Avenue
Oakland, CA 94612-3717

Please feel free to call or email Patricia Maurice of my staff at (510) 622-1644 or patricia_maurice@dot.ca.gov with any questions regarding this letter.

Sincerely,

Timothy C. Sable

TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Ms. Terry Roberts, State Clearinghouse

APPENDIX C

Bus Rapid Transit Analysis

APPENDIX C

Cumulative (2025) With Bus Rapid Transit Conditions

AC Transit is preparing an environmental impact report (EIR) on a project to implement bus rapid transit (BRT) along the length of International Boulevard in Oakland. The BRT project assumes that two travel lanes (one lane in each direction) will be converted to bus only lanes and therefore has the potential to create significant traffic impacts on International Boulevard as well as parallel arterials such as San Leandro Street. Parallel arterials are likely to be impacted as a result of traffic diversion that would occur after the conversion of two travel lanes to bus only lanes on International Boulevard.

At the request of City of Oakland, Fehr & Peers performed some analysis to determine the potential impacts of the BRT Project at the study intersections along International Boulevard and San Leandro Street. Study intersections along International Boulevard and San Leandro Street were selected for evaluation since these intersections would be the most likely to be impacted by the elimination of travel lanes on International Boulevard and the changes in through traffic as a result of traffic diversion. It is important to recognize that a full discussion of impacts and mitigation will be presented in the BRT EIR and that the evaluation presented in this study is for informational purposes only. The proposed project is not dependent on the approval or disapproval of the BRT project.

With the BRT project, through traffic on International Boulevard is anticipated to divert to San Leandro Street in the project study area. Fehr & Peers used data from the BRT EIR/EIS to determine the anticipated percent of traffic diversion that would occur with the BRT project. The table below summarizes the results of the analysis for the study intersection along International Boulevard and San Leandro Street with the BRT project.

With the BRT project, traffic conditions would worsen along International Boulevard as a result of converting a lane in each direction to a bus only lane. Furthermore, traffic conditions along San Leandro Street would also worsen as a result of traffic diversion that is anticipated to occur with the implementation of BRT on International Boulevard.

CUMULATIVE (2025) WITH BRT INTERSECTION LEVELS OF SERVICE

Intersection	Control[1]	Peak Hour	Cumulative W/O BRT & Project		Cumulative With BRT		Cumulative With BRT & Project	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
San Leandro Street / 98th Avenue	Signal	AM PM	50 81	D F	58 103	E F	59 105	E F
• *With Project Mitigation*							*56* *75*	*E* *E*
International Boulevard / 98th Avenue	Signal	AM PM	39 89	D F	51 158	D F	54 166	D F
• *With Project Mitigation*							*49* *140*	*D* *F*
International Boulevard / 92nd Avenue	SSSC	AM PM	4 (EB - 47) 54 (EB - 748)	A (E) D (F)	4 (EB - 31) 25 (EB - 241)	A (D) C (F)	6 (EB - 42) 33 (EB - 317)	A (E) D (F)
• *With Project Mitigation[3]*							*6* *9*	*A* *A*
San Leandro Street / 85th Avenue	Signal	AM PM	15 71	B E	15 68	B E	15 68	B E
San Leandro Street / 81st Avenue	Signal	AM PM	13 12	B B	14 13	B B	14 13	B B
San Leandro Street / 92nd Avenue	Signal	AM PM	11 26	B C	13 45	B D	14 55	B D

1. Signal = Signalized intersection; SSSC = Side-street stop-controlled intersection
2. Signalized intersection level of service based on weighted average control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000. Side-street stop level of service based on the weighted average control delay of controlled movements. For side-street stop controlled intersections, the worst side-street movement is presented in parentheses.
3. With a traffic signal.

Source: Fehr & Peers, 2005.

Appendix D

Summary of the Environmental Remediation Regulatory Process

Appendix D
Environmental Remediation Regulatory Process

Development, especially the development of existing properties in urban areas, often requires the clean-up, or remediation of contaminants from previous uses of the site. The range of possible contaminants is long, and the remediation process is complex. This appendix provides a brief overview of the regulatory process used to remediate contaminated sites. By necessity the information is very general, but it nevertheless provides the reader with an understanding of the remediation process.

Remediation is typically required before any new development is allowed to proceed. The extent of remediation is based on the intended future use of the site: a future school or residential subdivision requires different clean-up levels than a shopping center, a factory, or a park. To receive approval for development, a project sponsor typically works with a regulatory agency—such as the Regional Water Quality Control Board or the Department of Toxic Substances Control—to identify any environmental concerns, and to mitigate or remediate any identified adverse environmental conditions. Once the remediation is complete, the regulatory agency will issue a closure letter, indicating that all remediation has been completed to its satisfaction and no further remediation is required

The following are the typical steps necessary to obtain site closure from an environmental regulatory agency:

1. Designation of the appropriate regulatory oversight agency
2. Additional investigation to evaluate the source and extent of affected soil/groundwater
3. Health risk assessment
4. Public participation/notification
5. Preparation of a remedial action plan
6. Mitigation/Remediation activities
7. Preparation of a Risk Management Plan and deed restriction, if required
8. Preparation of a final report/site closure request

The actual process may differ based on which environmental agency is designated as the lead and which chemicals of concern are present. Each of the steps is an iterative process in and of itself that requires consultation with and approval by the agency. A general description of each step is provided below.

1. Designation of a regulatory oversight agency

Generally, a project sponsor will have completed some level of analysis of their site and will understand that regulatory guidance and approval will be required for development. Based on the type of contaminants present, a regulatory agency will designate itself as the "lead" agency, meaning that it will direct the remediation process and will issue the final closure letter, assuming all remedial actions have been completed to its satisfaction.

Once an agency is designated as the lead, the project sponsor typically meets with assigned staff to discuss the information collected to date and the steps necessary to proceed with remediation.

2. Additional Investigation

Based on the data collected to date, additional soil, groundwater, or soil vapor investigation may be required to more accurately assess the extent of contamination. This additional information will assist the agency in determining the need for remediation and, if necessary, will aid in selecting and designing a remedial measure. Additional sampling activities could include advancing borings for the collection of soil, grab groundwater, or soil vapor samples; trenching; a geophysical survey to identify possible underground storage tanks, sumps, or piping that may be the source of chemicals to the subsurface; or installation and sampling of groundwater monitoring wells.

3. Health Risk Assessment/Establishment of Remediation Standards

A main focus of remediation is to protect human health. Remediation activities are typically designed with the intention of reducing the risk to human health, based on the intended future use of a site. Regulatory agencies typically use what is called a human health risk assessment to determine whether a site requires more detailed site analysis. The typical purposes of the risk assessment are shown below:

- document potential human health risks
- develop site-specific risk-based cleanup goals
- provide a basis for a risk management plan, if required.

If a health risk assessment is required, the first step is to compare concentrations of chemicals at the site to "risk screening levels." A risk screening level is an established limit below which there would not be a recognized threat to human health. Screening levels vary according to the type of chemical and the agency that established them. Chemical concentrations below the risk screening level indicate that no further action is necessary at the site, in which case a request for closure can be made at that time. If, however, a chemical concentration is above the risk screening level, then a more rigorous site-specific health risk assessment is typically warranted.

4. Public Participation/Notification

Some level of public participation or notification is typically required by the regulatory agency. This participation may include activities such as the preparation of a public participation plan, public meetings, public comment periods on environmental documents, preparation of fact sheets, or the distribution of periodic status reports.

5. Preparation of a Remedial Action Plan

A remedial action plan is a document that tells the regulatory agency how the project sponsor proposes to address the existing contamination. The remedial action plan is based on discussions with the regulatory agency but is subject to the agency's review and approval. The plan typically provides the following information:

- site background information,
- summary of the data collected to date,
- results of the health risk assessment,
- proposed remediation goals,
- description of the areas and constituents to be remediated/mitigated,
- description of the implementation of the proposed remedial/mitigation alternative, and
- confirmation sampling program.

Typically, the project sponsor meets with the regulatory agency to present and discuss the proposed remediation prior to submittal of the remedial action plan.

6. Remediation/Mitigation

Once the remedial action plan is approved by the regulatory agency, it is implemented by the project sponsor. Once the remedial actions are complete, the project sponsor typically takes confirmation samples to confirm that any residual chemical concentrations are below designated levels. If the confirmation samples confirm otherwise, then additional actions are taken to address the residual contamination. This step continues until all identified chemical concentrations have been addressed as planned.

7. Preparation of a Risk Management Plan and Deed Restriction, if necessary

In some cases mitigation measures are designed into the project, necessitating long-term monitoring. Long-term monitoring is regulated through a Risk Management Plan, which outlines the stewardship actions for any measures that are incorporated into the development process. A deed restriction may be required as part of the long-term stewardship.

8. Preparation of a final report/site closure request

After remediation is complete, the project sponsor typically submits a report to the regulatory agency that summarizes site conditions and documents the remediation that has been completed. The report typically includes a brief site history, a description of the site conditions prior to and after remediation, an assessment of the risk to receptors posed by residual concentrations, and rationalization for site closure. The purpose of the report is to facilitate the agency's issuance of a No Further Action letter for the site.

Once the lead agency is satisfied that all of its remediation requirements have been implemented as directed, it will issue a No Further Action letter, indicating that the site has been remediated to levels appropriate for the intended future use.