

**Table 2.1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<i>LAND USE</i>				
<p>Impact 4-1: Project Inconsistency with Redwood City Strategic General Plan Policies Pertaining to Residential Development Location and "Smart Growth." "Smart growth" concepts, policies, and criteria set forth in adopted local (Redwood City Strategic General Plan) and regional (ABAG Regional Land Use Framework) land use policy documents are particularly applicable to intensive, large-scale high density residential developments like the proposed project. The proposed project embodies some "smart growth" characteristics; it is a compact, high density residential project that is pedestrian-oriented and located within an existing urban area--i.e., it is an "infill project." However, the proposed general plan amendment and rezoning to convert the project site from general commercial to high density residential use would be inconsistent with Redwood City and ABAG "smart growth" policies calling for location of residential development only where services and facilities can be provided. The proposed land use change would also be inconsistent with</p>	S	<p>Mitigation 4-1. Mitigation of this impact would require incorporation of the following "smart growth" characteristics into the proposed project, to City satisfaction:</p> <ul style="list-style-type: none"> ▪ <i>Mitigations 10-1 and 10-5</i> from chapter 10 (Infrastructure and Public Services) of this EIR pertaining to water service and park provisions; ▪ a convenient and effective <i>transit link</i> between the project and local and regional express transit corridors and/or hubs, including the El Camino Real transit corridor and Redwood City CalTrain intermodal station, and between the project, downtown Redwood City, and other local employment, financial, and retail concentrations; ▪ <i>on-site or nearby retail commercial provisions</i> sufficient to serve the convenience retail needs of project residences and businesses; and 	Applicant	SU

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<p><u>Redwood City Strategic General Plan</u> statements encouraging the City "to plan for more intensive higher density uses along public transit routes" including "apartments." The proposed land use change would also be inconsistent with <u>Redwood City Strategic General Plan</u> policies calling for promotion of higher residential densities "at locations near or within commercial and financial centers, employment centers, and transportation terminals." An adequate supply of water to serve the project has not been confirmed. Project compliance with City park and recreation requirements has not been demonstrated. The project site is not within or near an existing commercial, financial, or employment center, and is not convenient to a transportation terminal or related transit corridor.</p> <p>There is currently no public bus route serving or convenient to the project site. These project inconsistencies with applicable local and regional land use policies represent a <i>potentially significant adverse environmental impact</i>.</p>		<ul style="list-style-type: none"> ▪ a substantial <i>affordable (below-market-rate [BMR]) housing component</i>. <p>Provision of a convenient and effective transit link between the project and local and regional express transit corridors and/or hubs including the downtown, and provision of convenient retail commercial provisions, are measures that may not be economically feasible. The General Plan states that "Because financing may not always be available, improving the level of bus service [to a project] may not be economically feasible." Similarly, to incorporate on-site or nearby commercial provisions in this particular East Bayshore Road area sufficient to serve the convenience retail needs of project residents may not be economically feasible for a project of this scale. As a result, no viable mitigations have been identified to adequately mitigate the identified project conflicts with <u>Redwood City Strategic General Plan</u> objectives and policies pertaining to location of high density residential projects near commercial, financial, and employment centers, transportation terminals, or at locations conveniently served by transit. This impact is therefore considered to be a <i>significant unavoidable impact</i> (i.e., would require City</p>		

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		adoption of a Statement of Overriding Considerations).		
<p>Impact 4-2: Project Inconsistency with Redwood City Strategic General Plan Policies Regrading Land Use Compatibility and Harmonious Land Use Relationships. The proposed project involves introduction of a new large-scale high density residential development in proximity to existing commercial and industrial land uses along East Bayshore Road and east of Redwood Creek. The prospect of introducing approximately 1,200 new residents on the project site raises concerns regarding associated conflicts with these adjacent and nearby commercial and industrial uses. The currently proposed site plan does indicate that most of the proposed 4-story residential structures closest to the project's east and west boundaries would be separated from the existing adjacent commercial and industrial uses by intervening nonresidential buildings, including the proposed 4- to 4.5-story parking structures. However, the currently proposed site plan also indicates that the residential structures would not be shielded from the adjacent commercial and industrial uses at the following locations:</p>	S	<p>Mitigation 4-2. As part of the project approval process by the City of Redwood City, the proposed project would require Planned Development Permit approval (per Article 46 of the Zoning Ordinance), which would involve City review of site, building, and landscape plans in order to, in part, “promote the most functional and aesthetic relationships between building structures, signs, open space and parking areas in residential, commercial and industrial zoning districts.” In the course of this Planned Development Permit review process, the City could require the applicant to:</p> <p>(1) Incorporate specific internal project modifications to address the potential land use incompatibility impacts noted above--e.g., placement of nonresidential buildings, perimeter walls, windows, landscaping, etc., as necessary to provide the necessary additional buffering and ensure land use compatibility with adjacent land uses;</p>	City and Applicant	SU

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<ul style="list-style-type: none"> ▪ along a portion of the northeastern edge of the project site, adjacent to the existing Bair Island Mini-Storage; ▪ along a portion of the eastern edge of the site, near the proposed on-site public parking area for trail visitors, adjacent to the existing Boardwalk Motors; ▪ along a portion of the southwestern edge of the site, near the proposed swimming pool, adjacent to the existing Boardwalk Motors; and ▪ along a portion of the northwestern edge of the site, adjacent to the existing Alan Steel & Supply Company. <p>The above-mentioned unshielded areas could experience adverse light and glare, hazardous materials, noise and vibration, and/or air quality impacts from the existing adjacent land uses. Such effects would conflict with <u>Redwood City Strategic General Plan</u> goals and policies calling for "a more desirable and harmonious physical relationship between the parts and pieces that make up Redwood City...as changed uses, as new construction, and as redevelopment</p>	S	<p>(2) Implement specific mitigation measures identified in chapters 5, 12, 13, and 15, respectively, of this EIR related to visual impacts, hazardous materials impacts, noise and vibration impacts, and air quality impacts;</p> <p>(3) Ensure written disclosure by the renter to the prospective tenant of all project residential units, clearly stating that there are existing, possible extended hour, commercial and industrial activities adjacent to the project and in the project vicinity that may have perceived daytime and nighttime visual, traffic, noise and/or air quality-related nuisance effects;</p> <p>Implementation of these measures would reduce project land use compatibility impacts. However, reduction of the nuisance impacts of existing adjacent commercial storage, automobile retail, and heavy industrial uses, including their aesthetic, noise and nighttime lighting impacts, to less-than-significant levels, cannot be assured through implementation of these measures. These incompatibilities therefore represent a significant unavoidable adverse impact (i.e., would require City adoption of a Statement of Overriding Considerations).</p>	M	LS

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<p>occur...," and with policies discouraging "incompatible activities...which may have a negative impact on the residential living environment." These possible land use incompatibilities represent a potentially significant adverse environmental impact.</p>				
<p>Impact 4-3. Project Inconsistency with General Plan Maximum Allowable Density Limitations. The Bayside Gardens project proposes residential uses on a site designated for commercial uses, and at a density of approximately 42.5 residential units per gross acre, which would be higher than the maximum residential density currently allowed under any <u>Redwood City Strategic General Plan</u> land use category (the <i>High Density</i> designation allows up to 40 units per net acre). This proposed inconsistency with adopted City policy would represent a potentially significant adverse environmental impact.</p>	S	<p>Mitigation 4-3. Implement either one of the following measures:</p> <p>(1) Reduce the project residential density to 40 units or less per net acre, as calculated by the Redwood City Zoning Administrator;</p> <p>or</p> <p>(2) As part of the General Plan Amendment, Zoning Map Amendment, and Planned Development Permit process, obtain City approval of an overall project residential density greater than the maximum residential density currently allowed under the <u>Redwood City Strategic General Plan</u>.</p> <p>Implementation of either one of the above measures would reduce the project inconsistency</p>	Applicant	LS

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		with General Plan maximum allowable density to a less-than-significant level .		
<p>Impact 4-4: Project Relationships to Existing Overhead Electrical Transmission Lines. Policy L-2 of the <u>Redwood City Strategic General Plan Land Use Element</u> states: "Residential neighborhoods should be protected from the encroachment of incompatible activities or land uses which may have a negative impact on the residential living environment." The project residential components closest to the northern edge of the project site would be in close proximity (as close as 150 feet) to the existing PG&E 230- and 115-kilovolt (kV) electrical transmission tower lines. These introduced residential/transmission line relationships could result in adverse impacts related to visual and public health and safety effects. The significance of these impacts is described in chapters 5 (Visual Factors) and 12 (Public Health and Safety) of this EIR--see subsections 5.3.3 (<i>Impact 5-2: Visual Relationship of Project Development to Adjacent Electrical Transmission Lines</i>) and 12.3.2 (under "Potential Electromagnetic Field Health Hazards"). These nuisance and health factors may have a negative impact on the quality and perceived safety of the residential living</p>	S	<p>Mitigation 4-4. To address the potential for adverse (nuisance) impacts related to project relationships to the adjacent existing PG&E electrical transmission lines:</p> <p>(1) Provide notification in writing to all prospective residents of all project residential units within 200 feet of the edge of the 230-kV/115-kV transmission line easement clearly indicating that there are existing transmission lines of these specific power ratings, with associated visual characteristics, within this distance; this notification requirement shall run with the deed to the property, and shall be achieved by including such disclosure in the rental agreement materials to be signed by project residents; and</p> <p>(2) Implement <i>Mitigation 5-2 (Visual Relationship of Project Development to Adjacent Electrical Transmission Lines)</i> identified in chapter 5 (Visual Factors) of this EIR in order to reduce the potential visual impacts of the existing electrical transmission lines to less-than-significant levels.</p>	Applicant	LS

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<p>environment along the northern edge of the project site, and could lead to numerous future nuisance complaints; they are therefore considered to represent a <i>potentially significant adverse land use compatibility impact.</i></p> <p><i>VISUAL FACTORS</i></p> <p>Impact 5-1: Project Impacts on Views from East Bayshore Road, the Bay Trail, the Bair Island Wildlife Refuge, and U.S. 101. The proposed three four-story residential structures and associated three 4.5-level parking structures along and near the northern and southern edges of the project site would be prominently visible from East Bayshore Road, the Bay Trail, the Bair Island Wildlife Refuge, and U.S. 101 freeway vantage points. The EIR photomontage visual simulations convey the prominent visual appearance of the project in the context of the existing East Bayshore Road visual environment. The proposed building height and bulk characteristics, high site coverage and minimal setbacks, and the general multi-family residential character of the project, would be distinctly different from the existing commercial/industrial character of the affected East Bayshore Road frontage. The EIR simulations also indicate that</p>	S	<p>Implementation of these measures would reduce this potential land use compatibility impact to a <i>less-than-significant level.</i></p> <p>Mitigation 5-1. The proposed project will require City approval of a Planned Development Permit and an Architectural Permit application. In their review of and actions on these two permits, City decision-makers, including City staff and the City's Architectural Review Committee, Planning Commission and City Council, will consider project consistency with pertinent adopted Redwood City policies, standards, and design guidelines identified in section 5.2 herein (Pertinent Plans and Policies). During these approval procedures and associated design review activities, place emphasis on more variation in building heights, increased visual integration of parking structures and residential buildings (e.g., with color, facade treatments, etc.), reduced height of the parking structures, a revised project layout to help conceal portions of parking structures behind residential buildings, increased articulation of the parking structure</p>	City and Applicant	LS

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<p>the heights of the project residential buildings and parking structures would appear as generally uniform throughout the project. In particular, the proposed parking structures would potentially appear as large building masses with an unbroken horizontal appearance, minimal architectural articulation, and limited architectural relationship to the project residential structures. The parking structures as currently designed could appear visually monotonous and severe, distracting substantially from the visual appearance of the project and project vicinity as viewed from these vantage points.</p> <p>These project visual characteristics would be inconsistent with City-adopted architectural standards calling for "sufficient variety in the design of the structure to avoid monotony in the external appearance" (Zoning Ordinance Article 45-A), and "unity among (a structure's)...external features so as to present a harmonious appearance" (Zoning Ordinance Article 46.1). These project visual characteristics would also be inconsistent with <u>City of Redwood City Planning Division Urban Design Guidelines</u> stipulating that "excessive density and bulk shall be disallowed for new developments...", bulk should be restricted "in the form of additional setbacks,"</p>		<p>facades (e.g., varying setbacks, more interesting roof treatments, open-mesh design treatments, avoidance of long horizontal openings, etc.), and other measures to add visual interest.</p> <p>Particular consideration should also be given to the need to incorporate architectural, landscaping, and lighting provisions into the design of the proposed parking structures sufficient to soften their appearance, relate them more effectively to contiguous project residential structures, and reduce the degree of their perceived building mass as viewed from the Bay Trail, the Bair Island Wildlife Refuge, East Bayshore Road, U.S. 101, and other surrounding vantage points.</p> <p>Although the segment of East Bayshore Road along the project frontage is not a highly pedestrian-friendly segment due to the visual and noise effects of the freeway, improved project first floor relationships to the street and to pedestrians should also be emphasized in future design refinements.</p> <p>Implementation of these measures to City Architectural Review Committee, Planning Commission, and City Council satisfaction would</p>		

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<p>"parking structures shall be less prominent than the principal structures which they serve unless they are of exemplary architectural design quality," and "a sense of visual continuity with adjacent structures...shall be maintained."</p> <p>These identified potential visual effects and associated inconsistencies with City-adopted policies, standards and guidelines represent a potentially significant adverse visual impact.</p>		<p>reduce this impact to a less-than-significant level.</p>		
<p>Impact 5-2: Visual Relationship of Project Development to Adjacent Electrical Transmission Lines. The quality and livability of the closest project residences could be impacted by views of the existing PG&E electrical transmission lines and associated steel truss towers that extend east-west immediately north of the project site (see Figure 5.2). These visual effects would represent a potentially significant visual impact.</p>	S	<p>Mitigation 5-2. Measures which may effectively reduce the impacts of project residential unit views towards the existing electrical transmission lines, such as orientation of project residential buildings away from the transmission lines, or incorporation of strategic planting along the affected north perimeter of the site to screen views of the lines, would negate a primary project objective--i.e., the visual benefit of northern views of the wetlands and Bay tributaries. As a result, recommended mitigation is limited to the following:</p> <ul style="list-style-type: none"> ▪ Require the apartment complex operator to notify in writing prospective residents of all project residential units within 200 feet of the edge of the transmission line easement that 	Applicant	SU

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		<p>there are transmission lines within that distance. Require such disclosure to be included in the project rental agreement materials to be signed by project residents.</p> <p>Implementation of this measure would reduce the consequences of this impact; however, the impact would remain significant and unavoidable (i.e., would require City adoption of a Statement of Overriding Considerations).</p>		

POPULATION AND HOUSING

Impact 6-1: Project-Related Resident Population Growth. The proposed 600 housing units would house an estimated 1,200 people. This project-related local population growth has the potential to cause a number of population-related significant adverse environmental effects (traffic, infrastructure, noise, and air quality) as described in other chapters of this EIR (see chapters 7, 10, 13, and 15), representing **potentially significant project and cumulative impacts.**

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Mitigation 6-1. Implement the mitigation measures identified in other chapters of this EIR related to project population-induced environmental impacts (traffic--chapter 7, infrastructure and public services--chapter 10, noise--chapter 13, and air quality--chapter 15). Implementation of these measures would reduce identified environmental impacts associated with the project-related population increase to a **less-than-significant level**, with the exception of certain cumulative transportation impacts (*Impact 7-7*), project-related and cumulative municipal water service demand (*Impact 10-1*), and cumulative impacts on regional emissions (*Impact 15-2*), which after implementation of the

Applicant fair share

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		associated mitigation measures identified in this EIR, would remain significant and unavoidable (i.e., would require City adoption of a Statement of Overriding Considerations).		
TRANSPORTATION AND CIRCULATION				
<p>Impact 7-1: Project Transit Inaccessibility. Currently, no public bus route operates along East Bayshore Road to the project site. The proposed conversion of the site from commercial to high density residential use would therefore be inconsistent with City General Plan statements and policies calling for location of residential development "only where services and facilities can be provided" and encouraging the City "to plan for more intensive higher density land uses along public transit routes" (see <i>Impact 4-1</i>). This deficiency represents a potentially significant impact.</p>	S	<p>Mitigation 7-1. Mitigation of this impact would require implementation of <i>Mitigation 4-1</i>, calling for establishment of a convenient and effective <i>transit link</i> between the project and local and regional express transit corridors and/or hubs, including the El Camino Real transit corridor and Redwood City CalTrain intermodal station, and between the project, downtown Redwood City, and other local employment, financial, and retail concentrations. This link could take the form of a private system and/or extension of SamTrans operated routes. Under either scenario, the project, as well as other anticipated development in the Bayfront Area, could justify the addition of one or more SamTrans bus routes into the area.</p> <p>Also, as part of or in addition to <i>Mitigation 4-1</i>, require the project to accommodate on-site, or contribute its fair share to, a bus stop along East Bayshore Road to accommodate more convenient SamTrans bus service into the area.</p>	City and Applicant	LS

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		<p>However, as indicated under <i>Mitigation 4-1</i>, and as indicated in the City's General Plan, improving the level of bus service to the project site may not be economically feasible. This impact is therefore considered to be a significant unavoidable impact.</p>		
<p>Impact 7-2: Project-Plus-Cumulative Emergency Access Deficiency. During an emergency evacuation of the East Bayshore Road area under year 2020 conditions (with or without the proposed project), volumes on East Bayshore Road and Whipple Avenue near the project site could be expected to exceed roadway capacities, resulting in LOS F operations (unacceptable delays).</p> <p>The project alone would include approximately 600 residential units. The recently approved nearby Marina Shores Village development plan could accommodate up to 1,930 residential units. An analysis has been conducted to determine how many cumulative new project residential units could be developed in the East Bayshore Road/Bair Island Road area before the Blomquist Street Extension would be needed to maintain adequate emergency access. The results (available for review at the City of Redwood City</p>	S	<p>Mitigation 7-2. The extension of Blomquist Street over Redwood Creek to the East Bayshore Road/Bair Island Road intersection is currently under design by the City and partially funded. Completion of the Blomquist Street Extension over Redwood Creek would reduce this potential project-plus-cumulative emergency access impact to a less-than-significant level-i.e., would provide sufficient emergency access to the East Bayshore Road area with full buildout of the proposed project plus the first phases of the Marina Shores Village development (i.e., anticipated year 2020 conditions).</p> <p>This additional access would also be expected to change local vehicular travel patterns and the assignment of project-generated traffic, resulting in a potentially significant secondary project impact at the Blomquist Street/Maple Street intersection (see <i>Secondary Impact 7-2A</i> which follows).</p>	Applicant fair share	LS

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<p>Community Development Services Department, City Hall, 1017 Middlefield Road) indicate that the existing roadways have the capacity to accommodate 750 total new dwelling units (roughly 30 percent of the total units in the proposed project and Marina Shores Village developments) before a secondary access would be needed to accommodate the assumed emergency scenario.</p> <p>This identified project-plus-cumulative emergency access deficiency represents a potentially significant cumulative impact.</p>				
<p>Secondary Impact 7-2A: Project Secondary Impact of the Blomquist Extension (Mitigation 7-2) on the Blomquist Street/Maple Street Intersection. With completion of the Blomquist Street Extension, the Blomquist Street/Maple Street intersection would be expected to operate at LOS E (high delay) during the AM peak hour and LOS F (unacceptable delay) during the PM peak hour under Background Conditions. With the addition of the project traffic, operations at the intersection would be expected to maintain LOS E during the AM peak hour and LOS F during the PM peak hour; however, the change in the average delay at the intersection due to the</p>	S	<p>Secondary Mitigation 7-2A. Install a four-way stop at the Blomquist Street/Maple Street intersection. With this improvement, the intersection is expected to operate at LOS C (average delays) during the AM peak hour and LOS D (longer delays) during the PM peak hour under Project Conditions.</p> <p>Alternatively, install a traffic signal at the intersection. With signalization, the intersection is expected to operate at LOS B (low delay) during the AM and PM peak hours under Project Conditions.</p>	Applicant fair share	LS

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<p>project is expected to be more than 5.0 seconds (i.e., a significant project impact) during the PM peak hour. The intersection is also expected to satisfy the Caltrans Peak Hour Volume Warrant for traffic signal installation during both the AM and PM peak hours under Project Conditions.</p> <p>These secondary effects of <i>Mitigation 7-2</i>, completion of the Blomquist Street Extension, represent a significant secondary impact.</p>		<p>Or, as a third alternative, install a roundabout at the intersection. With the roundabout, the intersection would operate at LOS A (very low delay) during the AM and PM peak hours under Project Conditions.</p> <p>Implementation of one of these secondary mitigation alternatives to City satisfaction would be a project "fair share" responsibility. Implementation of any one of these three measures would reduce the project's secondary impact at the Blomquist Street/Maple Street intersection to a less-than-significant level.</p>		
<p>Impact 7-3: Project Impacts on C/CAG's Congestion Management Plan (CMP) Roadway Network--PM Peak Hour. The proposed project is expected to generate 307 net new peak-hour trips during the AM peak hour and 173 net new peak-hour trips during the PM peak hour. Because the project trip generation rate is more than 100 net new peak-hour trips and the project is subject to CEQA review, the proposed project must meet the mitigation requirements presented in the <i>C/CAG Guidelines for the Implementation of the Land Use Component of the 1999 Congestion Management Program (C/CAG Guidelines)</i>. Until the project meets</p>	S	<p>Mitigation 7-3. Based on the C/CAG requirements, implement and maintain a project transportation demand management (TDM) program that meets the requirements presented in the <i>C/CAG Guidelines</i> in order to reduce the number of vehicular trips on the CMP roadway network. The project TDM program must be approved by both the City and C/CAG prior to City approval of any tentative subdivision map for the proposed project. The program may require fair-share contributions to help fund a Bay Area TDM coordinator position and/or a transit shuttle system, if and when they are developed.</p>	Applicant	LS

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these mitigation requirements to C/CAG satisfaction, the project's potential effects on C/CAG's CMP roadway network in the AM and PM peak hours are considered to be significant .		<p>Include a provision in the TDM program for preparation by the project sponsor, and review by the City or City-designated TDM coordinator, of an <i>annual report</i> documenting the effectiveness of the TDM program. Future additions or changes to the TDM program will be identified by the City or C/CAG, if and as necessary, based on the program's annually documented effectiveness in reducing the number of project-generated vehicular trips. Maintain this TDM annual report review process in effect for five years after full project buildout.</p> <p>Implementation of this measure would reduce the impact to a less-than-significant level.</p>		
<p>Impact 7-4: Project Driveway Safety Impacts. If not properly aligned and accompanied by sight line obstruction controls, one or both of the project driveway connections to East Bayshore Road could be dangerous intersections (landscaping and street trees, and signs could limit sight distance for drivers entering and exiting driveways), representing a significant impact.</p>	S	<p>Mitigation 7-4. Incorporate the following in final project access details:</p> <ul style="list-style-type: none"> ▪ To minimize the potential for visual restrictions, maintain a minimum sight distance of 255 feet on East Bayshore Road at each driveway based on a posted speed limit on East Bayshore Road of 25 miles per hour (mph) and a design speed of 35 mph (10 mph higher than posted). This distance is the minimum distance that a driver of an 	City and Applicant	LS

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		<p>exiting vehicle in a project driveway should be able to see in each direction.</p> <ul style="list-style-type: none"> ▪ Prune any landscaping at the project site's driveways to a height of 3.0 feet or less. ▪ Locate any monument signs at the project site at least ten feet behind the face of curb. ▪ Realign the project's southern driveway approach to East Bayshore Road to create a 90-degree angle. ▪ Channelize the project driveways to clearly direct drivers along safe vehicle paths and to minimize pavement area. ▪ With City assistance, work with the adjacent auto dealership to relocate its existing signage and for-sale vehicle display, as necessary, to improve line of sight at the Bayside Gardens project driveways. <p>Incorporation of these measures in the final project access details would reduce this impact to a <i>less-than-significant level</i>.</p>		

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<p>Impact 7-5: Project Internal Circulation Impact. The project's internal vehicular, pedestrian, and bicycle circulation plan remains conceptual. At this preliminary point, on-site circulation would be provided via an internal loop roadway system of two-way drive aisles connecting East Bayshore Road and the internal reaches of the site. Internal roadway dimensions, circulation aisle widths, turnaround details, etc., have not yet been finalized. If not properly designed with adequate roadway and circulation aisle widths, turning radii, and turnaround dimensions, the project internal vehicular circulation system could present substantial safety hazards and/or emergency access deficiencies, representing a significant impact.</p>	S	<p>Mitigation 7-5. Incorporate the following minimum standards into the project's internal circulation system design, to City satisfaction:</p> <ul style="list-style-type: none"> ▪ all two-way circulation aisles shall be a minimum of 24-feet wide; ▪ all one-way circulation aisles providing access to any 60-degree parking shall be a minimum of 16-feet wide; ▪ turning templates shall be applied to the final detailed site plans to ensure that vehicles can negotiate all required turning movements; ▪ since moving vans will need to access buildings on the site, the internal circulation system shall be designed to safely and conveniently accommodate these vehicles; ▪ dead-end circulation aisles are not desirable; turnarounds shall be provided at all dead-end parking aisles; ▪ the internal circulation plan shall be subject to review and approval by the City to ensure that adequate emergency access is provided; 	Applicant	LS

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		<ul style="list-style-type: none"> ▪ direct sidewalk connections shall be provided between all buildings; and ▪ all sidewalks shall meet Americans with Disabilities Act (ADA) and City design standards. <p>Implementation of these measures would reduce this potential internal circulation impact to a less-than-significant level.</p>		
<p>Impact 7-6: Potentially Inadequate Project Parking Provisions. In order for the project to comply with City parking requirements and meet other applicable parking design standards and common practice, parking for all project residential units, retail activities, leasing office activities, and recreational (public access) provisions would have to be contained on-site, in numbers and configurations sufficient to meet peak-period parking demands for these uses, and within convenient proximity to users. The project parking provisions must also be designed and managed to meet the parking control and security concerns of the City.</p> <p>Based on City code requirements, the proposed project could be required to provide</p>	S	<p>Mitigation 7-6. As a condition of final project approval, provide the 1,398 on-site parking spaces required by City code or, if a parking variance is obtained, as a condition of approval, incorporate design and management measures to ensure that adequate peak-period parking provisions are provided within convenient proximity to users, and designed and managed to meet the parking control and security concerns of the Redwood City Police Department. The design and management measures shall include the following:</p> <p>(1) <i>Parking space-by-location provisions</i> that are adequate in number and convenient in proximity to projected peak residential, retail, leasing office, and recreational (public access) land uses.</p>	Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>approximately 1,398 parking spaces (not including spaces for the leasing office and public trail). The project, as proposed, would provide 1,191 parking spaces (not including spaces for the leasing office and public trail). The current conceptual parking program description does not yet incorporate a level of design and management detail to permit full evaluation of parking adequacy--e.g., full evaluation of the relationships between the location of the various parking provisions and associated residential, retail, leasing office, and public recreational demands, the adequacy and competence of project parking management and security provisions (defensive design features, exterior and interior lighting, security surveillance and monitoring equipment, etc.), and adequacy of provisions for interaction between project security personnel and the Redwood City Police Department.</p> <p>If one or more of the parking design objectives identified above (total spaces, convenient proximity, and adequate control and security) are not met, the project on-site parking provisions could be inadequate, which could result in overflow parking and spillover onto adjacent and nearby streets, and inordinate patrolling and</p>		<p>(2) An <i>Ongoing Parking Management Program</i>, prepared for City staff review and approval, that tailors parking demand to availability within the development complex, incorporates shuttle service and other measures included in the project's TDM program (see <i>Mitigation 7-3</i>), and includes provisions for <i>routine monitoring of parking use</i> as phased project construction and occupancy occurs, continuing for three years following project buildout; and includes <i>design provisions to permit parking expansion</i> to be readily accommodated on-site, perhaps through the ability to construct additional parking decks, if such a need is indicated by the <i>parking monitoring program</i>.</p> <p>Any future parking expansion shall not exceed the adopted per use parking space requirements of the City, and shall incorporate design features that, to the satisfaction of the City, reduce potential adverse land use compatibility or visual impacts to less-than-significant levels (e.g., locations behind residential and/or retail structures, architectural features, vegetative screening).</p> <p>(3) <i>Parking control and security provisions</i> that may include, but are not limited to, a full-time, on-</p>		

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 NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
enforcement demands on the Redwood City Police Department. Any one of these project effects would represent a significant impact .		<p>site security and monitoring operation (e.g., security personnel, surveillance cameras, emergency telephones, adequate security lighting, adequate patrolling, adequate emergency access, and adequate coordination between project security operations and Redwood City Police Department operations). Implement this measure regardless of whether or not the number of parking spaces required by City code is provided.</p> <p>Implementation of these measures would reduce identified potential parking impacts to a less-than-significant level.</p>		
<p>Impact 7-7: Project-Plus-Cumulative (2020) Impact on the Veterans Boulevard/Whipple Avenue Intersection. The Veterans Boulevard/Whipple Avenue intersection is expected to operate at LOS E (high delay) during the AM and PM peak hours under Cumulative (2020) Conditions, with or without the proposed project. The addition of project traffic is expected to increase the average delay at the intersection by more than 5.0 seconds during the AM peak hour. This project effect would represent a significant cumulative impact.</p>	S	<p>Mitigation 7-7. An improvement has been identified for this intersection in the <i>Redwood City Traffic Impact Mitigation Fee Study</i> (TIMFS). The identified improvement includes the addition of a dedicated eastbound right turn lane. However, the level of service analysis conducted for this EIR indicates that this improvement alone would not provide acceptable (LOS D or better) operations during the AM peak hour under Cumulative (2020) With Project conditions.</p> <p>Therefore, in addition to the TIMFS-identified additional eastbound right turn lane, the addition</p>	Applicant	SU

S = Significant
 LS = Less than significant
 SU = Significant unavoidable impact
 NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>Impact 7-8: Project-Plus-Cumulative (2020) Impact on the Blomquist Street/Maple Street Intersection. The Blomquist Street/Maple Street intersection is expected to operate at LOS F (unacceptable delay) during the AM and PM peak hours under Cumulative (2020) Conditions, with or without the proposed project. The addition of project traffic is expected to increase the average delay at the intersection by more than 5.0 seconds during both peak hours. The intersection is also expected to meet the Caltrans Peak Hour Volume Warrant for traffic signal</p>	S	<p>of a second westbound left turn lane would be needed to mitigate this AM peak-hour Cumulative (2020) With Project impact--i.e., to achieve LOS D at this intersection. This improvement would reduce this cumulative intersection impact to a <i>less-than-significant level</i>. However, this modification to the westbound approach may require widening of the Whipple Avenue overpass, would likely require coordination with Caltrans, and according to City Staff, is likely to be <i>infeasible</i>. Therefore, this cumulative intersection impact is considered to be significant and unavoidable (i.e., would require City adoption of a Statement of Overriding Considerations).</p> <p>Mitigation 7-8. Install a traffic signal at the intersection, widen the northbound approach to include a dedicated left turn lane and a shared through/right-turn lane, and reconfigure the southbound approach to include a dedicated left turn lane and a shared through/right-turn lane. With signalization and the recommended lane modifications, the intersection is expected to operate at LOS C during the AM and PM peak hours under Cumulative (2020) With Project conditions.</p>	Applicant fair share	LS

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 LS = Less than significant
 SU = Significant unavoidable impact
 NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>installation during both peak hours under Cumulative (2020) With Project conditions. These project effects would represent a significant cumulative impact.</p>		<p>Alternatively, install a roundabout at the intersection. With installation of a roundabout, the intersection is expected to operate at LOS A and LOS B during the AM and PM peak hours, respectively.</p> <p>Implementation of either one of the above mitigation alternatives would reduce this with-project cumulative impact at the Blomquist Street/Maple Street intersection to a less-than-significant level.</p>		

BIOLOGICAL RESOURCES

Impact 8-1: Potential Project Impacts on Steelhead and Chinook Salmon. The proposed project is located adjacent to Smith Slough tidal channel estuarine habitat for the steelhead, a federally listed threatened species, chinook salmon-California Coastal ESU, also a federally listed threatened species, and chinook salmon-Central Valley fall/late fall run, a federally listed species of concern and state-listed species of special concern. Project demolition and construction activities could result in increased water turbidity, contaminant release, noise, and underwater shock waves within this habitat.

S

Mitigation 8-1. Coordinate with the National Marine Fisheries Service (NMFS) and California Department of Fish and Game (CDFG) on steelhead and chinook salmon issues; and if required by the NMFS or CDFG, formulate and implement a *Habitat Mitigation and Monitoring Plan* (HMMP) for these species to the satisfaction of the NMFS and/or CDFG. If determined to be warranted in consultation with the NMFS or CDFG, the HMMP could include, but would not be limited to, the following provisions:

Applicant

LS

- Demolition and construction contractor use of a silt curtain around areas where demolition

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 SU = Significant unavoidable impact
 NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>These possible effects represent a <i>potentially significant impact</i>.</p>		<p>or construction activities are likely to release sediment into the Smith Slough tidal channel or where demolition or construction activities are directly adjacent to Smith Slough tidal channel estuarine habitat.</p> <ul style="list-style-type: none"> ▪ Water quality monitoring in the adjacent tidal slough to verify that the silt curtains contain turbidity to no more than 10 percent above ambient levels. ▪ Contractor minimization of dust through regular watering of demolition areas and bare ground and use of Best Management Practices to prevent demolition or construction debris or loose soil from falling into the tidal channel. ▪ Continuous monitoring by the contractor of the quality of sediments being mobilized, and contractor use of Best Management Practices to prevent the re-suspension of contaminants in the tidal channel. ▪ Where pile driving is involved, contractor use of a vibratory hammer, whenever possible, to drive the piles, in order to minimize hydroacoustic shockwaves. 		

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 NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>Consultation with the CDFG associated with this mitigation should be coordinated with all project-related State permit and certification procedures, including the required BCDC permit renewal and RWQCB certification process.</p> <p>The City of Redwood City shall not issue a grading permit for the project until any steelhead and chinook salmon issues are resolved to the satisfaction of the NMFS and CDFG. Copies of written correspondence between NMFS and CDFG and the applicant demonstrating resolution of this issue shall be submitted to the City prior to issuance of a demolition or grading permit.</p> <p>Implementation of these measures would reduce these impacts to a less-than-significant level.</p>		
<p>Impact 8-2: Potential Project Impacts on Essential Fish Habitat. The potential for project impacts on federally managed species protected under Essential Fish Habitat regulations would be similar to potential project impacts on salmon and steelhead. Construction activities could result in increased water turbidity, contaminant release, noise, and underwater shock waves. These</p>	S	<p>Mitigation 8-2. Implement <i>Mitigation 8-1</i> above with respect to Essential Fish Habitat. This measure would reduce the project's impact on Essential Fish Habitat to a less-than-significant level.</p>	Applicant	LS

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 SU = Significant unavoidable impact
 NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>possible effects represent a potentially significant impact.</p>				
<p>Impact 8-3: Potential Project Impacts on the California Clapper Rail. Project demolition and construction would occur adjacent to intertidal wetlands along the Smith Slough tidal channel which may be sufficient to support incidental foraging by the California clapper rail, a federal- and state-listed endangered species. Noise or other potential disturbance of intertidal habitat due to project demolition or construction activities could interfere with the ability of the clapper rails to detect predators. Impacts on clapper rails from noise associated with building demolition, pile driving, heavy construction, and earthmoving equipment in particular are potentially significant. These possible effects represent a potentially significant impact.</p>	S	<p>Mitigation 8-3. Coordinate with the U.S. Fish and Wildlife Service (USFWS) and CDFG on California clapper rail issues; and if required by the USFWS or CDFG, formulate and implement a <i>Habitat Mitigation and Monitoring Plan</i> (HMMP) for this species to the satisfaction of the USFWS and CDFG. If determined to be warranted in consultation with the USFWS or CDFG, the HMMP could stipulate avoidance of demolition or construction operations during the California clapper rail breeding season. If a protocol clapper rail survey is identified by the USFWS or CDFG to be necessary to adequately determine presence of breeding species in the project vicinity, the survey should be conducted during the breeding season, prior to demolition or construction. If the breeding survey detects clapper rail or other special-status bird species' breeding territories in adjacent wetlands, the USFWS and CDFG shall be consulted to determine if the distance of the territory from the proposed demolition and construction activity provides a suitable buffer requiring no further action. If breeding territories are found to be potentially affected by demolition- or construction-</p>	Applicant	LS

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 NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>related noise, all such activities should be prohibited within the buffer area as specified by the USFWS and/or CDFG.</p> <p>Consultation with the CDFG associated with this mitigation should be coordinated with all project-related State permit and certification procedures, including the required BCDC permit renewal and RWQCB certification process.</p> <p>A grading permit for the project should not be issued until the California clapper rail issues are resolved to the satisfaction of the USFWS and CDFG. Copies of written correspondence between the USFWS and CDFG and the applicant demonstrating resolution of this issue shall be submitted to the City prior to issuance of a demolition or grading permit. Implementation of these measures would reduce this potential impact to a <i>less-than-significant level</i>.</p>		
<p>Impact 8-4: Project General Demolition and Construction Noise Impacts on Wildlife. Foraging and reproductive activities of wildlife in the adjacent sensitive habitat areas, including habitat of special-status species, could be disrupted by project demolition and construction activity and associated noise. Noise impacts</p>	S	<p>Mitigation 8-4. Coordinate with the USFWS and CDFG on noise issues related to special-status species in the adjacent sensitive habitats; and if required by the USFWS or CDFG, formulate and implement an associated <i>Habitat Mitigation and Monitoring Plan</i> (HMMP) for one or more of these potentially affected species to the satisfaction of</p>	Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>resulting from possible building demolition or pile driving and other demolition or construction activities could disrupt reproductive success if conducted during the breeding and nesting seasons of the California clapper rail and California least tern, each federal- and state-listed endangered species; Western snowy plover, a federally listed threatened species and state-listed species of special concern; California black rail, a federally listed species of concern and state-listed threatened and fully protected species; northern harrier, a state-listed species of special concern; and the short-eared owl, saltmarsh common yellowthroat, and Alameda song sparrow, which are each federally listed species of concern and state-listed species of special concern. These possible effects represent a <i>potentially significant impact</i>.</p>		<p>the USFWS and CDFG. If determined to be warranted by the USFWS or CDFG, the HMMP could stipulate avoidance of demolition or construction operations during special-status species' breeding season. If a protocol special status species survey is identified by the USFWS or CDFG to be necessary to adequately determine the presence of breeding special-status species in the project vicinity, any such special-status species surveys shall be conducted during the breeding season, prior to demolition or construction. If the breeding survey detects special status species' breeding territories in adjacent wetlands, the USFWS and CDFG shall be consulted to determine if the distance of the territory from the proposed demolition and construction activity provides a suitable buffer requiring no further action. If breeding territories are found to be potentially impacted by demolition- or construction-related noise, all such demolition or construction activities should be prohibited within the buffer area as specified by the USFWS and/or CDFG.</p> <p>Consultation with the CDFG associated with this mitigation should be coordinated with all project-related State permit and certification procedures,</p>		

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>including the required BCDC permit renewal and RWQCB certification process.</p> <p>A demolition or grading permit should not be issued for the project until these noise issues are resolved to the satisfaction of the USFWS and CDFG. Copies of written correspondence between USFWS and CDFG and the applicant demonstrating resolution of this issue shall be submitted to the City prior to issuance of a grading permit.</p> <p>Implementation of these measures would reduce this potential impact to a <i>less-than-significant level</i>.</p>		
<p>Impact 8-5: Project-Related Bird Collisions. The project proposes to construct residential and parking structures up to 60 feet in height over the approximately 14-acre project site adjacent to the Bair Island Wildlife Refuge. Such structures are likely to cause bird collision mortality due to lighting and window hazards. These collisions are inevitable and constitute a <i>significant unavoidable impact</i>.</p>	S	<p>Mitigation 8-5. Reduce the potential for collisions by adopting, as part of the project's architectural review process, a <i>lighting plan</i> that emphasizes minimal exterior night-lighting, use of low-intensity exterior lighting, use of cutoff lights and shielding techniques that focus exterior light downward, and use of perimeter lights that are timed by project management to shut off automatically when not in use. Implementation of this measure to the satisfaction of the City's Architectural Review Committee and Planning</p>	Applicant	SU

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		Commission would reduce this impact to a less-than-significant level .		
<p>Impact 8-6: Project-Related General Outdoor Lighting Impacts on Biological Resources. The project would result in additional lighting at a close distance to sensitive wetland habitats. Outdoor lighting from the proposed project may adversely affect nocturnal, roosting, and nesting birds, and disrupt natural diurnal rhythms of a wide range of animals and plants associated with the adjacent tidal slough and opposite Bair Island. These possible effects represent a potentially significant impact.</p>	S	<p>Mitigation 8-6. Implementation of <i>Mitigation 8-5</i> would reduce this potential impact to a less-than-significant level.</p>	Applicant	LS
<p>Impact 8-7: Potential Project-Related Introduction of Invasive, Non-Native Plants. Since the project site is adjacent to the Bair Island Wildlife Refuge, a federally managed wildlife reserve, project introduction of invasive, non-native plant species could have an adverse impact on native vegetation and special-status wildlife in the Refuge area. Special-status wildlife species known to inhabit the area, such as California clapper rail and salt marsh harvest mouse, are dependent on native salt marsh vegetation and adjacent upland areas. Displacement of native vegetation by invasive</p>	S	<p>Mitigation 8-7. Exclude invasive, non-native species from the project landscape plan, especially within the proposed 50-foot-wide trail easement along the north edge of the project site, in order to reduce the identified potential impact of using non-native species to a less-than-significant level. The landscape plan plant list shall be subject to City approval.</p>	Applicant	LS

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 NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>non-native species, especially within the proposed 50-foot-wide trail easement along the north edge of the project site, would adversely impact habitat for these and other special-status wildlife species. Use of such plants in landscaping would therefore present a <i>potentially significant impact</i>.</p> <p><i>HYDROLOGY AND WATER QUALITY</i></p> <p>Impact 9-1: Potential Flooding Impacts. Preliminary plans indicate that the project would fill the site to a <u>finished grade</u> elevation of 108.0 feet Redwood City Datum (RCD). As noted in subsection 9.1.1(f) herein (Sea Level Rise), an increase in sea level of 0.85 feet by the year 2036 has been predicted, resulting in a potential "highest estimated tide" elevation in the project vicinity of 108.10 feet RCD. Based on the project geotechnical engineers' estimates of on-site settlement (ranging from approximately 1.75 to approximately 4.25 inches, or 0.15 to 0.35 feet, across the site), the 108.0-foot RCD <u>finished grade</u> indicated on project preliminary plans would potentially settle over time to an elevation ranging from 107.65 to 107.85 feet RCD. This would be below the computed "highest estimated tide" elevation in the project vicinity of 108.10 feet</p>	S	<p>Mitigation 9-1. To the satisfaction of the City Engineer, incorporate adequate allowances for anticipated sea level rise and on-site settlement in the project final grading plan and associated finished grade specifications.</p> <p>If installation of a protective levee and wall around the project site is ultimately selected as an alternative to raising the finished grade in order to protect the project from a 100-year flood, the levee system would require studies to address system design, embankment and foundation stability, sea level rise, on-site settlement, interior drainage, and operation and maintenance plans, all of which would be subject to approval by the City of Redwood City.</p>	Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
RCD. This apparent discrepancy between the finished grade elevation indicated on project preliminary plans and the projected vicinity "highest estimated tide" elevation represents a potentially significant impact .		Implementation of these measures would reduce potential project flooding impacts to a less-than-significant level .		
Impact 9-2: Temporary Soil Erosion Increase and Sedimentation Impacts During Project Construction. Project grading, filling, and removal of vegetative cover could cause disturbance of watershed lands and would expose large areas of bared soil surface to erosion with the potential for attendant sedimentation in the adjacent Smith Slough tidal channel, Smith Slough, and Redwood Creek. This is considered a potentially significant impact .	S	<p>Mitigation 9-2. In accordance with National Pollution Discharge Elimination System (NPDES) regulations, file a Notice of Intent with the State Water Resources Control Board (SWRCB), Division of Water Quality. Include with the filing a description of erosion control and stormwater treatment measures to be implemented during (including <i>Start at the Source</i> measures) and following project construction, as well as a schedule for monitoring of performance. These measures are referred to as Best Management Practices (BMPs) for the control of point and non-point source pollutants in stormwater and constitute the <i>Stormwater Pollution Prevention Plan</i> (SWPPP).</p> <p>Project grading shall not commence (no grading permit will be issued by the City) until an NPDES permit is issued, demonstrating that project erosion control and stormwater treatment measures, including the project SWPPP, meet SWRCB requirements.</p>	Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>Impact 9-3: Increased Stormwater Contaminant Loading--Potential Violation of Water Quality Standards. The project will replace an existing urban use (the 12-screen cinema complex) with a new urban use (residential/retail complex). Presumably,</p>	S	<p>Fully implement the erosion control and other water quality measures cited in the SWPPP and monitor these measures during the SWPPP-specified time period following completion of project construction. The RWQCB would be responsible for inspecting these measures, typically on an annual basis, while the sponsor would be responsible for implementing any remedial measures if the Board indicated that site stormwater quality objectives were not being met. (The City Engineering Division would also be responsible for post-construction inspection of all water quality mitigation measures that would eventually become part of the maintained infrastructure of the project, including source control and water quality treatment measures.)</p> <p>Implementation of these measures would reduce the construction-related soil erosion and sedimentation impacts to a less-than-significant level.</p> <p>Mitigation 9-3. Incorporate the following site-appropriate Best Management Practices (BMPs), or their equivalents, into the project stormwater drainage system design and <i>Stormwater Pollution Prevention Plan</i> (SWPPP) in order to comply with the requirements of the NPDES General Permit</p>	Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>measures to minimize stormwater contaminant loading from the extensive existing cinema parking area and from the limited existing cinema landscaped areas were incorporated into the previous development (1990). The proposed new high-density residential/retail project would include longer parking durations, more landscaped area, and increased use of fertilizers, pesticides and herbicides. As a result, the project could result in incremental increases in the stormwater contaminant loading for some heavy metals, as well as possible increases in oil and grease and fertilizer/pesticide/herbicide residues. The incremental contaminant increase could further impair the already impaired quality of stormwater discharged to the Smith Slough tidal channel. This possible project effect is considered a <i>potentially significant impact</i>.</p>		<p>and anticipated imminent updating of the Municipal Stormwater Permit for Redwood City:</p> <ul style="list-style-type: none"> ■ Integrate start-at-the-source measures for stormwater control and treatment into the project stormwater drainage design. Such measures could include pervious parking lots, infiltration basins, vegetated (grass) swales ("bioswales"), or other measures designed to minimize stormwater runoff (through maximization of local infiltration and detention storage), settle out fine sediments, and filter contaminants. Oil/grease traps, sand filters, or similar in-line filtration systems for storm drain systems should also be considered. Such traps, filters, or separators must be accompanied by a clean out/maintenance program that ensures acceptable trap efficiencies, specifies appropriate disposal procedures, and reduces the risk that the traps become sinks for pollutants. ■ Institute a regular schedule of street and parking lot sweeping. The frequency of cleaning shall be higher (twice monthly) during the winter rainy season, yet maintained year-round. Regular cleaning of paved surfaces reduce the "first flush" 		

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>phenomenon wherein the highest concentration of contaminants are flushed off the surfaces during the early portion of a runoff event. Cleaning practices may have to be modified if porous pavement systems are employed.</p> <ul style="list-style-type: none"> ■ Where bioswales are incorporated in site development plans to convey stormwater from paved surfaces to the adjacent Smith Slough tidal channel, implement design guidelines described in <i>Start at the Source: Design Guidance for Stormwater Quality Protection</i>, including the following: <ul style="list-style-type: none"> - Swale lengths should be a minimum of 100 feet to provide effective filtering; and - If swale slopes exceed two percent, check structures should be installed at appropriate intervals along the length of the swale to slow flow velocities and to increase infiltration opportunities. ■ Revegetate all disturbed areas at the onset (October) of the first winter rainy season following the completion of construction, and at a similar time during the next one to two 		

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>years as required to fully revegetate the site. Use of an erosion control grass and forb mixture, favoring native species, is best suited to this task. In addition, install biodegradable surface erosion protection (e.g., natural mulch, jute netting, erosion control blankets, punched straw) to reduce the erosive energy of incoming raindrops for at least the first winter season following construction. If project construction spans two consecutive winter seasons, these erosion protection measures shall be implemented at the beginning of each winter season, unless there is successful establishment of vegetal cover after the first year.</p> <ul style="list-style-type: none"> ▪ Install silt fencing along the construction perimeter prior to the start of construction, and keep the fencing in-place until construction is completed and erosion-control winterization measures are implemented. ▪ Prepare and implement an irrigation scheduling and chemical management plan governing the application of irrigation water and chemical amendments to landscaped areas adjacent to buildings and within or 		

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>adjacent to parking lot facilities. Components of such a plan likely would include an irrigation schedule linked to soil moisture levels or related variables (such as temperature, humidity, and wind speed). Specific chemical inputs proposed for application to vegetation shall be among those tested and cleared by the USEPA. Frequency and scheduling of these chemical inputs also shall be indicated based on site-specific characteristics (such as soil and vegetative cover and rates of uptake) and the acknowledged sensitivity of downstream receiving waters.</p> <p>Also, incorporate into the project storm drainage plan and/or SWPPP any additional measures required to comply with the new C.3 regulations adopted as part of the San Mateo Countywide Stormwater Pollution Prevention Program (STOPPP).</p> <p>Implementation of these measures would reduce the water quality impacts of the proposed project to a less-than-significant level.</p>		

INFRASTRUCTURE AND PUBLIC SERVICES

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 SU = Significant unavoidable impact
 NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>Impact 10-1: Project-Related and Cumulative Municipal Water Service Demand. The project would increase the demand for municipal water service in the project vicinity. Preliminary estimates indicate that the project could generate a demand for approximately 3,250 to 3,400 gallons per minute of emergency fire flow, up to 744,000 gallons of total fire flow volume, 326,286 gallons of emergency water storage on- or off-site, and a net increase of 92,305 gallons of domestic water demand (approximately 0.28 acre-feet) per average day, or 103.6 acre-feet per year. Redwood City already exceeds its contracted allocation of water from the San Francisco Public Utilities Commission (SFPUC) by over 1,000 acre-feet annually, and is predicted to exceed its allocation by over 2,000 acre-feet annually by 2010. As required by California SB 610, the Redwood City City Council approved a Water Supply Assessment (WSA) for the Bayside Gardens project on January 26, 2004. That assessment approval pertained to the adequacy and reliability of the assessment itself and was not intended as an approval or disapproval of the Bayside Gardens project itself. The WSA for the proposed project has determined that the City does not currently have sufficient water supply to meet the projected water demands of the</p>	S	<p>Mitigation 10-1. As mandated by State SB 221, prior to City approval of any project tentative map, when the project details have been more definitively established, the City of Redwood City Public Works Services Department would be required to also undertake a <i>subsequent water supply analysis</i>, which describes the citywide water supply situation at that future time, reflecting City progress on: (1) current studies and plans for finding opportunities for water transfers, (2) implementing its approved recycled water program, and (3) implementing additional “best management practices” (BMPs) for water conservation. As mandated by SB 221, no project tentative map could be approved until a <i>water supply analysis</i> concludes that sufficient water will be available to serve the proposed project needs.</p> <p>The project applicant will also be required to comply with all applicable current and future City of Redwood City water demand performance standards, including standards included in the <u>City of Redwood City Urban Water Management Plan</u>, the City’s recycled water project, and the City’s water conservation program.</p>	City and Applicant	SU

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>proposed project together with those of its existing customers and the demands of other planned development. Therefore, the anticipated project-related and cumulative demands for water service would represent a potentially significant project and cumulative impact.</p>		<p>Minus substantial evidence that these measures would mitigate this impact--i.e., would lead to the identification and realization of an adequate additional water source--the effectiveness of this mitigation measure is unknown at this time. Therefore, until an achievable water supply source is identified, this impact is considered to be a significant unavoidable impact (i.e., would require City adoption of a Statement of Overriding Considerations).</p> <p>Also, provision of the water system delivery improvements necessary to serve 600 units of multi-family housing at this location may limit City ability to make similar water delivery system improvements at other more centralized locations identified in the <u>Redwood City Strategic General Plan</u> as more appropriate for high density residential development (see <i>Impact 4-1</i>).</p>		
<p>Impact 10-2: Project-Related and Cumulative Impacts on Sewage Treatment and Transmission Capacity. The project would increase sewage generation in the project vicinity. Preliminary estimates indicate that the project could generate a total of approximately 94,654 gallons of sewage per day, for a net increase of approximately 79,020 gallons per day. Redwood</p>	S	<p>Mitigation 10-2. Prior to City approval of any project tentative map, the City will need to purchase from the SBSA the dry weather <u>treatment capacity</u> necessary to accommodate the projected net increase in sewage generated by the proposed project. The project's ultimate treatment capacity requirement will be calculated in the final permitting stage. The project applicant</p>	City and Applicant	LS

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<p>City already uses all of its allocated capacity from the South Bayside System Authority (SBSA) treatment plant, but possesses an option to purchase an additional 2.1 million gallons per day (mgd) of dry weather treatment capacity. Because the SBSA treatment capacity allocation to Redwood City is already being exceeded, the current allocation is inadequate to serve the project's projected demand in addition to existing SBSA commitments.</p> <p>In recent years, sewage flow into the SBSA sewage transmission system from Redwood City has occasionally exceeded the current peak wet weather flow capacity right (exclusive of Redwood Shores) of 25.9 mgd. Since 1994-95, the City has exceeded its allocated capacity nine times during the winter. Provision of sewer service to the project site would require modifications to the existing sewer system from the project site to the SBSA treatment plant in order to avoid any further contribution to this existing transmission capacity exceedance.</p> <p>As identified by the City of Redwood City Engineering and Construction Department, the main issue of concern is the limited delivering capacity of the regional transmission system itself</p>		<p>shall reimburse the City for all costs associated with the purchase of this treatment capacity (e.g., the capacity option itself, and associated administrative costs), the procedural details of which will be included in a development permit for the project.</p> <p>In addition, in order to mitigate the limited <u>transmission capacity</u> from the project site to the SBSA treatment plant, the project applicant shall be required to participate on a fair-share basis in any necessary upgrading or construction of: (1) the influent lifting station (ILS) at the treatment plant; (2) the treatment plant itself; and (3) a planned new pump station at Bair Island Road; <i>as well as</i> implement one of the following three design solution alternatives, subject to approval by the City's Engineering and Construction Department:</p> <p><i>(a) Pump Directly to the SBSA Treatment Plant:</i> (1) install a new gravity sewer line from the project site to the new pump station at Bair Island Road, and (2) install new sewer lines from the new pump station to the SBSA treatment plant;</p> <p>or</p>		

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<p>(i.e., pump stations and large force mains delivering member agencies' sewer flows to the treatment plant). According to the SBSA, the City has reached its 25.9 mgd peak wet weather flow (PWWF) capacity rights for the main area of Redwood City. The problem is how to accommodate the additional PWWF from this development, which is estimated as a project net peak off-hour (i.e., residential) flow of 324 gallons per minute (gpm).</p> <p>Because the SBSA treatment capacity allocation to Redwood City is already being exceeded, and because the limited capacity of the sewage transmission system to the SBSA treatment plant would require modifications to the existing sewer system, the project-related and cumulative impacts on sewage treatment and transmission capacity are considered a potentially significant project and cumulative impact.</p>		<p><i>(b) Pump to the SBSA 48-Inch Sewer System Force Main (SSFM):</i> (1) install a new gravity sewer line from the project site to the new pump station at Bair Island Road, (2) install new sewer lines from the new pump station to the existing 48-inch SSFM, and (3) complete minor modifications, if necessary, to the existing SBSA pump station at Maple Street;</p> <p style="text-align: center;">or</p> <p><i>(c) Pump to the SBSA Pump Station at Maple Street:</i> (1) install a new gravity sewer line from the project site to the new pump station at Bair Island Road, (2) install new sewer lines from the new pump station to the existing SBSA pump station at Maple Street, and (3) upgrade the pump station at Maple Street.</p> <p>A detailed discussion of these three pumping alternatives and associated potential design solutions is included in the Bayside Gardens Water and Sewer Report, available for review at the City of Redwood City Community Development Services Department, City Hall, 1017 Middlefield Road. Prior to the final design for construction documents, performance of flow monitoring will be required during wet weather</p>		

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		<p>conditions and completion of modifications to the sewer line will be required as necessary, subject to approval by the City's Engineering and Construction Department.</p> <p>Implementation of these measures, including any one of pumping alternatives (a), (b), or (c) above, would reduce the project and cumulative impact on sewage treatment and transmission capacity to a <i>less-than-significant level</i>.</p>		
<p>Impact 10-3: Emergency Response and Evacuation Impacts. Project-related traffic would create additional traffic congestion on East Bayshore Road and other local roadways, possibly delaying emergency response and limiting the Police Department's ability to evacuate the project vicinity safely during an emergency or major disaster. These possible project effects on emergency response and evacuation in the project vicinity would represent a <i>potentially significant impact</i>.</p>	S	<p>Mitigation 10-3. Implement mitigation measures identified in chapter 7 (Transportation and Circulation) of this EIR to reduce project-related traffic impacts on East Bayshore Road and other local roads to less-than-significant levels. In addition, require City review and approval of project-proposed emergency access provisions prior to tentative subdivision map approval. Implementation of these measures would reduce project impacts on emergency response and evacuation to a <i>less-than-significant level</i>.</p>	Applicant	LS
<p>Impact 10-4: Emergency Access Impacts. The project has the potential to conflict with RCFD standards for road design (e.g., 20 feet of unobstructed width and 45-foot/22-foot minimum outside and inside turning radii, respectively).</p>	S	<p>Mitigation 10-4. As a condition of tentative subdivision map approval, require demonstration by the applicant that the project complies with all applicable City of Redwood City and RCFD road design and emergency access standards. The</p>	City and Applicant	LS

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<p>Any potential conflicts with RCFD road design standards could cause emergency access deficiencies, representing a potentially significant impact.</p>		<p>City may consider other alternatives to these requirements if it determines that such alternatives are feasible and such access will not jeopardize emergency response. Implementation of this measure would reduce the impact to a less-than-significant level.</p>		
<p>Impact 10-5: Project Impacts on Parks and Recreation Services. Currently, no improved parkland exists within a convenient walking distance (e.g., less than ½ mile) of the project site. The new residents resulting from the project's 600-unit residential component would increase neighborhood and community demands for convenient off-site parks and recreation services. The City of Redwood City has not adopted a citywide parks standard; however, in order to maintain the City's current parks ratio of 1.7 acres of parkland per 1,000 residents, approximately 2.1 acres of additional improved parkland at a location or locations convenient to project residents would be necessary to serve the park needs of the projected approximately 1,200 project residents.</p> <p>The proposed project includes an approximately one-acre public trail easement, with seating and native landscaping, along the northern edge of</p>	S	<p>Mitigation 10-5. Implement one of the following two alternative measures:</p> <p>(1) If the <i>Parks, Recreation and Community Services Department Strategic Plan</i> currently being formulated by the City is adopted prior to approval of the project-requested General Plan Amendment, Zoning Text and Zoning Map Amendments, Planned Development Permit, Design Review (Architectural) Permit, or subdivision map, requirements of the Strategic Plan shall apply to that approval; <u>or</u></p> <p>(2) As part of the Planned Development Permit approval process for the project, determine what credit shall be given for the proposed on-site common trail and other recreational amenities and what combination of additional onsite provisions and/or in-lieu off-site improvements or contributions would be</p>	City and Applicant	LS

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<p>the project site parallel to the adjacent Smith Slough tidal channel; as well as a sports court, recreation center with pool, additional smaller pool/recreation area, and play lawns. These facilities would not represent the range of common amenities typically provided at neighborhood and community parks in the City. Unmet project demands for parks and recreation services and associated effects on City parks and recreation services would therefore represent a potentially significant impact.</p>		<p>necessary to adequately meet the parks and recreation needs of the project residents.</p> <p>Implementation of either one of these mitigation measures would reduce project impacts on park facilities and recreational programs to a less-than-significant level.</p>		
<p>Impact 10-6: Cumulative Impacts on Parks and Recreation Services. The projected 17,410 new residents resulting from citywide residential projects that are pending (including the proposed project) or have been recently approved or constructed (see Table 4.1 in chapter 4, Land Use) would require approximately 29.6 acres of parkland in order to maintain the City's current park acreage per capita ratio. Unless adequately mitigated, the project contribution to this unmet demand would represent a significant cumulative impact.</p>	S	<p>Mitigation 10-6: Implementation of <i>Mitigation 10-8</i> would reduce the project contribution to this cumulative impact on parks and recreation services to a less-than-significant level.</p>	City and Applicant	LS
<p>Impact 10-7: Solid Waste Diversion Impacts. The project has the potential to conflict with state-mandated requirements for 50 percent solid</p>	S	<p>Mitigation 10-7. In the final project architectural design, include containers for recyclable materials immediately adjacent to the garbage</p>	Applicant	LS

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<p>waste stream diversion if residents find the locations of recycling bins to be too distant or inconvenient. Site and project plans submitted at this time do not provide enough detail to determine if adequate provisions for recycling have been included in project design. If adequate recycling provisions are not ultimately included, the project could conflict with state-mandated waste stream diversion requirements, representing a potentially significant impact.</p>		<p>containers, or at another suitable location approved by the City. Provide bins for storage of recyclables for each residential unit. These provisions shall be included in project construction plans prior to City issuance of a Certificate of Occupancy. Implementation of this measure would reduce the impact to a less-than-significant level.</p>		

SOILS AND GEOLOGY

Impact 11-1: Geotechnical Hazards Associated with Project Grading. The interaction of existing geotechnical conditions on the project site with the proposed project grading and surface modifications, and their combined effect on surface settlement, seismic hazard, and soil erosion effects, have the potential to result in significant adverse effects. The applicant's preliminary geotechnical investigation (Treadwell & Rollo, August 7, 2001) made an initial assessment of these conditions. A design-level geotechnical investigation would be needed to adequately address all grading and stabilization mitigation needs associated with the project. Without such a study, and without the associated

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Mitigation 11-1. As recommended by the applicant-commissioned Treadwell & Rollo preliminary geotechnical investigation, require the applicant to retain a registered engineering geologist or geotechnical engineer to prepare *detailed, design-level geotechnical investigations* to guide design finalization for all project grading and stabilization activities. The *detailed, design-level geotechnical investigations* shall be performed for each of the structures proposed for the project site. Subsurface conditions shall be explored and laboratory tests conducted on selected soil samples to establish strength parameters for foundation design. Specific recommendations shall be developed for

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<p>supervision of an engineering geologist or geotechnical engineer during project grading and construction, the safety and long-term stability of project improvements could not be assured. These possible geotechnical hazards represent a potentially significant impact.</p>		<p>foundation support for each building (e.g., stiffened grid, rammed aggregate piers, driven concrete piles), slab-on-grade floors, and pavements. The <i>detailed, design-level geotechnical investigations</i> shall include subsurface investigation to further identify the thickness and the consolidation characteristics of the Bay mud underlying the project site. Recommendations from the investigation shall be incorporated into project grading and construction plans to the satisfaction of the City Engineer.</p> <p>Prior to City approval of project final grading plans, the detailed, design-level investigations, relevant recommendations, and all associated project final grading, filling, and foundation plans shall be subject to review and approval by an independent engineering geologist or geotechnical engineer retained by the City Engineer at applicant expense. The <i>detailed, design-level geotechnical investigations</i> shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> ▪ A subsurface investigation (including rotary-wash soil borings) to further identify the thickness and the consolidation characteristics of the Bay mud underlying the project site; 		

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		<ul style="list-style-type: none"> ▪ Estimates of potential settlements for the ground- and pier/pile-supported structures, as well as for downdrag loads; ▪ Detailed geotechnical investigations for each structure proposed for the project site; ▪ Subsurface explorations and laboratory tests on selected soil samples to establish strength parameters for foundation design, and for corrosivity potential (e.g., sulfate content) of the fill and Bay mud on foundation elements and buried utilities; and ▪ Specific recommendations for foundation support (e.g., stiffened grid, rammed aggregate piers, driven concrete piles) for each building, slab-on-grade floors, and pavements. 		
		<p>The project civil engineer shall certify that all relevant provisions of the investigation have been incorporated into the grading and construction plans. All earthwork and site preparation shall be performed under the direct supervision of a registered engineering geologist or geotechnical engineer, who shall also meet the associated</p>		

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<p>Impact 11-2: Total and Differential Settlement. The presence of weak, compressible Bay mud underlying the existing on-site fill layer is the most significant factor influencing the selection of a proper foundation system for the proposed project. The project's structural loads may be too great to be adequately supported on conventional shallow foundations bottomed in fill or weak Bay mud. Shallow foundations would potentially experience excessive total and differential settlements. These possible effects represent a potentially significant impact.</p>	S	<p>reporting requirements of the City Engineer. Implementation of these measures would reduce these potential impacts to a less-than-significant level.</p> <p>Mitigation 11-2. The <i>detailed, design-level geotechnical investigations</i> required under <i>Mitigation 11-1</i> shall include laboratory analyses of all materials proposed for use as fill. These analyses shall be sufficient to adequately estimate the rate and total amount of fill consolidation following compaction, and the resulting likelihood of differential settlement. The final design of all fills shall incorporate the results of these analyses to minimize the destructive effects of future settlement, and the investigation shall set forth guidelines that address, at a minimum and to City satisfaction, the composition of fill materials, methods of fill placement, the required degree of fill compaction, and the layout of the subsurface drainage systems needed to adequately dewater the fill. In addition, all improvements to be constructed on top of or within fills shall be designed in accordance with the recommendations of the <i>detailed, design-level geotechnical investigations</i>. Once a final grading plan has been prepared and building loads determined, estimates of potential settlements for</p>	Applicant	LS

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		<p>the ground- and pile-supported structures, as well as for downdrag loads, shall be provided. Following completion of fills, settlement shall be monitored and improvement plans shall be modified as necessary to City satisfaction (see details below).</p> <p>All recommendations contained in and derived from the <i>detailed, design-level geotechnical investigations</i> shall be incorporated into the conditions of approval for each structure or construction phase, with implementation enforced by the City throughout the construction period. In general, these recommendations are expected to include, but not be limited to, the following provisions:</p> <ul style="list-style-type: none"> ▪ Support project buildings on stiffened grid foundations, rammed aggregate piers, or driven concrete piles. At this preliminary point in the geotechnical analysis, Treadwell & Rollo has concluded that the most appropriate foundation system would depend on the particular building type and height (e.g., apartment building or parking structure), structural loads, location on the site, and allowable differential settlement. In general, the relatively light, wood-framed residential 		

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<p>Impact 11-3: Ground Shaking. Development of the proposed project would place new residences</p>	S	<p>structures could be supported on a stiffened grid foundation or on rammed aggregate piers. However, in locations of soft soil (e.g., near the tidal channel), rammed aggregate piers would be necessary to support the proposed residential structures. Any steel- or concrete-framed mid-rise structures (e.g., the proposed parking structures) would require support from rammed aggregate piers or driven concrete piles. Load tests would be required to evaluate the ultimate capacity and required length of the piers and piles.</p> <ul style="list-style-type: none"> ▪ If computed potential settlements are found to be excessive, consider a pre-construction <i>surcharge program</i> to reduce the effects of settlement. Surcharging consists of placing excess fill in areas where settlements are a concern and leaving it in place a sufficient amount of time to partially pre-consolidate the underlying compressible soil. <p>Implementation of these measures would reduce this potential impact to a <i>less-than-significant level</i>.</p>	City and Applicant	LS

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<p>and businesses in a subregion that is expected to experience severe earthquake-induced ground shaking during the useful life of the project improvements. This ground movement could cause differential settlement of poorly consolidated on-site soils (including Bay mud) and induce ground failure within on-site alluvial soils that are prone to liquefaction (including some layers below Bay mud). These possible responses to anticipated seismic activity represent a potentially significant impact.</p>		<p>recommended under <i>Mitigations 11-1</i> and <i>11-2</i> include analysis of project site seismic stability, evaluation of liquefaction potential, and soil response characteristics with respect to ground acceleration.</p> <p>The <i>detailed, design-level geotechnical investigations</i> should include the following:</p> <ul style="list-style-type: none"> ▪ Seismic stability analysis of the existing on-site soil, including fill, Bay mud, and underlying alluvial deposits; ▪ Evaluation of liquefaction potential through the performance of additional cone penetration tests, borings, and/or equivalent methods; and ▪ Determination of site-specific soil response characteristics and maximum credible ground acceleration for an earthquake recurrence interval specified by the City. <p>Recommendations from the investigations, including appropriate soil stabilization and foundation construction techniques, minimum setbacks around potentially unstable areas, and criteria for the compaction and treatment of on-site fills, shall be incorporated into the final project</p>		

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		<p>grading and foundation plans. In general, these recommendations are expected to include the following requirements:</p> <ul style="list-style-type: none"> ▪ that all construction to comply with the Uniform Building Code (UBC, 1997) for Seismic Zone Factor 4 and Soil Profile Type S_F (or possibly S_D), ▪ that all project structural designs be based on proper estimates by the project geotechnical engineer of peak and maximum repeatable earthquake-induced ground surface accelerations expected to occur on the project site; and ▪ that excavations will be adequately sloped or shored in order to minimize ground movements. Typically, when excavation extends into Bay mud, 4:1 or flatter slopes are required to reduce movements. <p>Implementation of these measures--combined with conformance with standard Uniform Building Code, City of Redwood City, and other applicable regulations--would reduce the potential effects of ground shaking to a less-than-significant level.</p>		

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<p>Impact 11-4: Encountering Groundwater in Bay Mud During Excavation. Excavation for the proposed project's below-grade installations, such as utilities, might be difficult due to the high groundwater and the relatively shallow depth of underlying Bay mud. This condition represents a <i>potentially significant impact</i>.</p>	S	<p>Mitigation 11-4. Require that the <i>detailed, design-level geotechnical investigations</i> recommended under <i>Mitigations 11-1</i> through <i>11-3</i> also include adequate analyses of groundwater and Bay mud within the limits of all foundation and utility construction, to City satisfaction. The analyses shall make recommendations regarding dewatering techniques, slope and shoring requirements for excavations, buffer zones for construction equipment near slope edges, the potential for requiring light grading equipment, subgrade remediation techniques, and the use of excavated fill. Project grading and construction plans shall incorporate the results and recommendations of these analyses. In general, these recommendations are expected to include, but not be limited to, the following provisions:</p> <ul style="list-style-type: none"> ▪ Soil excavated from below the water level would be saturated and would require drying before it can be used as fill. Continuous dewatering of excavations might be required. ▪ The sides of the excavations should be sloped or shored to minimize ground movements; steep cuts are not possible in Bay mud unless shoring is used. Typically, when excavation extends into Bay mud, 4:1 	City and Applicant	LS

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		<p>or flatter slopes are required to reduce movements.</p> <ul style="list-style-type: none"> ▪ Construction equipment would be required to be kept away from the edges of slopes in order to reduce vibration degradation. Use of light grading equipment should be considered to avoid creating ruts in the subgrade, a situation that might require pumping. Rutted subgrade areas could be remediated by over-excavating the soft area to a depth of 18 to 24 inches, placing a geotextile at the bottom of the over-excavation, and backfilling with suitable granular material. ▪ Excavated Bay mud should not be used as fill beneath structures or pavement. When placing substantial fill directly on top of Bay mud, the fill might need to be placed in thin, uniformly thick lifts to prevent "mud waves" from forming. Mud waves can damage structural elements already installed, particularly piles and underground utilities. <p>The project civil engineer shall certify that all relevant provisions of the <i>detailed, design-level geotechnical investigations</i> have been</p>		

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		<p>incorporated into the grading and construction plans.</p> <p>All earthwork and site preparation shall be performed under the direct supervision of a certified engineering geologist or geotechnical engineer.</p> <p>Implementation of these measures would reduce this impact to a less-than-significant level.</p>		
<p>Impact 11-5: Corrosive Soils. The Bay mud layer underlying the project site is expected to have a high sulfate content. This condition, in addition to the potential for other corrosive soil conditions (e.g., chloride, pH) on-site, could result in long-term damage to building foundations and underground utility systems, a possibility that represents a potentially significant impact.</p>	S	<p>Mitigation 11-5. Require that the <i>detailed, design-level geotechnical investigations</i> recommended under <i>Mitigations 11-1 through 11-4</i> include an evaluation of corrosive soils within the limits of all foundation and utility construction. Wherever corrosive soils are found in sufficient concentrations, recommendations shall be made to City satisfaction to protect iron, steel, metal, and concrete from long-term deterioration caused by contact with corrosive on-site soils. In general, these recommendations are expected to include, but not be limited to, the following provisions:</p> <ul style="list-style-type: none"> ▪ Protection of buried iron, steel, galvanized steel, cast iron, ductile iron, and dielectric coated steel or iron (including all buried 	City and Applicant	LS

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		<p>metallic pressure piping) against corrosion from soil.</p> <ul style="list-style-type: none"> ▪ Protection of buried metal and cement structures in contact with earth surfaces from chloride ion concentrations. ▪ Use of sulfate-resistant concrete mix for all concrete in contact with the ground, including piers, piles, pile caps, and grade beams. ▪ Consultation with a corrosion expert during the project's detailed design phase to help design the most effective corrosion protection. <p>Implementation of this measure would reduce this potential to a less-than-significant level.</p>		
<p>Impact 11-6: Soil Erosion and Sedimentation. Project development (grading) would temporarily disturb the site's existing topography and vegetative cover, leaving soils exposed to wind and water erosion during the construction period. Eroded soils could be washed either directly into the adjacent Smith Slough tidal channel or into on-site drainage facilities, which drain into the tidal channel. Resulting sedimentation could</p>	S	<p>Mitigation 11-6. Require that the applicant prepare an <i>erosion control plan</i> subject to City approval and consistent with the required project <i>Stormwater Pollution Prevention Plan (SWPPP)</i> (see <i>Mitigation 9-2</i>). Implement the plan during construction. Erosion during all phases of construction shall be controlled through the use of erosion and soil transport control facilities. These shall include the use of catch basins and filter</p>	City and Applicant	LS

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<p>affect the flows of Smith Slough and Redwood Creek, increasing flooding potential and maintenance problems. In addition, suspended sediment would degrade water quality in the tidal channel, slough, and creek by increasing turbidity. These possible effects of soil erosion represent a potentially significant impact.</p>		<p>fabrics, and the direction of stormwater runoff away from disturbed areas. The plan shall also provide for long-term stabilization and maintenance of remaining exposed soils after construction is completed. Areas disturbed by construction shall be either covered with impervious surfaces (e.g., buildings and pavement) or fully stabilized with landscaping and/or native vegetation. All revegetated areas shall be irrigated and maintained as necessary to ensure the long-term survival of the vegetation.</p> <p>Implementation of this measure would reduce this potential impact to a less-than-significant level.</p>		

PUBLIC HEALTH AND SAFETY

Impact 12-1: Safety Impacts Related to San Carlos Airport. The proposed project would introduce new residential development, including approximately 1,200 full-time residents, within the planning area of the San Carlos Airport Land Use Plan (ALUP). Until project plans are submitted for required review and approval by the Federal Aviation Administration (FAA) (airspace review) and by the City/County Council of Governments (C/CAG) of San Mateo County, in its designated role as the County Airport Land Use Commission

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Mitigation 12-1. In addition to the required project review by C/CAG per PUC section 21670 et seq., the applicant shall submit a *Notice of Proposed Construction or Alteration (FAA Form 7460-1)* to the FAA for airspace review. If the proposed project structures are deemed to be obstructions to air navigation, specific mitigation measures required by the FAA shall be implemented to ensure that navigation is not obstructed.

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<p>(ALUC), it should be assumed that the proposed project would introduce a <i>potentially significant public health and safety impact.</i></p>		<p>In order to minimize potential conflict between project development and the continued safe and efficient operation of San Carlos Airport, and as outlined in the San Carlos ALUP, the City shall also forward the project plans and a description of the project as well as the General Plan Amendment and Zoning Text and Zoning Map Amendment applications to the C/CAG Airport Land Use Commission for Commission review and recommendation. Based on the Commission's review of the proposed project, although outside the San Carlos ALUP designated Avigation Easement Review Area, the project <i>may require</i> the granting of an Avigation Easement over all or an appropriate portion of the project site, following the process outlined in the San Carlos ALUP, Section H, subsection 4, p. IV-52. Under such an easement, the proposed project residential uses would be considered as "conditional," and as such, could be required to comply with certain C/CAG Airport Land Use Commission recommended safety measures. Once approved by C/CAG, the project Avigation Easement would be recorded on the title of each included property in the Bayside Gardens development and remain on each included property in perpetuity. The Avigation Easement would constitute a "buyer awareness measure,"</p>		

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		<p>and would require transfer of appropriate disclosure documents to buyers and renters which include an acknowledgment of potential nuisance and safety issues associated with property ownership and tenancy in proximity to a general aviation facility.</p> <p>Regardless of the C/CAG decision regarding the Avigation Easement, the transfer of mandatory disclosure documents would be completed as part of the required California Department of Real Estate <i>Transfer Disclosure Statement (TDS)</i> given to all prospective buyers and renters.</p> <p>Implementation of this measure would reduce safety impacts related to San Carlos Airport to a less-than-significant level.</p>		

NOISE

Impact 13-1: Project Compatibility with the Existing and Projected Noise Environment.

As currently proposed at this conceptual stage of project architectural design, the proposed project residential building nearest the U.S. 101 freeway would have apartments that overlook the freeway. Future noise levels at the facades of these units would be expected to measure up to 78 dBA

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Mitigation 13-1. The applicant shall conduct and submit an *acoustical study* for the project multifamily residential component in accordance with State Title 24 requirements. The study report shall identify to the satisfaction of the City of Redwood City Building Department noise insulation features and other elements (e.g., forced-air mechanical ventilation, sound-rated

Applicant

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<p>CNEL. In addition, the facades of perimeter apartments with views of U.S. 101 would be exposed to noise levels of up to 70 dBA CNEL. Both of these situations would represent a noise environment in which “new residential construction or development should not be undertaken” according to the <u>Redwood City Strategic General Plan Noise Element</u>, and which is also considered incompatible with residential uses according to the <u>San Carlos Airport Land Use Plan</u>. This condition would therefore represent a potentially significant impact.</p>		<p>windows) to be included in the final design of the project residential structures sufficient to maintain interior noise levels at or below City and state standards (45 dBA CNEL or L_{dn}). This report shall be submitted to and approved by the City's Building Department prior to City issuance of a residential building permit. Implementation of this measure would reduce this potential impact to a less-than-significant level.</p>		
<p>Impact 13-2: Project Demolition and Construction Period Ground-Borne Vibration Levels. Project demolition and construction activities could generate substantial vibration in the project vicinity. In particular, project construction could involve driving of piles up to 90 feet in length (and potentially longer, depending on project final foundation engineering; see subsection 11.3.4 in chapter 11, Soils and Geology, of this EIR), which could result in temporary ground-borne vibration levels that may damage nearby structures or interfere with the enjoyment of nearby daily activities. These possible effects represent a potentially significant impact.</p>	S	<p>Mitigation 13-2. Reduce ground-borne vibration levels during the project demolition and construction period by incorporating conditions in project demolition and construction contractor agreements that stipulate the following ground-borne vibration abatement measures:</p> <ul style="list-style-type: none"> ▪ Restrict vibration-generating activity to between the hours of 7:00 AM and 7:00 PM, Monday through Friday. Prohibit such activity on weekends and holidays. ▪ Notify occupants of land uses located within 200 feet of pile-driving activities of the project construction schedule in writing. 	Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>Impact 13-3: Project Demolition and Construction Period Noise. Project demolition and construction activities would temporarily elevate noise levels at nearby residential receptors (Marina Pointe, Villas at Bair Island, and Docktown) as well as at on-site residential areas constructed and inhabited during earlier phases of the project construction period. Noise levels at 50 feet from the demolition or construction equipment source could reach approximately 105 dBA, resulting in intermittent interference with typical residential activities, and exceeding the noise limits established in the <u>Redwood City Strategic General Plan Noise Element</u>. This possibility represents a potentially significant short-term noise impact.</p>	S	<ul style="list-style-type: none"> ▪ Investigate in consultation with City staff possible pre-drilling of pile holes as a means of minimizing the number of percussions required to seat the pile. <p>Implementation of these measures would reduce this potential impact to a <i>less-than-significant level</i>.</p> <p>Mitigation 13-3. Reduce project demolition- and construction-period noise impacts on nearby residences by incorporating conditions in project demolition and construction contract agreements that stipulate the following conventional construction-period noise abatement measures:</p> <ul style="list-style-type: none"> ▪ <i>Construction Plan.</i> Prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with nearby noise-sensitive facilities so that construction activities and the event schedule can be scheduled to minimize noise disturbance. ▪ <i>Noise Disturbance Coordinator.</i> Designate a "noise disturbance coordinator" who would be 	Applicant	SU

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and institute reasonable measures warranted to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site. (The City should be responsible for designating a noise disturbance coordinator and the project applicant should be responsible for posting the phone number and providing construction schedule notices).</p> <ul style="list-style-type: none"> ▪ <i>Construction Hours.</i> Restrict noise-generating construction activity to between the hours of 7:00 AM and 7:00 PM, Monday through Friday. Prohibit such construction activities on weekends and holidays. ▪ <i>Construction Equipment Mufflers and Maintenance.</i> Properly muffle and maintain all construction equipment powered by internal combustion engines. ▪ <i>Equipment Location.</i> Locate all stationary noise-generating construction equipment, 		

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		<p>such as air compressors, as far as practical from nearby residences.</p> <ul style="list-style-type: none"> ▪ <i>Quiet Equipment Selection.</i> Utilize "quiet" construction equipment, particularly air compressors, whenever possible. ▪ <i>Potential Pile Driving.</i> Utilize multiple pile drivers to expedite this potential phase of project construction and reduce the duration of associated impacts. ▪ <i>Blanket Barriers.</i> Cover pile drivers with temporary noise-control blanket barriers. ▪ <i>Pile Holes.</i> Investigate in consultation with City staff possible pre-drilling of foundation pile holes to minimize the number of percussions required to seat the pile. ▪ <i>Posting.</i> As a reminder to construction workers, clearly post construction-period noise control measures at the construction site. <p>Implementation of these measures would substantially reduce project construction- period noise impacts, but occasional exceedances of the</p>		

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		<p>City standards (60 dBA CNEL) at nearby residential areas may still occur. As a result, this impact would remain significant and unavoidable (i.e., would require City adoption of a Statement of Overriding Considerations).</p>		
CULTURAL AND HISTORIC RESOURCES				
<p>Impact 14-1: Disturbance of Prehistoric Cultural Resources. Implementation of the proposed project grading plan, including grading/excavation for new roads, subsurface foundations and infrastructure, could disturb as yet unidentified sensitive, on-site, subsurface cultural resources. This potential represents a potentially significant impact.</p>	S	<p>Mitigation 14-1. Require that a qualified archaeologist be retained at applicant expense to periodically monitor project-related on-site building foundation, infrastructure, and other excavations. In the event that subsurface cultural resources are encountered during approved ground-disturbing activities, work in the immediate vicinity must be stopped and the retained archaeologist shall evaluate the finds. The discovery or disturbance of any cultural resources shall also be reported to the California Historical Resources Information System (CHRIS) and the Native American Heritage Commission. Identified cultural resources shall be recorded on State Department of Parks and Recreation (DPR) form 422 (archaeological sites). Mitigation measures prescribed by these groups and required by the City shall be undertaken prior to resumption of construction activities. If disturbance of a project area cultural</p>	Applicant	LS

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		<p>resource cannot be avoided, a mitigation program, including measures set forth in the City's <i>Cultural Resources Management Program</i> and in compliance with sections 15064.4 and 15126.4 of the CEQA Guidelines, shall be implemented. In the event that any human remains are encountered, earthmoving shall be stopped until the County Coroner's office has been contacted. Implementation of these measures would reduce this potential impact to a <i>less-than-significant level.</i></p>		
<i>AIR QUALITY</i>				
<p>Impact 15-1: Project Demolition and Construction Period Emissions. Project demolition and construction activities, including proposed building demolition, excavation and grading operations, filling, associated construction vehicle traffic, and wind blowing over resultant exposed earth, would generate a combination of exhaust emissions and fugitive particulate matter emissions that would affect local air quality. These possible effects represent a <i>potentially significant impact.</i></p>	S	<p>Mitigation 15-1. Dust emissions from demolition and construction activities can be greatly reduced by implementing fugitive dust control measures. The significance of construction impacts is, according to the BAAQMD Guidelines, determined by whether or not appropriate dust control measures are implemented. Implementation of the following conventional BAAQMD-recommended dust control measures would be expected to reduce this impact to a <i>less-than-significant level:</i></p> <p><u>(1) Demolition Period.</u> Require implementation of the following dust control measures by</p>	Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>contractors during demolition of existing structures:</p> <ul style="list-style-type: none"> (a) Watering shall be used to control dust generation during demolition of structures and break-up of pavement; (b) All trucks hauling demolition debris from the site shall be covered; and (c) Whenever possible, dust-proof chutes shall be used for loading debris onto trucks. <p><u>(2) All Construction Phases.</u> Require implementation of the following dust control measures by construction contractors during all construction phases:</p> <ul style="list-style-type: none"> (a) Water all active construction areas at least twice daily and more often during windy periods. Active construction areas adjacent to existing land uses must be kept damp at all times, or must be treated with non-toxic stabilizers or dust palliatives; 		

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<ul style="list-style-type: none"> (b) Water or cover all stockpiles of debris, soil, sand, or other materials that can be blown by the wind; (c) Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard; (d) 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; (e) Sweep daily (preferably with water sweepers) all paved access roads, parking areas, and staging areas at construction sites; (f) Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets; (g) Hydroseed or apply non-toxic soil stabilizers to inactive construction areas; 		

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		(h) Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.); (i) Install sandbags or other erosion control measures to prevent silt runoff to public roadways; and (j) Replant vegetation in disturbed areas as quickly as possible.		
Impact 15-2: Cumulative Impact on Regional Emissions. The project would require an amendment to the <u>Redwood City Strategic General Plan</u> , and development under the proposed high-density residential designation would generate greater vehicle miles traveled than the existing 12-screen cinema use and could generate more vehicle miles traveled than other commercial and/or office development scenarios permissible under the project site's current <i>Commercial/Office (Office Park Oriented Uses)</i> General Plan designation. This would represent a <i>cumulatively significant impact</i> .	S	Mitigation 15-2. In addition to the transportation demand management (TDM) mitigations identified in chapter 7 (Transportation and Circulation) of this EIR, require the project to provide the following: <ul style="list-style-type: none"> ▪ transit facilities (e.g., bus bulbs/turnouts, benches, shelters, etc.); ▪ project-provided or fair-share participation in adequate shuttle service to the regional transit system and multimodal center (i.e., the downtown, El Camino Real transit corridor and CalTrain station) and to other major local destinations such as employment centers, shopping centers, and schools; 	City and Applicant	SU

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<ul style="list-style-type: none"> ▪ bicycle lanes and/or paths connected to the community-wide network; and ▪ apartment infrastructure (wiring) to allow use of emerging electronic communication technology. <p>The project is a mixed use development that would provide opportunities for non-auto travel and associated reductions in overall trip generation. The emissions forecasts shown in Table 15.5 include an adjustment for internal trips resulting from the mixed use nature of the project. The above mitigation measures, in combination with the mixed use (residential/convenience retail) nature of the proposed project, would reduce emissions by approximately 20 percent. This level of reduction would fall short of the emissions reduction needed to reduce the project's cumulative impact contribution to a less-than-significant level (i.e., to no increase over emissions levels associated with the existing 12-screen cinema use). The project contribution to a cumulative regional emissions impact would therefore remain significant and unavoidable (i.e., would require City adoption of a Statement of Overriding Considerations).</p>		

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