

RESOLUTION NO. 51-12

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RICHMOND CERTIFYING THE ENVIRONMENTAL IMPACT REPORT (SCH NO. 2008022018) FOR THE RICHMOND GENERAL PLAN 2030 AND ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

WHEREAS, in November 2005, the City Council (the “Council”) of the City of Richmond (the “City”), authorized a comprehensive update (the “proposed Richmond General Plan 2030”) to the City of Richmond’s 1994 General Plan; and

WHEREAS, the California Environmental Quality Act (CEQA) requires a lead agency to prepare an Environmental Impact Report (EIR) for projects that would or could have one or more significant impacts on the environment; and

WHEREAS, the City, as the lead agency under CEQA, determined that implementation of the proposed Richmond General Plan 2030 may have one or more significant impacts on the environment; and

WHEREAS, the City retained Atkins (formerly PBS&J), a well-qualified environmental consulting firm, to prepare an EIR for the proposed Richmond General Plan 2030; and

WHEREAS, on February 1, 2008, the City released a Notice of Preparation (the “NOP”) of an EIR for the proposed Richmond General Plan 2030 to responsible agencies, interested parties and organizations, as well as private organizations and individuals that have stated an interest in the proposed Richmond General Plan 2030; and

WHEREAS, on February 28, 2008, the City held a public scoping hearing to solicit guidance on the scope and content of the EIR for the proposed Richmond General Plan 2030; and

WHEREAS, on February 14, 2011, the City released the Draft EIR for the proposed Richmond General Plan 2030 for a 45-day public review and comment period; and

WHEREAS, the Draft EIR for the proposed Richmond General Plan 2030 identifies significant impacts that would or could result from implementation of the proposed Richmond General Plan 2030 relative to air quality, biological resources, climate change, cultural resources, geology, soils, and mineral resources, hazards and hazardous materials, hydrology and water quality, noise, parks and open space, public services, transportation and circulation, and visual resources; and

WHEREAS, the Draft EIR for the proposed Richmond General Plan 2030 identifies mitigation measures to reduce the impacts relative to biological resources, geology, soils, and mineral resources, hazards and hazardous materials, hydrology and water quality, parks and open space, and public services to a level of less-than-significant; and

WHEREAS, after implementation of mitigation measures identified in the Draft EIR for the proposed Richmond General Plan 2030, impacts relative to air quality, climate change, cultural resources, noise, public utilities, transportation and circulation, and visual resources would remain at a level of significant and unavoidable; and

WHEREAS, on March 17, 2011, the Planning Commission of the City of Richmond (the “Planning Commission”) held a public hearing to receive comments on the Draft EIR for the proposed Richmond General Plan 2030;

WHEREAS, on August 15, 2011, the City released the Final EIR for the proposed General Plan; and

WHEREAS, the Final EIR for the proposed Richmond General Plan 2030 sets forth the City's responses to comments on the Draft EIR for the proposed Richmond General Plan 2030 and those responses clarify, correct, and amplify the text in the Draft EIR, as appropriate; and

WHEREAS, the Final EIR for the proposed Richmond General Plan 2030 also includes text changes to the Draft EIR which do not alter the conclusions of the Draft EIR; and

WHEREAS, following a public hearing, on November 3, 2011, the Planning Commission recommended certification of the EIR, adoption of an MMRP, and adoption of a Statement of Overriding Considerations; and

WHEREAS, based on further analysis and, in some cases, incorporation of further mitigation measures identified in the CEQA Findings of Fact, Statement of Significance, and Mitigation Monitoring and Reporting Program (MMRP) contained in Exhibit A attached hereto, a Statement of Overriding Considerations is no longer required because the significant and unavoidable impacts originally identified in the Draft EIR relative to air quality, climate change, cultural resources, noise, public utilities, transportation and circulation, and visual resources have been eliminated; and

WHEREAS, on January 17, 2012, the City Council held a public hearing to consider certifying the EIR for the proposed Richmond General Plan 2030; and

WHEREAS, the City Council finds that the Final EIR adequately analyzes all potential environmental impacts associated with adoption of the Richmond General Plan 2030 and incorporates all reasonable mitigation measures to minimize adverse impacts of future development under the General Plan.

NOW, THEREFORE, BE IT RESOLVED that the City Council does hereby adopt the CEQA Findings of Fact, Statement of Significance, and MMRP contained in Exhibit A attached hereto; certifies the EIR for the proposed Richmond General Plan 2030; and directs the filing of a Notice of Determination with the Office of the Contra County Clerk-Recorder.

I certify that the foregoing resolution was passed and adopted by the Council of the City of Richmond at a special meeting thereof held on April 24, 2012, by the following vote:

AYES: Councilmembers Bates, Beckles, Boozé, Butt, Ritterman, Vice Mayor Rogers, and Mayor McLaughlin.

NOES: None.

ABSTENTIONS: None.

ABSENT: None.

DIANE HOLMES
CLERK OF THE CITY OF RICHMOND

(SEAL)

Approved:

GAYLE MCLAUGHLIN
Mayor

Approved as to form:

BRUCE GOODMILLER
City Attorney

State of California }
County of Contra Costa } : ss.
City of Richmond }

I certify that the foregoing is a true copy of Resolution No. 51-12, finally passed and adopted by the City Council of the City of Richmond at a special meeting held on April 24, 2012.

EXHIBIT A of City Council Resolution 51-12

**CEQA FINDINGS OF FACT, STATEMENT OF SIGNIFICANCE, AND
MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)**

**RICHMOND GENERAL PLAN 2030
FINAL ENVIRONMENTAL IMPACT REPORT
(SCH NO. 2008022018)**



Lead Agency:
City of Richmond
450 Civic Center Plaza
Richmond, CA 94804-1630

April 2012

TABLE OF CONTENTS

CHAPTER 1	7
INTRODUCTION.....	7
CERTIFICATION	7
ORGANIZATION OF CEQA FINDINGS OF FACT.....	8
RECORD OF PROCEEDINGS.....	10
CHAPTER 2	11
PROJECT DESCRIPTION.....	11
PROJECT OVERVIEW	11
PROJECT OBJECTIVES	12
PROPOSED GENERAL PLAN ELEMENTS	12
CHARACTERISTICS OF THE PROPOSED GENERAL PLAN	15
Major Activity Centers.....	15
Key Corridors.....	15
Districts	16
LAND USE MAP AND LAND USE CLASSIFICATIONS	16
Residential Neighborhoods	16
Corridors.....	16
Activity Centers.....	17
Business and Industry	17
Community	17
BUILDOUT PROJECTIONS FOR THE PROPOSED GENERAL PLAN	17
REQUIRED APPROVALS	18
CHAPTER 3	19
CEQA REVIEW AND PUBLIC OUTREACH.....	19
CHAPTER 4.....	20
FINDINGS ON ENVIRONMENTAL EFFECTS.....	20
AIR QUALITY	20
BIOLOGICAL RESOURCES	28
CULTURAL RESOURCES	28
CLIMATE CHANGE	36
GEOLOGY, SOILS, AND MINERALS	43
HAZARDOUS MATERIALS.....	48
HYDROLOGY AND WATER QUALITY.....	54
NOISE.....	60
PARKS AND RECREATION.....	68
PUBLIC SERVICES	70
PUBLIC UTILITIES	72
TRANSPORTATION AND CIRCULATION	79
VISUAL RESOURCES.....	83
CHAPTER 5 FINDINGS REGARDING PROJECT ALTERNATIVES.....	89
ALTERNATIVES DISMISSED FROM FURTHER CONSIDERATION	89
ALTERNATIVES CONSIDERED	89
ENVIRONMENTALLY SUPERIOR ALTERNATIVE.....	91
CHAPTER 6 STATEMENT OF SIGNIFICANCE.....	92
CHAPTER 7 FINDINGS ON MITIGATION MONITORING AND REPORTING PROGRAM	98

CHAPTER 8 FINDINGS ON CHANGES TO THE DRAFT EIR AND RECIRCULATION..... 122
CHANGES TO THE DRAFT EIR 122
CITY COUNCIL ANALYSIS AND REVISION AND ADDITION OF MITIGATION MEASURES 122
FINDINGS REGARDING THE FINAL EIR..... 122

CHAPTER 1 INTRODUCTION

The California Environmental Quality Act (CEQA), (Cal. Pub. Res. Code, §21080) and the CEQA Guidelines (Cal. Code Regs., Title 14, §15063) state that if it has been determined that a project may or will have significant impacts on the environment then an Environmental Impact Report (EIR) must be prepared. Accordingly, an EIR has been prepared by the City of Richmond (hereafter referred to as “the City”) to evaluate potential environmental effects that may result from implementation of the proposed Richmond General Plan 2030. The EIR has been prepared in accordance with the California Environmental Quality Act of 1970, as amended (Cal. Pub. Res. Code, §21000 et seq.), and implementing State CEQA Guidelines (Cal. Code Regs., Title 14, §15000 et seq.).

CERTIFICATION

In accordance with CEQA Guidelines Section 15090, the City of Richmond, as Lead Agency for the Richmond General Plan 2030 (hereafter referred to as “the proposed General Plan”), certifies that:

- a) The Final EIR for the proposed General Plan has been completed and processed in compliance with the requirements of CEQA;
- b) The Final EIR was presented to the City Council of the City of Richmond (hereafter referred to as “the City Council”), as the decision making body for the proposed General Plan, and the City Council reviewed and considered the information contained in the Final EIR prior to adopting the proposed General Plan; and
- c) The Final EIR reflects the City of Richmond's independent judgment and analysis. The City has exercised independent judgment in accordance with Public Resources Code Section 21082.1(c) in retaining its own environmental consultant directing the consultant in the preparation of the EIR as well as reviewing, analyzing, and revising material prepared by the consultant.

These CEQA findings of fact (hereafter referred to as “Findings”), statement of significance, and mitigation monitoring and reporting program have been prepared in accordance with CEQA and the CEQA Guidelines. The purpose of these Findings is to satisfy the requirements of Public Resources Code Section 21081 and Sections 15090, 15091, 15092, and 15097 of the CEQA Guidelines, in connection with the adoption of the proposed General Plan.

Before approving a project (in this case, adoption of a general plan) an EIR must be certified pursuant to Section 15090 of the CEQA Guidelines. Prior to approving a project for which an EIR has been certified, and for which the EIR identifies one or more significant environmental impacts, the approving agency must make one or more of the following findings, accompanied by a brief explanation of the rationale, pursuant to Public Resources Code Section 21081 Section 15091 of the CEQA Guidelines, for each identified significant impact:

- 1) Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
- 2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- 3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

It is recommended that one or more of the specific written findings above be adopted regarding each significant impact associated with the proposed General Plan. Those findings are presented here, along with a presentation of facts in support of the findings. Concurrent with the adoption of these findings, it is recommended that the City Council adopt the Mitigation Monitoring and Reporting Program as presented in Chapter 5 of the Final EIR and Chapter 7 of these Findings.

Section 15092 of the CEQA Guidelines states that after consideration of an EIR, and in conjunction with the Section 15091 findings identified above, the lead agency may decide whether or how to approve or carry out the project. Based on City Council input, these Findings include (1) new and revised mitigation measures and findings, which explain how the measures would reduce effects to below the significance level (i.e., new Mitigation Measures 3.3-2(e), 3.6-1(q), 3.10-3(b), 3.13-3(b), 3.14-3, 3.14-6, and 3.15-1 and revised Mitigation Measures 3.5-1, 3.10-1, and 3.10-2); (2) findings that explain why other impacts are properly characterized as less-than-significant (i.e., air quality impact 3.3-1 and cumulative impacts, cultural resources cumulative impacts identified in EIR Section 3.5, public utilities wastewater treatment and conveyance systems impact 3.13-3 and cumulative impacts, public utilities landfill capacity cumulative impacts identified in EIR Section 3.13, and visual resources impact 3.15-2 and cumulative impacts); and (3) findings that establish and explain why mitigation is the responsibility of another agency and not the City, and that another agency can and should adopt a mitigation measure to reduce the impact to below the applicable significance level. Where an impact would be reduced to a less-than-significant level through implementation of mitigation measures within the responsibility and jurisdiction of another public agency and not the City, the impact is identified in these Findings as "LS-OA."

It is recommended that the City Council expressly finds the Final EIR for the proposed General Plan reflects the City's independent review and judgment, as required by CEQA. In accordance with the provisions of CEQA and the CEQA Guidelines, it is recommended that the City Council adopt these Findings as part of its certification of the Final EIR.

ORGANIZATION OF CEQA FINDINGS OF FACT

The Findings are organized into the following sections:

- **Chapter 1, Introduction** outlines the organization of this document and identifies the location and custodian of the record of proceedings.
- **Chapter 2, Project Description** describes the location, project overview, project objectives, and the required permits and approvals for the Project.
- **Chapter 3, CEQA Review and Public Outreach** describes the steps the City has undertaken to comply with the CEQA Guidelines as they relate to public input, review, and participation during the preparation of the Draft and Final EIRs.
- **Chapter 4, Findings on Environmental Effects** provides specific written findings and supporting explanations regarding each impact associated with the proposed General Plan.
- **Chapter 5, Findings Regarding Environmental Alternatives** provides a summary of alternatives dismissed for analysis in the EIR, the alternatives considered in the EIR, and the environmentally superior alternative, as well as brief summaries of proposed General Plan impacts that reflect the new and revised mitigation measures and analysis included in these Findings.
- **Chapter 6, Statement of Significance** provides a summary of impacts previously identified as significant, unavoidable and adverse that are reduced to a less-than-significant level through: (1) new and revised mitigation measures and findings, which explain how the measures would reduce effects to below the significance level (i.e., new Mitigation Measures 3.3-2(e), 3.6-1(q),

3.10-3(b), 3.13-3(b), 3.14-3, 3.14-6, and 3.15-1 and revised Mitigation Measures 3.5-1, 3.10-1, and 3.10-2); (2) findings that explain why other impacts are properly characterized as less-than-significant (i.e., air quality impact 3.3-1 and cumulative impacts, cultural resources cumulative impacts identified in EIR Section 3.5, public utilities wastewater treatment and conveyance systems impact 3.13-3 and cumulative impacts, public utilities landfill capacity cumulative impacts identified in EIR Section 3.13, and visual resources impact 3.15-2 and cumulative impacts); and (3) findings that establish and explain why mitigation is the responsibility of another agency and not the City, and that another agency can and should adopt a mitigation measure to reduce the impact to below the applicable significance level.

- **Chapter 7, Findings on Mitigation Monitoring and Reporting Program** provides a brief discussion of the project's compliance with the CEQA Guidelines regarding the adoption of a program for mitigation reporting and monitoring.
- **Chapter 8, Findings Regarding Changes to the Draft EIR and Recirculation** provides a summary of the changes to the Draft EIR in response to public comments received, and findings that changes to the Draft EIR and addition of mitigation measures and analysis based on City Council input do not require recirculation of the Draft EIR for public review.

RECORD OF PROCEEDINGS

The documents and other materials that constitute the record of proceedings upon which the City Council's project approval is based are located at: Richmond City Hall - Second Floor, 450 Civic Center Plaza, Richmond, CA 94804-1630. The City of Richmond Planning and Building Services Department is the custodian of such documents and other materials that constitute the record of proceedings. The record of proceedings is provided in compliance with Public Resources Code §21081.6 (a)(2) California Code of Regulations Title 14, §15091(e).

CHAPTER 2 PROJECT DESCRIPTION

PROJECT OVERVIEW

California Government Code Section 65300 et seq. mandates that all local jurisdictions prepare a general plan that establishes policies and standards for future development, housing affordability, and resource protection within the jurisdiction. Each jurisdiction's general plan must include all of the following seven elements: Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety. Additional elements may be included in a general plan, at the discretion of the City. The City's existing General Plan was adopted in 1994 and consists of the seven state-mandated elements and three optional elements as shown in Table 2.1, below:

Table 2.1 – 1994 General Plan Elements		
Elements	Mandatory	Optional
<i>Land Use</i>	✘	
<i>Circulation</i>	✘	
<i>Community Facilities</i>		✘
<i>Economic Development</i>		✘
<i>Growth Management</i>		✘
<i>Housing</i>	✘	
<i>Noise</i>	✘	
<i>Open Space and Conservation</i>	✘	
<i>Safety</i>	✘	

The proposed project is a comprehensive update of the 1994 Richmond General Plan. Beyond the seven state-mandated general plan elements, the proposed General Plan includes additional elements covering topic areas that have also been deemed critical to the community. Table 2.2, below, shows the required and optional elements that comprise the proposed General Plan. The proposed General Plan is intended to respond directly to changes experienced in the City since the preparation of the last General Plan in 1994 and to provide guidance for community development over the next 20 years.

Table 2.2 – General Plan 2030		
Elements	Mandatory	Optional
<i>Economic Development</i>		✘
<i>Education and Human Services</i>		✘
<i>Land Use and Urban Design</i>	✘	
<i>Circulation</i>	✘	
<i>Housing</i>	✘	
<i>Community Facilities and Infrastructure</i>		✘
<i>Conservation, Natural Resources, and Open Space</i>	✘	
<i>Energy and Climate Change</i>		✘
<i>Growth Management</i>		✘

<i>Parks and Recreation</i>		✘
<i>Community Health and Wellness</i>		✘
<i>Public Safety and Noise</i>	✘	
<i>Arts and Culture</i>		✘
<i>Historic Resources</i>		✘
<i>National Historical Park</i>		✘

PROJECT OBJECTIVES

The proposed General Plan addresses issues related to physical development, growth, and conservation of resources in the City and expresses the community's vision and goals for the future. The proposed General Plan aims to:

- Present strategies and specific implementing actions to achieve the community's overarching vision and long-term goals;
- Establish a basis for determining whether future development proposals and public projects align with the community's vision and long-term goals;
- Allow City departments, other public agencies, and private developers to design projects that will enhance community character and sustain and improve quality of life in accordance with particular values and principles defined in the proposed General Plan;
- Provide a basis for developing more detailed regulatory plans and implementing programs such as the Zoning Ordinance, capital improvement plans, facilities plans, community needs assessments, and specific plans; and
- Guide the City as well as public agencies that work with the City, such as school districts, regional boards, or state agencies, as well as private investors, as they contemplate future actions within the City.

PROPOSED GENERAL PLAN ELEMENTS

Following are brief descriptions of the purpose for each of the proposed General Plan elements.

1. The **Economic Development Element** establishes direction for short and long-term economic growth. It includes a range of strategies to sustain businesses and industries, diversify the economic base, accommodate job growth and increase access to employment for Richmond residents.
2. The **Education and Human Services Element** provides direction to improve educational opportunities and support social and emotional well-being through human service offerings. The Element seeks to ensure that Richmond residents have equitable access to a diverse range of educational opportunities and resources that are fully integrated with the City's long-term quality-of-life goals.
3. The **Land Use and Urban Design Element** presents a framework for governing future decisions about allowable, context-appropriate land use and desirable development patterns. Overarching goals focus on providing a vibrant urban core, active public spaces and enhanced neighborhood character in the context of balanced and compatible uses.

4. The **Circulation Element** seeks to ensure efficient mobility and access for all residents, workers and visitors through a safe, interconnected, multimodal transportation system. Goals, policies and implementing actions will guide management of transportation systems in a progressive, responsible and well-balanced way.
5. The **Housing Element** establishes a framework for protecting, maintaining and expanding quality and affordable housing options for current and future residents. It also seeks to provide adequate housing for groups with special needs and promote integrated neighborhoods that support families, seniors and people of all incomes. Due to extensive revisions necessary to meet requirements set forth by State housing element law, the Housing Element will not be adopted with the other General Plan Element described here.
6. The **Community Facilities and Infrastructure Element** presents a framework for the City to provide services, amenities and infrastructure for today's residents as well as future generations. Policies and implementing actions seek to responsibly improve educational and human service facilities, physical infrastructure and a range of public utilities and services to best meet community needs as Richmond grows.
7. The **Conservation, Natural Resources and Open Space Element** is designed to protect, maintain and enhance Richmond's natural resources and open spaces, and balance current community resource needs with critical conservation endeavors to benefit the common good.
8. The **Energy and Climate Change Element** provides strategic direction for the City to promote mitigation, sustainability and adaptation in response to Richmond's impact on climate change. The Element identifies goals, policies and implementing actions to address energy conservation, renewable energy production and use, sustainable business development, responsible community revitalization and reduction of climate change impacts in Richmond.
9. The **Growth Management Element** provides a framework for effective coordination of land use, transportation and infrastructure. This Element outlines a strategy to promote compact urban development, protect open space and provide adequate infrastructure and services to accommodate future community needs in Richmond.
10. The **Parks and Recreation Element** provides direction for developing and maintaining a comprehensive system of quality parks, recreational facilities, programs, support services and open space. General Plan goals, policies and implementing actions are designed to preserve resources and enrich parks and recreational offerings.
11. The **Community Health and Wellness Element** establishes a critical path for improving conditions that will foster the physical health and emotional well being of Richmond residents. The Element defines healthy living indicators, reviews current conditions in Richmond relative to those indicators, and sets forth specific policies and implementing actions tailored to critical health needs in the community.
12. The **Public Safety and Noise Element** seeks to minimize risks posed by environmental and human-caused hazards that may impact Richmond residents' health and welfare. These include crime, geologic and seismic hazards, flooding, fires, hazardous materials and noise.
13. The **Arts and Culture Element** presents Richmond's approach to integrating arts and culture into everyday community life, thereby strengthening Richmond's unique character and identity.

14. The **Historic Resources Element** provides a framework for preserving, restoring and leveraging Richmond's historic assets to maintain the City's sense of place and ensure that current and future residents and visitors can enjoy these assets.
15. The **National Historical Park Element** establishes a framework for fully developing the Rosie the Riveter/World War II Home Front National Historical Park. The National Historical Park honors and preserves Richmond's history and commemorates the millions who worked on the wartime home front.

CHARACTERISTICS OF THE PROPOSED GENERAL PLAN

The City of Richmond has few remaining opportunities for new greenfield development to accommodate growth. Consequently, the City has responded to increasing demand for growth through infill development in its downtown, along commercial corridors, and on underutilized brownfield parcels within the City's industrial areas. A preliminary assessment suggests that there are more than 1,200 acres of vacant and underutilized land in Richmond that may be available for infill development. The City is composed of several types of areas and the proposed General Plan includes an overarching development strategy for Richmond that includes stable areas, conservation areas, and 16 "change areas" in which it is anticipated that there will be varying degrees of new uses, development and redevelopment.

Land uses in the vast majority of the City are expected to remain stable. Many of the stable areas of the City are residential neighborhoods. However, areas that are not designated for a change in land use may benefit from improvements, such as community facility and infrastructure renovations or upgrades and the inclusion of neighborhood-serving retail, where appropriate.

Areas of the City with significant natural habitat, open space, parks and recreational resources, and agricultural lands have been identified for conservation, preservation, and environmental rehabilitation. Resources in these areas are valued by the community and will continue to be protected by the City and other public and regulatory agencies.

The 16 change areas identified in the proposed General Plan are deemed most suitable for a shift in intended use as compared to existing conditions, and may experience significant changes in land use and development character over the next 20 years. The proposed change areas largely represent areas that are underutilized, have incompatible land uses, high potential for redevelopment, or are inconsistent with current community goals and priorities. The proposed General Plan organizes the change areas into the three following urban design components: major activity centers, key corridors, and districts.

Major Activity Centers

Change areas that have been identified as major activity centers in the proposed General Plan will be the primary urban centers that provide a wide mix of retail, office, housing, and entertainment-related uses serving the City and the region overall. Richmond's major activity centers are envisioned as concentrated, high-intensity community hubs that generate revenue and jobs, and serve as the focal point of cultural, commercial and social activities. They are also envisioned as pedestrian and transit-oriented, with higher-density development that provides services and amenities to residents and visitors. Major activity centers will define Richmond's distinct identity and reflect the character of surrounding neighborhoods. The following change areas are identified as major activity centers. Refer to the Land Use and Urban Design Element of the proposed General Plan for detailed descriptions of each change area.

- Change Area 1 – Downtown/Macdonald Avenue
- Change Area 2 – Hilltop
- Change Area 3 – Ford Peninsula in Marina Bay

Key Corridors

Change areas that have been designated key corridors will be the commercial streets that provide local-serving retail, multi-family housing, and other community services within walking distance of residential neighborhoods. These corridors will also be pedestrian and transit-oriented, support multiple types of travel, and feature a balanced mix of uses and development intensities that will meet the needs of adjacent neighborhoods. The type and character of development along these corridors will promote activity along the street at all times of day. Key corridors will continue to link multiple neighborhoods to each other and to regional destinations. The following change areas are identified as key corridors. Refer to the Land Use and Urban Design Element of the proposed General Plan for detailed descriptions of each change area.

- Change Area 4 – San Pablo Avenue Corridor
- Change Area 5 – 23rd Street Corridor
- Change Area 6 – Marina Way Corridor
- Change Area 7 – Cutting Boulevard Corridor
- Change Area 8 – Harbour Way Corridor
- Change Area 9 – Ohio Avenue Corridor
- Change Area 10 – Carlson Boulevard Corridor

Districts

Change areas that have been designated districts will provide a unique mix of uses including industrial, office, retail, residential, and open space that serve the entire community. Districts will also represent geographic areas or zones where there will be a concentration of related or complementary activities and uses. The following change areas are identified as districts. Refer to the Land Use and Urban Design Element of the proposed General Plan for detailed descriptions of each change area.

- Change Area 11 – Northern Parkway
- Change Area 12 – Northshore
- Change Area 13 – San Pablo Peninsula Area
- Change Area 14 – Port Priority Use Area
- Change Area 15 – Regatta/Marina Bay
- Change Area 16 – Southern Gateway

LAND USE MAP AND LAND USE CLASSIFICATIONS

The Land Use and Urban Design Element of the proposed General Plan contains the land use map and land use classifications for the City. The land use map designates that proposed general location, distribution, and extent of land uses within the City. The proposed General Plan land use map and land use classifications indicate a maximum permissible density and intensity of development, but do not require development projects to be approved for the maximum density or intensity applicable to that land use classification. Site conditions as well as specific development standards that will be a part of the comprehensive update to the City's existing zoning ordinance following the adoption of the proposed General Plan may reduce development potential within the ranges stated for each land use classification. The proposed land use classifications are organized into the following broad categories: residential neighborhoods, corridors, activity centers, business and industry, and community. Each broad category is briefly discussed below. Refer to the Land Use and Urban Design Element of the proposed General Plan for detailed descriptions of each land use classification as well as density and intensity ranges for each classification.

Residential Neighborhoods

Richmond has a variety of residential neighborhoods that include multi-family and single-family housing. Residential land use designations encourage the development of complete, accessible, and diverse neighborhoods. The following land use classifications comprise the residential neighborhood category: hillside residential, low-density residential, medium-density residential, and neighborhood mixed-use.

Corridors

Richmond has several key corridors that serve as major routes of travel in the City and support a wide range of retail and community amenities as well as housing on adjacent parcels. Land use planning and major improvements in these areas would create a network of vibrant, mixed-use, higher density pedestrian and transit-oriented corridors that link major community centers in the City. The following land use classifications comprise the corridors land use category: medium-density mixed use (residential emphasis) and medium-intensity mixed-use (commercial emphasis).

Activity Centers

Richmond enjoys a central Bay Area location, strong regional transit connectivity and existing infrastructure. These assets provide important opportunities to enhance, revitalize, and develop new activity centers to serve both residents and visitors. Richmond's activity centers are intended to be pedestrian- and transit-friendly community hubs characterized by mixed-use and higher-density development capable of generating revenue and creating jobs, while providing services and amenities to residents, businesses, and visitors. This land use category includes the following three mixed-use classifications: medium-intensity mixed-use (commercial nodes and gateways), high-intensity mixed-use (major activity center), and regional commercial mixed-use.

Business and Industry

Richmond has a diverse local economy that includes a port, heavy and light industry, research and development, regional and local retail, agriculture, and commercial services. Businesses and industry are important parts of the regional economy and contribute to the City's tax base, local employment opportunities, and a balanced community. Land use regulations in the business and industry category are intended to encourage positive business growth and support economic development. This land use category includes the following land use classifications: live/work, business/light industrial, marine and waterfront commercial, industrial, and port.

Community

Richmond has a wide range of parks, open spaces, and civic uses that serve a diverse range of community needs. Natural areas such as the shoreline, hills, wetlands and creeks offer opportunities for preservation, conservation, recreation, and interpretation. Public facilities provide opportunities for social and community development. Land use planning in these areas will aim to improve these amenities and enhance accessibility for all City residents. The community category includes the following four land use classifications: open space, parks and recreation, public, cultural and institutional, and agriculture.

BUILDOUT PROJECTIONS FOR THE PROPOSED GENERAL PLAN

The term "buildout" refers to full development under the proposed General Plan. Although the proposed General Plan has a 20-year planning horizon, the proposed General Plan is not intended to specify or anticipate when buildout will actually occur; nor does the designation of a site for a certain use necessarily mean the site will be built or redeveloped within the next 20 years. In fact, due to the large amount of underutilized land in the City of Richmond, it is highly unlikely that the City would build out within the planning horizon. Therefore, to determine a realistic projection for future development in the City, population and job growth were estimated using a "regional share" approach for the 2030 planning horizon year. This methodology assumed that Richmond would capture some percentage of the projected regional growth in Contra Costa County based on the City's historical rates of growth. Between 1980 and 2005, Richmond's share of regional population growth was 8.39 percent. The Association for Bay Area Governments (ABAG) projects Richmond will capture 10.91 percent of regional growth by 2030. However, because of the goal to stimulate higher intensity development within the City, the EIR for the proposed General Plan assumes that Richmond will capture an even greater percentage of regional population growth – 13 percent. The number of jobs that would be generated was calculated based on ABAG's projected ratio of jobs to population for Richmond in 2030 (0.48 jobs per person). Based upon this methodology, the proposed General Plan could result in an increase in population of 30,147 and an additional 22,488 jobs over the next 20 years. It is also estimated that the proposed General Plan would add approximately 15,548 housing units within the City.

REQUIRED APPROVALS

Adoption of the proposed General Plan will require City Council certification of the EIR, adoption of the CEQA findings of fact and statement of significance, and adoption of a Mitigation Monitoring and Reporting Program (MMRP). Upon adoption of the proposed General Plan, the City will initiate a comprehensive update of its zoning ordinance and other sections of its municipal code to achieve consistency with the newly adopted General Plan. The updated zoning ordinance will further define land use classifications and performance standards applicable to those classifications. The updated zoning ordinance would also establish the land use entitlement process applicable to future development projects.

CHAPTER 3 CEQA REVIEW AND PUBLIC OUTREACH

The City has complied with CEQA and the CEQA Guidelines during the preparation of the EIR for the proposed General Plan. The Draft EIR, dated February 2011, was prepared after soliciting input from the public, responsible agencies, and affected agencies through the EIR scoping process. The “scoping” of the EIR was conducted utilizing several of the tools available under CEQA. In accordance with Sections 15063 and 15082 of the CEQA Guidelines, a Notice of Preparation (NOP) was prepared and distributed to the California Office of Planning and Research (State Clearinghouse), responsible agencies, affected agencies, and other interested parties on February 1, 2008. The NOP was posted in the Contra Costa County Clerk-Recorder’s Office for a period of 30 days. The NOP was also submitted to the State Clearinghouse to officially solicit participation in determining the scope of the EIR. In response to the NOP, numerous comment letters were received from various agencies, organizations, and individuals.

A public scoping meeting was held on February 28, 2008. The purpose of the meeting was to seek input from public agencies and the general public regarding the environmental issues and concerns that may potentially result from the proposed General Plan. A summary of the public comments and copies of the written comment letters are included in Appendix A of the Draft EIR.

The Draft EIR was circulated for public review and comment on February 14, 2011, initiating a 45-day public review period pursuant to CEQA and its implementing guidelines. The public review period provided interested public agencies, groups, and individuals the opportunity to comment on the contents and accuracy of the document. The document and Notice of Completion (NOC) was distributed to the State Clearinghouse. Relevant agencies also received copies of the document. A Notice of Availability (NOA) was distributed to interested parties informing them of where they could view the Draft EIR and how to comment on the document. The Draft EIR was made available to the public at the City of Richmond Planning and Building Services Department, the City of Richmond Public Library, and the City of Richmond’s General Plan Website.

A Final EIR has been completed and includes written comments received by mail and electronic mail on the Draft EIR, verbal comments received at the Draft EIR public hearing, written responses to the written and verbal comments, and changes to the Draft EIR.

CHAPTER 4 FINDINGS ON ENVIRONMENTAL EFFECTS

DEMOGRAPHICS

Impact 3.2-1:

Finding: The City Council finds that implementation of the proposed General Plan could result in physical impacts due to population growth beyond what is assumed in the Draft EIR. Implementation of Mitigation Measure 3.2-1 would ensure there would be *no impact* beyond those already addressed in the EIR.

- **Mitigation Measure 3.2-1:** The City shall continue to track the number of new housing units as building permits are issued to determine if new development exceeds the amount of development assumed in the EIR (15,548 housing units). As part of its annual Housing Element progress report City staff shall provide a report on the number of new housing units to the City Council annually. If the number of units approaches or exceeds 80 percent of the number assumed in the General Plan EIR (12,438 housing units), the City shall prepare an update to the General Plan and General Plan EIR to assess the environmental effects of additional projected growth.

Rationale/Supporting Explanation: Implementation of Mitigation Measure 3.2-1 would require the City to prepare an update to the proposed General Plan and General Plan EIR to assess the environmental effects of any population growth beyond what has been assumed in the General Plan EIR if new development exceeds the amount of development assumed in the EIR.

Impact 3.2-2:

Finding: The City Council finds that implementation of the proposed General Plan could result in physical impacts due to job growth beyond what is assumed in the Draft EIR. Implementation of Mitigation Measure 3.2-1 would ensure there would be *no impact* beyond those already addressed in the EIR.

- **Mitigation Measure 3.2-1:** Based on available U.S. Census or ABAG data, the City shall track the number of new jobs to determine if new development exceeds the amount of development assumed in the EIR (22,488 jobs). City staff shall provide a report on the number of new jobs to the City Council annually and if the number of jobs approaches or exceeds 80 percent of the number assumed in the General Plan EIR (9,950 jobs), the City shall prepare an update to the General Plan and General Plan EIR to assess the environmental effects of additional projected growth.

Rationale/Supporting Explanation: Implementation of Mitigation Measure 3.2-1 would require the City to prepare an update to the proposed General Plan and General Plan EIR to assess the environmental effects of any job growth beyond what has been assumed in the General Plan EIR if new development exceeds the amount of development assumed in the EIR.

AIR QUALITY

Impact 3.3-1:

Finding: The City Council finds that implementation of the proposed General Plan could provide new sources of regional air emissions that would conflict with or obstruct implementation of the Clean Air Plan. However, a conflict with the Clean Air Plan is not, itself, a significant unavoidable physical adverse impact to the environment for purposes of CEQA. Based on implementation of

General Plan policies and the following mitigation measures, as well as the analysis below, this impact is considered *less-than-significant*.

- **Mitigation Measure 3.3-1(a):** Encourage the inclusion of the ferry terminal within the shuttle service feasibility study and within the current transportation system to promote the use of public transportation and provide for convenience of use.
- **Mitigation Measure 3.3-1(b):** Promote reduced transit fares for daily commutes within the City, and encourage the cooperation between all modes of transportation to provide for ease of use, such as the institution of a monthly commuter pass that would provide access to the ferry, as well as bus, train, and/or BART systems.
- **Mitigation Measure 3.3-1(c):** Continue to expand the Bay Trail and other routes for bicycle and pedestrian travel.
- **Mitigation Measure 3.3-1(d):** Provide bicycle and pedestrian amenities, such as benches and bike storage, along routes leading to the Richmond and El Cerrito Del Norte BART stations to promote non-motorized travel to and from public transit.
- **Mitigation Measure 3.3-1(e):** Provide development incentives, such as reduced parking requirements, for businesses that provide transit incentives to employees.

Rationale/Supporting Explanation: The 2009 Clean Air Plan (CAP) discussed in the Air Quality Section of the Draft EIR was prepared to accommodate growth, to reduce the high levels of pollutants within areas under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), to return clean air to the region, and to minimize the impact of reduced air quality on the economy. Projects that are considered to be consistent with the CAP would not interfere with attainment because this growth is included in the projections used during the preparation of the CAP. Therefore, projects, uses, and activities that are consistent with the applicable assumptions used in the development of the CAP would not jeopardize attainment of the identified air quality levels, even if they exceed the BAAQMD's recommended thresholds.

Projects that are consistent with the employment or population projections identified in the Projections 2007 report prepared by ABAG are considered consistent with the CAP growth projections, since the 2007 Projections form the basis of the land use and transportation control portions of the CAP.

Another measurement tool in determining consistency with the CAP is to determine how a project accommodates the expected increase in population. Generally, if a project is planned in a way that results in the minimization of vehicle miles traveled (VMT), both within the project area and the surrounding area in which it is located, and minimizes air pollutant emissions, that aspect of the project is consistent with the CAP.

The BAAQMD CAP relies on population and employment projections supplied by ABAG. As the time frame for development anticipated in the proposed General Plan would be 2030, the CAP for the Basin may have to be updated to include accurate population and employment forecasts for the City. Additionally, the improvements planned under the proposed General Plan would serve to accommodate anticipated growth within the City of Richmond and in the Bay Area. The update would increase the variety of uses available within the 16 change areas of the City and work to decrease reliance on the automobile within the City by developing more residential areas that would allow employees to use other modes of transportation.

The existing VMT for the City of Richmond is 1,668,000. Development anticipated under the proposed General Plan would result in 2,503,000 VMT, an increase of slightly more than 50

percent, which is greater than the 21.95 percent population increase (from 107,000 in 2007 to 137,100 in 2030) over the proposed General Plan timeframe. The BAAQMD has instituted Transportation Control Measures (TCMs) in order to meet the requirements of the Bay Area Clean Air Plan and the California Clean Air Act. The TCMs are designed to reduce VMT and air pollution caused by automobiles and other transportation facilities including the maintenance and expansion of traffic signal timing programs and improving access to rail, constructing HOV and express bus lanes, and encouraging greater density development near transit centers. Contra Costa County has already incorporated a number of the TCMs into the existing transportation plan, and with the adoption of the Countywide Comprehensive Transportation Plan (CTP) of 2009, will include all feasible TCMs as indicated by the BAAQMD. With the implementation of these TCMs, all of the cities in Contra Costa County will be consistent with the transportation portion of the CAP. However, although the General Plan is consistent with the transportation portion of the CAP, the increase in VMT nevertheless exceeds the increase in population. Various land use and circulation policies incorporated into the proposed General Plan would reduce VMT within the City. However, because of the programmatic nature of the policies and available mitigation measures, quantifying the VMT reductions is not possible at this time. Although VMT is expected to decrease from the numeric values discussed, it cannot be guaranteed to be reduced to below a level of significance. Thus, it may result in an inconsistency with the transportation portion of the CAP. However, as discussed below, such an inconsistency is not in itself a significant impact.

The City's population increase under the full buildout scenario would be greater than projected regional growth the City anticipates it could capture within the General Plan's 2030 planning horizon. Although growth of the magnitude of full buildout is unlikely, if such growth were to occur, it would generate new sources of regional air emissions that would conflict with or obstruct implementation of the Clean Air Plan. Because the development under the full buildout scenario would be substantially more intense than the growth projected within the General Plan planning horizon, the emissions would be substantially greater than analyzed above.

However, a conflict with the CAP projection is not, itself, a significant unavoidable physical adverse impact to the environment for purposes of CEQA, but it does warrant more detailed consideration to evaluate the extent to which an impact may occur as a result of this plan conflict. Upon further analysis and mitigation as discussed below, this is no longer considered a significant unavoidable impact from General Plan implementation.

First, the CAP is periodically reviewed and updated, and this process is again underway and being informed by the regional Sustainable Communities Strategy (SCS) being prepared under SB 375 to reduce GHG emissions. Under all proposed SCS growth scenarios under consideration, higher density development in communities nearest regional job centers and served by transit results in a net air quality improvement by reducing VMT and corresponding emissions of toxic, criteria and greenhouse gas (GHG) vehicular pollutants. Concentrating more growth in Richmond, as proposed in the General Plan, will improve air quality at the local and regional (most relevant to criteria pollutants) and global (most relevant to GHG pollutants) levels. It is also anticipated that the next revision to the CAP will reflect the changed development patterns being proposed for the SCS. Because (1) the General Plan is consistent with the SCS growth scenarios under consideration, (2) it is reasonably foreseeable that the SCS will be timely adopted in 2012, as required by SB 375, and (3) it is reasonably foreseeable that the CAP will continue to be timely revised to include the growth forecasts in the SCS and the General Plan as required by applicable federal regulations that mandate integration of the "best available information" about land use development patterns into federal Clean Air Act plans and conformity determinations, the CAP inconsistency with the General Plan is considered temporary. Further, this temporary inconsistency will not result in any adverse air quality impacts, since the higher growth and density planned in the General Plan is not expected to be realized until well after 2012.

Finally, the temporary CAP inconsistency is not, itself, an adverse physical impact to the existing environment. This impact is no longer considered significant and unavoidable for General Plan implementation.

Moreover, the proposed General Plan includes policies that would reduce the emissions associated with development within the Plan Area. At this time, however, the extent of additional growth and the exact nature of future effects associated with this additional growth are unknown. Therefore, it would be speculative to attempt a more detailed analysis in the EIR. Any future development would be subject to rigorous review to determine impacts on air quality in accordance with CEQA. Future planning efforts and environmental analysis would address additional growth beyond the General Plan's planning horizon and the potential implications of this growth.

Impact 3.3-2:

Finding: The City Council finds that implementation of the proposed General Plan would result in construction and operational emissions that could contribute substantially to an existing or projected air quality violation. However, the General Plan includes policies that commit the City to supporting the regulatory efforts of air quality and public health enforcement agencies. New Mitigation Measure 3.3-2(e) is also added to the EIR to further avoid, reduce or mitigate air quality impacts from General Plan implementation. Notwithstanding these policies and mitigation measures, many sources of air pollution are outside the City's jurisdiction and control, and attainment of healthy air quality levels within the City requires the cooperation and regulatory support of several agencies charged with attaining and maintaining compliance with air quality standards. Therefore, the City finds that mitigation measures to further reduce the air quality impacts from General Plan implementation and cumulative conditions to a *less-than-significant* level are within the jurisdiction and control of air quality agencies including the BAAQMD, the California Air Resources Board (CARB) and the Environmental Protection Agency (EPA), and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.

- **Mitigation Measure 3.3-2(a):** All construction projects shall incorporate the most recent Best Management Practices as required by the BAAQMD.
- **Mitigation Measure 3.3-2(b):** Future development under the proposed General Plan shall be subject to review to determine construction air quality impacts in accordance with CEQA.
- **Mitigation Measure 3.3-2(c):** The City of Richmond shall continue to require individual developers to implement applicable new stationary source control measures as proposed in the most recent CAP, while conforming with existing BAAQMD stationary source regulations and requirements and complying with BAAQMD rules and regulations regarding indirect sources.
- **Mitigation Measure 3.3-2(d):** The City of Richmond shall consult with project proponents during the pre-application review process to ensure that uses with a high level of operational emissions are appropriately designed and sited to avoid impacts on neighboring uses and regional air quality.
- **Mitigation Measure 3.3-2(e):** The City will continue to work proactively with BAAQMD, CARB and EPA to help these agencies enforce air pollution prevention and control mandates within the City. The City will also work with the community to identify and advocate for air quality improvement measures that are within the jurisdiction of these agencies and can and should be implemented to improve Richmond's air quality to levels

that are protective of human health and the environment.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would result in generation of new emissions from construction activities. For plan level analysis of construction emissions, the BAAQMD indicates that a General Plan is less-than-significant for construction emissions with the incorporation of the most recently available BMPs as determined by the BAAQMD. Without implementation of these BMPs to the greatest extent feasible, a plan level project impact would be considered *significant*.

Implementation of Mitigation Measures 3.3-2(a) and 3.3-2(b) would require that individual projects developed under the proposed General Plan provide an air quality analysis for construction activities and incorporate the most recent Best Management Practices as indicated by the BAAQMD. With implementation of BMPs, the proposed General Plan would have a *less-than-significant* impact with respect to construction emissions.

The proposed General Plan would result in long-term operational impacts as determined by the continued operation of land uses allowed in the proposed General Plan. Thresholds of significance have been established by the BAAQMD for the control of these emissions. The BAAQMD has incorporated control measures into its 2005 Ozone Strategy that are incorporated into the 2009 CAP. As part of its significance threshold for plan level operational emissions, the BAAQMD requires that the proposed General Plan incorporate current CAP control measures as appropriate to the City of Richmond. The current control measures are detailed in Appendix C of the 2005 Ozone Strategy. The City of Richmond currently requires "...individual developers to closely coordinate with the BAAQMD in implementing applicable new stationary source control measures as proposed in the most recent CAP, while conforming with existing BAAQMD stationary source regulations and requirements and complying with BAAQMD rules and regulations regarding indirect sources."

The City of Richmond is taking several important steps in further reducing its operational long-term emissions through implementation of air quality related policies and actions such as General Plan Policy HW9.1 and Actions HW9.A through HW9.I. In addition, the City has implemented Green Building standards and adheres to BAAQMD guidelines. The incorporation of Mitigation Measures 3.3-2(c) and 3.3-2(d) would reduce the impacts from operational emissions. However, long-term operational impacts of the proposed General Plan would result in an increase in VMT within the City of Richmond. The rate of increase of VMT and associated emissions are higher than the rate of increase in population within the City as discussed in Impact 3.3-1.

Notwithstanding these General Plan policies and EIR mitigation measures, many sources of air pollution are outside the City's jurisdiction and control, and attainment of healthy air quality levels within the City requires the cooperation and regulatory support of several agencies charged with attaining and maintaining compliance with air quality standards, including BAAQMD, which generally regulates industries and other "stationary" sources of air pollution, CARB, which generally regulates pollutants from "mobile" sources of air pollution such as vehicles as well as from consumer products, and the EPA, which establishes minimum regulatory standards for stationary and mobile sources - CARB and BAAQMD standards are typically more stringent - and also regulates activities outside of CARB's and BAAQMD's jurisdiction, such as emissions from trains and ships. These air quality agencies, vested with legal jurisdiction over sources of air pollution in and outside the City under applicable federal, state and regional laws and regulations, can and should implement further mitigation measures to improve existing and future air quality. These air quality improvements and management measures are within the responsibility and control of these air quality agencies. They should continue to be implemented concurrently with the City's General Plan, and should address both General Plan implementation air quality impacts as well as planned future cumulative scenarios including the regional growth and development plans that have been or are being prepared by other regional agencies such as the Bay

Conservation and Development Commission in its Bay Plan, and the Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC) in the SCS being prepared under SB 375. The City finds that mitigation measures to further reduce the air quality impacts from General Plan implementation and cumulative conditions to a *less-than-significant* level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates. .

Impact 3.3-3:

Finding: The City Council find that operational activities under the proposed General Plan would not expose sensitive receptors to substantial pollutant concentrations in excess of the established thresholds. This impact would be considered *less-than-significant*.

- **Mitigation Measure 3.3-3(a):** The City of Richmond shall implement special overlay zones around all planned sources of TACs to minimize the potential impacts to sensitive receptors. Land Use diagrams within the adopted General Plan will indicate the Special Overlay Zones which shall include an overlay zone of at least 500 feet on either side of all freeways and high volume roadways (100,000 vehicles per day or more).
- **Mitigation Measure 3.3-3(b):** The City of Richmond shall require all new industrial and commercial development projects that have the potential to emit TACs to be located an adequate distance from existing and proposed development used by sensitive receptors—including residential, schools, day care facilities, congregate care facilities, hospitals, or other places of long-term residency. The determination of development projects that have the potential for TAC emissions and adequate distances from sensitive receptors as identified in CARB’s “Air Quality and Land Use Handbook—A Community Health Perspective (April 2005; CARB Guidance) are as follows:
 - Proposed dry cleaners and film processing services that use Perchloroethylene shall be sited at least 500 feet from sensitive land uses.
 - Proposed auto body repair services shall be sited at least 500 feet from sensitive land uses.
 - Proposed gasoline dispensing stations with an annual throughput of less than 3.6 million gallons shall be sited at least 50 feet from sensitive land uses. Proposed gasoline dispensing stations with an annual throughput at or above 3.6 million gallons shall be sited at least 300 feet from sensitive land uses.
 - Other proposed sources of TACs including furniture manufacturing and repair services that use Methylene Chloride or other solvents identified as a TAC shall be sited at least 300 feet from sensitive land uses.
 - Proposed distribution centers with more than 100 trucks per day; more than 40 trucks with operating transport refrigeration units per day; or where transport refrigeration unit operations cumulatively exceed 300 hours per week should not be sited within 1,000 feet of sensitive land uses.
 - Proposed rail yards for major service and maintenance operations should not be sited within 1,000 feet of sensitive land uses.
 - Proposed chrome platers should not be sited within 1,000 feet of new sensitive land uses.

- The City will support buffer zones between industrial areas and sensitive land uses, including port development. Proposed port developments should not site the heavily impacted areas immediately upwind (based on prevalent wind direction) of sensitive land uses. Siting of port developments that have the potential to emit TACs should be done in consultation with the BAAQMD to determine the need for a health risk assessment.
- The City will support buffer zones between industrial areas and sensitive land uses, including refinery development. Proposed petroleum refineries should not site the heavily impacted areas immediately upwind (based on prevalent wind direction) of sensitive land uses. Siting of refineries should be done in consultation with the BAAQMD to determine the need for a health risk assessment.
- **Mitigation Measure 3.3-3(c):** Proposed sensitive land uses including schools, daycare facilities, congregate care facilities, hospitals, or other places of long term residency for people shall be sited:
 - At least 500 feet from dry cleaners and film processing services that use Perchloroethylene.
 - At least 500 feet from auto body repair services.
 - At least 50 feet from existing gasoline dispensing stations with an annual throughput of less than 3.6 million gallons and 300 feet from existing gasoline dispensing stations with an annual throughput at or above 3.6 million gallons.
 - At least 300 feet from existing land uses that use Methylene Chloride or other solvents identified as a TAC, including furniture manufacturing and repair services.
 - At least 1,000 feet from distribution centers with more than 100 trucks per day; more than 40 trucks with operating transport refrigeration units per day; or where transport refrigeration unit operations cumulatively exceed 300 hours per week. In addition sensitive land uses should not be sited near facility entry and exit points.
 - At least 1,000 feet from major service and maintenance rail yards.
 - At least 1,000 feet from chrome plating facilities.
 - The City will support buffer zones between industrial areas and sensitive land uses, including port development. Avoid siting sensitive land uses immediately downwind (based on prevalent wind direction) from stationary TAC sources or primary loading areas located within the boundaries of existing port facilities.
 - The City will support buffer zones between industrial areas and sensitive land uses, including refinery development. Avoid siting sensitive land uses immediately downwind (based on prevalent wind direction) from stationary TAC sources located within the boundaries of petroleum refineries.
- **Mitigation Measure 3.3-3(d):** The City of Richmond shall consult with the BAAQMD to identify TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.

Rationale/Supporting Explanation: BAAQMD defines typical sensitive receptors as residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. When evaluating potential air quality impacts to sensitive receptors, the BAAQMD is primarily concerned with high localized concentrations of CO. Motor vehicles, and traffic- congested roadways and intersections are the primary source of high localized CO concentrations. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO “hotspots.”

Implementation of the proposed General Plan is not expected to expose existing or future sensitive uses within the City to substantial CO concentrations. As shown in Table 3.3-3 (Carbon Monoxide Concentrations at 2030 Buildout) of the Draft EIR, based on CO modeling using the simplified CALINE4 methodology at the 10 intersections expected to operate at LOS D or worse at 2030, CO concentrations would be substantially below the national 35.0 ppm and state 20.0 ppm 1-hour ambient air quality standards, and the national and state 9.0 ppm 8-hour ambient air quality standards when growth envisioned under the proposed General Plan occurs. Therefore, the proposed General Plan would result in a *less-than-significant* impact with respect to CO.

Toxic air contaminants of potential concern within the City of Richmond include diesel particulate matter, a form of PM_{2.5} emitted mostly from diesel-powered equipment during construction activities, and chemicals emitted from the industrial uses within the City. The individual projects that are included in the industrial development of the City have not been planned to the level of detail where pollution sources can be identified and emissions quantified. In the absence of specific project data, the BAAQMD Guidelines provide thresholds of significance for plan-level analysis. In order for General Plans to be considered less-than-significant with respect to potential TACs, special overlay zones need to be established around existing and proposed land uses that emit TACs. Mitigation Measure 3.3-3(a) would require the City of Richmond to implement special overlay zones around all planned sources of TACs to minimize the potential impacts to sensitive receptors. Additionally land use diagrams within the adopted General Plan would indicate the Special Overlay Zones which would include an overlay zone of at least 500 feet on either side of all freeways and high volume roadways (100,000 vehicles per day or more). The inclusion of this mitigation measure would reduce impacts from TACs to a *less-than-significant* level.

Impact 3.3-4:

Finding: The City Council finds that implementation of the proposed General Plan would not create objectionable odors that would affect a substantial number of people. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: The proposed General Plan does not include proposals for specific development projects and therefore lacks the level of detail necessary to identify and quantify odor sources. In the absence of specific project data, the BAAQMD Guidelines provide thresholds of significance for plan-level analysis. In order for General Plans to be considered less-than-significant with respect to potential odor emissions, a plan must identify the location of existing and planned odor sources in the plan area and include policies to reduce potential odor impacts in the plan area. The General Plan identifies areas of potential nuisance odor sources that could potentially affect nearby uses as the industrial area of the City in the vicinity of Harbor Way South, Marina Way South, Interstate 580, and Hall Avenue. The General Plan includes General Plan Policies LU5.3 and ED8.2 that are intended to minimize conflicts between land uses to protect human and environmental health and safety, preserve community character, and retain job generating activities.

The accompanying actions, General Plan Actions LU5.C and ED7.B, require new industrial uses adjacent to existing residential or commercial uses to incorporate measures, such as enclosure of

industrial activities in buildings, to minimize impacts on residential uses. New residential and commercial uses established adjacent to existing industrial uses must also incorporate measures to minimize impacts to the residents from odors. The City would review proposed uses for the potential to result in nuisance odors to ensure compliance with these actions. With these policies and actions in place to reduce exposure of sensitive receptors to nuisance odors, the proposed General Plan complies with the BAAQMD guidelines for odors and would, therefore, result in a *less-than-significant* impact related to odor.

The analysis presented in the Draft EIR assumes buildout of the General Plan. Therefore, impacts related to odors would be the same as discussed above. Future development would be subject to review to determine impacts related to odors in accordance with CEQA. Future planning efforts and environmental analysis would address additional growth beyond the General Plan's planning horizon and the potential implications of this growth.

BIOLOGICAL RESOURCES

Impact 3.4-1:

Finding: The City Council finds that the proposed General Plan would not have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The City of Richmond is occupied primarily by urban development, including commercial, residential, and industrial land uses that do not provide habitat for any state or federally listed, or other special-status species. However, undeveloped, natural land is present within the boundaries of the planning area including natural areas east of the City such as Wildcat Canyon Regional Park, San Pablo Ridge, Sobrante Ridge Manzanita Grove, and northwest of the City along the San Pablo Bay in areas such as the San Pablo Creek and Wildcat Creek Marshes, Point Pinole, Hoffman Marsh, and Brooks Island. These natural areas provide suitable habitat for a variety of state and federally listed and other special-status species such as pallid manzanita, soft bird's-beak, Santa Cruz tarplant, California red-legged frog, Alameda whipsnake, California black rail, California clapper rail, and salt-marsh harvest mouse, among others. Additionally, these natural areas provide habitat for a wide variety of common native plant and wildlife species.

The City of Richmond places great value on its remaining natural areas and the plant and wildlife species that they support. The proposed General Plan includes Policy CN1.1, which is intended to preserve and restore Richmond's natural habitat and associated range of plants and wildlife including wetlands, baylands, riparian areas, oak woodlands and other sensitive biological resources. The General Plan encourages restoration efforts such as controlling invasive species, re-establishing natives, restoring creeks, and reclaiming priority conservation areas. These actions are essential to maintaining critical habitat and biodiversity. Conservation, Natural Resources, and Open Space Actions in the General Plan include working with Contra Costa County and the East Bay Regional Park District to develop habitat conservation plans (General Plan Action CN1.A), identification of areas in the City with significant natural habitat, open space and recreation resources for conservation, preservation and environmental rehabilitation (General Plan Action CN1.B), and establishment of performance standards for creek corridors that allow for existing and created wildlife habitat and species sensitive to human disturbance, provide vegetative filtration for water quality and corridors for wildlife habitat linkage, and protection from runoff and other impacts of adjacent urban uses (General Plan Action CN1.C). These policies and actions would protect sensitive species and their habitat.

In addition, future planned development in the City would be primarily focused on urban infill of brownfields, undeveloped urban lots, and redevelopment of underused existing development where special-status species are not likely to occur. No development in natural areas, such as the eight County-designated ESUs or the one area of the City that may support the Alameda whipsnake, is proposed as a part of the proposed General Plan and none of the 16 change areas encroach into areas with moderate or high potential for a special-status species to occur. However, if any development were proposed in the vicinity of a natural area, that project would have to comply with applicable state and federal regulations regarding natural resources. Such compliance for any project, at a minimum, would require a survey of the project area by a qualified biologist to evaluate its potential to support any wetlands, sensitive habitats or special-status species known from the region. If such resources are found, the project applicant, and/or its consulting biologist, would be required to coordinate with the applicable state or federal resource agency to ensure that any potential impacts on those resources are either avoided, or are mitigated to a less-than-significant level through mitigation. Since compliance with these regulations is required on a project level, the proposed General Plan would not have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS. Therefore, this is considered a *less-than-significant* impact.

Impact 3.4-2:

Finding: The City Council finds that the proposed General Plan would not interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The planning area is occupied primarily by urban development, including commercial, residential, and industrial land uses that would not be of value as wildlife movement corridors, or wildlife nursery sites. However, natural land is present within the boundaries of the planning area. In particular, the open space areas in the San Francisco and San Pablo bays, along creeks, along the ridges, and in the regional preserves and parks provide areas for migratory birds and wildlife species.

The City of Richmond places great value on its remaining natural areas, and has, as discussed previously under Impact 3.4-1, included policies and actions related to conservation, natural resources, and open space that would protect natural habitat and biodiversity and preserve biological resources. As noted previously under Impact 3.4-1, future planned development in the City would be focused on urban infill of brownfields, undeveloped urban lots, and redevelopment of underused industrial development, with no development expected to occur in natural areas. Specific actions included as part of General Plan Policy CN1.1 call for protection of marshes, baylands, and creek corridors that would serve to protect wildlife migration corridors. Additionally, as described under Impact 3.4-1, any future projects would be required to comply with state and federal regulations pertaining to natural resources. To facilitate this compliance, project applicants will be required to retain a qualified biologist to evaluate whether a project would potentially interfere with wildlife movement, migration, or breeding/nesting. If potential to affect wildlife movement, migration, or nesting is discovered, project applicants or their consulting biologists would be required to coordinate with the appropriate resource agency to ensure that impacts are either avoided, or mitigated to a less-than-significant level. With development focused in infill areas and away from areas on ridgelines and the regional preserves and parks, and compliance with existing state and federal regulations pertaining to natural resources, the proposed General Plan would not result in the interference with the movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. As noted in General Plan Policy CN1.1, if there were proposed development or other improvements that could disturb wildlife movement, the City would require

mitigation of impacts on sensitive species in coordination with USFWS, CDFG, and other regulatory agencies, as appropriate. In addition, potential effects on migratory fish and bird species would be reduced through compliance with the California Fish and Game Code (Sections 5515 and 3511, respectively) and with the MBTA. Therefore, this is considered a *less-than-significant* impact.

Impact 3.4-3:

Finding: The City Council finds that the proposed General Plan would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Sensitive natural communities identified in the CNDDDB and East Bay California Native Plant Society in the vicinity of the City of Richmond include Eelgrass beds, Northern Coastal Salt Marsh, Northern Maritime Chaparral, Oak Woodlands, Coastal Prairie Grassland, and Valley Needlegrass Grassland. Additionally, riparian habitat occurs along portions of San Pablo Creek and Wildcat Creek. Although development within these known sensitive natural communities is not expected to occur as a result of the proposed General Plan, it is possible that future development and improvements may disturb these or other previously undocumented sensitive biological habitats. However, all future projects are required to comply with state and federal regulations regarding natural resources. Such compliance, at a minimum, would require that the project applicant retain a qualified biologist to evaluate the project site for the presence of sensitive natural communities such as riparian woodland or vernal pools. If such communities are found, the applicant or its consulting biologist is required to coordinate with the appropriate resource agency to ensure that impacts on these resources are either avoided or mitigated to a less-than-significant level.

Additionally, the proposed General Plan contains policies and actions that would avoid or reduce the impacts on biological resources to less-than-significant. In particular, General Plan Actions CN1.A through CN1.C, and CN1.H are protective of riparian habitats and natural communities.

General Plan Action CN1.B involves identification of areas in the City with significant natural habitat, open space, and recreation resources for conservation, preservation, and environmental rehabilitation, such as the sensitive natural communities identified above. General Plan Action CN.1J involves creation of a program to restore creek corridors in urban areas, in coordination with regional agencies and local nonprofits toward restoration of creeks currently diverted in culverts or hardened channels to their natural state, where feasible. This action also calls for adoption of regional guidelines for channel creation or modification to ensure that channels meander, have a naturalized side slope, and a varied channel bottom elevation. These measures would reduce potential effects on riparian areas and restore some creeks to a more natural condition.

Future planned development in the City would be focused on urban infill of brownfields, undeveloped urban lots, and redevelopment of underused existing development, outside of riparian areas. As stated above, any future development that could affect riparian areas or other sensitive natural communities would also be subject to applicable regulations designed to protect these resources. Specifically, the CDFG Lake and Streambed Alteration Agreements, the California Native Plant Protection Act, and CEQA would serve to avoid or reduce disturbances to riparian habitat and other natural communities. Therefore, the project would not result in a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS. Therefore, this is considered a *less-than-significant* impact.

Impact 3.4-4:

Finding: The City Council finds that the proposed General Plan would not have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Wetlands and other waters of the United States as defined by Section 404 of the Clean Water Act are present within the boundaries of the planning area. However, due to the occupation of the majority of the City by urban development, wetlands are generally limited to natural areas, such as the Wildcat Canyon Regional Park, San Pablo Creek and Wildcat Creek Marshes, Point Pinole, Hoffman Marsh, Brooks Island, and along Wildcat Creek and San Pablo Creek as they pass through the City of Richmond.

Future planned development in the City would be focused on urban infill of brownfields, undeveloped urban lots, and redevelopment of underused existing development, where federally protected wetlands are not expected to occur. However, as discussed in the Draft EIR, any activity that could affect waters of the United States would be subject to Section 404 of the Clean Water Act. Compliance with Section 404, which includes, at a minimum, an evaluation of each project area by a qualified biologist to determine if potential wetlands are present, followed by coordination with the Army Corps of Engineers and local RWQCB if potential impacts exist, would ensure that there would be no net loss of wetlands. Consequently, the project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means. Therefore, this is considered a *less-than-significant* impact.

Impact 3.4-5:

Finding: The City Council finds that the proposed General Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The City of Richmond is primarily occupied by urban development, but that development includes landscape trees that receive protection under the City of Richmond Municipal Code. The City of Richmond Municipal Code, Chapter 10.08 *Trimming, Pruning, Care, Planting, Removal and Moving of Trees, Shrubs or Plants* prohibits trimming or removing trees in or on any "street, park, pleasure ground, boulevard, alley or public place" without first obtaining a permit from the Recreation and Parks Director of the City of Richmond or any of his or her authorized deputies. Applicants for development permits under the proposed General Plan would be required by law to comply with the latest version of Municipal Code Chapter 10.08 by obtaining the necessary permits prior to trimming or removal of any trees related to development. Additionally, applicants would be required to place protective structures around any trees that would remain after construction to protect them from harm during construction of development projects. Since project applicants would be required by law to comply with all applicable provisions of Chapter 10.08 of the City of Richmond Municipal Code, the proposed General Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The City has no other policies or ordinances that explicitly protect biological resources. Because project applicants would be required to comply with all applicable provisions of the City of Richmond Municipal Code, this is considered a *less-than-significant* impact.

Impact 3.4-6:

Finding: The City Council finds that the proposed General Plan would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan since none exist. As a result, the proposed General Plan would have *no impact* on adopted conservation plans.

Rationale/Supporting Explanation: No Habitat Conservation Plans or Natural Community Conservation Plans have been designated within the City boundaries. The closest HCP/NCCP is the *East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan*, which is a joint venture between the cities of Brentwood, Clayton, Oakley, Pittsburg and the county of Contra Costa. The City of Richmond is not a part of this plan. Other nearby adopted habitat conservation plans include the San Francisco Bay Plan, the Suisun Marsh Protection Plan, and a variety of regional habitat and park plans by the East Bay Regional Park District, but the City of Richmond is outside the scope of these plans. Since no HCPs or NCCPs are currently included in the City of Richmond future development within the City of Richmond resulting from implementation of the General Plan would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, there would be *no impact*.

CULTURAL RESOURCES

Impact 3.5-1:

Finding: The City Council finds that the development activities associated with the proposed General Plan could cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. With the implementation of General Plan policies and actions and the following revised mitigation measure, this impact would be considered *less-than-significant*.

- **Mitigation Measure 3.5-1:** Future projects shall implement the City's Historic Structures Code to minimize impacts on historical resources by requiring thorough scrutiny for compliance with applicable legal requirements, including but not limited to compliance with the General Plan's historic resource protection policies, and compliance with state and federal historic resource protection laws, before any resource may be demolished and ensuring that alteration conforms to the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Rationale/Supporting Explanation: The City includes a number of properties and landmarks that have been determined significant at the local level. Some of these properties have been added to Richmond's Historical Register, including the Pullman District, Kaiser Field Hospital, Civic Center District, and Santa Fe Reading Room. Others are unofficial potential listings such as the International Hotel, the Fire Station at Cutting Boulevard, and the Chevron Refinery Administration Building and Laboratory.

Many of Richmond's historic and cultural resources have been officially recognized at federal and state levels through listing on the NRHP and the CRHR. Of particular significance are the resources that have become part of the establishing legislation for the Rosie the Riveter/World War II Home Front Historical National Park. These resources are recognized as having outstanding historic value and significance in relation to the World War II home front effort and they range from waterfront parks and structures associated with the shipyards to factory buildings, housing, and other community-serving facilities. An inventory of officially recognized national historical resources in the City is provided in Table 3.5-1 of the Draft EIR. The locations of these resources are shown on Figure 3.5-1 in the Draft EIR.

Because the City has not been comprehensively surveyed for historical resources, numerous buildings or structures of historic age (45 years old or older) that could qualify as historical resources pursuant to CEQA may be undocumented.

CEQA Guidelines Section 15064.5(b) states that “a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” The proposed General Plan focuses on change areas within the City that would be redesignated to accommodate growth in the proposed General Plan. Development activities have the potential to cause a substantial adverse change in the significance of an historical resource through demolition or alteration of a historical resource’s physical characteristics that convey its historical significance.

As detailed in the Draft EIR, there are a number of federal, state, and local policies, regulations, and institutions in place to protect historical resources in the City. The Richmond Historic Structures Code guides the City in protecting and restoring historic buildings, creating compatibility with historic districts, acknowledging Richmond’s industrial historic identity, and celebrating the City’s long-standing multicultural background. The Richmond Historic Structures Code establishes a Historic Preservation Commission for the purpose of recommending public policy related to historic resources and conducting historic resources surveys or studies. In addition, General Plan policies and actions such as General Plan Policies HR1.1 through HR1.3 and General Plan Actions HR1.A through HR1.E would further reduce the potential for impact on historic resources.

General Plan Policy HR1.1 seeks to protect, preserve and enhance the diverse range of historic, cultural, and archaeological sites and resources in the City for the benefit of current and future residents and visitors; General Plan Policy HR1.2 promotes adaptive reuse, rehabilitation, and retrofitting of historic buildings that are no longer in their original use; General Plan Policy HR1.3 promotes context-sensitive design that respects and celebrates the history and historical character of sites and resources. General Plan Action HR1.A encourages adaptive reuse of significant historical resources in the City and meeting all requirements to retain CLG status; General Plan Action HR1.B would develop an incentives program to encourage and support preservation of sites and resources of historic significance in the City that are not covered by the Historic Preservation Ordinance, but have community value; General Plan Action HR1.C calls for updating the comprehensive citywide inventory of historic resources and development of a citywide survey to identify structures that may be eligible for local, state and national historic resource designation; General Plan Action HR1.D calls for the establishment of a uniform archival program for documents, maps, and photographs of historic resources in the City; and General Plan Action HR1.E encourages strategic partnerships with local and state historic preservation groups to strengthen historic preservation efforts in the City.

The proposed General Plan policies are important to addressing adverse physical impacts on historic properties that could occur as a result of development activities associated with the proposed General Plan. However, the policies represent only a portion of an extensive and robust policy framework aimed at the protection of historical resources within the City. The City has successfully implemented historic resource protection and adaptive use measures to preserve and re-purpose historic structures. The Richmond Historic Structures Code furthers adaptive reuse and would ensure that development activities resulting from implementation of the proposed General Plan would undergo rigorous review to determine impacts on historical resources in accordance with CEQA and would encourage the avoidance of significant impacts through explicitly defined actions (e.g., adaptive reuse) and development incentives. Federal and state laws also preserve and protect designated categories of historic and cultural resources, and the City - and future projects implementing the General Plan - must comply with these federal and state legal requirements. Revised Mitigation Measure 3.5-1 requires conformance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties, and clarifies the

multiple layers of protection afforded the City's historical resources. Based on the analysis above and revised Mitigation Measure 3.5-1, the General Plan impact to historical resources is mitigated to a *less-than-significant* level. In addition, historical, cultural, and paleontological resources are location-specific (i.e., within the City boundaries), and there are no reasonably foreseeable projects beyond those that could or would occur in compliance with the General Plan that would adversely affect these resources. Accordingly, since the General Plan does not include any components that would cause a substantial adverse impact to a historical, cultural, or paleontological resource, and no such adverse impacts are reasonably foreseeable at a cumulative level, cumulative impacts to these resources are *less-than-significant*.

Impact 3.5-2:

Finding: The City Council finds that development activities associated with the proposed Richmond General Plan Update could cause a substantial adverse change in the significance of an archaeological resource as defined in section 15064.5 of the CEQA Guidelines or disturb human remains, including those interred outside of formal cemeteries. With the implementation of mitigation measures, this is considered a *less-than-significant* impact.

- **Mitigation Measure 3.5-2(a):** The City shall require that impacts on unique archaeological resources be mitigated to a less-than-significant level through methods identified in Public Resources section 21083.2, including planning construction to avoid archaeological sites, deeding archaeological sites into permanent conservation easements, capping or covering archaeological sites with a layer of soil before building on the sites, or planning parks, greenspace, or other open space to incorporate archaeological sites.
- **Mitigation Measure 3.5-2(b):** The City shall require new development within the City to evaluate the potential for impacts on human remains. The City shall require that the treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable state and federal laws, including notification of the County Coroner and, in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC).

Rationale/Supporting Explanation: The greater San Francisco Bay Area is known to be rich in subsurface archaeological resources, substantiated by an archaeological record that indicates a high level of habitation/seasonal habitation and resource use by Native Americans. Various locations in Richmond, including Point San Pablo, are known to contain archaeological sites connected to the Ohlone Indians, the earliest inhabitants of the Richmond area. Some of these sites have been determined eligible for NRHP listing, including the Ellis Landing Shellmound site, the Lower San Pablo Creek Archaeological District, and the Stege Mounds Archaeological District. However, the overall archaeological record is scattered and sparse due to the ground disturbance caused by intensive development during the years before modern archaeological studies and the application of environmental protection for cultural resources. Consequently, there is the possibility that important prehistoric and historic-age archaeological resources and Native American human remains could be found in the subsurface, especially beneath structures built before the application of environmental compliance laws requiring surveys prior to construction. For these reasons, the City is considered to be sensitive for the presence of archaeological resources and human remains.

Under CEQA, public agencies must consider the effects of their actions on "unique archaeological resources." Public Resources Section 21083.2 requires agencies to determine whether proposed projects would have effects on unique archaeological resources. PRC Section 21083.2(g), states that "unique archaeological resource" means an archaeological artifact, object, or site about

which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or has a special and particular quality such as being the oldest of its type or the best available example of its type; or is directly associated with a scientifically recognized important prehistoric or historic event or person.

The proposed General Plan focuses on 16 change areas within the City that would be re-designated to accommodate growth in the proposed General Plan. Given the sensitivity for the presence of archaeological resources and human remains throughout the City of Richmond, earth-disturbing development activities associated implementation of the proposed General Plan could inadvertently damage or destroy unique archaeological resources, and this would result in a significant impact pursuant to CEQA.

As detailed in the Draft EIR, there are a number of federal, state, and local policies, regulations, and institutions in place to protect archaeological resources and human remains in the City. The Historic Resources Element of the proposed General Plan includes General Plan Policy HR1.1 (see discussion under Impact 3.5-1), which seeks to protect, preserve, and enhance the diverse range of historic, cultural, and archaeological sites and resources in the City for the benefit of current and future residents and visitors. Nonetheless, because existing and proposed City policies do not explicitly prohibit actions that would cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the CEQA Guidelines or disturb human remains, impacts on archaeological resource and human remains are considered *potentially significant*.

Implementation of Mitigation Measures 3.5-2(a) and 3.5-2(b) which would prohibit any action that would cause a substantial adverse change in the significance of a unique archaeological resource as defined in Section 15064.5 of the CEQA Guidelines, and would require identification and mitigation of impacts on human remains, would reduce this impact to a *less-than-significant* level.

In addition, historical, cultural, and paleontological resources are location-specific (i.e., within the City boundaries), and there are no reasonably foreseeable projects beyond those that could or would occur in compliance with the General Plan that would adversely affect these resources. Accordingly, since the General Plan does not include any components that would cause a substantial adverse impact to a historical, cultural, or paleontological resource, and no such adverse impacts are reasonably foreseeable at a cumulative level, cumulative impacts to these resources are *less-than-significant*.

Impact 3.5-3:

Finding: The City Council finds that development activities associated with the proposed General Plan could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. With the implementation of the following mitigation measures, this impact is considered *less-than-significant*.

- **Mitigation Measure 3.5-3:** The City shall require new development within areas of high sensitivity paleontological resources to evaluate the potential for impacts on significant paleontological resources. The City shall require that impacts on significant paleontological resources be mitigated to a less-than-significant level through data recovery or other methods determined adequate by a professional paleontologist.

Rationale/Supporting Explanation: The sediment and rock formations underlying the City of Richmond are known to be rich in subsurface paleontological resources, as substantiated by the records of the University of California Museum of Paleontology. The relative sensitivity of the

formations can be established using the Society of Vertebrate Paleontology's (SVP) *Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontological Resources: Standard Guidelines, 2007* suggested procedures for the investigation, collection, preservation, and cataloguing of fossil-bearing sites. The SVP defines the level of potential as one of three sensitivity categories for sedimentary rocks: High, Moderate, and Low, as discussed in the Draft EIR. Two additional categories, Marginal and Zero, define non-sedimentary rocks.

In the context of CEQA, fossils of land-dwelling vertebrates and their environment are considered significant paleontological resources. Such fossils typically are found in river, lake, and bog deposits, although they may occur in nearly any type of sedimentary sequence. The undivided quaternary deposits in the study area (Area B as indicated on Figure 3.5-2 in the Draft EIR) fit the definition of High Sensitivity for both vertebrate and invertebrate paleontological resources. Because the Holocene and Pleistocene deposits are not differentiated, it is not possible to provide a systematic separation of the more sensitive Pleistocene deposits from the less sensitive Holocene deposits. The Bay Mud (Area A) and the Orinda formation (Areas E and F) also fit the definition of High Sensitivity for paleontological resources. For these areas, impacts on paleontological resources are considered *potentially significant*. Rocks of the Franciscan Complex (Areas C and D) fit the definition of low sensitivity. For these areas, impacts on paleontological resources are considered less-than-significant. For areas of high sensitivity (Areas B, E, and F) for the occurrence of paleontological resources, implementation of Mitigation Measure 3.5-3 would reduce this impact to a *less-than-significant* level.

In addition, historical, cultural, and paleontological resources are location-specific (i.e., within the City boundaries), and there are no reasonably foreseeable projects beyond those that could or would occur in compliance with the General Plan that would adversely affect these resources. Accordingly, since the General Plan does not include any components that would cause a substantial adverse impact to a historical, cultural, or paleontological resource, and no such adverse impacts are reasonably foreseeable at a cumulative level, cumulative impacts to these resources are *less-than-significant*.

CLIMATE CHANGE

Impact 3.6-1:

Finding: Implementation of the proposed General Plan would result in the generation of GHGs that may have a significant impact on the environment. Implementation of BAAQMD BMPs would ensure that construction emissions of GHGs would be *less-than-significant*. New Mitigation Measure 3.6-1(q) is added to the EIR to further avoid, reduce, or mitigate GHG impacts from General Plan implementation. Notwithstanding General Plan policies and EIR mitigation measures, many sources of GHG are outside the City's jurisdiction and control, and attainment of atmospheric concentrations of GHG that will reverse or reduce the effects of global climate change are likewise outside the City's jurisdiction and control. The City finds that mitigation measures to further reduce the GHG impacts from General Plan implementation and cumulative conditions to a *less-than-significant* level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.

- **Mitigation Measure 3.6-1(a):** All construction projects shall incorporate the most recent Best Management Practices for Greenhouse Gas Emissions as indicated by the BAAQMD.
- **Mitigation Measure 3.6-1(b):** All new development and all retrofits of single-family developments, multi-family developments of over 10 units, and all commercial/industrial remodels of over 10,000 square feet shall be required to exceed Title 24 standards by 20

percent by 2020 and 30 percent by 2030. This mitigation measure enhances General Plan Action EC3.C. This mitigation measure enhances General Plan Action EC3.C. Measures to reduce emissions can include, but are not limited to:

- Install energy efficient appliances, including air conditioning and heating units, dishwashers, water heaters, etc.;
 - Install solar water heaters;
 - Install top quality windows and insulation;
 - Install energy efficient lighting;
 - Optimize conditions for natural heating, cooling and lighting by building siting and orientation;
 - Use features that incorporate natural ventilation;
 - Install light-colored "cool" pavements, and strategically located shade trees along all bicycle and pedestrian routes; and
 - Incorporate skylights, reflective surfaces, and natural shading in buildings design and layouts;
 - Replace inefficient air conditioning and heating units with new energy efficient models;
 - Replace older, inefficient appliances with new energy efficient models;
 - Replace old windows and insulation with top-quality windows and insulation;
 - Replace inefficient and incandescent lighting with energy efficient lighting; and
 - Weatherize existing buildings to increase energy efficiency.
- **Mitigation Measure 3.6-1(c):** Require all new City-owned and operated facilities and 50 percent of all new development to generate at least 10 percent of their energy use from renewable sources. Enhances General Plan Action EC3.B.
 - **Mitigation Measure 3.6-1(d):** All new commercial and multi-family developments installing boilers shall be required to install energy efficient boilers such that they achieve a minimum 4.5 percent reduction in energy usage. The same reductions shall be required of all remodeled multi-family developments of over 10 units and all commercial/industrial remodels of over 10,000 square feet.
 - **Mitigation Measure 3.6-1(e):** Develop improved waste reduction and expanded recycling programs such that a 75 percent diversion rate is achieved by 2020 and an 85 percent diversion rate is achieved by 2030 for all non-construction waste streams. Potential measures could include: providing recycling containers in parks and public spaces; establishing computer reuse and recycling programs; enhancing recycling and green waste services for all residents; and providing locations for household hazardous wastes to be recycled. Enhances General Plan Actions EC3.D.

- **Mitigation Measure 3.6-1(f):** Develop a program that requires all construction and demolition activities to evaluate energy use and waste and to reduce or mitigate construction-related impacts by 75 percent. Enhances General Plan Actions EC3.E.
- **Mitigation Measure 3.6-1(g):** Implement an Anti-Idling Policy for heavy-duty diesel trucks, including local delivery trucks and long-haul truck transport within the City. This policy would prohibit idling of on and off-road heavy duty diesel vehicles for more than 5 minutes. This policy would be implemented by requiring signage at all loading docks and along truck routes informing drivers of the requirement to limit idle time to no more than five minutes at loading docks and parking areas. Variances to the policy would include the necessity to idle while in traffic lanes due to traffic congestion on the roadway, or during emergency situations. Employers who own and operate truck fleets would be required to inform their drivers of the anti-idling policy. Enhances General Plan Policy EC5.3.
- **Mitigation Measure 3.6-1(h):** Provide tax and development incentives for employers with more than 100 employees within the City to establish a trip reduction plan that would incorporate annual employee commute surveys, marketing of commute alternatives, ride matching assistance, and transit information at a minimum. Additional measures shall be incorporated such that vehicle trips are reduced by a minimum of 4%. Measures may include and implement secure bicycle parking, showers and lockers for employees who bike to work, among others. This measure would encourage building management companies and smaller localized businesses to cooperate in establishing joint trip reduction plans. Enhances General Plan Actions EC2.F and EC2.I.
- **Mitigation Measure 3.6-1(i):** Implement Citywide car and bicycle sharing programs. Collaborate with service providers to identify potential sites for locating carshares.
- **Mitigation Measure 3.6-1(j):** Require new local-serving mixed-use in residential areas to provide needed services and amenities close to where people live and work. Require new development and redevelopment projects to provide community amenities and uses that serve priority community needs. Enhances General Plan Policy EC4.1 and General Plan Actions EC4.A, EC4.B, and EC4.D.
- **Mitigation Measure 3.6-1(k):** Require mixed-use development along transit-oriented corridors that attracts people and facilitates activity throughout the day. Prohibit isolated or gated communities in order to improve physical connectivity throughout the City, and remove barriers in existing gated areas. Maintain streets to ensure that neighborhoods and streets are safe and well used. Enhances General Plan Policy EC4.2 and Actions EC2.C, EC2.E, EC2.G, EC4.A, EC4.B, EC4.C and EC4.E.
- **Mitigation Measure 3.6-1(l):** Collaborate with AC transit, BART, West Contra Costa Transit Agency, Amtrak, and major employers in Richmond that provide shuttle service to expand transit in the evenings and late nights, and for people with special needs. Enhance Richmond's paratransit service. Collaborate with major employers to provide employer-based "open-door" shuttles to BART, the planned ferry terminal and other transit hubs. Collaborate with regional and Contra Costa County transportation agencies to maintain and enhance service within the City and region. Explore strategies to address affordability, access, and safety. Expand outreach and information programs to promote transit use. Measure results in a 10 percent expansion of transit system, and an increase in service frequency and speed for 2020; and a 15 percent expansion by 2030. Expand outreach and information programs to promote transit use. Enhances General Plan Policy EC2.C.

- **Mitigation Measure 3.6-1(m):** All new street lighting and all re-modeled or replaced street lighting shall consist of high-efficiency lamps that reduce energy consumption by a minimum of 16 percent.
- **Mitigation Measure 3.6-1(n):** All new traffic lights and all replaced traffic lights shall consist of LED lights. This high efficiency lighting would reduce emissions from traffic lights by 90 percent.
- **Mitigation Measure 3.6-1(o):** Require new development to incorporate water-saving measures demonstrating a minimum reduction of 20 percent in water use over a similar project completed within the previous five years. This measure enhances General Plan Action EC3.F. This measure would be enhanced by General Plan Action EC3.G.
- **Mitigation Measure 3.6-1(p):** The City of Richmond shall adopt a Climate Action Plan within 18 months of the adoption of the General Plan Energy and Climate Change Element. The Climate Action Plan shall include the following pursuant to CEQA Guidelines Section 15183.5(b):
 - a) The quantification of greenhouse gas emissions, both existing (2005) and projected for 2020 and General Plan horizon year (2030). These inventories and projections shall be used in the forthcoming Climate Action Plan.
 - b) The Climate Action Plan shall define reduction targets that are California State Assembly Bill 32 (AB 32) compliant and continue reducing emissions past 2020 in order to address cumulatively considerable impacts of greenhouse gas emissions. At a minimum, the Climate Action Plan shall set a target to reduce emissions to 1990 levels by 2020, which is anticipated to be a reduction of 15% from 2005 levels.
 - c) The 2020 and 2030 Business As Usual (BAU) Inventories provide emissions by land use types and emission sectors based upon the anticipated changes and growth in land use within the General Plan Land Use and Urban Design Element, which fulfills the criteria of CEQA Guidelines 15183.5(b)(C). As such, the inventories shall provide quantities and context of the emissions that need to be reduced in order to achieve the reduction target. Reduction measures in the Climate Action Plan shall focus on reducing the emissions from the sectors and land use types identified in the 2020 and 2030 BAU inventories.
 - d) The Climate Action Plan shall specify reduction measures or groups of reduction measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the AB 32 compliant reduction target. To implement the goals and policies in the General Plan Energy and Climate Change Element, the Climate Action Plan shall include adaptation strategies that focus on potential local impacts of climate change, such as sea level rise, increased risk of flooding, diminished water supplies, and public health. Broader sustainability measures may include the preservation of local water quality, air quality, open space, and biodiversity. In addition, the following reduction strategies shall be incorporated into the Climate Action Plan:
 - i. Require all new or renovated municipal buildings to seek California Green 2010 Tier 1 building standards or higher and require new development building design to be, at a minimum, compliant with California Green 2010 building standards.

- ii. Require all municipal fleet purchases to be fuel efficient vehicles for their intended use, based on the fuel type, design, size, and cost efficiency.
 - iii. Require new development projects to implement a construction plan that demonstrates how activities will reduce waste through recycling and/or salvaging of nonhazardous construction and demolition debris at a minimum of 50%.
 - e) In order to establish a mechanism to monitor the Climate Action Plan's progress towards achieving the reduction targets and to require amendment if the Climate Action Plan is not achieving the reduction targets, the Climate Action Plan shall include an implementation chapter describing how the reduction measures are to be implemented, emissions monitored, and the Climate Action Plan updated. Emissions inventories shall be conducted at minimum intervals of five years in order to evaluate the progress of the Climate Action Plan. The Climate Action Plan shall be updated together with future General Plan Updates or as necessary to implement new statewide reduction thresholds.
 - f) The Climate Action Plan, including all updates, is a project subject to public review and comment under the California Environmental Quality Act.
- **Mitigation Measure 3.6-1(q):** The City will continue to work proactively with BAAQMD, CARB and EPA to help these agencies enforce GHG prevention and control mandates within the City, and will work with the community to identify and advocate for GHG measures that are within the jurisdiction of these agencies and can and should be implemented to further reduce GHG from the City.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would result in GHG emissions generated from construction activities. For plan-level analysis of construction emissions, the BAAQMD recommends quantification of the emissions and the implementation of BMPs to reduce those emissions. Although the proposed General Plan indicates population and employment growth, it does not have a detailed growth forecast as to the amount of square footage of commercial and industrial land uses. Because GHGs remain in the atmosphere for years, even the temporary emissions from construction activities would be cumulatively considerable without the implementation of the BAAQMD recommended BMPs and the General Plan policies and actions to reduce construction related GHG emissions. General Plan Policies EC2.1, EC2.2, EC3.2, EC3.3, and EC4.3 and General Plan Actions EC2.A, EC2.K, EC3.E, EC4.G, and EC4.H address construction related GHG emission reductions. Implementation of Mitigation Measure 3.6-1(a) would incorporate the most recent Best Management Practices as indicated by the BAAQMD. With implementation of the General Plan policies and actions as well as the BMPs, the proposed General Plan would have a less-than-significant impact with respect to construction related GHG emissions.

The proposed General Plan would result in long-term operational impacts from the generation of GHGs during the continued operation of land uses allowed in the proposed General Plan. Thresholds of significance have been established by the BAAQMD as 6.6 MT CO₂e per service population for plan-level emissions of GHGs. Service population for this analysis is defined as the total number of residents and employees anticipated in Richmond for the proposed General Plan's development. Based on the 2005 Greenhouse Gas Inventory for the City of Richmond, emissions for 2020 are anticipated to be approximately 2.4 MMT of CO₂e. Emissions for 2030 were not provided in the emissions inventory and were estimated based on estimated population and employment growth. Table 3.6-1 in the Draft EIR shows the City-wide emissions by sector compared to the BAAQMD threshold.

As shown in Table 3.6-1 of the Draft EIR, the City emissions without reductions exceed the BAAQMD operational threshold for GHG emissions. The State has implemented numerous policies that will provide reductions for all sectors of the City. In addition, the City has implemented numerous policies that will also provide reductions in GHG emissions.

The City of Richmond is in the process of developing a Climate Action Plan which will provide reduction strategies for the City to attain, at a minimum, the AB 32 goal of 29 percent below Business As Usual. It is anticipated that the quantification of the General Plan Policies and Actions that have not been quantified in this analysis will afford a minimum of an additional 13.6 percent reduction, thereby meeting the AB 32 threshold. Even with this additional reduction, the emissions per service population for 2020 and 2030 are anticipated to be 13.22 and 12.23 respectively, remaining above the 6.6 BAAQMD threshold.

The incorporation of the state measures, General Plan policies and actions, and the Mitigation Measures 3.6-1(b) through 3.6.1(l) would reduce the impacts from operational emissions. However, long-term operational impacts of the proposed General Plan would result in an increase in GHG emissions and would still exceed the BAAQMD's threshold of 6.6 MT CO₂e per service population..

Implementation of the Mitigation Measures 3.6-1(m) through 3.6-1(p) would further reduce impacts from GHG emissions. While the measures would provide a reduction in GHG emissions, the emissions reductions cannot be quantified. These measures either support measures that would further ensure the success of the General Plan actions and mitigation stipulated above, or are measures where there is not enough detail available in the 2005 Greenhouse Gas Emissions Inventory to determine a reduction percentage. Although not reiterated here, the General Plan Policies and Actions not identified in the quantified reduction measures will provide reductions in greenhouse gases.

While localized air pollutant impacts are addressed in the context of the Air Quality section of the EIR for traditional CEQA topics, such as the protection of human health and the environment, GHG is a category of air emissions that is unique in CEQA by contributing to an impact that is global in scale: climate change. Various studies have recognized that traditional CEQA approaches to minimizing GHG emissions at a project-by-project (or city-by-city) level fall short of meeting climate change challenges by perpetuating sprawl development patterns that contribute more per capita GHG emissions by, for example continuing to be dependent on single-occupancy automobile commutes and single-family, low-density housing types. (See, e.g., *Californians Tackle Global Warming: A Community's Guide to SB 375*, California League of Conservation Voters and Natural Resources Defense Council, 2009, Chapter 3.)

Thus, while typical CEQA mitigation strategies for downsizing proposed employment and population growth can be effective in minimizing and mitigating impacts to localized resources such as an air basin or a neighborhood, for GHG impacts this "downsizing" strategy backfires, on a regional, state, and even national scale, by missing the opportunity to reduce per capita GHG emissions by increasing the density and intensity of transit-oriented development in established, urbanized areas such as Richmond.

The Legislature recognized that climate change and GHG required special treatment under CEQA, and enacted SB 97 to direct the Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide greater direction on how CEQA should be applied to GHG emissions and climate change. In response, OPR developed revisions to the CEQA Guidelines, as well as explanatory guidance that concluded, for example, that GHG is most appropriately considered in the context of a cumulative impact analysis since no single project or plan is substantial enough in scale to affect atmospheric levels of GHG found to cause global climate change. (See *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines*

Addressing Analysis and Mitigation of Greenhouse Gas Emissions, Office of Planning & Research, 2009.)

OPR's revised CEQA Guidelines also direct agencies to evaluate compliance with future plans and policies for reducing GHG emissions, including a major ongoing process - reducing GHG emissions from the land use and transportation sectors through the development and implementation of the region's SCS by ABAG/MTC as required by SB 375. While the region's SCS has not yet been adopted, it is noteworthy that all early drafts under consideration call for substantially increasing the density of development in established urbanized areas adjacent to San Francisco Bay such as Richmond. This SCS development pattern promotes GHG reduction on a regional scale by accommodating more population and employment growth in areas that are already served by transit and already have a base development pattern that includes a broad range of both employment and housing types.

The increased density and intensity of development, the expansion of employment, and other core components of the General Plan are fully aligned with the proposed visions for the region's SCS. When the SCS is finalized and implemented, and the City's Climate Action Plan is finalized and implemented, the City's growth will have a *beneficial* impact on climate change with a land use pattern that reduces per capita GHG emissions and that meets cumulative regional targets for GHG reductions from the land use sector.

However, as discussed above and in the Air Quality section of the EIR with respect to air pollutants other than GHG, the City has limited jurisdiction over the many other sectors that contribute to GHG emissions. Accordingly, Mitigation Measure 3.6-1(q) is added to the EIR to further avoid, reduce, or mitigate GHG impacts from General Plan implementation.

Notwithstanding these General Plan policies and EIR mitigation measures, many sources of GHG are outside the City's jurisdiction and control, and attainment of atmospheric concentrations of GHG that will reverse or reduce the effects of global climate change are likewise outside the City's jurisdiction and control. BAAQMD, CARB, EPA, and the federal government working on international efforts with other countries, can and should implement further mitigation measures to reduce GHG and avoid or minimize adverse climate change impacts. These GHG improvements and management measures are within the responsibility and control of these air quality agencies specifically, and the federal government working in cooperation with other nations more generally, and can and should continue to be implemented concurrently with the City's General Plan, and should address both General Plan implementation GHG impacts as well as planned future cumulative scenarios including the regional growth and development plans that have been or are being prepared by other regional agencies such as the SCS.

The City finds that mitigation measures to further reduce GHG impacts from General Plan implementation and cumulative conditions to a *less-than-significant* level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.

Impact 3.6-2:

Finding: The City Council finds that construction and operation of the proposed General Plan could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Through the implementation of Mitigation Measures 3.3.1, 3.3-2, and 3.6-1 and General Plan Policies, it is anticipated that emissions would be reduced to a *less-than-significant* level and, therefore, would not be considered cumulatively considerable.

Rationale/Supporting Explanation: The construction and operation of the development under the proposed General Plan would result in the emission of greenhouse gases. Future

development within the City of Richmond will be required to comply with AB 32, and with the Richmond Climate Action Plan once developed. AB 32 requires a 29 percent reduction from Business As Usual emissions by 2020. Business as Usual is defined as the anticipated emissions for 2020 without the incorporation of policies and reduction measures that are not currently implemented. With the implementation of the mitigation measures as detailed above, the reductions to the anticipated citywide emissions for 2020 and 2030 are 15.4 and 20.03 percent respectively, which would result in a significant cumulative impact.

The City of Richmond is in the process of developing a Climate Action Plan which will provide reduction strategies for the City to attain, at a minimum, the AB 32 goal of 29 percent below Business As Usual. It is anticipated that the quantification of the General Plan Policies and Actions that have not been quantified in the Draft EIR analysis would afford a minimum of an additional 13.6 percent reduction resulting in a 29 percent reduction for 2020 and a 34.12 percent reduction for 2030. As the reductions would meet the AB 32 threshold, the future development under the General Plan's contribution would not be cumulatively considerable.

GEOLOGY, SOILS, AND MINERALS

Impact 3.7-1:

Finding: The City Council finds that the buildout of the proposed General Plan would not expose people or structures to fault rupture, strong seismic groundshaking, or seismic-related ground failure beyond an acceptable level of risk which is minimized through adherence to the California Building Code. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Within the City, there is one Earthquake Fault Zone encompassing the Hayward fault. The Hayward fault runs approximately along the west ridge of Wildcat Canyon, crossing through Parchester Village and extends into San Pablo Bay.

Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface. Fault rupture almost always follows preexisting faults, which are zones of weakness. Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Sudden displacements are more damaging to structures because they are accompanied by groundshaking. Projects within earthquake fault zones require geologic evaluation to determine if a potential hazard from any fault, whether previously recognized or not, exists.

From a review of regional and local geo-seismic conditions, it is apparent that the City would be subjected to at least one major earthquake during the life of the plan. The resulting vibration would cause damage to buildings and infrastructure (primary effects) and could cause ground failures in loose alluvium, landslide deposits, Bay Mud, or poorly compacted fill (secondary effects).

The most susceptible structures to these types of hazards are unreinforced masonry buildings or buildings constructed on unreinforced brick foundations, which could have been constructed before building codes were adopted. Some newer buildings constructed before earthquake-resistant provisions were included in the codes could also be damaged during an earthquake. Unless the buildings are identified and properly reinforced, building occupants, visitors, or workers could be exposed to potential hazards from falling debris or structural failure. Older masonry buildings without seismic reinforcement (unreinforced masonry) are the most susceptible to the type of structural failure that can result in injury or death. Wood-frame buildings one or two stories high (e.g., single-family dwellings) are considered to be the most structurally resistant to earthquake damage.

The policies and criteria of the State Mining and Geology Board state that no structure may be

placed across the trace of an active fault and an area within 50 feet of an active fault is presumed to be underlain by active branches of the fault unless proven otherwise.

To reduce the primary and secondary risks associated with seismically induced groundshaking, it is necessary to take the location and type of subsurface materials into consideration when designing foundations and structures. In the City of Richmond, commercial, institutional, and large residential buildings and all associated infrastructure are required to reduce the exposure to potentially damaging seismic vibrations through seismic-resistant design, in conformance with Chapters 16 and 16A, Structural Design, Section 1613, Earthquake Loads, of the CBC, as adopted by the City.

Adherence to the Building Code, as required by state and City regulations, would ensure maximum practicable protection available for users of buildings and associated infrastructure. Adherence would include:

- Use of CBC seismic standards as the minimum seismic-resistant design for all proposed facilities;
- Seismic-resistant earthwork and construction design criteria, based on the site-specific recommendations of a California-registered civil engineer in cooperation with the project's California-registered geotechnical and structural engineers (Section 1802 ff and 1802A ff);
- An engineering analyses that demonstrates satisfactory performance of alluvium or fill where either forms part or all of the support, especially where the possible occurrence of liquefiable soils exists; and
- An analysis of soil expansion potential and appropriate remediation (compaction, removal/replacement, etc.) prior to using any expansive soils for foundation support.

To address potential hazards associated with older buildings that may present seismic safety hazards, the City would be required to implement the provisions of its Code for the Seismic Retrofit of Hazardous Unreinforced Masonry Bearing Wall Buildings (Richmond Municipal Code Section 6.12). □The design of the roads, bridges (vehicular and pedestrian overcrossings), and underground utilities (especially gas and water pipelines) would be required to comply with adopted design criteria, or with other accepted non-building structure standards to reduce the primary and secondary risks associated with seismically induced groundshaking. □In addition to CBC regulations that are enforced and monitored at the local level, proposed General Plan Policy SN1.1 and General Plan Actions SN1.A through SN1.C, are specifically intended to regulate land use, development standards, and construction practices to reduce the risk to humans and property in the event of an earthquake or other geological activity.

The preceding explanations of seismic issues indicate that the Building Code requires a site-specific geotechnical investigation and report for each construction site that (a) identifies seismic hazards and (b) contains appropriate recommendations and design criteria that conform to the analysis and implementation criteria described in the CBC, Chapters 16, 16A, 18, and 18A. General Plan Action SN1.C would require the City review all development proposals for CBC compliance. Thus, a regulatory framework exists including the proposed General Plan, the CBC, and the Richmond Municipal Code to address seismic hazards issues, including the risk of fault rupture and strong groundshaking and related secondary hazards. In view of these requirements, implementation of the proposed General Plan would have a *less-than-significant* impact regarding exposing people or property to seismic hazards.

Impact 3.7-2:

Finding: The City Council finds that adherence to the California Building Code would ensure that development under the proposed General Plan would not be subject to risk from settlement and/or subsidence of land, lateral spreading, or expansive soils, which could create risks to life and property. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Available information on subsidence indicates that there is only slight subsidence risk in Richmond, in comparison to other waterfront areas around the San Francisco and San Pablo bays. However, the addition of fill to alluvial and Bay Mud areas could cause settlement and, as shown in Figure 3.7-4 of the Draft EIR, portions of the change areas are located in areas with liquefaction potential. Three types of settlement can occur: pile settlement caused by building loads; consolidation settlement in the layer of young soil of subsurface material; and seismically induced compaction settlement in artificial fill. Settlement can occur either uniformly or differentially. Uniform settlement in a building can create problems of poor drainage and potential failure of underground utility connections. Differential settlement can cause mechanical problems within a structure, although these can be minimized if the structural engineers are aware of the site conditions. For example, land that is subject to settlement can be surcharged before the building or road construction; that is, a calculated load of temporary dirt fill can be placed on the soil for a predetermined period of time. This has the effect of forcing consolidation of the underlying soils. Based on a review of subsurface conditions in the City, the possibility of settlement should be investigated during early planning stages prior to any project's construction. Such investigation and treatment is a requirement of the City's Building Code.

Expansive soil is prevalent in the Bay Plain area. Expansive soils result in the shrinking and swelling of soils in moisture conditions, which causes problems with building foundations, slabs-on-grade, and pavement unless identified and addressed during design and corrected during construction.

Seeps and springs on hillsides can cause problems if not investigated and proper drainage provided. In the Bay Plain area of Richmond, sand layers between clay layers build up artesian pressure that may burst through the soil layer above when excavation is undertaken above. Appropriate drainage measures may be necessary.

The variability in soil conditions and potential for soil-related geotechnical hazards could increase the risk to people and structures, if soil characteristics were not appropriately identified and accounted for in project design. For example, using unsuitable materials would have the potential to create heaving, subsidence, or collapse problems leading to excavation wall failure, building or bridge settlement, and/or utility line and pavement disruption. The risk of soils collapse and settlement would be highest in areas containing fill. Lateral spreading and collapse could occur in unsupported walls of pits excavated in the existing fill or loose alluvium.

To eliminate any adverse effects of weak materials in the alluvium on buildings or non-building structures for human occupancy, the buildings and structures would need foundations that do not depend on weak soils for support. This can be accomplished by such methods as removing any existing unstable alluvium and replacing it with select fill (non-expansive, non-organic, appropriately sized mix of materials); covering any existing unstable alluvium with select fill; extending the foundations below any existing fill using cast-in-place piers, piles, or similar deep-foundation design.

It is relatively common to re-engineer weak soils specifically for stability prior to use. This can be done for the support of surface parking areas and light structures. An acceptable degree of soil stability can be achieved for expansive material by the required incorporation of soil treatment programs (replacement, grouting, compaction, drainage control, etc.) in the grading and

construction plans to address site-specific soil conditions. A site-specific evaluation of soil conditions is required, as stated, above, and must contain recommendations for ground preparation and earthwork specific to the site, and incorporated into the construction design.

General Plan Policy SN1.1 and General Plan Actions SN1.C and SN1.D would reduce impacts related to expansive or unstable soils through development proposal compliance with the CBC and the geotechnical review guidelines. The Building Code requires a site-specific foundation investigation and report for each construction site that (a) identifies potentially unsuitable soil conditions and (b) contains appropriate recommendations for foundation type and design criteria that conform to the analysis and implementation criteria described in the CBC. As indicated, a regulatory framework exists to address soils issues, including the risk of soil expansion, subsidence, and settlement. In view of these requirements, implementation of the proposed General Plan would have a *less-than-significant* impact regarding exposing people or property to the hazards related to settlement and/or subsidence of land, lateral spreading, or expansive soils.

Impact 3.7-3:

Finding: The City Council finds that project-specific review and conformity with the City's Hillside Preservation Ordinance would ensure that development under the proposed General Plan would not result in soil erosion that would result in long-term safety concerns or slope instability beyond an acceptable level of risk. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Soil erosion is a naturally occurring process. The agents of soil erosion are water and wind, each contributing a significant amount of soil loss. The effects of erosion are intensified with an increase in slope (as water moves faster, it gains momentum to carry more debris), the narrowing of runoff channels (which increases the velocity of water), and by the removal of groundcover (which leaves the soil exposed to erosive forces). Development under the proposed General Plan would not result significant topsoil loss. The areas where topsoil could be present is generally limited to existing undeveloped areas designated agricultural lands, so development permitted under the proposed General Plan would not convert those lands to urban uses that could, in turn, reduce topsoil.

The potential for soil erosion can be accelerated and increased by cut-and-fill activities, such as may be needed for future development. When completed, surface improvements, such as buildings and paved roads, decrease the potential for erosion onsite, but can increase the rate and volume of runoff, potentially causing off-site erosion. If unmitigated, eroding soil can clog drainages and cause flooding, slope instability, and additional erosion by diverting water flow.

Grading for most structures that would be built under the proposed General Plan is expected to be minimal, however, consisting of grading for foundations, building pads, access roads, and utility trenches in areas that are already developed. Excavations for utility trenches and foundations typically involve less than five feet of change in ground surface elevations. Most road and pad grading typically would be less than two feet deep. Nonetheless, deeper excavations could accompany the emplacement of underground facilities in the flatlands or road cuts in the uplands.

Because one of the major effects associated with grading is sedimentation in receiving waters, erosion control standards are set by the RWQCB through administration of the National Pollution Discharge Elimination System (NPDES) permit process for storm drainage discharge. The NPDES permit requires implementation of nonpoint source control of stormwater runoff through the application of a number of Best Management Practices (BMPs). These BMPs are meant to reduce the amount of constituents, including eroded sediment, that enter streams and other water bodies. A Storm Water Pollution Prevention Plan (SWPPP), as required by the RWQCB, is required to describe the stormwater BMPs (structural and operational measures) that would

control the quality (and quantity) of stormwater runoff. Erosion and sedimentation issues are addressed more fully in Draft EIR Section 3.9, Hydrology and Water Quality.

General Plan Policies CN2.3 and CN2.6 and General Plan Action CN2.E would reduce impacts related to erosion. Policies CN2.3 and CN2.6 address erosion and the need for site controls. In addition, Richmond Municipal Code Section 12.44 contains provisions for excavation and grading that require measures to control erosion. Any project that involves disturbing more than 50 cubic yards of soil is required to obtain a grading permit pursuant to the City's grading ordinance. The permit requires the preparation of an erosion control plan. The City's Hillside Physical Constraint Area ordinance regulates development on hillside areas to preserve hills, ridges, and their natural features, which also helps reduce erosion potential. In addition, implementation of Mitigation Measure 3.9-4 would require additional measures such as construction scheduling and temporary and permanent sediment controls. Thus, erosion would not be a substantial hazard and implementation of the proposed General Plan would have a *less-than-significant* impact regarding soil erosion.

Impact 3.7-4:

Finding: The City Council finds that development under the proposed General Plan would not result in landslide hazards beyond an acceptable level of risk. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: There are three areas within the City that have been subject to major landslide activity in recent years: the El Sobrante Valley where landslides have occurred on both the San Pablo and Sobrante Ridges, the Point Richmond area along the San Pablo/Potrero Hill Range, and the Berkeley Hills. Other slides have occurred in the Hilltop area and along the more northern reaches of the San Pablo/Potrero Hills Ridge; however, the geology in these areas is generally more stable than in the Sobrante Ridge, San Pablo Ridge, and the Berkeley Hills. Development in those areas under the proposed General Plan could expose people and property to landslide hazards. As shown in Draft EIR Figure 3.7-5, portions of the City, including portions of some of the change areas, are located in areas categorized as unstable. General Plan Policies SN1.1 and CN2.3 and General Plan Action SN1.C would reduce impacts related to landslides.

General Plan Policy SN1.1 and General Plan Action SN1.C direct that land use, development standards, and construction practices are to be used to reduce the risk to humans and property from geological activity such as naturally occurring landslides. General Plan Policy CN2.3 is intended to protect hillside areas by regulating site preparation, grading, soils repair, foundation design and topographic alteration, quantities of cut and fill, placement of utility crossings, and removal of vegetation. The City's Hillside Physical Constraint Area ordinance regulates development on hillside areas to preserve hills, ridges and their natural features, which help reduce potential landslide hazard due to human activity.

As required under the Building Code, development in areas prone to landslides requires a geotechnical investigation involving both geological and soils evaluation to identify potentially unsuitable soil conditions, such as landslides, and to develop appropriate recommendations for mitigating associated hazards. For example, landslide repair typically involves removing soil, incorporating a crushed rock and piped drainage system, and replacing the soil as an engineered fill. Pile supported retaining walls are used to prevent soil creep. Swales and ditches are used to convey water away from the top of slopes prone to landslides. During design and construction, proper grading practices involving good compaction, keyways and benches in slopes, surcharging of downslope areas, proper subdrain system installation, flatter slopes, and the provision of toe support are important for avoidance of landsliding. It is also important to ensure that increases in impervious areas, such as paved and roofed areas, are limited and properly

addressed in design. Design includes consideration of ditching, landscape watering, and maintenance of drainage systems.

In view of these requirements and the availability of standard engineering methods to mitigate potential hazards, implementation of the proposed General Plan would have a *less-than-significant* impact regarding exposing people or property to landslide hazards.

Impact 3.7-5:

Finding: The City Council finds that development under the proposed General Plan would not affect mineral resource availability. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Sandstone and shale aggregates are present in the City, and the State has designated three MRZ-2 locations as regionally significant sectors (W-1, W-2, and W-3) in the San Pablo-Potrero Hills Ridge Area. There are potential sources of crushed rock in Sector W-1, but they cannot be mined because of the tank farm on the ridge to the west. Quarries in the other two sectors have ceased operations. Although extraction operations are limited, the sector and MRZ-2 designations remain in effect until changed by the State Mining and Geology Board.

The proposed General Plan does not propose any mineral extraction, nor would it involve any changes in existing extractive mineral resource operations within the City, including the change areas. Changes in land use or development at the designated sectors that would limit availability of or access to these sectors, if any, would be subject to the requirements of the Surface Mining and Reclamation Act (SMARA) sections 2762-2763, as described in the Draft EIR. In addition, General Plan Conservation, Natural Resource, and Open Space Policy CN2.8 would minimize the potential for future development to threaten the availability of mineral resources. Conservation, Natural Resource, and Open Space Policy CN2.8 would require that the best management practices available be used in order to avoid nuisances, hazards, or adverse environmental, public health, and safety impacts including development setbacks, buffers, screening and other appropriate measures. Therefore, potential impacts associated with availability of mineral resources and land use compatibilities would be less-than-significant.

Development under the proposed General Plan would increase the number of buildings, roadways, and other structures that would use aggregate materials in their construction. Aggregates are brought to Richmond from quarries in San Rafael, Vallejo, and the Livermore area. Future growth (with or without the project) would incrementally contribute to reduction of aggregate resources and the subsequent depletion of those resources. The depletion of aggregate resources could have economic effects by limiting future growth and employment opportunities. However, this would not result in a physical change in the environment within the planning area, and this is considered a *less-than-significant* impact.

HAZARDOUS MATERIALS

Impact 3.8-1:

Finding: The City Council finds that Implementation of the proposed General Plan would involve the routine use, storage, transportation, and disposal of hazardous materials in existing and proposed land uses. However, it would not create a significant hazard to the public or the environment. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The General Plan identifies change areas that would be designated to accommodate growth in the proposed General Plan, and it identifies the range of activities that could be expected to occur in proposed land use designations. The "Business/Light

Industrial” land use designation includes research and development, light industrial, and warehousing. The “Marine and Waterfront Commercial” land use designation supports water-oriented businesses and activities including boat repair and marinas. The “Industrial” land use designation supports activities that require large parcels for manufacturing, assembly, and storage of goods. This land use designation may allow for warehousing and civic uses such as corporation yards and water treatment plants. The “Port” land use designation supports activities related to a working waterfront including port terminals, warehousing, commercial fishing, ship repair, and related office uses. All of these land uses are likely to involve activities in which hazardous materials would be routinely used, stored, handled, and transported. Hazardous waste would also be generated.

The proposed General Plan promotes the continuation of existing industrial and commercial activities as a viable and necessary element for the City’s economic wellbeing. It does not, however, propose a substantial change in land use designations or identify specific target industries or businesses that would, in turn, substantially increase hazardous materials use beyond that which already occurs. Nonetheless, it is reasonably foreseeable that economic and employment growth under the General Plan could attract additional industries and commercial activities into the City, and provided such activities are consistent with the proposed General Plan’s land use designations and zoning, new development would involve routine hazardous materials use greater than under existing conditions. The precise increase in the types and volumes of hazardous materials that could be present city-wide as a result of implementation of the proposed General Plan is speculative, because the specific businesses that could operate in the planning area is not known, and because hazardous materials use is subject to continuous change as technologies evolve and as businesses change.

Residential and mixed-use development with neighborhood-serving retail, commercial, and office uses would also involve hazardous materials use, but at a reduced level, compared to industrial and manufacturing activities. Construction activities, regardless of the type or location of development, involve a variety of products and materials that may be a hazardous material. Wherever hazardous materials are used or stored, or hazardous waste generated, there is the potential for human exposure, and, under certain conditions, potential releases to the environment. In each situation, the potential hazards and the risks they would pose to people or the environment would depend on the nature and amount of the hazardous materials used, the location and containment measures where the materials would be used and stored, the processes and handling procedures for the materials, and the personnel dealing with the hazardous materials. The “exposure pathways” through which employees, the public, and the environment could be exposed include inhalation, ingestion, dermal contact, and accidental releases that allow the hazardous materials to become airborne or enter waterways.

The potential risks associated with hazardous materials handling and storage would generally be limited to the immediate area where the materials would be located, because this is where exposure would be most likely. For this reason, the individuals most at risk would be employees or others in the immediate vicinity of the hazardous materials, rather than residents or visitors. For the most part, the health and safety procedures that protect workers and other individuals in the immediate vicinity of hazardous materials would also protect the adjacent community and environment. The pathways through which the community or the environment (e.g., local air quality and biota) could be exposed to hazardous materials include air emissions, transport of hazardous materials to or from the site, waste disposal, human contact, and accidents. However, the only primary potential pathway for public exposure to hazardous materials would be airborne emissions under normal operations or upset conditions. As a result of hazardous materials use, there would be ongoing and likely an increase in the amount of hazardous waste generated with implementation of the proposed General Plan.

As the number of commercial, industrial, and governmental operations that handle hazardous materials increase, the frequency of accidental release incidents, both on the site of the operations and on the routes used during the transport of hazardous materials, would be expected to proportionally increase.

The General Plan does not identify industries and commercial businesses (including the refinery and port) that would be subject to more intense regulation and oversight than businesses (and households) that handle smaller quantities of more common materials.

The routes currently used for transportation of hazardous materials would continue to be used through the life of the proposed General Plan (roadway and rail), and the types of materials transported are not expected to change substantially because the location and development intensity of lands designated for industrial, commercial, research and development, and other hazardous materials-intensive uses would generally remain the same. The number of trips transporting hazardous materials would be expected to increase somewhat, however, because of the increased amount of hazardous materials generated by new commercial and industrial development. The potential for traffic accidents, due in part to the overall growth in traffic volume (to which the proposed project contributes) and congestion in the City and regional roadway network that traverses the city, would also be expected to increase. In addition, there may also be more sensitive receptors, such as those in residential uses, schools, home care facilities, and other buildings along these routes and near the businesses and government operations that handle hazardous materials. Taken as a whole, the frequency of accidental releases would be expected to increase. While the increase in the risk of exposure is most closely tied to the increases in residential population (i.e., number of people who may be exposed) and the amount of traffic on roads (i.e., frequency of traffic accidents involving vehicles carrying hazardous materials), the strongest correlation in potential accidental releases would be with the number of jobs that involve handling hazardous materials.

CFR Title 49, Parts 106 through 189, regulate the transport of hazardous substances on rail lines. Additionally, the rail industry, through the Association of American Railroads (AAR), has developed a detailed protocol on recommended railroad operating practices for the transportation of hazardous materials. The AAR issued the most recent version of this document, known as Circular OT-55-I, on August 26, 2005. The Circular details railroad operating practices for designating trains as "key trains" for certain types and amounts of hazardous substances, designating operating speed and equipment restrictions for key trains, designating "key routes" for key trains, and setting standards for track inspection and wayside defect detectors, assisting communities with emergency response training and information, and shipper notification procedures among others. These recommended practices were originally implemented by all of the Class I rail carriers operating in the United States; the most recent version of the circular also includes short-line railroads as signatories. Overall, the rail safety record has been extremely good. In 2005, 99.997 percent of rail hazardous substances shipments reached their final destination without a release caused by an accident. In fact, railroads have reduced hazmat accident rates by 86 percent from 1980 through 2005.¹²

A primary safety and security concern related to the rail transportation of hazardous materials is the catastrophic release or explosion in proximity to densely populated areas, including urban areas and events or venues with large numbers of people in attendance. Also of major concern is the release or explosion of a rail car in proximity to iconic buildings, landmarks, or environmentally significant areas. Such a catastrophic event could be the result of an accident, or a deliberate act of terrorism. The causes of intentional and unintentional releases of hazardous material are very different; however, in either case the potential consequences of such releases could be substantial. The consequences of an intentional release of hazardous material by a criminal or terrorist action are likely to be more severe than the consequences of an unintentional release because an intentional action is designed to inflict the most damage possible.

The Homeland Security Act of 2002 authorized the Secretary of Transportation to prescribe regulations for the safe transportation, including security, of hazardous material in intrastate, interstate, and foreign commerce. In November 2008, the Transportation Security Administration (TSA) issued a final rule to enhance the security of the Nation's rail transportation system. This rule, codified in Title 49 of the CFR, Parts 1520 and 1580, established security requirements for freight railroad carriers; rail transit systems; and rail operations at certain, fixed-site facilities that ship or receive specified hazardous materials by rail. This rule codified the scope of TSA's existing inspection program and requires regulated parties to allow TSA and Department of Homeland Security (DHS) officials to enter, inspect, and test property, facilities, conveyances, and records relevant to rail security. This rule also requires that regulated parties designate rail security coordinators and report significant security concerns. This rule further requires that freight rail carriers and certain facilities handling specified hazardous materials be able to report location and shipping information to TSA upon request and implement chain of custody requirements to ensure a positive and secure exchange of specified hazardous materials. TSA also clarifies and amends the sensitive security information (SSI) protections to cover certain information associated with rail transportation.

Additionally, the Freight Rail Security Program is an innovative public-private partnership dedicated to assessing policies and technologies for enhancing security throughout the freight rail industry. One product of this partnership is the development of the Rail Corridor Risk Management Tool (RCRMT). The RCRMT will leverage existing technologies and accepted risk management practices where feasible, and incorporate new technologies and elements as appropriate. A second project of the Freight Rail Security Program is the Rail Corridor Hazmat Response and Recovery Tool (RCHRRT), which will integrate geographical information and risk modeling. The RCHRRT is being developed through a grant to the Railroad Research Foundation and will include participation from the rail industry. When fully developed, these tools will provide a formal methodology to assist the rail carriers in complying with the enhanced safety and security planning requirements.

The proposed General Plan includes land use designations that would permit schools. New schools could be sited near locations where hazardous materials would be or are used, stored, or transported. The California Education Code (Section 17210 et seq.) outlines the requirements of siting school facilities near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste. The code requires that, prior to commencing the acquisition of property for a new school site, an environmental site investigation be completed to determine the health and safety risks (if any) associated with a site.

Implementation of the proposed General Plan could increase the types and amounts of hazardous materials in the City relative to existing conditions. The proposed General Plan could also result in siting sensitive land uses near facilities that use hazardous materials. As a result, people could be exposed to potential health and safety risks associated with hazardous materials use, storage, transport, and waste through routine use, or through accidental releases. However, the existing regulatory framework, which is monitored and enforced at the State and local level, was designed to minimize the risks associated with hazardous materials use, and the Draft EIR analysis assumes the City will ensure compliance with adopted laws and regulations. Further, the General Plan proposes policies and actions, such as SN1.3, CN6.1, CN6.B, CN6.C, and SN1.G through SN1.K, that establish standards for siting of facilities with hazardous materials or wastes, as well as reinforcing the City's hazardous materials and waste compliance programs. Compliance with existing regulations in addition to the proposed General Plan policies and actions would minimize the risks associated with hazardous materials and reduce this impact to *less-than-significant*.

Impact 3.8-2:

Finding: The City Council finds that development under the proposed General Plan would include demolition or renovation of existing structures that could contain asbestos-containing materials, lead-based paint, PCBs, or other building materials containing hazardous substances that could expose people or the environment to risks associated with those materials. However, project-specific review and implementation of best management practices and project-specific mitigation measures would ensure that these activities would not result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would allow urban infill and redevelopment, along with the intensification of development within the City. As a result, existing structures may need to be demolished prior to the construction of new buildings. Depending on their age, these structures could contain asbestos in building materials such as roofing, floors, and pipe coverings, lead-based paint, or PCBs in electrical equipment.

Inadvertent releases of friable asbestos, lead, or PCBs contained in materials or items removed during demolition activities could expose people to these hazardous materials, which could result in various adverse health effects if exposures were of sufficient quantity and duration. In addition, some of the debris may meet criteria for hazardous waste and must be disposed of properly. To reduce potential human exposures to acceptable levels and to protect the environment, development activities would be required to comply with regulations and guidelines pertaining to abatement of and protection from exposure to asbestos and lead, as discussed in the Draft EIR, as appropriate (e.g., Cal/OSHA has regulations on worker exposure to both substances). Items containing PCBs, mercury, or other hazardous substances that are intended for disposal must be managed as hazardous waste and must be handled in accordance with OSHA worker protection requirements.

Implementation of applicable regulations and standards would ensure that potential health and environmental hazards associated with asbestos, lead, or PCBs in buildings and structures to be demolished or renovated would be reduced to the extent required by law. Because these demolition and construction activities would not result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, impacts would be *less-than-significant*.

Impact 3.8-3:

Finding: The City Council finds that there are locations within the City that are included on the list of hazardous materials sites (Cortese List) compiled pursuant to Government Code section 65962.5, as well as other locations where hazardous materials-related environmental contamination may be present, but the sites are not yet listed. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The Cortese List sites located within the City contain environmental contamination from the release of hazardous substances that can present a human health and environmental risk unless properly managed. Some of these sites have been cleaned up and others are still being investigated. Because of the extent of industrial and commercial activity within the City, there may be other sites where contaminants may be present at levels that can pose public health and safety impacts. There has not been a city-wide survey to identify all possible sites, because such studies must be performed on a site-specific basis when land use, ground disturbance, and development footprints are known. Additionally, it is possible that underground storage tanks (USTs) that were in use prior to permitting and record keeping

requirements may be present. The grading, excavation, and dewatering of sites for new development in the City could expose construction workers and the public to such known or potentially unknown hazardous substances present in the soil or groundwater. In the event undiscovered hazardous material contamination is found in the soil or groundwater during construction activities for new development in the City, such contamination could cause various short-term or long-term adverse health effects in persons exposed to the hazardous substances. In addition, exposure to contaminants could occur if the contaminants migrated from the contaminated zone to surrounding areas either before or after the surrounding areas were developed, or if contaminated zones were disturbed by future development at the contaminated location.

Contamination (if any) must be properly identified and managed prior to any development activities on any of these sites to prevent exposure of people and the environment to these hazards. The investigation and cleanup of a contaminated site would be subject to federal and State laws and regulations that are administered at the local level. Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, State, and local hazardous materials laws and regulations. DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. The standards identify approaches to determining if a release of hazardous wastes/substances exists at a site and delineating the general extent of contamination; estimating the potential threat to public health and/or the environment from the release and providing an indicator of relative risk; determining if an expedited response action is required to reduce an existing or potential threat; and completing preliminary project scoping activities to determine data gaps and identifying possible remedial action strategies. If remediation is necessary, work plans would be developed to identify the approach to clean up the site. Because remedial actions that could involve removing soil or groundwater also have the potential to create human health and environmental hazards, a health and safety plan for remediation and construction workers would be required, and, where appropriate, contingency plans would be prepared to address unknown hazards. In addition, any actions that have the potential to generate air emissions would be subject to BAAQMD review.

Compliance with applicable regulations governing the investigation and remediation of contaminated sites is mandatory. Nonetheless, proposed General Conservation, Natural Resources, and Open Space Policy CN6.1 and associated Conservation, Natural Resources, and Open Space Actions CN6.A and CN6.B establish a process that must be followed to address contaminated sites that could be affected by development.

The City requires those who apply to develop potentially contaminated sites to retain a Registered Environmental Assessor (i.e., a professional environmental scientist or engineer registered as an REA in California) to inspect the sites for the presence of hazardous materials and wastes. The investigations must take the form of environmental audits, and must include, at a minimum, site inspections for hazardous materials, examination of historic records, and reviews of public agency records. Reports detailing the results of the inspections are required to be submitted to the City for review. The report preparer must either certify that the site is free of hazards or recommend preparation of a site mitigation plan. If the results of the environmental audit indicate a potential for contaminated soils, the City requires the applicant to work with appropriate state and regional agencies to fully analyze the site and remediate the problem. The City checks that inspection reports are on file prior to project approval and prior to any excavation or construction. Acceptance of the site inspections report allows the proposed development to proceed to the permitting stage. All activities under this mitigation must be done in conformance with the policies and procedures presented in Chapter 11 of the County Hazardous Waste Management Plan.

In the event that site inspections uncover pesticide contamination, underground storage tanks, abandoned drums, or other hazardous materials or wastes in the project area, the inspection report preparer is required to notify the City and the City is responsible for notifying the Contra Costa County Health Services Department. Under the direction of the appropriate agencies, a site remediation plan must be prepared by the project applicant that would (1) specify measures to be taken to protect workers and the public from exposure to potential site hazards both during construction and for future maintenance and (2) certify that the proposed remediation measures would clean up the wastes, dispose of the wastes, and protect public health in accordance with federal, state, and local requirements.

Permitting or work in the areas of potential hazard is not allowed to proceed until the site remediation plan is on file with the City. In accordance with OSHA requirements, any activity performed at a contaminated site must be preceded by preparation of a separate site health and safety plan (prepared by the project applicant and filed with the City) for the protection of workers and the public. All activities under this mitigation must be done in conformance with policies and procedures in Chapter 11 of the County Hazardous Waste Management Plan.

The potential for future activities in the City to cause or contribute to soil or groundwater contamination would be reduced through Conservation, Natural Resources, and Open Space Action CN6.C, which encourages pollution prevention by informing residents, businesses and industry about pollution prevention, disposal of hazardous waste and chemicals, liability and clean-up.

With the existing regulatory framework and City of Richmond requirements to address contaminated sites, implementation of the proposed General Plan would not create a significant hazard to the public or the environment. Impacts would be *less-than-significant*.

HYDROLOGY AND WATER QUALITY

Impact 3.9-1:

Finding: The City Council finds that development under the proposed General Plan would not result in violation of waste discharge requirements (WDRs), because of existing measures to ensure compliance with the WDRs and the proposed policies and implementing actions included as part of the General Plan. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The relevant WDRs are the Municipal NPDES Permit or Regional Municipal Stormwater Permit, as applicable, the revised Construction General Permit, Industrial General Permit, and Recycled Water General Permit and the Richmond Municipal Sewer District, West County Wastewater District, East Bay Municipal Utility District, and Stege Sanitary District individual NPDES Permits. The relevant water quality standards are listed in the Basin Plan. The WDRs are considered protective of water quality. General Plan Policies and Actions CN3.1, CN3.A, CF1.1, CF1.D, and CF1.E would reduce the potential for violation of WDRs.

Compliance with the WDRs would ensure that substantial violation of water quality standards would not occur. Additionally, the CWA Section 305(b) requires biannual evaluation of water quality to determine whether water quality is degrading, which would further ensure that water quality standards are not violated. Compliance with existing regulations and incorporation of measures included in the respective permits would ensure that this would be a *less-than-significant* impact.

Impact 3.9-2:

Finding: The City Council finds that new development under the proposed General Plan would not be expected to substantially reduce groundwater recharge or increase groundwater use within the City. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: New development under the proposed General Plan could increase the amount of impervious surfaces and reduce groundwater recharge by limiting the area where precipitation could infiltrate. Increased growth and development, including increased green space and park areas, could also increase the amount of water used for potable water supplies and irrigation. As discussed in Draft EIR Section 3.13 Utilities, the City obtains its water supplies from EBMUD. EBMUD water supplies are derived primarily from the Mokelumne River. A secondary source of water is runoff from local watersheds. No new groundwater wells are planned for implementation of the proposed General Plan. Therefore, increased growth is not expected to result in increased groundwater use or lowering of groundwater tables. As noted above, the soils in the City are generally fine grained with slow to very slow permeability. Because the infiltration rate of soils in the City tends to be quite slow, stormwater runoff would be naturally high and infiltration relatively low. Thus, changes in pervious surfaces in the City would not substantially affect groundwater recharge. General Plan Policies and Actions CN1.1, CN1.I, and CN2.A through CN2.E would further reduce the potential for impacts on reduced groundwater recharge, including through the protection of open space.

As noted above, no new groundwater sources are proposed under the proposed General Plan. The General Plan policies and actions referenced above would further reduce the potential for groundwater impacts by preserving open space areas and increasing and enhancing open space and park acreage in the City. This would be a *less-than-significant* impact.

Impact 3.9-3:

Finding: The City Council finds that construction and operation of development under the proposed General Plan could substantially alter drainage patterns that could result in substantial erosion or siltation. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Construction and development under the proposed General Plan would substantially alter drainage patterns by changing the land cover, land slope, drainage pathways, and susceptibility of materials to erosive forces. Clearing, grading, and grubbing construction activities would expose bare soil to wind and water erosion. These disturbed areas would remain susceptible to erosion and sediment transport until stabilized or covered. Development on steep slopes would increase the potential for erosion because bare surfaces on steep slopes are more susceptible to erosion, and cut and fill activities could lead to unstable slopes and enhanced erosion potential. Unless designed correctly and until stabilized, stream restoration and/or creek daylighting projects would remove engineered erosion protection and expose stream beds and banks to erosive forces from stormwater runoff. Increased impervious surfaces associated with development could also increase the rate and amount of stormwater runoff, further exacerbating the potential for creek bed and bank erosion. General Plan Policies and Actions CN1.1, CN1.D, CN1.E, CN2.3, CN2.6, CN3.1, and CN3.A and would reduce the impact on erosion.

Implementation of the referenced General Plan policies and actions would help reduce erosion impacts of the proposed General Plan. These policies call for regulating allowable methods of site preparation, grading, soils repair, foundation design and topographic alteration. They also require the use of BMPs to reduce erosion potential, that creek channel configuration and vegetation can withstand storm flows, that facilities are designed so conveyance capacity is not impeded, and that facilities are monitored, inspected, and maintained to ensure long-term continued function.

These policies would ensure impacts from erosion is *less-than-significant*.

Impact 3.9-4:

Finding: The City Council finds that implementation of the proposed General Plan could alter drainage patterns and cause or contribute to increased runoff and flooding. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Increased impervious surfaces, insufficient flood flow capacity in restored/daylighted creeks, changes in slope, and more efficient routing of stormwater runoff could all increase the rate and amount of stormwater runoff to the storm drain system or local creeks. The capacity of storm drains and creeks in the City is already exceeded in many locations. Increased runoff rate or volume could exacerbate these flood issues or cause or contribute to new areas of flooding and storm drain system capacity exceedance. If the Municipal Regional Stormwater Permit is adopted, it would only limit increased stormwater runoff when discharge is to a drainage feature susceptible to erosion; it would not limit increases in runoff to an engineered system, such as an underground pipe or lined channel. Restored/daylighted streams could also reduce storm flow conveyance because stream channels may be designed to reduce stream velocity to prevent erosion and high flows may have to be routed around restored/daylighted creeks. General Plan Policies and Actions CF1.1, CF1.4, CF1.B, CF1.D, CF1.J, CF2.4, CF2.B, and CF2.C would reduce the impact on runoff and flooding.

Implementation of the referenced General Plan policies and actions reduce impacts associated with flooding and storm drain system capacity constraints. The proposed General Plan policies and actions would ensure that stormwater conveyance capacity constraints are remediated and maintained as development under the General Plan occurs, and that restored/daylighted creeks do not contribute to additional capacity constraints. Impacts on flooding and storm drain system capacities would, therefore, be *less-than-significant*.

Impact 3.9-5:

Finding: The City Council finds that buildout of the proposed General Plan could increase the amount of runoff and pollution in runoff. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Pollutants in stormwater runoff depend upon the type of associated land use and cover conditions. Where the land use type does not greatly change, the type and amount of pollutants in stormwater runoff would not be substantially altered. If development were to substantially increase the amount of runoff, even if the type of land use (and therefore, the type and amount of pollutants in stormwater runoff) were not altered, the total load (or quantity) of pollutants discharged to receiving waters could increase.

Construction activities, such as clearing and grubbing, pavement removal and replacement, excavation and trenching for foundations and utilities, soil compaction, cut and fill activities, and grading, would all temporarily disturb soils. Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport from the site. Erosion and sedimentation affect water quality through interference with photosynthesis, oxygen exchange, and the respiration, growth, and reproduction of aquatic species. Other pollutants, such as nutrients, trace metals, and hydrocarbons, can attach to sediment and be transported with sediment to downstream locations. Sediment-associated pollutants could also cause or contribute to degradation of water quality.

The delivery, handling, and storage of construction materials and wastes, as well as the use of construction equipment, could also introduce a risk for stormwater contamination that could impact water quality. Spills or leaks from heavy equipment and machinery can result in oil and

grease contamination, and some hydrocarbon compound pollution associated with oil and grease can be toxic to aquatic organisms at low concentrations. Staging areas or building sites can be sources of pollution because of the use of paints, solvents, cleaning agents, and metals during construction. Impacts associated with metals in stormwater include toxicity to aquatic organisms, such as bioaccumulation, and the potential contamination of drinking supplies. Pesticide use (including herbicides and fungicides) associated with site preparation work (as opposed to pesticide use for landscaping) is another potential source of stormwater contamination during construction. Pesticide impacts to water quality include toxicity to aquatic species and bioaccumulation in larger species.

Larger pollutants, such as trash, debris, and organic matter, are additional pollutants that could be associated with construction activities. Impacts include health hazards and aquatic ecosystem damage associated with bacteria, viruses, and vectors, and physical changes to the aquatic ecosystem. Construction impacts on water quality are potentially significant and could lead to exceedance of water quality objectives or criteria.

Following construction, the major source of pollution in stormwater runoff would be contaminants that have accumulated on rooftops and other impervious surfaces, such as driveways and pedestrian walkways. These include nutrients, oil and grease, metals, organics, pesticides, gross pollutants (including trash, debris, and bacteria), and, in some cases, chemicals associated with industrial processes.

Nutrients that may be present in post-construction stormwater include nitrogen and phosphorous from fertilizers applied to landscaping, gross debris, and debris from atmospheric deposition of airborne sources. Excess nutrients can impact water quality by promoting excessive and/or rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides can also enter stormwater after application on landscaped areas or overspray on impervious surfaces. Pesticides are toxic to aquatic organisms and can bioaccumulate in larger species, such as birds and fish. Erosion of unprotected surfaces can contribute sediment to runoff and off-site drainage systems. Oil and grease can enter stormwater from vehicle leaks, traffic, and maintenance activities. Metals may enter stormwater as surfaces corrode, decay, or leach. Potential gross pollutants associated with operational activities include clippings associated with landscape maintenance, street litter, and pathogens (bacteria). Pathogens (from sanitary sewer overflows, spills, and leaks from portable toilets, pets, wildlife, and human activities) can affect beneficial uses such as water contact recreation, noncontact water recreation, and shellfish harvesting. Toxic chemicals in soils can also be picked up by stormwater as it passes over or through the contaminated areas.

As discussed in the Draft EIR, for construction activities that would disturb more than one acre of land, contractors would be required to obtain and comply with the State General Construction Activity Stormwater Permit. General Permit applicants are required to prepare and implement a SWPPP and retain it at the construction site. This requirement would reduce potential construction impacts on runoff and pollution in runoff. The Municipal NPDES Permit includes Provision C.3. for new development and redevelopment post-construction stormwater quality BMPs to reduce the potential for pollutants in stormwater runoff. The Industrial General Permit requires preparation and implementation of a SWPPP and monitoring program for all regulated industrial operations. These permits are intended to ensure compliance with state water quality standards and water protection laws and regulations. In addition, General Plan Policies and Actions CN3.1, CN3.2, CN6.1, CN6.A through CN6.C, CF1.1, and CF1.F would further minimize the potential for pollutants in stormwater runoff.

Compliance with existing regulation related to stormwater runoff and implementation of the above Policies and Implementing Actions would reduce impacts related to polluted runoff. Implementation of the regulations, policies, and actions listed above would ensure compliance

with state water quality standards and water protection laws and regulations. Impacts related to runoff and pollution in runoff would be less-than-significant.

Impact 3.9-6:

Finding: The City Council finds that construction and operation of development under the proposed General Plan could contribute to groundwater quality degradation. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The depth to groundwater within the Bay Plain area can be within one foot below ground surface. Development under the proposed General Plan may result in increased use of recycled water for non-potable water uses, such as landscape irrigation, that could migrate to groundwater. Recycled water typically has a higher salt content than potable water. Sea water intrusion already occurs and limits the depth of potable groundwater resources. Additional salt loads would further reduce groundwater quality. Compliance with the Recycled Water General Permit, including requirements for an Operations Plan and an Irrigation Management Plan, would reduce potential impacts. Additionally, groundwater quality can be affected by spills and leaks of contaminants and construction activities that could expose contaminated soils to rainfall that could wash contaminants out of soils and into groundwater. General Plan Policies and Actions CN1.2, CN1.G, CN1.H, CN3.1, CN3.4, CN3.A, SN1.3, and SN1.G through SN1.K would protect groundwater during construction, reduce use of recycled water for landscape irrigation, reduce potential for contaminants in soil and water, and reduce impacts to groundwater.

Implementation of the regulations, General Plan policies and actions referenced above would protect groundwater during construction, reduce use of recycled water for landscape irrigation, and reduce potential for contaminants in soil and water, thereby reducing impacts on groundwater quality. Implementation of these regulations and policies would ensure impacts related to ground water quality would be *less-than-significant*.

Impact 3.9-7:

Finding: The City Council finds that construction and operation of development under the proposed General Plan could expose people and structures to 100-year flood hazards. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Areas within the City are located within 100-year flood hazard areas as identified by FEMA. Development within these areas would expose people, residences, and structures to risks from a 100-year flood event or greater. However, existing floodplain development regulations and General Plan Policies and Actions SN1.2, SN1.D SN3.1, SN3.3, SN3.A, and SN3.B would reduce effects of development within 100-year flood hazard areas to less-than-significant. Furthermore, there are no floodways as delineated in the FEMA June 2009 flood hazard maps. Therefore, there would be no impact on floodways and flood flows.

Implementation of the regulations, policies, and actions listed above would reduce effects of development within 100-year flood hazard areas by requiring installation and maintenance of flood control measures on all creeks and watersheds in coordination with the Flood Control District. Impacts related to exposure of people and structures to 100-year flood hazards would, therefore, be less-than-significant.

Impact 3.9-8:

Finding: The City Council finds that Development within the City could be subject to dam failure inundation and sea level rise flood hazards. With implementation of General Plan Policies and Actions and the following mitigation measures, this impact is considered *less-than-significant*.

- **Mitigation Measures 3.9-8(a):** For all projects within the inundation zone for maximum sea level rise as identified in Map 8.1 of Chapter 8 of the General Plan, the project site shall be graded such that finished floor elevations are 3.5 feet above the Base Flood Elevation (BFE), and streets and pads are 3 feet above BFE to allow for future sea level rise, thereby elevating all structures above the existing and potential future flood hazard area.
- **Mitigation Measure 3.9-8(b):** For all projects with in the inundation zone for maximum sea level rise as identified in Map 8.1 of the General Plan, shoreline and public access improvements shall be designed to allow future increases in elevation along the shoreline edge to keep up with higher sea level rise values, should they occur. Design elements shall include providing adequate setbacks to allow for future elevation increases of at least 3 feet from the existing elevation along the shoreline. Before a Small Lot Final Map is approved, the project Applicant must petition the appropriate governing body to form (or annex into if appropriate) and administer a special assessment district or other funding mechanism to finance and construct future improvements necessary to ensure that the shoreline, public facilities, and public access improvements will be protected should sea level rise exceed 16 inches at the perimeter of the project. Prior to the sale of the first residential unit or lease of the first commercial or industrial space, the legislative body shall have acted upon the petition to include the property within the district boundary. The newly formed district shall also administer a Monitoring and Adaptive Management Plan to monitor sea level and implement and maintain the protective improvements. All improvements shall be subject to approval by the City of Richmond planning and public works staff prior to issuance of building or grading permits. These improvements shall include, but are not limited, one or more of the following:
 - Construction of a shoreline protection system that is initially built to accommodate a mid-term rise in sea level of 16 inches, with a design that is adaptable to meet higher than anticipated values in the mid-term, as well as for the long- term;
 - Construction of a storm drainage system that is initially built to accommodate a mid-term rise in sea levels of 16 inches, with a design that is adaptable to meet higher than anticipated sea level rise values (similar to the first bullet); and
 - Construction of buildings and vital transportation infrastructure at elevations that would not be exceeded by flood waters, even if the shoreline protection does not function, for existing conditions and over a longer-term as compared to the two above.

Rationale/Supporting Explanation: The City is located within the dam failure inundation area of the San Pablo Reservoir dam. Failure of the San Pablo dam would inundate the City west of 23rd Street and between 23rd Street and I-80 from about Macdonald Avenue to between San Pablo Dam Road and Hilltop Drive and along San Pablo Creek, east of I-80. As noted in the Draft EIR, the San Pablo Reservoir dam was structurally unstable. However, EBMUD completed a seismic upgrade consisting of a larger buttress and improvements to the foundation to seismically strengthen the dam. The San Pablo Dam Seismic Upgrade was completed in September 2010 and the reservoir level limits have been returned to their pre-2004 status and the dam and

reservoir are now fully operational.

As noted in the Draft EIR, sea level rise could occur, which could result in coastal flooding at a greater frequency and to a larger extent than currently occurs. These flood risks would also include erosion and destructive forces from wave action. Development of structures and public uses within coastal areas would be subject to greater risks. General Plan Policies Actions SN1.1, SN1.C, SN1.2, SN1.D, SN1.E, SN3.1, SN3.A through SN3.E, CF2.4, CF2.D, CF1.1, and CF1.F would reduce the impact of dam failure inundation are identified below and would reduce potential flood hazards to less-than-significant. General Plan Policies and Actions that would reduce the impact of sea level rise inundation to less-than-significant include EC6.2, EC6.A, EC6.3, CF2.4, CF2.D, CN3.3, CN3.D, SN1.2, and SN1.D.

Implementation of the referenced General Plan policies and actions require special design features to prevent damage from flooding for all new development located within the areas subject to flood hazard and coordination with East Bay Municipal Utility District regarding flood potential and EBMUD's Emergency Action Plan. The policies also include management of low-lying areas that are likely to be affected by sea level rise and storm surges and encourage development patterns, infrastructure, and flood management practices to adapt to potential climate change impacts. Impacts related to exposure of people and structures to flood hazards from dam inundation and sea level rise would be *less-than-significant*.

Impact 3.9-9:

Finding: The City Council finds the proposed General Plan would require infrastructure improvements to accommodate increased stormwater runoff and drainage needs, the construction of which could result in physical impacts. With the implementation of standard construction measures and Best Management Practices, this impact is considered *less-than-significant*.

Rationale/Supporting Explanation: New storm drains to serve new and existing development would be constructed under the proposed General Plan. Construction of the new storm drain systems would be subject to the same regulatory requirements and proposed General Plan policies and actions as referenced under Impacts 3.9-1, 3.9-3, 3.9-4, and 3.9-5. This would ensure that adequate drainage would be provided for new development under the General Plan and that the design would incorporate BMPs and ensure a *less-than-significant* impact related to stormwater runoff and drainage infrastructure.

NOISE

Impact 3.10-1:

Finding: The City Council finds that the construction activities associated with the future land use changes under the proposed General Plan would continue exposure to urbanized noise sources.. Implementation of noise limits in the City of Richmond Municipal Code would limit the exposure of sensitive receptors to temporary or periodic increases in noise levels. With the implementation of General Plan policies and the following revised Mitigation Measure 3.10-1, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a *less-than-significant* level.

- **Mitigation Measure 3.10-1:** Future projects shall incorporate project-specific mitigation measures to reduce the impact of construction noise.

(a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise and vibration construction activity minimization and

mitigation plan for any multi-story development project located within a residential neighborhood, or located adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address high-noise or vibration construction activities such as pile-driving, and must address outdoor construction activities occurring outside normal weekday business hours. The plan must also address construction-related noise and vibration from current and concurrently with project-related construction activities to address potential cumulative noise and vibration impacts. Excessive noise and vibration impacts from such construction-related activities (defined as noise and vibration impacts that would not occur from similar construction-related activities) shall be avoided or minimized to the extent feasible, and high-noise or vibration construction activities shall not occur during evenings or weekends adjacent to occupied residential units.

(b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating noise and vibration impacts from construction activities, for use as appropriate in noise and vibration plans required under Mitigation Measure 3.10-2(a) above.

(c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for construction-related noise and vibration impacts during daytime weekday hours, and will consider and include feasible conditions in building, demolition and grading permits to avoid or minimize excessive noise and vibration from construction activities.

(d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal Code.

Rationale/Supporting Explanation: The City of Richmond is an established, urbanized area in which periodic exposure to construction-related noise and vibration effects are existing conditions, as are exposures to both ongoing and periodic operational urbanized noise sources such as regional highways, industrialized and Port activities, emergency services, school, athletic events, and other urban uses. Implementation of the proposed General Plan would potentially increase the level of intensity of land uses within the City and result in additional construction activities that may exceed noise levels established in the City's Municipal Code. Development of future projects under the proposed General Plan would require the use of heavy equipment for demolition, site excavation, installation of utilities, site grading, paving, and building fabrication. Construction activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary based on the amount of equipment in operation and the location of the activity.

The EPA has compiled data regarding the noise-generating characteristics of specific types of construction equipment and typical construction activities. These data are presented in Draft EIR Tables 3.10-11 and 3.10-12. These noise levels would diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance for construction equipment, as identified by the EPA.

Noise that would be experienced by sensitive uses due to construction activities associated with implementation of the proposed General Plan is determined at the property lines. The nearest sensitive uses would vary at different locations in and around the City. Specific development plans have not yet been determined at individual sites; however, there is the potential that future construction activities could occur within 50 feet of sensitive receptors. Sensitive receptors within the vicinity of individual development projects would potentially experience noise levels up to 98 dBA Leq as a result of routine construction activities and up to 107 dBA Leq if pile driving

activities were required.

Measures to reduce construction-related noise and vibration are included in both the General Plan and EIR. Additionally, the Municipal Code includes a Noise Ordinance that allows construction activity noise during designated times and days, and also includes noise limits that are exceeded by existing and reasonably foreseeable future construction activities. The City of Richmond Municipal Code Section 9.52.110 allows for noise resulting from construction activities if they are conducted at certain times during the day and on certain days (see Draft EIR Tables 3.10-8 and 3.10-9). However, the potential exposure as a result of construction activities could still exceed the highest noise standard (80 dBA for multi-family residential) allowed by R.M.C. Section 9.52.110 by up to 18 dBA (or 27 dBA if pile driving activities occur for brief intervals). To reduce the potential impacts of construction noise on nearby sensitive receptors, the proposed General Plan includes the following policies and actions: SN4.1, SN4.B, SN4.C, and SN4.E.

With the implementation of General Plan Policies and Actions SN4.1, SN4.B, SN4.C, and SN4.E, which emphasize the need to mitigate construction noise on a site-specific and project-specific basis, the temporary or periodic increase in ambient noise levels would be limited and the impact on sensitive receptors minimized. However, as discussed under the “Thresholds of Significance” section of the Draft EIR, the Draft EIR assumes that an increase of 5.0 dBA or greater over ambient noise levels is substantial and significant. As shown in Draft EIR Table 3.10-3, the highest existing daytime ambient noise level monitored in the City was 70.3 dBA Leq at 23rd Street and Bush Avenue. With additional mitigation requirements included in revised Mitigation Measure 3.10-1, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a *less-than-significant* level. Any project for which noise or vibration impacts is not reduced to a *less-than-significant* level requires appropriate environmental review and further feasible project-level mitigation. Finally, implementation of the General Plan does not authorize any construction activities, and implementation of the General Plan will not, itself, cause a significant adverse noise or vibration construction impact.

Impact 3.10-2:

Finding: The City Council finds that the construction of future new land uses under the proposed General Plan would continue to generate or expose persons or structures to temporary groundborne vibration. With the implementation of General Plan policies and the following revised Mitigation Measure 3.10-2, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a *less-than-significant* level.

- **Mitigation Measure 3.10-2:** Future projects shall incorporate project-specific mitigation measures to reduce the impact of construction-related groundborne vibration.

(a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise and vibration construction activity minimization and mitigation plan for any multi-story development project located within a residential neighborhood, or located adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address high-noise or vibration construction activities such as pile-driving, and must address outdoor construction activities occurring outside normal weekday business hours. The plan must also address construction-related noise and vibration from current and concurrently with project-related construction activities to address potential cumulative noise and vibration impacts. Excessive noise and vibration impacts from such construction-related activities (defined as noise and vibration impacts that would not occur from similar construction-related activities) shall be avoided or minimized to the extent feasible, and high-noise or vibration construction activities shall not occur during evenings or weekends adjacent to occupied residential units.

(b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating noise and vibration impacts from construction activities, for use as appropriate in noise and vibration plans required under Mitigation Measure 3.10-2(a) above.

(c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for construction-related noise and vibration impacts during daytime weekday hours, and will consider and include feasible conditions in building, demolition and grading permits to avoid or minimize excessive noise and vibration from construction activities.

(d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal Code.

Rationale/Supporting Explanation: Construction-related vibration has two potential effects. First, vibration at high enough levels can result in human annoyance. Second, groundborne vibration can potentially damage the foundations and exteriors of older and potentially historic structures. Groundborne vibration that can cause this kind of damage is typically limited to impact equipment, such as pile drivers. Construction activities that would occur under the proposed project have the potential to generate low levels of groundborne vibration. Draft EIR Table 3.10-13 (Vibration Source Levels for Construction Equipment) identifies various vibration velocity levels for the types of construction equipment that would operate within the City during construction.

Groundborne vibration would attenuate at a rate of approximately 6 VdB per doubling of distance. The groundborne vibration generated during construction activities would primarily impact existing sensitive uses that are located adjacent to or within the vicinity of specific projects. These sensitive uses could sometimes be located within 50 feet of the construction site or as far as several hundred feet away. Based on the information presented in Draft EIR Table 3.10-13, vibration levels could reach up to 87 VdB for typical construction activities and up to 104 VdB if pile driving activities were to occur. For sensitive uses that are located within 25 feet of potential project construction sites, sensitive receptors at these locations may experience vibration levels during construction activities that exceed the FTA's vibration impact threshold of 85 VdB for human annoyance. If construction occurs more than 50 feet from sensitive receptors, the impact associated with groundborne vibration generated by the typical construction equipment would be below 85 VdB and thus would be less-than-significant. However, as development projects, equipment types, and construction schedules under the proposed General Plan are unknown at this time, and the proposed General Plan includes no policies or actions to prevent impacts from groundborne vibration, it is possible that construction activities could occur as close as 25 feet from sensitive receptors or pile driving activities could occur. This would result in these sensitive receptors experiencing vibration levels beyond the 85 VdB threshold for human annoyance. While there will be an increase in ambient noise and vibration levels from these construction activities, any measurable or discernible increase in construction-related ambient noise or vibration levels is not inherently significant for CEQA purposes. Measures to reduce construction-related noise and vibration are included in both the General Plan and Final EIR. Additionally, the Municipal Code includes a Noise Ordinance that allows construction activity noise during designated times and days, and also includes noise limits that are exceeded by existing and reasonably foreseeable future construction activities. In addition to the General Plan Noise Element, the Final EIR, and the Noise Ordinance included in the Municipal Code, revised Mitigation Measure 3.10-2 further mitigates and minimizes potentially significant future adverse noise and vibration impacts from construction activities. As a result of the additional mitigation requirements implemented through revised Mitigation Measure 3.10-2, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a *less-than-significant* level. Any project for

which noise or vibration impacts is not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Finally, implementation of the General Plan does not authorize any construction activities, and implementation of the General Plan will not, itself, cause a significant adverse noise or vibration construction impact.

Impact 3.10-3:

Finding: The City Council finds that Richmond is an urbanized area and General Plan implementation will result in increases to ambient noise levels including potential increases in excess of noise standards included in the City's existing Noise Ordinance. As a result of additional mitigation requirements implemented through new Mitigation Measure 3.10-3(b), operational noise impacts at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level. In addition, the City finds and determines that mitigating impacts from rail and roadway operations is within the jurisdiction and responsibility of other agencies, including Caltrans, the Public Utilities Commission, and the Federal Railroad Administration. These agencies can and should implement mitigation measures to further reduce noise levels associated with highway and railway operations to a *less-than-significant* level.

Mitigation Measure 3.10-3:

(a) Future projects shall incorporate project-specific mitigation measures and maintain Quiet Zones to reduce the impact of train noise.

(b) Future commercial and industrial projects shall incorporate project-specific mitigation measures to reduce operational noise levels for higher-noise sources such as commercial HVAC systems, generators, pumps and manufacturing activities.

a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise minimization plan for any commercial or industrial project located within a residential neighborhood, or located adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address operational noise generating activities such as HVAC systems, generators and pumps. Excessive noise from such sources shall be avoided or minimized to the extent feasible.

b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating operational noise from commercial and industrial projects, for use as appropriate in the noise minimization plan required under Mitigation Measure 3.10-3(b)(a) above.

c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for urbanized ambient noise standards, and will consider and include feasible conditions in building and use permits to avoid or minimize excessive operational noise from commercial and industrial activities.

d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal Code.

Rationale/Supporting Explanation: Due to the existing traditional development pattern of the City, residential, commercial, and industrial uses are located relatively close to one another and, in some instances, two or more of these uses co-exist on the same site. The proposed General Plan would allow increased density and/or mixed uses in specific areas. In general, the most significant land use changes would occur within the 16 proposed change areas described in the

General Plan Land Use and Urban Design Element.

Operational sources of noise generated by implementation of the proposed General Plan would include new stationary sources, such as rooftop HVAC systems for office, commercial, and mixed-use development. Large HVAC systems associated with development can result in noise levels that average between 50 and 65 dBA Leq at 50 feet from the equipment. As 24-hour CNEL noise levels are about 6.7 dBA greater than 24-hour Leq measurements, this means that the HVAC equipment associated with the retail-commercial buildings could generate community noise levels that average between 57 to 72 dBA CNEL at 50 feet when the equipment is operating constantly over 24 hours. General Plan Policies and Actions SN4.1, SN4.2, SN4.A, SN4.B, and SN4.C, would require design considerations and measures to be incorporated into new development that would restrict operational noise levels associated with stationary equipment to ensure that existing noise levels would be maintained.

Implementation of the proposed General Plan could also involve an increase in the delivery of goods to commercial, retail, and industrial developments. Two noise sources would be associated with delivery operations: the noise of the diesel engines of the delivery trucks and the backup beeper alarm that sounds when a truck is put in reverse, as is required and regulated by Cal-OSHA. The noise generated by idling diesel engines typically ranges between 64 and 66 dBA Leq at 75 feet. This noise would be temporary in nature, typically lasting no more than five minutes. Backup beepers, intended to warn persons who are behind the vehicle when it is backing up, are required by Cal-OSHA to be at least 5 dBA above ambient noise levels. These devices are highly directional in nature, and, when in reverse, the trucks and the beeper alarm would be directed towards the loading area and adjacent commercial structures.

As a result of additional mitigation requirements implemented through new Mitigation Measure 3.10-3(b), operational noise impacts at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level. Any project for which noise or vibration impacts is not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Finally, implementation of the General Plan does not authorize any construction activities, and implementation of the General Plan will not, itself, cause a significant adverse noise or vibration construction impact.

With respect to potential impacts from rail operations, under the proposed General Plan, additional sensitive uses (primarily residential structures) could be located in close proximity to the existing rail lines discussed in the Draft EIR. Typical commuter train noise produces a noise level of 80 dBA at 50 feet from the tracks, while a stopped commuter train would produce a noise level of 65 dBA. Per the Federal Railway Administration, noise levels associated with trains are anticipated to attenuate/reduce at a rate of 4.5 dBA for each doubling of distance. As such, noise-sensitive uses, such as residential structures, in the vicinity of rail operations would likely experience noise levels ranging from 60.5 to 75.5 dBA due to the physical movement and idling of commuter trains along the existing rail lines.

In addition to movement and idling noise levels, trains are required to use horns at any at-grade crossing for safety reasons. Depending on the type of horn used, noise levels could reach 110 dBA at a distance of 100 feet. Under the proposed General Plan, sensitive uses could be located within areas that may experience excessive noise levels due to train horns. Under new construction practices, noise levels inside structures, such as residential buildings, can be expected to be 30 dBA less than exterior noise levels. As such, the instantaneous interior noise levels attributable to residential units located within 100 feet of an existing rail line would be reduced to approximately 80 dBA when a train horn blows. This noise level would be in excess of City noise standards as established in the Municipal Code by approximately 15 dBA for instantaneous noise. However, General Plan Action SN4.D is included as part of the proposed General Plan to address the potential impact of train horns.

The study of quiet zones would not, in and of itself, reduce potential noise impacts. General Plan Policies and Actions SN4.1 through SN4.3, and SN4.A through SN4.C would reduce potential impacts with respect to rail operations. Nonetheless, the potential for rail horns to affect nearby sensitive receptors, especially along Grant Boulevard and Carlson Boulevard, would still exist, even with implementation of the proposed General Plan policies and actions. As stated previously, the proposed General Plan contains General Plan Policy SN4.1, the intent of which is to reduce or mitigate objectionable noise sources and require new noise sources to comply with noise standards. This policy would encourage developers to protect and preserve any existing neighborhoods and the sensitive residential uses contained within from traffic noise, and encroachment activities associated with future new land uses allowed under the proposed General Plan. However, mitigating these impacts from rail and roadway operations lies within the jurisdiction and responsibility of other agencies, including Caltrans, the Public Utilities Commission, and the Federal Railroad Administration. These agencies can and should implement mitigation measures to further reduce noise levels associated with highway and railway operations, such as using roadbed and rail materials that dampen or otherwise reduce noise levels, developing and implementing safety measures with lower noise levels than existing equipment such as rail whistles and crossing alarms, and working with manufacturers and operators of rail and vehicular equipment to reduce operational equipment noise levels to a *less-than-significant* level.

Impact 3.10-4:

Finding: The City Council finds that the operation of new land uses under the proposed General Plan would not generate and expose sensitive receptors on- or off-site to excessive groundborne vibration or groundborne noise levels. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: During the life of the proposed General Plan, background operational vibration levels would be expected to average approximately 50 VdB throughout the majority of the City and especially within the residential neighborhoods, as discussed in the Draft EIR. This is substantially less than the applicable 85 VdB threshold. Groundborne vibration resulting during the life of the proposed General Plan would primarily be generated by trucks making periodic deliveries to and from uses within City limits. However, these types of deliveries would be consistent with deliveries that are currently made along roadways to commercial uses within the City currently and would not be expected increase groundborne vibration substantially above existing levels. In addition, because potential operational vibration would be attributed to primarily commercial and industrial uses, General Plan Policies and Action SN4.1, SN4.2, SN4.3, and SN4.A through SN4.C would further ensure that nearby sensitive receptors would not be exposed to excessive groundborne vibration or noise.

Therefore, with inclusion of the proposed General Plan policies, operation of the proposed project would not expose sensitive receptors on or off site to excessive groundborne vibration or groundborne noise levels, and this impact would be *less-than-significant*.

Impact 3.10-5:

Finding: The City Council finds that operation of new land uses under the proposed General Plan would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in the project vicinity. However, operational noise impacts at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level with implementation of General Plan policies and the following mitigation measure, as well as with implementation of mitigation measures within the jurisdiction and responsibility of other agencies, including Caltrans.

- **Mitigation Measures 3.10-5:** Future projects shall incorporate project-specific mitigation measures to promote non-motorized transportation to reduce the impact of traffic noise.

Rationale/Supporting Explanation: Future noise levels within the City would continue to be dominated by vehicular traffic on the adjacent roadways. Other sources of noise would include new stationary sources (such as rooftop HVAC equipment) and increased human activity throughout the City.

Locations in the vicinity of the individual projects within the City could experience slight changes in noise levels as a result of an increase in the on-site population and intensification of land use densities and a concentration of vehicle trips in the immediate vicinity of a project site that could occur due to the potential new land uses allowed under the proposed General Plan. Existing traffic noise levels are identified in Draft EIR Table 3.10-4. Noise levels associated with traffic generated from existing conditions within the City are calculated at the selected locations along the study-area roadway segments using traffic data from the traffic study (included in Appendix E of the Draft EIR). As stated in the “Thresholds of Significance” section of the Draft EIR, where ambient noise levels are 60 dBA CNEL or less, a 5.0 dBA CNEL increase would be considered a substantial increase; where ambient noise levels are between 60 dBA and 65 dBA CNEL, an increase of 3 dBA would be considered a substantial increase; and if ambient noise levels are 65 dBA CNEL or greater, an increase of 1.5 dBA would be considered a substantial increase. Draft EIR Table 3.10-14 (Future Roadway Noise Levels Compared to Ambient Future Noise Levels) presents the average daily noise levels associated with these roadways under the proposed project and compares them to future without development of the proposed General Plan. Draft EIR Figure 3.10-4 depicts the future noise levels under the proposed General Plan with cumulative regional vehicle traffic.

As shown in Draft EIR Table 3.10-14, six roadway segments are expected to experience a significant increase over existing conditions with the addition of future traffic volumes due to implementation of the proposed General Plan and regional growth. The increases along these six segments would constitute a substantial permanent increase in ambient noise levels due to implementation of the proposed General Plan. General Plan Policies and Actions SN4.1, SN4.2, SN4.3, SN4.B, and SN4.C would serve to reduce associated noise levels at nearby sensitive receptors.

Exterior noise levels in existing and proposed noise-sensitive areas can be remediated by relocating roadways, building sound walls, providing buffer zones, retrofitting older homes with insulation or applying appropriate window treatments (i.e., double-paned windows, interior storm windows, etc.) or choosing development sites in quiet areas. For new development, it is anticipated that many City standards could be met and substantial noise increases could be avoided by incorporating some of the strategies listed above. However, it would not be possible to guarantee success in all cases because funding may not be available for sound wall construction, land may not be available for buffer zones, or it may be cost prohibitive to relocate existing roadways. While project-specific measures, as required through Mitigation Measure 3.10-5, could reduce noise effects from transportation noise at new development, it may not be possible or feasible to include noise reduction strategies to address an increase in noise levels for existing residences located in areas adjacent to roadways or other noise generating sources. The City finds that mitigating impacts from roadway operations is within the jurisdiction and responsibility of other agencies, including Caltrans. These agencies can and should implement mitigation measures (i.e., using roadbed materials that dampen or otherwise reduce noise levels) to further reduce noise levels associated with highway operations to a *less-than-significant* level.

PARKS AND RECREATION

Impact 3.11-1:

Finding: The City Council finds that implementation of the proposed General Plan would increase the use of existing neighborhood and regional parks or other recreational facilities but would not substantially accelerate or result in substantial physical deterioration of the facilities. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: An increase in population resulting from implementation of the proposed General Plan would place a greater demand on existing neighborhood and regional parks or other recreational facilities such that deterioration of these facilities could be accelerated. Chapter 15.08.400 of the City of Richmond Municipal Code establishes a standard of three acres of property for each 1,000 residents residing within the City to be devoted to local park and recreational purposes. The City has a total local parklands inventory of 251 acres, not including joint-use facilities acreage. Regional park acreage and any other jurisdiction's facility acreage are not included in this inventory. The City currently maintains a local parkland to population ratio of 2.44 acres per 1,000 residents (251 acres of parkland and 102,700 residents), which is below the City's standard of 3 acres of local parkland per 1,000 residents. Implementation of the proposed General Plan would result in a direct population increase of 30,147 residents, resulting in a resident population in Richmond of 132,847 in 2030. As stated above, the parkland ratio for City-owned parkland is below the City's standard of 3 acres of local parkland per 1,000 residents. However, this standard does not take into account the 4,029 acres of regional and state parks located in the City, which supplements local parks and recreational facilities for Richmond residents. The proposed General Plan includes a conceptual system of parks, but does not include plans for specific park development. The proposed General Plan would, however, allow for future development resulting in direct and indirect population growth and creating a need for parklands in the City. Assuming an additional population of 30,147, the proposed General Plan would create a demand for 90.4 acres of parkland at 3 acres per 1,000 residents. In order to mitigate impacts created by additional demands on existing park and recreation services due to the increase in new residential development in the City, the City imposes a development impact fees to fund parks and recreation, as permitted by Chapter 15.08.400 of the City of Richmond Municipal Code. As a condition of approval of a final map or parcel map, the developer is required to either dedicate land or pay a fee for park or recreational purposes, The amount of land to be provided is determined pursuant to Formula 15.08.400(4)(a) of the Municipal Code, or developers may pay an in-lieu of fee equal to the value of the land prescribed. Payment of an in-lieu of fee or dedication of land to be used for recreation purposes would ensure that new development in the City would provide adequate park facilities. The physical impacts of the construction of new parks within the City are assumed as part of the proposed General Plan and analyzed in the technical sections of the Draft EIR at a program level. General Plan Policies and Actions PR1.3, PR1.4, PR1.A through PR1.C, PR1.F, and PR1.G would further reduce the potential for impacts on parks and recreation facilities.

General Plan Policy PR1.3 maintains the parkland development standard of three acres of community or neighborhood parkland per 1,000 residents in each neighborhood planning area, and encourages the development of compact parks, play lots and plazas in order to increase access to recreation opportunities for residents. General Plan Policy PR1.4 promotes shared access to non-city operated parks and recreational facilities, and pursuing additional joint-use opportunities. Additionally, General Plan Action PR1.F, which supports Policy PR1.4, pursues joint-use agreements with WCCUSD, EBRPD, neighboring cities, public agencies or nonprofit organizations to maximize use of existing facilities in the community, would increase the City's parkland inventory while sharing various costs.

General Plan Actions PR1.B, and PR1.C allow for the preparation of a Parks Master Plan, as well as several other planning documents that would identify the recreation needs of the City and facilitate the development of additional parks. Implementation of General Plan Action PR1.G calls for an update of the parkland dedication ordinance to require new development and redevelopment projects to pay a fair share to cover cost of parkland acquisition and improvement if adequate parkland within the project is not provided. This action also prioritizes park dedication over impact fees, and describes a provision to prevent a net loss of parklands in the City by requiring at 1 for 1 replacement if there is any loss of public open space and parkland due to redevelopment. Implementation of these policies and actions would ensure the continued collection of fees and dedication of land in order to develop additional parks and facilities throughout the City to serve the needs of the residents.

Because the parks that serve the City of Richmond, including regional parks, far exceed the City's per-resident parkland standard, the City would be adequately served in the future. In addition, the implementation of the goals and policies in the proposed General Plan, as well as the dedication of land or payment of an in-lieu fee for future residential subdivisions, would further reduce the effect from increased demand and use resulting from an increase in citywide population. Therefore, the proposed General Plan would not significantly accelerate the deterioration of existing recreational facilities. This impact would be less-than-significant.

Impact 3.11-2:

Finding: The City Council finds that implementation of the proposed General Plan would not create a demand for the construction or expansion of park facilities beyond that anticipated in the General Plan. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would result in a direct population increase of 30,147 residents by 2030 over the 2005 population of 102,700, resulting in a resident population in Richmond of 132,847 in 2030. The City currently maintains a parkland-to-population ratio of 2.44 acres per 1,000 residents for local parks, which is below the City's standard, and represents a deficit of approximately 57.1 acres of parkland.

Provisions of the proposed General Plan would ensure that future residential growth in the City would provide a minimum of 3 acres of parkland per 1,000 residents, so that future park facilities would be provided commensurate with local growth in Richmond. Specifically, as explained under Impact 3.11-1, all future private developers proposing residential subdivisions within the City would be required to either dedicate land for park facilities or pay a fee in lieu of providing parkland. The current park and recreation dedication and fees are collected by the City as part of the development review process and used only for the purpose of developing new park facilities to serve the development for which the fees were paid. Policies and implementation actions contained in the proposed General Plan would also reduce impacts on recreational facilities by outlining the ways in which the City would acquire the funds and the land to increase the City's parkland inventory in order to better serve the community.

The policies set forth in the General Plan are designed to ensure that future development in the City would not create a need for recreation facilities beyond that anticipated in the General Plan. The physical effects of providing the required park acreage, such as construction emissions and effects on biological resources, are considered in the other technical sections of the Draft EIR. This impact is less-than-significant.

PUBLIC SERVICES

Impact 3.12-1:

Finding: The City Council finds that the implementation of the proposed General Plan would increase the demand for fire protection and emergency services and/or create a demand for additional fire stations, department personnel, and/or equipment, but would not reduce the level of protection. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: As discussed in the Land Use and Urban Design Element of the proposed General Plan, the change areas can be characterized as urban and would not substantially alter the interface between development and undeveloped areas such that the increase for wildland fire would increase. However, significant changes in land use and development character are proposed as part of the proposed General Plan within the targeted change areas. The proposed General Plan would increase the population and development intensity in the change areas. However, an increase in population, by itself, would not increase demand for fire protection services. The demand for fire stations and firefighting services vary more as a function of the geographic distribution of development than of population increases. Thus, the Richmond Fire Department's (RFD) service goals are based on accepted service levels of distance and time, rather than firefighters or stations per capita. As stated in the Draft EIR, the RFD is currently operating at acceptable levels of fire protection services of five minutes. In light of this service standard, it is more relevant to examine the location of the change areas relative to existing fire stations than to consider the additional personnel needed to support the projected population increase in the City by 2030.

The proposed General Plan would increase the intensity of development in the change areas, but these areas are already currently served by fire protection services. As a result, new development under the proposed General Plan would not cause the RFD to travel farther or require additional time to reach the new development; the new development within the change areas would occur as infill. To further reduce the impact of new development on the existing RFD facilities, equipment, and personnel, the City requires that the proposed structures, access, and water supply meet the California State Fire Code and City building requirements. In addition, project developers would be required to pay development impact fees as established by City ordinance. The City of Richmond would mitigate impacts on the existing RFD facilities, equipment, and personnel by imposing development impact fees to fund public facilities, including fire facilities. General Plan Policies and Actions SN1.B, SN2.2, SN2.3, SN2.C, SN2.D, SN2.F, SN2.G, and SN3.1 would further reduce potential impacts on fire protection services.

The policies contained in the proposed General Plan require that adequate infrastructure be provided as new development occurs. For example, compliance with General Plan Policy SN2.2 would ensure that growth and development would be coordinated with the provision of adequate infrastructure. Thus, fire staffing and facilities would be expanded commensurately to serve the needs of new development to maintain the current response time. General Plan Action SN2.B would evaluate the response times for fire and emergency medical calls annually to gauge the need for additional facilities, equipment, and personnel, and identify specific geographic areas of the City that may not be adequately served.

Additionally, new development would be required to comply with state and local regulations governing the provision of fire protection services, including adequate fire access, fire flows, and number of hydrants. The City of Richmond has adopted the 2010 California Fire Code with City amendments and some exceptions. These provisions include construction standards in new structures and remodels, road widths and configurations designed to accommodate the passage of fire trucks and engines, and requirements for minimum fire flow rates for water mains. Finally, if new facilities would need to be constructed to accommodate increased demand on fire protection

services, further environmental review would be required as specific facilities are proposed. In addition, all significant new development would be subject to the City's environmental review process, which includes project-specific assessment of fire protection services. Compliance with applicable regulations and policies contained in the proposed General Plan would ensure impacts on fire services remain *less-than-significant*.

Impact 3.12-2:

Finding: The City Council finds that the implementation of the proposed General Plan would increase the demand for police protection services and create a demand for additional police stations, department personnel, and/or equipment, but would not reduce the level of protection. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: Currently, there are 1.6 sworn officers per every 1,000 City residents, and the Richmond Police Department (RPD) currently maintains an acceptable level of service. Projected growth under the proposed General Plan would result in an additional 30,147 residents by 2030. Based on current personnel-per-capita ratios, this population growth would require 48 additional sworn officers. The proposed General Plan would increase the intensity of development in the change areas, but these areas are already currently served by police protection services and thus would not result in an increase in response times for various calls for service.

The RPD's ability to support the needs of future growth is dependent upon its ability to hire and train police personnel and to redefine district and patrol beats to maintain a manageable call load. General Plan Policies and Actions SN2.1, SN2.2, SN2.A, SN2.B, SN2.C, and SN3.1 would further reduce the potential for impact on police protection services.

Policies and actions in the proposed General Plan require that adequate infrastructure be provided as new development occurs. Compliance with General Plan Policy SN2.2 would ensure that growth and development would be coordinated with the provision of adequate service and equipment. Thus, police staffing and facilities would be expanded commensurately to serve the needs of new development to maintain acceptable response times. General Plan Action SN2.B would evaluate the response times for police annually to gauge the need for additional facilities, equipment and personnel, and identify specific geographic areas of the City that may not be adequately served. In addition, all significant new development would be subject to the City's environmental review process, which includes project-specific assessment of police services. Compliance with applicable regulations and policies contained in the proposed General Plan would ensure impacts on police services remain *less-than-significant*.

Impact 3.12-3:

Finding: The City Council finds that the implementation of the proposed General Plan could generate additional students, but the demand for new school facilities would be fully mitigated with required payment of school fees. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: The proposed General Plan could add as many as 15,548 housing units in the City by 2030. Using WCCUSD student generation factors shown in Draft EIR Table 3.12-4, the proposed General Plan could result in a student population increase of approximately 10,448 students by 2030.

Impacts due to increases in school enrollment would be reduced through the payment of school impact fees, required for all new development. These fees would be based on the use and size of a project. Additionally, the proposed General Plan policies and actions that require adequate school infrastructure be provided as new development occurs, which would further reduce the

potential for impact on school facilities. In particular, compliance with General Plan Policy CF1.4 would require new development to provide school facilities and infrastructure improvements as the new development occurs. Thus, school staffing and facilities would be expanded to serve the needs of new development to maintain adequate service levels.

As school fees are collected from residential, commercial, and industrial uses, developers are required to fund necessary school service and facility improvements to accommodate anticipated population and student enrollment. If new facilities need to be constructed to accommodate increased student enrollment, further environmental review would be required as project-specific plans are developed. In addition, all significant new development would be subject to the City's environmental review process, which includes project-specific assessment of student growth and impacts on schools. This environmental review, combined with developer fees and applicable policies and actions in the proposed General Plan, would ensure impacts on schools remain *less-than-significant*.

Impact 3.12-4:

Finding: The City Council finds that the implementation of the proposed General Plan would create an additional demand for library services, but would not result in a substantial adverse environmental impact associated with the provision of new or physically altered libraries or the need for new or physically altered libraries. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: The City of Richmond currently has no standard for library services. Increased development in the City does not necessarily equate to an increase in need for total volumes or square feet of library space. General Plan Policies and Actions CF1.1, CF4.2, EH1.A, EH3.7 would reduce potential impacts on library services.

Compliance with the above policies and implementation actions in the proposed General Plan would assure library needs would be addressed and plans to improve existing facilities would be undertaken. The City of Richmond mitigates impacts on existing library services from new residential and commercial structures in the City by imposing library impact fees to fund library facilities. As such, impacts associated with library services would be *less-than-significant*.

PUBLIC UTILITIES

Impact 3.13-1:

Finding: The City Council finds that implementation of the proposed General Plan would not require or result in the construction and/or expansion of water supply facilities, the construction of which could cause significant environmental impacts, or require water supplies in excess of existing entitlements. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: As discussed in the Draft EIR, the City of Richmond's water supply is provided by EBMUD. More than 90 percent of the water delivered to EBMUD's customers originates from the Mokelumne River watershed, and approximately 10 percent originates as runoff from the protected watershed lands in the East Bay Area. EBMUD has six water treatment plants that can filter and process more than 375 million gallons of water daily.

Additional development accommodated under the proposed General Plan would increase water use within the City, thus increasing the need for water treatment services. The 2040 Demand Study takes into account the growth in water demand in the City of Richmond as well as the other areas served by EBMUD. Existing water supply, combined with the three projects currently under construction or in the feasibility phase, would be substantially augmented, as the FRWP would increase EBMUD supplies during drought years by 100 mgd; the Bayside Groundwater project

would store an annual average of 1 mgd during its initial phase; and the Bay Area Regional Desalination Project would provide a total capacity of 71 mgd.

As noted above, EBMUD compared the proposed General Plan with the 2040 Demand Study's land use database and the projected General Plan land use matched very closely, and determined that the EBMUD 2040 Demand Study is a good predictor of water demands in the City of Richmond. Therefore, from a cumulative perspective, the WSMP 2040 would meet citywide demand in Richmond. Specific project assessments pursuant to SB 221 and SB 610 would provide further review of the long-term adequacy of the water supply to meet the needs of individual projects as they are submitted for consideration by the City. General Plan Policies and Actions CF1.4, CN3.4, CN3.B, CN3.H, PR3.D, and EC3.4 would further reduce the potential for impacts on water supply.

The proposed General Plan Update policies and implementing actions direct the City to implement water conservation measures to assist in water conservation efforts to meet the current and projected future daily and peak water demands. For example, Policy CN3.4 promotes and encourages residents, businesses, and industry to conserve water, especially during drought years. The proposed General Plan Update Policy CF1.4 requires new development to provide proportionate facilities and infrastructure improvements as the new development occurs, including water treatment and conveyance facilities. In addition, EBMUD's WSMP 2040 policies and programs are designed to provide sufficient water supplies to serve future development out to 2040, including development associated with the proposed General Plan, so the proposed General Plan would not require new or expanded water entitlements. Lastly, EBMUD would provide verification of adequate water supply for subsequent projects as they are proposed. As such, adequate water supply and infrastructure would be provided for all development under the proposed General Plan Update. These impacts would be less-than-significant.

Impact 3.13-2:

Finding: The City Council finds that implementation of the proposed General Plan would not exceed wastewater treatment requirements of the Regional Water Quality Control Board. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: The City of Richmond requires NPDES permits, as administered by the SFBRWQCB, according to Federal regulations for both point source discharges (a municipal or industrial discharge at a specific location or pipe) and nonpoint source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the United States. For point source discharges, such as sewer outfalls, each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. The wastewater Districts that serve the City of Richmond would be required to comply with all requirements in the NPDES permit to ensure that any discharges would not exceed wastewater treatment requirements of the Regional Water Quality Control Board. In addition, General Plan Action CN3.A would further reduce the potential for impact related to wastewater discharges.

Wastewater from new development under the proposed General Plan would be directed to existing facilities, which would continue to comply with all provisions of the NPDES program, as enforced by the SFBRWQCB. Therefore, the proposed General Plan would not result in an exceedance of wastewater treatment requirements. All future projects under the proposed General Plan would be required to comply with all applicable wastewater discharge requirements issued by the State Water Resources Control Board (SWRCB) and SFBRWQCB. Therefore, implementation of the proposed General Plan would not exceed applicable wastewater treatment requirements of the SFBRWQCB with respect to discharges to the sewer system or stormwater system within the City. Consequently, because future development under the proposed General Plan would be required to adhere to existing regulations, the impact would be *less-than-*

significant.

Impact 3.13-3:

Finding: Implementation of the General Plan Update could require the construction or expansion of wastewater treatment facilities or collection systems that could cause significant environmental impacts, absent project-specific mitigation measures. However, since the impacts of this project are not yet known, it is premature to conclude that the impacts of the expansion or construction will create significant unmitigated adverse impacts to the environment. Therefore, with implementation of General Plan policies and mitigation measures, including new Mitigation Measure 3.13-3(b), this impact is considered *less-than-significant*.

- **Mitigation Measure 3.13-3:**

- (a) Future projects shall incorporate project-specific mitigation measures to reduce impacts from the construction of new wastewater collection and treatment facilities.

- (b) The City will work with affected stakeholders to avoid, minimize or mitigate any significant adverse impacts to the environment that may occur as a result of increasing the capacity of the wastewater treatment and conveyance system. This is appropriately evaluated and implemented at the project-specific level for the treatment plant and conveyance systems.

Rationale/Supporting Explanation: Wastewater service within City of Richmond is provided by three sanitary sewer districts. RMSD is managed by the City of Richmond. As described in the Draft EIR, WCWD plant has a dry weather design capacity of 12.5 mgd; RMSD WWTP has a dry weather design capacity of 24 mgd; and EBMUD's Wastewater Treatment Plant, which provides treatment for the SSD collection facility, has a maximum flow of 168 mgd.

According to the 2040 Demand study, the EBMUD service area would require 229 mgd of water by 2030 and 230 mgd of water by 2040. Regions AN, AS, GC, and GN encompass the City of Richmond and would generate 120 mgd by 2040. This would yield an estimated wastewater generation of 108 mgd for the regions AN, AS, GC, and GN, which also includes demand from other cities that have other wastewater service providers and the City of Richmond would yield only a small percentage of this estimate. The RMSD, WCWD, and EBMUD's combined wastewater flow capacity is over 200 mgd. General Plan Policies and Actions CF1.4, CF2.4, CF2.B, and CF3.A would reduce the potential for impact on wastewater.

The General Plan policies and actions such as General Plan Policy CF1.4 would require new development to provide proportionate facilities and infrastructure improvements as the new development occurs. In addition, the City of Richmond mitigates impacts created from additional demands on services due to the increase in new residential and commercial structures in the City by imposition of sewer service fees to provide sewer services.

As noted, RMSD, WCWD, and EBMUD's combined wastewater flow capacity is over 200 mgd, compared to an estimated 229 mgd wastewater generation in the service area. In addition, as discussed above, the RMSD WWTP currently experiences wet weather flows that exceed the plant's treatment capacity. With implementation of the proposed General Plan policies and the City's development fee imposed by the City's municipal code, wastewater facilities would be funded as development occurs. However, because some improvements would be required in order to accommodate growth in the City absent project-specific mitigation measures, there is potential for physical effects associated with the construction of new or expansion of existing facilities. The extent to which environmental impacts associated with any new infrastructure would be ascertained at a later time, prior to implementation of any improvements. However, it is

premature to conclude that these infrastructure improvements will cause significant, unmitigated adverse impacts to the environment. Accordingly, with implementation of new Mitigation Measure 3.13-3(b), this impact is considered *less-than-significant*.

Impact 3.13-4:

Finding: The City Council finds that implementation of the proposed General Plan would not result in a determination by the wastewater treatment provider that it does not have adequate capacity to serve the project's demand in addition to the provider's existing commitments. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would generate additional demand on the existing sewer system from increased sewage flows. The proposed General Plan could result in a net increase of residential and non-residential developments by the proposed General Plan horizon year of 2030. The City contribution to the daily wastewater received by the treatment facilities resulting from the implementation of the proposed General Plan would increase from the current City's daily wastewater flow. Any request for service resulting from new development would be subject to a site-specific evaluation of the existing wastewater system's capacity to service the development. If improvements to the existing wastewater system are required or additional facilities are needed, the property developer would be required to pay its fair share of the cost of the needed improvements. General Plan Policies and Actions CF1.4, CF2.4, CF2.B, and CN3.A would further reduce the potential for impact on wastewater facilities.

As discussed in the Draft EIR (pages 3.13- 12 through 3.13-14), three sanitary sewer agencies serve areas within the geographical boundaries of the City of Richmond: West County Wastewater District, Stege Sanitary District, and the Richmond Sanitary Sewer District. All three agencies are responsible for maintenance of their collection and treatment systems, and all three agencies have enacted regulations to ensure that private property owners are tasked with maintaining private sewer laterals. Through enforcement of regulations affecting private property owners, the imposition of development impact fees, the use of bond financing, and the collection of fees for services, all three sewer districts meet their obligations to maintain, repair, expand and upgrade their collections and treatment systems.

The Richmond Sanitary Sewer District operates a wastewater treatment plant within the City of Richmond. The treatment plant is operated and maintained to meet all requirements of federal and state law.

The Draft EIR acknowledges on pages 3.13-12 and 3.13-13 that under existing conditions, wet weather flows exceed the capacity of the wastewater treatment plant due to inflow and infiltration (I & I). This, however, is the existing condition and not a result of the proposed General Plan. To remedy this existing condition and reduce the potential for infrastructure shortcomings to result in violations of wastewater discharge requirements, the City has developed Sanitary Sewer and Wastewater Treatment Plant Master Plans that address wet weather storage, long and short-term improvement projects, as well as funding strategies for short-term and long-term Capital Improvement Projects. Projects are identified and prioritized to comply with all regulatory agency requirements and/or mandates as well as the terms of the Baykeeper Settlement Agreement. Additional improvements have been identified to address on-going rehabilitation and replacement of collection and treatment system facilities. The City issued municipal bonds to finance projects over the next three years, and is developing a long term financial plan which identifies methods for funding additional, on-going improvements. The City has also implemented a Lateral Compliance Program (RMC 12.17), which is based on "point-of-sale" for homes and businesses located in the Richmond Municipal Sewer District (RMSD). There are currently over 18,000 lateral connections in the RMSD, totaling an estimated 270 miles in length. Poorly

operating or failing laterals allow I & I into the sanitary sewer system during wet weather contributing to system capacity problems and increased potential for sanitary sewer overflows. Repairing and/or replacing these laterals significantly reduces I&I of groundwater and stormwater into the sewer system.

The City policy is to work closely with developers to identify opportunities to include infrastructure improvements as part of proposed developments. The City's Planning and Engineering Departments work with developers to incorporate these improvements utilizing methods that will not be cost prohibitive. Therefore, the City's current plans to repair and replace poorly operating or failing laterals would substantially reduce the existing conditions that result in violations of wastewater discharge requirements. In addition, requirements placed on new development to include adequate infrastructure to accommodate that new development would ensure that implementation of the proposed General Plan would improve the condition of the sanitary sewer collection and treatment systems in the City and reduce the risk of unpermitted wastewater discharges. For these reasons, the Draft EIR concluded that implementation of the proposed General Plan would have a *less-than-significant* impact on wastewater services.

As discussed, because treatment capacity is limited, expansion of treatment facilities would be required to accommodate the proposed General Plan. The General Plan policies and implementation actions, such as Policy CF1.4 (Concurrent Infrastructure Development) would require new development to provide proportionate facilities and infrastructure improvements as the new development occurs. With implementation of the proposed General Plan policies and the City's development fee imposed by the City's municipal code, projects would be required to fund any required improvements to wastewater treatment facilities associated with increased growth in the City. Because policies and implementing measures contained in the proposed General Plan would ensure that adequate treatment facilities would be provided for growth in the City, this impact is considered *less-than-significant*. The physical effects of constructing wastewater treatment facilities are addressed in Impact 3.13-3.

Impact 3.13-5:

Finding: The City Council finds that implementation of the proposed General Plan could result in the generation of additional solid waste, but there is sufficient landfill capacity to accommodate the increased demand for solid waste service. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would produce 55,796 tons of solid waste in 2030 (or 152.9 tons per day), which would be an increase of 12,662 tons (or 34.7 tons per day) from 2005. As discussed in the Draft EIR, the Potrero Hills Landfill has been approved to expand its original capacity by approximately 61.6 million cubic yards for a total capacity of 83.1 million cubic yards, which would extend the capacity by approximately 35 years. In addition, the WCCIWMA has utilized other landfills besides Potrero Hills Landfill in 2008 and Draft EIR Table 3.13-2 (Disposal Facilities Used by WCCIWMA in 2008), shows four landfills with closure dates past the proposed General Plan horizon year of 2030, each of which with substantial remaining capacity. Bakersfield Metropolitan (Bena) SLF is scheduled to close on December 31, 2038 with a permitted daily capacity of 4,500 tons with remaining capacity of 44,818,958 (84.6 percent). Keller Canyon Landfill is scheduled to close on December 31, 2030 with a permitted daily capacity of 3,500 tons with remaining capacity of 63,408,410 (84.5 percent). Pacheco Pass Landfill is scheduled to close on December 31, 2066 with a permitted daily capacity of 3,000 tons with remaining capacity of 40,600,000 (97.1 percent). Redwood Sanitary Landfill is scheduled to close on January 1, 2039 with a permitted daily capacity of 2,300 tons with remaining capacity of 12,900,000 (67.5 percent).

As shown in Table 3.13-2 (Draft EIR page 3.13-23), the 14 landfills that served the City have a daily permitted capacity of 51,716 tons/day. As discussed on Draft EIR page 3.13-25, it is

estimated that the City would generate 152.9 tons/day of solid waste in 2030, an increase of 34.7 tons/day. The total daily solid waste generated in the City, including existing waste generation, would represent 0.3 percent of the daily capacity of the listed landfills and the increase generated by the General Plan would represent 0.07 percent of that capacity. This is not a significant increase relative to available capacity. It should also be noted that landfills regularly undergo expansions to increase capacity, though the Draft EIR analysis does not consider expansions beyond those already approved. The landfills themselves consider more than one source in calculating the daily and total capacities of the landfill, so the contributions of other jurisdictions are already considered in those capacities.

With the approval of the expansion of the Potrero Hills Landfill, there would be sufficient landfill capacity to serve the proposed General Plan. Even without the additional capacity at the Potrero Hills Landfill, there are other landfills that could accommodate the proposed General Plan: the additional 34.7 tons per day anticipated to be generated by the proposed General Plan would comprise only a small percent of the daily permitted landfill capacity at Bakersfield Metropolitan, Keller Canyon Landfill, Pacheco Pass Landfill, or Redwood Sanitary Landfill. Existing landfill facilities are adequate to serve the City through the General Plan horizon year 2030. Because adequate landfill capacity exists to accommodate solid waste generated by proposed General Plan growth, this impact would be *less-than-significant*.

Impact 3.13-6:

Finding: The City Council finds that implementation of the proposed General Plan would comply with all applicable federal, state, and local statutes and regulations related to solid waste. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: State law requires a 50 percent diversion of solid waste from landfills. The City of Richmond, as part of the WCCIWMA, has met the 50 percent waste diversion goal in 2006. The RecycleMore program continues to work to maintain this level of diversion. WCCIWMA diverted at least 50 percent in 2006. Therefore, the City, as part of WCCIWMA, is in compliance with state law. In addition, the City remains committed to continuing its existing waste reduction programs and minimization efforts with the General Plan policies and actions. General Plan Policies and Actions CF1.E, CN5.3, CN5.D, and CN5.F would reduce the potential for impacts related to solid waste.

General Plan Policy CN5.3 and Actions CN5.D and CN5.F would ensure that waste reduction and recycling programs would be enhanced and practiced within the City of Richmond. Thus, implementation of the proposed General Plan would have no conflict with federal, State, or local statutes or regulations related to solid waste disposal. Therefore, the impact would be less-than-significant.

Impact 3.13-7:

Finding: The City Council finds that implementation of the General Plan would increase the demand for electricity and natural gas, but would not require or result in the construction of new energy production or transmission facilities, the construction of which could cause a significant environmental impact. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: The implementation of the General Plan would result in new development and would increase the use of electricity in the City of Richmond to light, heat, ventilate, and air condition the new buildings. The total annual electricity consumption by during the life of the proposed General Plan is estimated to be approximately 656,943,000 kWh of electricity per year, which would be an increase of 149,080,000 kWh of electricity from 2005. The state has experienced constraints related to energy supply and delivery. These constraints have

generally been limited to peak demand days during the summer months, such that for the majority of the days during the year adequate energy supplies are reliably provided to consumers. Implementation of the General Plan would increase use of electricity in the City of Richmond, in particular, the demand for electricity to light, heat, ventilate, and air condition new buildings. □ There are many sources of electrical energy, and it is likely that various sources would be used by the City. For example, PG&E has entered into a contract with El Dorado Energy, LLC, a subsidiary of Semptra Generation, to purchase 48 megawatts (MW) of photovoltaic solar power produced at the Copper Mountain Solar facility, which will produce an average of 100 gigawatt-hours of electricity each year, equal to the annual consumption of more than 14,000 average homes. PG&E also obtains energy from hydroelectric, nuclear, and fossil facilities.

Development under the proposed General Plan would be required to comply with the energy conservation measures contained in Title 24 of the California Code of Regulations, and General Plan polices would implement energy saving practices. General Plan Policies and Actions CF1.4, CF.F, CN5.1, CN5.2, CN5.A, CN5.C, EC3.1, EC3.2, EC3.A, and EC3.C would further reduce the potential for impact on energy.

The construction of new electric facilities could be required to serve new development within the City. The physical impacts from the construction of these facilities are assumed as part of the proposed General Plan development and are analyzed in the Draft EIR. The referenced policies require energy efficiency and conservation and require the City to collaborate with utility and partner agencies to develop a program to reduce energy demand and promote energy conservation. Implementation of the referenced policies and actions would further reduce demands for electricity and would ensure that impacts related to electricity supply would be less-than-significant

Under the proposed General Plan, the City of Richmond would require approximately 389,212,000 Therms of natural gas per year, which would be an increase of 88,324,000 Therms of natural gas from 2005. The planning area would be served by natural gas lines approved by PG&E. As PG&E declares itself a “reactive” utility that provides natural gas as customers request its services, PG&E does not envision any problems with adequate supply of natural gas available to serve the City of Richmond. Any expansion of service necessitated by implementation of the proposed General Plan would be in accordance with PG&E’s policies and extension rules on file with the California Public Utilities Commission at the time contractual agreements are made.

For the reasons discussed above, the proposed General Plan would not require or result in the construction of new energy production or transmission facilities, the construction of which could cause a significant environmental impact. In addition, PG&E has provided a “will serve” letter for the proposed General Plan that natural gas and electric service is available and extension of any facilities will be made in accordance with PG&E’s gas and electric rules and regulations on file with the State of California Public Utilities Commission at the time natural gas and electric service is requested. This impact is considered *less-than-significant*.

Impact 3.13-8:

Finding: The City Council finds that the implementation of the proposed General Plan would not result in the wasteful or inefficient use of energy. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: As discussed Draft EIR, all new buildings are required to comply with the energy conservation standards specified in CCR Title 24. In order to conform to CCR Title 24, efficient energy use would be enforced. In addition, the General Plan Policies and Actions CF1.4, CF1.F, CN5.1, CN5.2, EC3.1, EC3.2, EC3.A, and EC3.C would further reduce the potential for impact on energy.

General Plan Policy CN5.1 would require energy efficiency and conservation and General Plan Policy CN5.2 would encourage construction and building development practices that reduce resource expenditures throughout the life-cycle of a structure. Adherence to existing regulations and the General Plan's goals, policies and actions would ensure that there would be a *less-than-significant* impact with respect to the wasteful or unnecessary use of energy under the proposed General Plan.

TRANSPORTATION AND CIRCULATION

Impact 3.14-1:

Finding: The City Council finds that the proposed General Plan may result in traffic congestion that exceeds the previous City of Richmond traffic LOS standard of LOS D, as well as CCTA and WCCTAC LOS and MTOS standards. Although the CCTA and WCCTAC LOS and MTOS standards are beyond the City's jurisdiction and control, these agencies can and should adopt alternative thresholds with appropriate roadway service metrics for urbanized, transit-oriented communities. The City finds and determines that LOS and MTOS impacts from General Plan implementation can and should be mitigated to a *less-than-significant* level by CCTA and WCCTAC through the adoption of alternative, appropriate LOS and MTOS thresholds for urbanized areas seeking to improve transit, pedestrian and bicycle transit modes and seeking to discourage reliance on private automobile usage. Adoption of appropriate LOS and MTOS thresholds by these other agencies is beyond the jurisdiction and authority of the City.

- **Mitigation Measure 3.14-1:** Future projects shall incorporate project-specific mitigation measures to reduce traffic impacts.

Rationale/Supporting Explanation: As shown in Draft EIR Table 3.14-10, three roadway segments are projected to exceed the LOS standard based on the City's current LOS standard and other regional agencies' standards. They are: 23rd Street between Sanford and Grant (LOS E); San Pablo Dam Road between Barranca and El Portal (LOS F); and I-580 between Western Drive and the San Rafael Bridge (LOS F).

All of these roadways would exceed capacity with or without implementation of the proposed General Plan – that is, they exceed capacity in the No Project case also. The actual exceedances are due to traffic growth from within the City and other regional sources. On 23rd Street, regional traffic (that is, trips with both ends outside the City limits) makes up approximately 17 percent of the daily volume; on San Pablo Dam Road, the regional traffic constitutes approximately 42 percent of the daily volume; and on I-580, the regional traffic constitutes approximately 68 percent of the daily volume. While the current LOS standard used by the City is LOS D, the proposed General Plan, particularly through Policy CR1.9 and Action CR1.N, makes clear that the City's circulation system should be managed, going forward, to ensure balanced access to all modes of travel, and that vehicle capacity and LOS would not be the sole criterion by which physical and operational improvements are planned and implemented. General Plan Policies and Actions CR1.1 through CR1.8, and CR1.A through CR1.N would contribute to the mitigation of this impact.

In particular, General Plan Action CR1.N requires the City to classify all streets in the City to conform to the place-based classification system articulated in the Circulation Element of the General Plan and establish multi-modal level of service (MMLOS) standards consistent with each street's intended function and character, which should occur before any significant improvements or realignments are approved. In addition, General Plan Actions CR1.A, CR1.B, and CR1.H address working with regional planning agencies (such as Caltrans, CCTA and WCCTAC, and transit agencies) to develop and implement improvements that would mitigate impacts on roadways either partly or fully under other agencies' jurisdictions.

Proposed policies and implementing actions would reduce the impact by converting more trips to alternative modes and optimizing roadway and intersection capacity within the constraints of the "Place Based" street classification and evaluation policy. However, the impacts would not be reduced to a less than-significant level, due to potential for LOS impacts to remain on 23rd Street between Sanford and Grant and roadways under non-City jurisdiction or monitoring.

Increasing the density and intensity of development consistent with transit-oriented development patterns, and promoting walkable community design, are inherently incompatible with a LOS metric that requires ever expanding roadways designed to avoid delays even at peak utilization periods. This LOS metric is also incompatible with the increasingly urbanized development pattern required of the region's Bayfront cities to reduce the region's VMT. Although the CCTA and WCCTAC LOS and MTOS standards are beyond the City's jurisdiction and control, these agencies can and should adopt alternative thresholds with appropriate roadway service metrics for urbanized, transit-oriented communities. The City finds and determines that LOS and MTOS impacts from General Plan implementation can and should be mitigated to a *less-than-significant* level by CCTA and WCCTAC through the adoption of alternative, appropriate LOS and MTOS thresholds for urbanized areas seeking to improve transit, pedestrian and bicycle transit modes and seeking to discourage reliance on private automobile usage. Adoption of appropriate LOS and MTOS thresholds by these other agencies is beyond the jurisdiction and authority of the City.

Impact 3.14-2:

Finding: The City Council finds that the proposed General Plan's Planned Roadway Improvements would improve mobility and safety for all modes, fulfilling the proposed General Plan's goals and policies regarding safety and provision of a multi-modal circulation system. This is a *less-than-significant* impact.

Rationale/Supporting Explanation: Draft EIR Figure 3.14-7 shows Map 4.3 from the proposed General Plan Circulation Element. It identifies a new roadway connection through the South Shoreline area, connecting to the I-580/Bayview/Carlson interchange; three potential railroad/roadway grade separation (bridge) projects; freeway interchange improvement and/or reconstruction projects planned by Caltrans; and several streetscape projects that would implement the proposed General Plan's vision of multi-modal, place-based street design. With the exception of the Marina Bay Parkway grade separation, which is substantially funded and in design, the other improvements have not had funding fully identified. Without adequate funding, some of the improvements identified in the proposed General Plan may not be implemented, which could result in inadequate transportation infrastructure to serve the proposed General Plan. This would be a significant impact. It is not expected that the long-term improvements in a General Plan have a full funding and implementation plan identified upon adoption, but rather that the Plan contains policies and actions to ensure that the City take the proper steps toward funding and implementing the improvements.

Proposed General Plan Action CR1.G recognizes high priority projects for the Capital Improvement Plan, and states that the CIP should be regularly updated. In addition, General Plan Action CR1.H would reduce congestion for all modes of transportation by enhancing the public transportation system, promoting mixed-use development patterns to reduce vehicle miles traveled and by implementing transportation demand management strategies to increase mobility options. General Plan Policy CR3.3 and General Plan Action CR3.C require that new development within Richmond contribute to infrastructure improvements through a circulation fee. With these policies and actions, the City would provide funding mechanisms to support the proposed transportation infrastructure improvements, which would ensure the impact is *less-than-significant*.

Impact 3.14-3:

Finding: The City Council finds that implementation of the proposed General Plan would produce higher demand for transit service, but there is no evidence that General Plan implementation will exceed the capacity of transit service providers, nor is there evidence that transit service providers will be unable to continue to meet future cumulative transit demand. Mass transit service within the City is within the jurisdiction and control of other agencies, including primarily Alameda-Contra Costa Transit District (AC Transit), Bay Area Rapid Transit (BART), and AMTRAK. Notwithstanding the General Plan policies and the following new Mitigation Measure 3.14-3, increased demand for transit service falls within the jurisdiction and control of the other transit agencies identified above, and these agencies can and should implement measures to continue to provide and expand transit service as needed to meet demand.

- **Mitigation Measure 3.14-3** The City shall continue to cooperate and coordinate with transit agencies and work with the community to promote and advocate for improved transit services and increased transit capacity to meet anticipated General Plan implementation and cumulative impacts for transit service, and seek grant funding opportunities to supplement available transit service.

Rationale/Supporting Explanation: The proposed General Plan contains several inter-related policies and actions that, taken together, promote higher transit use among Richmond residents, employees, and visitors. These include General Plan Policy CR1.4 and its supporting actions, supporting expanded and affordable public transit; General Plan Policy CR1.7 and its supporting actions, supporting regional ferry service to Richmond; General Plan Policy CR1.8 and its supporting actions, promoting the place-based roadway classification system, which would include transit-priority streets; and the following additional General Plan Policies and Actions CR2.2, CR2.C, CR3.1, CR5.1, CR5.A, CR1.L, and CR1.J.

The effect of these proposed General Plan Circulation Element policies and actions, in combination with the residential and employment growth projected by 2030 within the 16 change areas, would be to substantially increase the demand for transit. The current bus frequencies, at typical 30-to-60-minute headways and high passenger loading of certain key routes, would not be sufficient to support the transit demand generated by the proposed General Plan growth patterns.

The same policies and actions referenced above that promote transit use would be instrumental in helping the City push for the service increases needed to serve the new demand. Mass transit service within the City is within the jurisdiction and control of other agencies, including primarily AC Transit, BART, and AMTRAK. AC Transit, BART, and AMTRAK all operate under state or federal law, all qualify for federal transportation funding, and all have jurisdiction to establish rates, routes and transit service patterns to meet regional needs. These agencies also work cooperatively with other regional transportation planning agencies, such as MTC and ABAG, and with the state (Caltrans) and the federal government (Department of Transportation, including the Federal Transportation Administration and the Federal Railway Administration).

Notwithstanding new Mitigation Measure 3.14-3, increased demand for transit service falls within the jurisdiction and control of the other transit agencies identified above, and these agencies can and should implement measures to continue to provide and expand transit service as needed to meet demand.

Impact 3.14-4:

Finding: The City Council finds that implementation of the proposed General Plan would provide enhanced facilities to serve pedestrians and bicyclists, increasing connectivity and safety for these modes. The project would result in *no impact*.

Rationale/Supporting Explanation: The Land Use and Circulation Element are consistent in the vision of a development pattern and circulation system that promote and support bicycling and walking. By concentrating new development within key corridors and change areas, the density and urban design of new land uses would be more conducive to non-auto modes of travel than typical suburban land use patterns. The Circulation Element responds to the land use plans by implementing a “place based” circulation system that ensures the appropriate transportation infrastructure is provided to serve adjacent land uses within a corridor or development area. In addition, General Plan Policies and Actions CR1.5, CR1.6, CR1.D, and CR1.E, promote pedestrian and bicycle improvements and incentives. General Plan Policies and Actions CR2.2, CR2.3, CR2.A through CR2.F, and CR3.1 would also support bicycling and walking in Richmond.

As shown in Draft EIR Figure 3.11-9, the planned pedestrian and bicycle facilities in the proposed General Plan Circulation Element include improvements to several key bicycle route crossings of major barriers – higher volume roadways and railroad tracks. These barriers have historically been a safety and mobility concern for the City. The crossings would provide much better connectivity citywide, enabling longer bicycle trips for a variety of recreational and utilitarian purposes. The proposed General Plan bicycle network is consistent with the Contra Costa Countywide Bicycle and Pedestrian Plan. The Pedestrian Improvement Districts shown for the Hilltop Mall, Downtown/ MacDonald, and Ford Peninsula/South Shoreline areas would focus attention on providing better pedestrian facilities (sidewalks, crosswalks, benches, buffers between the pedestrian and vehicle realms, etc.) in these key mixed-use change areas.

The proposed General Plan would not disrupt existing bicycle and pedestrian facilities, would not interfere with planned bicycle/pedestrian facilities, and is consistent with the adopted Countywide Bicycle and Pedestrian Plan. The proposed General Plan would improve safety for non-vehicular travel modes and would result in no impact.

Impact 3.14-5:

Finding: The City Council finds the proposed General Plan would reduce the potential for conflicts at rail/roadway crossings, improving safety for all modes. The project would result in *no impact*.

Rationale/Supporting Explanation: Draft EIR Figure 3.14-7 shows the proposed General Plan’s priority grade separation projects, at Harbor Way, Marina Way South, and Marina Bay Parkway. The latter location is already in the design stage. However, there are several other crossing locations in the City that could benefit from additional safety measures to limit the potential for train-vehicle, train-pedestrian, and train-bicycle conflicts. General Plan Policy CR3.1 and Action CR3.A provide the direction for the City to study, design, and implement these measures, which could include upgrades to the existing railroad crossing warning devices, modifications to the traffic control devices at the crossing, provision of enhanced pedestrian barriers and/or better pedestrian routing, or changes to the street system, including street closures and provision of better roadway connections that avoid or reduce the crossing conflicts. The City will need to work with the railroad owners and operators and the California Public Utilities Commission in these efforts.

As discussed under Impact 3.14-2, the City currently does not have a full funding program for the grade separation projects or for safety improvements at other at-grade crossings. However, the General Plan Policies and Actions noted under Impact 3.14-2 – specifically, General Plan Actions CR1.G and CR1.H, General Plan Policy CR3.3, and General Plan Action CR3.C – will ensure that the City would work to provide funding mechanisms to support the proposed transportation infrastructure improvements. Therefore, with these General Plan Policies and Actions, there would be no impact.

Impact 3.14-6:

Finding: The City Council finds that the proposed General Plan would increase congestion and reduce travel speeds on various roadways throughout the City, including some that are on primary emergency response routes (i.e. freeways and arterials). However, with the addition of new Mitigation Measure 3.14-6, and based on the analysis below, this impact is *less-than-significant*.

- **Mitigation Measure 3.14-6** The City will continue to support coordination among its departments and other agencies in planning for emergency access and response routes, and will periodically review and as appropriate update its emergency access and response route planning.

Rationale/Supporting Explanation: The City and its Departments (e.g., Police, Fire and Planning) coordinate emergency preparedness and response planning activities, and also participate in emergency response training and planning activities with other agencies. Emergency access and emergency response vehicular routing is also addressed as an important component of emergency response and planning activities. The two thresholds of significance for emergency vehicle response are (1) provide inadequate design features to accommodate emergency vehicle access and circulation, and (2) cause a substantial decrease in travel speeds on primary emergency response routes such that emergency vehicles would be significantly delayed. The first criterion is not triggered by the proposed General Plan, as the policies and actions guiding street improvements and design would ensure that emergency vehicles are physically accommodated. With respect to the second criterion, the City has a very accessible grid of localized streets as well as multiple freeways, arterial and bypass routes that can be used in the event of an emergency. Established emergency vehicle equipment such as sirens and flashing lights are effective in helping clear access even in congested emergency conditions (e.g., freeway accidents). There is no evidence that the increased congestion resulting from anticipated General Plan Buildout will result in congestion levels that significantly impede emergency vehicle access on emergency response routes. To further reduce the potential that this impact may occur, new Mitigation Measure 3.14-6 is added to the EIR. Also, the proposed General Plan policies and actions regarding roadway improvements and capacity management are designed to provide mixed-use urban streets that balance public transit, walking and bicycling with other modes of travel to alleviate the impacts of congestion as population and job growth occurs. General Plan Action CR1.H, listed under Impact 3.14-1, discusses providing street capacity and infrastructure improvements to address congestion. This action would reduce this impact. Apart from the issue of emergency access, the existence of roadway congestion is common in urbanized areas, and congestion itself does not constitute a significant impact. With the addition of Mitigation Measure 3.14-6 and the additional analysis noted above, this impact is *less-than-significant*.

VISUAL RESOURCES

Impact 3.15-1:

Finding: The City Council finds that the City is an evolving urban environment, and development activities associated with the proposed General Plan do not equate to significant adverse aesthetic impacts for CEQA purposes. Based on the analysis below and new Mitigation Measure 3.15-1, impacts to scenic vistas and the visual character and quality of the City at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level.

- **Mitigation Measure 3.15-1** As a condition of authorizing development within existing undeveloped areas, or demolishing commercial or industrial structures that were built prior to 1950, the City shall require the applicant to provide photographs or another

appropriate form of visual record of the project location's existing physical setting, and a photograph or another appropriate form of visual record of one or more public vistas of the project location (e.g., views from public parks or civic buildings). These visual records shall be submitted to the Planning Department or its designee for appropriate storage and retrieval for future studies of the City's evolving urban character.

Rationale/Supporting Explanation: The General Plan provides the framework for development of the City and establishes a vision for the community's urban form and development patterns and outlines the community's land uses, street network, prototypical housing types, and a system of parks and trails. As discussed in the Draft EIR, various points throughout the City of Richmond have views of the shoreline or the hillside that would constitute a locally recognized scenic vista or corridor. To the extent that development would occur in the "stable areas," (areas not included in the change areas), it would remain generally consistent with existing land use types, which would result in similar visual characteristics as existing development. Development within the designated change areas - the activity centers, the improvement districts, and the corridor areas - would be allowed at a higher density and would allow maximum building heights ranging from 55 feet to 135 feet, which is an increase over the existing maximum building height range of 35 to 75 feet. The tallest buildings (135 feet) could only be developed within the three activity center areas that include the "High-Intensity Mixed-Use" land use designation. This potential increase in building height would create a more urban feel and could result in a substantial change in the character of the change areas as well as those areas that have views of and beyond those change areas. It is possible that existing residents could have existing views of the shorelines or hillsides that would either be fully or partially obscured by buildings developed under the proposed General Plan due to the increase in the number of buildings developed, as well as the increase in building height. However, the City is an evolving urban environment where change is the only constant, including for example: the evolving emphasis on green technology, renewable energy, sustainable practices, transit-oriented higher density development patterns, and reduced reliance on private automobile use. These and other evolving urbanized activities also result in visual change.

The General Plan provides a development model that encourages infill development in blighted and underutilized areas. The proposed General Plan would provide for the development of structural, artistic, cultural, and transit uses that would serve as a catalyst for high-density, mixed-use development indicative of a modern, urban, 24-hour downtown. Despite the many potential benefits of the General Plan, the proposed infill development identified in the General Plan could result in change in the existing visual character of the City. The promotion of new higher-density mixed uses and transit-oriented development uses would be considered by some residents to improve the look of City, particularly in the Downtown/Macdonald Avenue, Hilltop, and Ford Peninsula in Marina Bay change areas, and in district and corridor improvement areas, and other centrally located areas. However, the overall development would ultimately alter the skyline and views of the City for both residents and off-site receptors. While many improvements may occur from certain vantage points, some of the aforementioned scenic views and corridors could be obscured, particularly from residents on the eastern portion of the City. In addition, the proposed General Plan allows for some additional residential development within existing vacant hillside areas, which could alter the visual character of the eastern portion of the City. Residential development along the hillside would be restricted to designated areas and would be clustered in a manner that preserves more open space. However, while some may equate change to existing private or public vistas or to the existing visual character of an area to a significant adverse environmental impact, as lead agency, the City does not agree that change equates to significant adverse aesthetic impacts. The General Plan, City ordinances, the City's discretionary permit and Design Review process, and the CEQA process all have components designed to protect and enhance the visual character of the City while embracing the changes inherent in an urbanized area. While some vistas should be preserved unchanged in perpetuity (e.g., Yosemite Valley), the changing visual character of the City is protected by its ongoing evolution and implementation of

adopted policies and standards. The changing visual character of the city is protected by its ongoing evolution and implementation of adopted policies and standards.

As detailed in the Draft EIR, the Richmond Municipal Code provides development standards that guide the City in its development practices and protects valued scenic corridors and views. The municipal code guidelines aim to create standards that allow for the development of new and innovative structures that allow for the maintenance of establish natural and man-made views that help define the City of Richmond. General Plan Policies and Actions LU1.1, LU1.2, LU1.4, LU1.B, LU1.D, LU1.H, LU2.2, LU2.B, LU3.4, LU3.E, LU3.G, LU4.1, LU4.2, LU5.2, LU5.3, LU5.B, CN2.3, and AC2.2 would reduce the potential for impact on scenic resources and visual character.

General Plan Policy LU1.1 aims to protect, preserve, and enhance visual character within the City by encouraging the development of high-density mixed-use products on vacant and blighted property; General Plan Policy LU1.2 promotes adaptive reuse of historic buildings and the use of public art as a means of improving the visual character of blighted areas. General Plan Policy LU1.4 promotes the provision of street benches, street lighting, and shade trees in a manner that promotes context-sensitive design while improving the visual character of the community. General Plan Action LU1.B requires that design guidelines be incorporated into the corridor improvement plans. General Plan Action LU1.D requires that urban design guidelines are incorporated into the Downtown Specific Plan; General Plan Action LU1.H would encourage the City to prepare an inventory of blighted and underutilized properties and evaluate their redevelopment potential; General Plan Policy LU2.2 would provide visual amenities such as sidewalks street trees, street lighting and landscaping improvements to improve pedestrian views; General Plan Action LU2.B would incorporate green design elements such as bioswales and planter strips street elements into streetscape design; General Plan Policy LU3.4 aims to protect, preserve, and enhance visual character within the City by encouraging the development of job creating structures on vacant and blighted property; General Plan Action LU3.E promotes the preparation of a Shoreline Specific Plan to guide the design and development standards for the various shoreline areas; General Plan Action LU3.G promotes the preparation of a Hilltop Specific Plan to guide the design and development standards for the area; General Plan Policy LU4.1 promotes the preservation of scenic viewsheds, such as Point San Pablo, by maintaining the existing condition and limiting proposed shoreline development; General Plan Policy LU4.2 promotes the preservation of scenic viewsheds along the hillsides and the shoreline through preservation, enhancement, and restoration of the City's open space areas; General Plan Action LU4.A promotes the preparation of shoreline specific plans to guide the design and development standards for the shoreline areas. The goal of these plans is to increase local access and visibility of the shoreline. General Plan Policy LU5.2 promotes the creation of districts along the waterfront that include designs that highlight the visual character of the shoreline through interpretive displays and use of rehabbed historic structures; General Plan Policy LU5.3 promotes the development of compatible adjacent uses in terms of size, scale, and use of buildings; General Plan Action LU5.B aims to prepare design guidelines that focus on the visual compatibility of contemporary and historic uses; General Plan Policy CN2.3 aims to protect the natural topography of the area, with a specific focus on the hillside and regulate the grading and site design concepts that are allowable within the City's hillsides; and General Plan Policy AC2.2 would provide façade improvements in an effort to visually define the City's Art and Culture character.

The proposed City of Richmond General Plan policies and implementation actions are important in addressing the potentially adverse physical impacts on visual resources resulting from development by ensuring visual compatibility, promoting design standards and building height restrictions, and incorporating building façade and streetscape improvements. The impacts of development on visible hillsides would be protected through implementation of proposed General Plan Policy CN2.3, which calls for protection of these ridgelines and visible hillsides from inappropriate development and preservation of these viewsheds.

While embracing change, the City recognizes the value of recording the visual history and evolution of the City. To assure that the evolving visual character of the City is recognized and preserved for future study, new Mitigation Measure 3.15-1 is added to the EIR. As a result of this analysis and the additional mitigation requirement, impacts to scenic vistas and the visual character and quality of the City at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level. Any project with aesthetic impacts that are not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Finally, implementation of the General Plan does not authorize any new development activities, and implementation of the General Plan will not itself cause a significant adverse aesthetic impact.

On the pedestrian level, the changes that would occur within the change areas of the City would result in physical improvements and a reduction in blighted conditions, which most viewers would find an improvement in the overall visual character of those areas. However, at greater distances, the physical changes could dramatically affect the scale of development in the City, which could block views and substantially alter the character of the City. As discussed above, the City does not agree that change equates to significant adverse aesthetic impacts. The General Plan, City ordinances, the City's discretionary permit and Design Review process, and the CEQA process all have components designed to protect and enhance the visual character of the City while embracing the changes inherent in an urbanized areas. The changing visual character of the city is protected by its ongoing evolution and implementation of adopted policies and standards.

As a result of this analysis and the addition of new Mitigation Measure 3.15-1, impacts to scenic vistas and the visual character and quality of the City at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level.

Impact 3.15-2:

Finding: The City Council finds that the development of the proposed General Plan could create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. As discussed in Impact 3.15-1 above, changing urbanized conditions result in different distributions of potential light and nighttime glare impacts. Also as discussed above, the General Plan, City ordinances, the City's discretionary permit and Design Review process, and the CEQA process, itself each have components designed to protect and enhance the visual character of the City while embracing the changes inherent an in urbanized area. The City's General Plan, ordinances, discretionary permit and Design Review processes, and CEQA process must all be implemented as applicable to future project-level decisions. It is anticipated that the visual quality of the City will improve, and not be the subject of "substantial degradation," as the General Plan is implemented over time. Accordingly, with the implementation of General Plan policies and actions and the following mitigation measures, this impact is considered *less-than-significant* at the General Plan and cumulative levels.

- **Mitigation Measures 3.15-2(a):** All street lighting shall be directed downward and shielded to prevent light spill onto surrounding properties, sky glow, and glare.
- **Mitigation Measures 3.15-2(b):** The City shall restrict the use of high level outdoor lighting for new homes, particularly along the hillside ridges.
- **Mitigation Measures 3.15-2(c):** Landscaping shall be incorporated along internal roads and near off-site homes to reduce spill light emanating from vehicles and buildings.
- **Mitigation Measure 3.15-2(d):** The City shall require design review of any project containing reflective glass or metal building materials that exceed 50 percent of any building surface or the first three floors.

Rationale/Supporting Explanation: The City of Richmond is primarily built-out, and a significant amount of light and glare from urban uses already exists. However, new development permitted under the proposed General Plan could create new sources of glare from paved surfaces, glare from reflective building surfaces, exterior building lighting, lighted recreation facilities (such as outdoor ball fields), new street lighting, parking lot lights, and headlights of vehicular traffic. These new sources would be more noticeable from new development in large infill areas and previously undeveloped sites outside of the downtown area. As a result, these new sources of glare could affect the day or nighttime views of adjacent sensitive land uses. These sensitive land uses could generally be undeveloped lands and residential uses adjacent to commercial or industrial areas.

As development under the General Plan occurs, it would primarily result in development of infill of vacant or underutilized parcels, as well as intensification and reuse of existing developed sites. The majority of the development would occur within the change areas, which are primarily in urbanized parts of the City. New development would be located in areas that commonly experience at least minimal impacts from existing light sources. The only exception to this would be development in those few outlying areas that are currently undeveloped along the shoreline and the hillside.

Under the proposed General Plan, there would be some construction of residential uses adjacent to commercial uses, which could result in some lighting impacts on new receptors. Commercial facilities typically involve lighting for building exteriors and parking lots, which could result in light spillover onto adjacent residential properties.

Because the City is primarily built-out, a significant amount of ambient light already exists, especially near the downtown area. With an emphasis on infill development within the City, additional light sources would be concentrated within existing lighted areas and would not result in extensive use of lighting in outlying areas of the City. It is reasonable to assume that the increase in development density, particularly in activity areas, could result in spill light impacts, in comparison to the existing ambient light already present in the City. This is particularly true due to the General Plan's desire to add street lighting throughout the change areas, and create a 24-hour lifestyle within the proposed activity centers. Due to the anticipated increase in night activity associated with the Plan, as well as the uncertainty and lack of specificity of the mechanisms in place aimed at reducing the impacts of light on surrounding uses including residential and roadways, this impact is considered *potentially significant*.

Daytime glare could be produced by the increased amount of surface area of proposed commercial and residential structures, which could reflect or concentrate sunlight. While the majority of development would be focused within the defined change areas, the increase in maximum building heights within the defined activity centers could result in the development of structures of up to 135 feet. Because details of the type of building materials to be used are unknown, exterior materials used to construct new buildings could include materials that could result in glare if the surfaces are highly reflective. In particular, proposed high-rise buildings in the downtown area could produce glare if significant amounts of glass and other reflective materials are used on the exterior of the building. These types of projects would be required to go through the City's Design Review process as well as undergo project level CEQA analysis once project-specific information is available. However, because the extent to which future development could contribute to glare is not known, this is considered a *potentially significant impact*.

General Plan Policies and Actions LU5.3 and LU5.B would reduce the potential for impact on light and glare. General Plan Policy LU5.3 and General Plan Action LU5.B, require Design Guidelines to address all aspects of land use compatibility, including lighting compatibility. Compliance with Mitigation Measure 3.15-2 would reduce glare associated with new development, particularly in the downtown area, but could not ensure that impacts would be reduced to *less-than-significant*.

Daytime glare from built surfaces, such as reflective glass or public art, and nighttime glare from indoor and outdoor light sources exist and will continue to occur under evolving conditions in the future (e.g., new and retrofit structures with reflective exteriors, new and retrofit outdoor lighting of parks and other public and private spaces, and new and retrofit indoor lighting). These changes, however, including increasing the overall density and intensity of the City's development pattern, do not equate to a significant adverse impact for CEQA purposes. Aesthetic impacts are unique in CEQA because judgment about whether a particular change is significant is inherently variable based on the aesthetic sensibilities and values of the individual perceiving the change. While an informed disagreement may occur at a project-level scale (e.g., in a debate about the aesthetic merit of a piece of public art, or the design of a building or park), this debate is particularly difficult at the General Plan level since design aesthetics of individual projects are not yet known and, thus, cannot be debated. This is even more true at the cumulative impact level, when aesthetic impacts from other communities near the City and in the region are taken into account.

The City's General Plan, ordinances, discretionary permit and Design Review processes, and CEQA process must all be implemented as applicable to future project-level decisions. It is anticipated that the visual quality of the City will improve, and not be the subject of "substantial degradation," as the General Plan is implemented over time. Accordingly, this impact is considered *less-than-significant* at the General Plan and cumulative levels.

CHAPTER 5 FINDINGS REGARDING PROJECT ALTERNATIVES

Pursuant to CEQA Guidelines Section 15126.6, an EIR must evaluate the comparative merits of a reasonable range of alternatives to the proposed project, or to the location of the proposed project that could feasibly attain most of the basic objectives of the project while avoiding or substantially lessening any of the significant effects of the project. This Chapter sets forth findings regarding the project alternatives considered in the Draft EIR for the proposed General Plan. The findings considered in the Draft EIR were based on impacts of the proposed General Plan identified in the Draft EIR. As discussed in Chapter 4, these Findings include new and revised mitigation measures and analysis based on City Council input. Accordingly, for the sake of comparison, this Chapter also includes brief summaries of proposed General Plan impacts that reflect the new and revised mitigation measures and analysis included in these Findings.

ALTERNATIVES DISMISSED FROM FURTHER CONSIDERATION

Consistent with the CEQA Guidelines, primary consideration was given to alternatives that would reduce significant impacts while still meeting most of the project objectives. Alternatives that would have impacts identical to or more severe than the proposed project, or that would not meet most of the project objectives, were rejected from further consideration. The significant impacts identified in the Draft EIR for the proposed General Plan are related to air quality, cultural resources, noise, wastewater, transportation/traffic, and visual resources. Alternatives that would exceed the significance thresholds for the aforementioned issue areas, including an alternative that would increase the intensity of development, would not substantially lessen any significant environmental impacts identified in Chapter 4 of the Draft EIR and were rejected from further analysis.

The alternatives analyzed include a “No Project Alternative” and two other scenarios, each of which was developed as part of an extensive community visioning process where individuals, organizations, and agencies from the community were able to express their expectations for the City of Richmond’s future. Three land use alternatives, the proposed project and the two alternatives discussed below, were carried forward as part of the community visioning process. The two alternatives represent a reduction in density and intensity compared to the proposed project. Community opinion regarding alternatives that would include more intense development than the proposed project was that the larger scale development associated with such an alternative would alter the scale and character of the City and would be inconsistent with the vision developed for the proposed General Plan. Because an increased intensity alternative would not be consistent with the vision and objectives of the proposed General Plan, the Draft EIR did not analyze an increased intensity alternative.

ALTERNATIVES CONSIDERED

Although a number of alternatives could be designed that could result in the reduction or elimination of project impacts, three representative alternatives were evaluated in the Draft EIR. The alternatives include a No Project Alternative and two other scenarios that represent a reduction in the level of development intensity compared to the proposed project. The alternatives are summarized below.

- **No Project (1994 General Plan Alternative)** – Under this alternative, development for the proposed General Plan would not occur. Development would be guided by continued implementation of the existing General Plan.
- **Alternative 1:** This alternative assumed a lower intensity of development in the City with a lower share of the County’s growth, 8.39 percent of the population growth in Contra Costa County. Between 1980 and 2005, Richmond’s share of regional population growth was 8.39 percent, so this alternative represents no change from the past growth trend.

- **Alternative 2:** This alternative assumed that Richmond would capture 10.19 percent of population growth for the County over the next 20 years. This growth rate is higher than the historic growth rate in the region (8.39 percent) and is a moderate growth rate.

The discussion found in Draft EIR pages 5-3 through 5-38 describes each of the alternatives considered. Each discussion is followed by an assessment of the alternative's impacts relative to the proposed project. For the purposes of brevity, this discussion is incorporated into these Findings by reference. The focus of the analysis is the difference between the alternative and the proposed project, with an emphasis on addressing the significant impacts identified under the proposed project. For each issue area, the analysis in the Draft EIR indicates which mitigation measures would be required of the alternative and which significant and unavoidable impacts would be avoided. If necessary, the Draft EIR analysis indicates what additional mitigation measures would be required for the alternative being discussed, and what significant impacts would be more or less severe. Unless otherwise indicated, the level of significance and required mitigation would be the same for the alternative as for the proposed project and no further statement of the level of significance is made. Table 5.1, below, provides a summary comparison of the severity of impacts for each alternative by topic. Impacts for the Proposed General Plan are identified in two ways: first, impacts identified in these Findings (which reflect additional or revised mitigation measures or City Council analysis of impacts); and second, impacts analyzed in the Draft EIR (which were considered in the Draft EIR's alternatives analysis).

Table 5.1 – Alternative Impact Comparison

Issue Area	Proposed General Plan (Impacts Conclusions in Findings)	Proposed General Plan (Analyzed in Draft EIR)	No Project/1994 General Plan	Alternative 1	Alternative 2
Air Quality	LS, LS-OA, NLS	SU	Reduced	Reduced	Reduced
Biological Resources	LS	LS	Equal	Equal	Equal
Climate Change	LS-OA	SU	Reduced	Reduced	Reduced
Cultural Resources	LS, NLS	SU	Equal	Equal	Equal
Geology, Soils, Mineral Resources	LS	LS	Equal	Equal	Equal
Hazards and Hazardous Materials	LS	LS	Equal	Equal	Equal
Hydrology and Water Quality	LS	LS	Greater	Equal	Equal
Noise	LS, LS-OA	SU	Reduced	Reduced	Reduced
Parks and Open Space	LS	LS	Equal	Equal	Equal
Public Services	LS	LS	Equal	Equal	Equal
Public Utilities	NLS	SU	Reduced	Reduced	Reduced
Transportation and Circulation	LS, LS-OA	SU	Reduced	Reduced	Reduced
Visual Resources	LS, NLS	SU	Reduced	Equal	Equal

Notes:

SU = Significant and Unavoidable – if any impact was identified as significant and unavoidable in the technical analysis.
 LS = Less-than-significant – if all impacts were identified as less-than-significant in the technical analysis.
 LS-OA = Impact reduced to a less-than-significant level through implementation of mitigation measures that are within the jurisdiction or control of other public agencies.
 NLS = No longer significant, based on additional analysis in Findings.
 NI = No impact would occur when compared to the proposed project.
 Equal = Level of significance is equal or similar to the proposed project.
 Greater = Level of significance is greater than the proposed project.
 Reduced = Level of significance is reduced compared to the proposed project, but not necessarily to a less-than-significant level.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As discussed in the Draft EIR, significant impacts identified for the proposed General Plan would be related to air quality, cultural resources, climate change, noise, wastewater, solid waste, traffic, and visual resources. The No Project (1994 General Plan Alternative) would be consistent with the 2009 Clean Air Plan, but without Mitigation Measure 3.9-4, impacts related to runoff under the No Project (1994 General Plan Alternative) would be greater than those of the proposed General Plan, and impacts could be *significant*. Alternatives 1 and 2 would result in reduced environmental impacts due to reduced development intensity, but would not reduce significant impacts to less-than-significant levels.

Transportation and air quality impacts are directly related to population and reductions in population, as well as improving alternative travel modes, which would reduce these impacts. However, impacts related to cultural resources would occur if historic structures or if currently undiscovered remains or artifacts are encountered during construction. Consequently, any alternative that includes development could potentially impact these resources. Similarly, the wastewater treatment plant currently experiences flows beyond capacity during wet weather, so any alternative that would generate wastewater flows would result in an impact. The only alternative, therefore, that could eliminate impacts on cultural resources and wastewater would be the No Project/No Development Alternative. However, the No Project/No Development Alternative would halt all development within the City, regardless of the status of entitlements. By stopping all future development, this alternative would eliminate growth in traffic impacts, greenhouse gas (GHG) emissions, demand for public infrastructure and services, and impacts on environmental resources, such as air quality, noise, biological, and cultural resources. However, while a No Project/No Development Alternative could be an option for an individual development project, eliminating all future development in the entire City would not be a realistic alternative.

Although the other alternatives would reduce some of the impacts compared to the proposed General Plan, none would eliminate a significant impact identified in the Draft EIR. Infrastructure improvements that could result in physical effects would be required for any of these alternatives. The Draft EIR concluded that the proposed General Plan was found through the planning process to be most consistent with the objectives of the plan and would serve the greatest population, while still potentially resulting in significant effects disclosed above.

As explained in these Findings, the City Council has added and revised mitigation measures and findings, which explain how the measures would reduce effects to below the significance level (i.e., new Mitigation Measures 3.3-2(e), 3.6-1(q), 3.10-3(b), 3.13-3(b), 3.14-3, 3.14-6, and 3.15-1 and revised Mitigation Measures 3.5-1, 3.10-1, and 3.10-2). The City Council has also made findings that explain why other impacts are properly characterized as less-than-significant (i.e., air quality impact 3.3-1 and cumulative impacts, cultural resources cumulative impacts identified in EIR Section 3.5, public utilities wastewater treatment and conveyance systems impact 3.13-3 and cumulative impacts, public utilities landfill capacity cumulative impacts identified in EIR Section 3.13, and visual resources impact 3.15-2 and cumulative impacts). Finally, the City Council has made findings that establish and explain why mitigation is the responsibility of another agency and not the City, and that another agency can and should adopt a mitigation measure to reduce the impact to below the applicable significance level. Based on additional and revised mitigation measures and findings, the proposed General Plan would not have any significant and unavoidable impacts.

Therefore, the proposed General Plan would be the environmentally superior alternative.

CHAPTER 6 STATEMENT OF SIGNIFICANCE

The City of Richmond has considered the information and analysis set forth in the EIR and reiterated in Chapter 4 of these Findings, as well as City Council input regarding additional and revised mitigation measures that reduce impacts of the proposed General Plan to a less-than-significant level, findings that certain General Plan impacts are no longer considered significant and unavoidable, and findings that certain mitigation measures are within the responsibility and jurisdiction of another public agency. Based on this information and analysis, the following project-specific significant impacts related to air quality, cultural resources, climate change, noise, public utilities, transportation and circulation, and visual resources identified as significant and unavoidable in the Draft EIR are no longer considered significant and unavoidable.

- **3.3-1:** The CAP is periodically reviewed and updated, and this process is again underway and being informed by the regional SCS being prepared under SB 375 to reduce GHG emissions. Under all proposed SCS growth scenarios under consideration, higher density development in communities nearest regional job centers and served by transit results in a net air quality improvement by reducing VMT and corresponding emissions of toxic, criteria and GHG vehicular pollutants. Concentrating more growth in Richmond, as proposed in the General Plan, will improve air quality at the local and regional (most relevant to criteria pollutants) and global (most relevant to GHG pollutants) levels. It is also anticipated that the next revision to the CAP will reflect the changed development patterns being proposed for the SCS. Because (1) the General Plan is consistent with the SCS growth scenarios under consideration, (2) it is reasonably foreseeable that the SCS will be timely adopted in 2012, as required by SB 375, and (3) it is reasonably foreseeable that the CAP will continue to be timely revised to include the growth forecasts in the SCS and the General Plan as required by applicable federal regulations that mandate integration of the "best available information" about land use development patterns into federal Clean Air Act plans and conformity determinations, the CAP inconsistency with the General Plan is considered temporary. Further, this temporary inconsistency will not result in any adverse air quality impacts, since the higher growth and density planned in the General Plan is not expected to be realized until well after 2012. Finally, the temporary CAP inconsistency is not, itself, an adverse physical impact to the existing environment. Accordingly, this impact is no longer considered a significant and unavoidable impact from General Plan implementation.
- **3.3-2:** New Mitigation Measure 3.3-2(e) is added to the EIR to further avoid, reduce, or mitigate air quality impacts from General Plan implementation. In addition, mitigation measures to further reduce the air quality impacts from General Plan implementation and cumulative conditions to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.
- **3.5-1:** The General Plan includes policies to protect historical resources. In addition, the City has successfully implemented historic resource protection and adaptive use measures to preserve and re-purpose historic structures, and has a Historic Structures Code to further such adaptive use. Federal and state laws also preserve and protect designated categories of historic and cultural resources, and the City and future projects implementing the General Plan must comply with these federal and state legal requirements. Mitigation Measure 3.5-1 is revised in the EIR to clarify the multiple layers of protection afforded the City's historical resources. Based on this evaluation and clarified mitigation measure, the General Plan impact to historical resources is mitigated to a less-than-significant level.
- **3.6-1:** The General Plan includes policies to reduce GHG emissions, to commit the City to preparing a Climate Action Plan, to reduce GHG emissions and per capita VMT, to increase the density and intensity of development to support and promote transit, and to support the

regulatory efforts of air quality enforcement agencies such as BAAQMD, CARB and EPA. In addition, development patterns in the region's draft SCS promotes GHG reduction on a regional scale. The increased density and intensity of development, the expansion of employment, and other core components of the General Plan are fully aligned with the proposed visions for the region's SCS. When the SCS is finalized and implemented, and the City's Climate Action Plan is finalized and implemented, the City's growth will have a beneficial impact on climate change with a land use pattern that reduces per capita GHG emissions and that meets cumulative regional targets for GHG reductions from the land use sector. The City has limited jurisdiction over the many sectors that contribute to GHG emissions. Accordingly, new Mitigation Measure 3.6-1(q) is added to the EIR to further avoid, reduce or mitigate GHG impacts from General Plan implementation. Notwithstanding these General Plan policies and EIR mitigation measures, mitigation measures to further reduce GHG impacts from General Plan implementation to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB, and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.

- **3.10-1:** In addition to the General Plan Noise Element, the Final EIR, and the Noise Ordinance included in the Municipal Code, Mitigation Measure 3.10-1 is revised to further mitigate and minimize potentially significant future adverse noise and vibration impacts from construction activities. As a result of these additional mitigation requirements, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a less-than-significant level. Any project for which noise impacts are not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any new development activities, and implementation of the General Plan will not itself cause a significant adverse noise impact..
- **3.10-2:** In addition to the General Plan Noise Element, the Final EIR, and the Noise Ordinance included in the Municipal Code, Mitigation Measure 3.10-2 is revised to further mitigate and minimize potentially significant future adverse noise and vibration impacts from construction activities. As a result of these additional mitigation requirements, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a less-than-significant level. Any project for which noise impacts are not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any new development activities, and implementation of the General Plan will not itself cause a significant adverse noise impact.
- **3.10-3:** New Mitigation Measure 3.10-3(b) is added to further mitigate and minimize potentially significant future adverse noise and vibration impacts associated with exposure of sensitive receptors to noise levels in excess of the noise standards established by the City of Richmond. As a result of these additional mitigation requirements, operational noise impacts at the General Plan implementation and cumulative level are mitigated to a less-than-significant level. Any project for which noise impacts are not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any new development activities, and implementation of the General Plan will not itself cause a significant adverse noise impact. In addition, the City finds and determines that mitigating impacts from rail and roadway operations is within the jurisdiction and responsibility of other agencies, including Caltrans, the Public Utilities Commission, and the Federal Railroad Administration. These agencies can and should implement mitigation measures to further reduce noise levels associated with highway and railway operations to a less-than-significant level.
- **3.10-5:** Any project for which noise impacts are not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any new development activities, and

implementation of the General Plan will not itself cause a significant adverse noise impact. Therefore impacts associated with increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in the project vicinity are mitigated to a less-than-significant level. Additionally, measures to reduce roadway noise impacts are within the jurisdiction and responsibility of other agencies, including Caltrans. These agencies can and should implement mitigation measures to further reduce noise levels associated with highway operations.

- **3.13-3:** The EIR acknowledges the recognized need for additional wastewater treatment and conveyance capacity, but it is premature to conclude that these infrastructure improvements will cause significant unavoidable impacts. Accordingly, with implementation of new Mitigation Measure 3.13-3(b), this impact is considered *less-than-significant*.
- **3.14-1:** Increasing the density and intensity of development consistent with transit-oriented development patterns, and promoting walkable community design, are incompatible with a LOS metric that requires expansion of roadways to avoid traffic congestion. The LOS metric is also incompatible with the increasingly urbanized development pattern required of the region's Bayfront cities to reduce the region's VMT. Although the CCTA and WCCTAC LOS and MTOS standards are beyond the City's jurisdiction and control, these agencies can and should adopt alternative thresholds with appropriate roadway service metrics for urbanized, transit-oriented communities. The City finds and determines that LOS and MTOS impacts from General Plan implementation can and should be mitigated to a less-than-significant level by CTA and WCCTAC through adoption of alternative, appropriate LOS and MTOS thresholds for urbanized areas seeking to improve transit, pedestrian and bicycle transit modes and seeking to discourage reliance on private automobile usage. Adoption of appropriate LOS and MTOS thresholds by these other agencies is beyond the City's jurisdiction and authority.
- **3.14-3:** New Mitigation Measure 3.14-3 is added to the EIR to further minimize potential adverse impacts on transit services. Notwithstanding this additional mitigation measure, increased demand for transit service falls within the jurisdiction and control of other transit agencies including the AC Transit, BART, and AMTRAK. These agencies can and should implement measures to continue to provide and expand transit service as needed to meet demand.
- **3.14-6:** The City and its Departments (e.g., Police, Fire and Planning) coordinate emergency preparedness and response planning activities, and also participate in emergency response training and planning activities with other agencies. Emergency access and emergency response vehicular routing is also addressed as an important component of emergency response and planning activities. Increased roadway congestion will occur as part of the General Plan Buildout and cumulative scenarios, but the City has a very accessible grid of localized streets as well as multiple freeways, arterial and bypass routes that can be used in the event of an emergency. Additionally, established emergency vehicle equipment such as sirens and flashing lights are effective in helping clear access even in congested emergency conditions (e.g., freeway accidents). There is no evidence that the increased congestion resulting from anticipated General Plan Buildout will result in congestion levels that significantly impede emergency vehicle access on emergency response routes. New Mitigation Measure 3.14-6 is added to the EIR, to further reduce the potential that this impact may occur. With this analysis and addition of new Mitigation Measure 3.14-6, this impact is less-than-significant.
- **3.15-1:** The City has determined that change does not equate to significant adverse aesthetic impacts. The General Plan, City ordinances, and the City's discretionary permit and Design Review process, and the CEQA process all have components designed to protect and enhance the visual character of the City while embracing the changes inherent in an urbanized area. While embracing change, the City recognizes the value of recording the visual history and evolution of the City. To assure that the evolving character of the City is recognized and preserved for future

study, new Mitigation Measure 3.15-1 is added to the EIR. As a result of this additional evaluation and the additional mitigation requirement, impacts to scenic vistas and the visual character and quality of the City at the General Plan implementation and cumulative level are mitigated to a less-than-significant level. Any project with aesthetic impacts not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any new development activities, and implementation of the General Plan will not itself cause a significant adverse aesthetic impact.

- **3.15-2:** The General Plan, City ordinances, and the City's discretionary permit and Design Review process, and the CEQA process all have components designed to protect and enhance the visual character of the City while embracing the changes inherent in an urbanized area. The General Plan, ordinances, and discretionary permit and Design Review processes, and CEQA processes must be implemented as applicable to future project-level decisions. It is anticipated that the visual quality of the City will improve, and not be the subject of "substantial degradation" as the General Plan is implemented over time. Therefore, visual resources impacts associated with new sources of substantial light or glare that would adversely affect day or nighttime views in the area are considered less-than-significant at the General Plan level.

In addition, the following significant cumulative impacts related to air quality, cultural resources, climate change, noise, public utilities, transportation and circulation, and visual resources identified in the Draft EIR are no longer considered significant and unavoidable impacts.

Air Quality

For the reasons noted above, a conflict with the Clean Air Plan projection is not considered a significant and unavoidable impact from General Plan implementation. Because a conflict with the CAP projection is not a significant and unavoidable impact, the proposed General Plan's contribution to cumulative effects on the CAP is likewise not considered a significant and unavoidable cumulative impact.

The emissions associated with vehicle miles traveled are higher than the rate of increase in population within the City. Thus it may result in an inconsistency with the transportation portion of the CAP. However, such an inconsistency is not in itself a significant impact..

New Mitigation Measure 3.3-2(e) is added to the EIR to further avoid, reduce, or mitigate air quality impacts from General Plan implementation. In addition, mitigation measures to further reduce the air quality impacts from General Plan implementation and cumulative conditions to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates. With implementation of these mitigation measures, implementation of the proposed General Plan is not expected to result in a cumulatively considerable net increase of criteria pollutants (ozone, carbon monoxide, nitrogen dioxide, and inhalable particulates) for which the region is in nonattainment under an applicable federal or state ambient air quality standard.

Cultural Resources

Significant adverse impacts to historical, cultural and paleontological resources are mitigated to a less-than-significant level under the General Plan and EIR. These resources are location-specific (i.e., within the City boundaries), and there are no reasonably foreseeable projects beyond those that could or would occur in compliance with the General Plan that would adversely affect these resources. Accordingly, since the General Plan does not include any components that would cause a substantial adverse impact to a historical, cultural, or paleontological resource, and no such adverse impacts are reasonably foreseeable at a cumulative level, cumulative impacts to these resources are less-than-significant.

Climate Change

As noted above, the increased density and intensity of development, the expansion of employment, and other core components of the General Plan are fully aligned with the proposed visions for the region's SCS. When the SCS is finalized and implemented, and the City's Climate Action Plan is finalized and implemented, the City's growth will have a beneficial impact on climate change with a land use pattern that reduces per capita GHG emissions and that meets cumulative regional targets for GHG reductions from the land use sector. New Mitigation Measure 3.6-1(q) is added to the EIR to further avoid, reduce, or mitigate GHG impacts from General Plan implementation. Notwithstanding these General Plan policies and EIR mitigation measures, many sources of GHG are outside the City's jurisdiction and control. The City finds that mitigation measures to further reduce GHG impacts from General Plan implementation and cumulative conditions to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB, and EPA.

Noise

As a result of additional mitigation requirements implemented through revised Mitigation Measures 3.10-1 and 3.10-2, construction-related noise and vibration impacts at the cumulative level are mitigated to a less-than-significant level. Any project for which noise or vibration impacts is not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any construction activities, and implementation of the General Plan will not, itself, cause a significant adverse noise or vibration construction impact.

The City finds and determines that mitigating impacts from rail and roadway operations is within the jurisdiction and responsibility of other agencies, including Caltrans, the Public Utilities Commission, and the Federal Railroad Administration. These agencies can and should implement mitigation measures to further reduce noise levels associated with highway and railway operations, such as using roadbed and rail materials that dampen or otherwise reduce noise levels, developing and implementing safety measures with lower noise levels than existing equipment such as rail whistles and crossing alarms, and working with manufacturers and operators of rail and vehicular equipment to reduce operational equipment noise levels.

Public Utilities

It is premature to conclude that infrastructure improvements will cause significant unavoidable impacts. Accordingly, with implementation of new Mitigation Measure 3.13-3(b), this impact is considered *less-than-significant*. The General Plan and EIR include policies and mitigation requirements to minimize levels of solid waste requiring landfill disposal, which in turn reduce landfill demand and extend the operational capacity of existing landfill. The City is a member of the West Contra Costa Integrated Waste Management Authority (WCCIWMA), a regional entity that disposes of solid waste within the region at several landfill facilities including the Potrero Hills Landfill in Solano County. The expansion of the Potrero Hills Landfill was approved in 2010, and provided the landfill with approximately 35 years of additional capacity (to 2045). WCCIWMA also uses other regional landfill facilities, as described in the EIR. Because the EIR concludes that adequate landfill capacity exists through and beyond the horizon year of the General Plan, it is not the case that regional landfill capacity will be significantly and unavoidably impacted during this period. Accordingly, the cumulative impact associated with the General Plan's contribution to solid waste generation is not significant and unavoidable.

Transportation and Circulation

As noted above, increasing the density and intensity of development consistent with transit-oriented development patterns, and promoting walkable community design and the increasingly urbanized development pattern required of the region's Bayfront cities to reduce the region's VMT are incompatible with a LOS metric that requires expansion of roadways to avoid traffic congestion. LOS and MTOS

impacts from General Plan implementation can and should be mitigated to a less-than-significant level by CTA and WCCTAC through adoption of alternative, appropriate LOS and MTOS thresholds for urbanized areas seeking to improve transit, pedestrian and bicycle transit modes and seeking to discourage reliance on private automobile usage. Adoption of appropriate LOS and MTOS thresholds by these other agencies is beyond the City's jurisdiction and authority.

Similarly, notwithstanding the addition of new Mitigation Measure 3.14-3, increased demand for transit service falls within the jurisdiction and control of the other transit agencies identified above. These agencies can and should implement measures to continue to provide and expand transit service as needed to meet demand.

There is no evidence that the increased congestion resulting from anticipated General Plan buildout will result in congestion levels that significantly impede emergency vehicle access on emergency response routes. With the additional analysis noted above and the addition of Mitigation Measure 3.14-6, the cumulative impact associated with increased congestion and reduced travel speeds on various roadways throughout the City, including some that are on primary emergency response routes (i.e. freeways and arterials) is no longer considered significant and unavoidable.

Visual Resources

As noted above, the General Plan, City ordinances, and the City's discretionary permit and Design Review process, and the CEQA process all have components designed to protect and enhance the visual character of the City while embracing the changes inherent in an urbanized area. To assure that the evolving character of the City is recognized and preserved for future study, new Mitigation Measure 3.15-1 is added to the EIR. As a result of this additional evaluation and the additional mitigation measure, impacts to scenic vistas and the visual character and quality of the City at the cumulative level are mitigated to a less-than-significant level.

It is anticipated that the visual quality of the City will improve, and not be the subject of "substantial degradation" as the General Plan is implemented over time. Therefore, visual resources impacts associated with new sources of substantial light or glare that would adversely affect day or nighttime views in the area are considered less-than-significant at the cumulative level.

CHAPTER 7

FINDINGS ON MITIGATION MONITORING AND REPORTING PROGRAM

Pursuant to Section 15091(a)(1) of the CEQA Guidelines, implementation of the mitigation measures identified in the Final EIR would substantially lessen the significant environmental impacts resulting from the project. These mitigation measures have been required in, or incorporated into the proposed General Plan. In accordance with Section 15091(d), and Section 15097 of the CEQA Guidelines, which require a public agency to adopt a program for reporting or monitoring required changes or conditions of approval to substantially lessen significant environmental effects, the Mitigation Monitoring and Reporting Program provided in this chapter is hereby adopted as the mitigation monitoring and reporting program for the proposed General Plan.

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
3.2 Demographics					
3.2-1 Implementation of the proposed General Plan could result in new physical impacts due to population growth.	3.2-1 The City shall continue to track the number of new housing units as building permits are issued to determine if new development exceeds the amount of development assumed in the EIR (15,548 housing units). As part of its annual Housing Element progress report City staff shall provide a report on the number of new housing units to the City Council annually. If the number of units approaches or exceeds 80 percent of the number assumed in the General Plan EIR (12,438 housing units), the City shall prepare an update to the General Plan and General Plan EIR to assess the environmental effects of additional projected growth.	Track the number of new housing units as building permits are issued to determine if new development exceeds the amount of development assumed in the EIR	Planning & Building Services	Annually	Planning & Building Services
3.2-2 Implementation of the proposed General Plan could result in new physical impacts due to job growth.	3.2-2 Based on available U.S. Census or ABAG data, the City shall track the number of new jobs to determine if new development exceeds the amount of development assumed in the EIR (22,488 jobs). City staff shall provide a report on the number of new jobs to the City Council annually and if the number of jobs approaches or exceeds 80 percent of the number assumed in the General Plan EIR (9,950 jobs), the City shall prepare an update to the General Plan and General Plan EIR to assess the environmental effects of additional projected growth.	Track the number of new jobs to determine if new development exceeds the amount of development assumed in the EIR	Planning & Building Services	Annually	Planning & Building Services
3.3 Air Quality					
3.3-1 Implementation of the proposed General Plan could provide new sources of regional air emissions that would conflict with or obstruct implementation of the Clean Air Plan. The temporary CAP inconsistency is not, itself, an adverse physical impact to the existing environment and is not considered significant and unavoidable.	3.3-1 <ul style="list-style-type: none"> a. Encourage the inclusion of the ferry terminal within the shuttle service feasibility study and within the current transportation system to promote the use of public transportation and provide for convenience of use. b. Promote reduced transit fares for daily commutes within the City, and encourage the cooperation between all modes of transportation to provide for ease of use, such as the institution of a monthly commuter pass that would provide access to the ferry, as well as bus, train, and/or BART systems. c. Continue to expand the Bay Trail and other routes for bicycle and pedestrian travel. d. Provide bicycle and pedestrian amenities, such as benches and bike storage, along routes leading to the Richmond and 	<ul style="list-style-type: none"> Include the ferry terminal within the shuttle service feasibility study Promote reduced transit fares for daily commutes within the City Expand routes for bicycle and pedestrians Provide bicycle and pedestrian 	<ul style="list-style-type: none"> Planning & Building Services City Manager's Office Project Applicant/Engineering Services Department Project applicant/Engineering 	<ul style="list-style-type: none"> During preparation of feasibility study On-going On-going On-going 	<ul style="list-style-type: none"> Planning & Building Services City Manager's Office/Planning & Building Services Planning & Building Services Planning & Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p>El Cerrito Del Norte BART stations to promote non-motorized travel to and from public transit.</p> <p>e. Provide development incentives, such as reduced parking requirements, for businesses that provide transit incentives to employees.</p>	<p>amenities along routes leading to BART stations</p> <p>Provide incentives for businesses that provide transit incentives</p>	<p>Services Department</p> <p>City Manager's Office/Planning & Building Services</p>	<p>Within 18 months of the adopting of the General Plan</p>	<p>Planning & Building Services</p>
<p>3.3-2 Implementation of the proposed General Plan would result in construction and operational emissions that could contribute substantially to an existing or projected air quality violation. New Mitigation Measure 3.3-2(e) further reduces or mitigates air quality impacts from General Plan implementation. In addition, the City finds that mitigation measures to further reduce air quality impacts from General Plan implementation and cumulative conditions to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and not the City, and these agencies can and should adopt more stringent air pollution and air quality improvement mandates.</p>	<p><u>Construction</u></p> <p>3.3-2 a. All construction projects shall incorporate the most recent Best Management Practices as required by the BAAQMD.</p> <p>b. Future development under the proposed General Plan shall be subject to review to determine construction air quality impacts in accordance with CEQA.</p> <p><u>Operational</u></p> <p>c. The City of Richmond shall continue to require individual developers to implement applicable new stationary source control measures as proposed in the most recent CAP, while conforming with existing BAAQMD stationary source regulations and requirements and complying with BAAQMD rules and regulations regarding indirect sources.</p> <p>d. The City of Richmond shall consult with project proponents during the pre-application review process to ensure that uses with a high level of operational emissions are appropriately designed and sited to avoid impacts on</p>	<p>Incorporate the most recent BMPs</p> <p>Future projects shall be reviewed to determine air quality impacts</p> <p>Require developers to implement stationary source control measures as proposed in the most recent CAP</p> <p>Ensure that uses with a high level of operational emissions are designed and sited</p>	<p>Project applicant</p> <p>Project applicant</p> <p>Project applicant</p> <p>Project applicant</p>	<p>On-going during grading and construction</p> <p>During project design and development review</p> <p>During project design and development review</p> <p>During project design and development review</p>	<p>Planning & Building Services/ BAAQMD</p> <p>Planning & Building Services</p> <p>Planning & Building Services</p> <p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p>neighboring uses and regional air quality.</p> <p>e. The City will continue to work proactively with BAAQMD, CARB and EPA to help these agencies enforce air pollution prevention and control mandates within the City. The City will also work with the community to identify and advocate for air quality improvement measures that are within the jurisdiction of these agencies and can and should be implemented to improve Richmond's air quality to levels that are protective of human health and the environment.</p>	<p>to avoid impacts on neighboring uses and regional air quality</p> <p>Work proactively with other agencies to help enforce air pollution prevention and control mandates within the City; work with the community</p>	<p>City Manager's Office/Planning & Building Services</p>	<p>On-going</p>	<p>City Manager's Office/Planning & Building Services</p>
<p>3.3-3 Operational activities under the proposed General Plan would not expose sensitive receptors to substantial pollutant concentrations in excess of the established thresholds. This impact would be considered <i>less-than-significant</i>.</p>	<p>3.3-3 a. The City of Richmond shall implement special overlay zones around all planned sources of TACs to minimize the potential impacts to sensitive receptors. Land Use diagrams within the adopted General Plan will indicate the Special Overlay Zones which shall include an overlay zone of at least 500 feet on either side of all freeways and high volume roadways (100,000 vehicles per day or more).</p> <p>b. The City of Richmond shall require all new industrial and commercial development projects that have the potential to emit TACs to be located an adequate distance from existing and proposed development used by sensitive receptors—including residential, schools, day care facilities, congregate care facilities, hospitals, or other places of long-term residency. The determination of development projects that have the potential for TAC emissions and adequate distances from sensitive receptors as identified in CARB's "Air Quality and Land Use Handbook—A Community Health Perspective (April 2005; CARB Guidance) are as follows:</p> <ul style="list-style-type: none"> • Proposed dry cleaners and film processing services that use Perchloroethylene shall be sited at least 500 	<p>Implement special overlay zones around all planned sources of TACs</p> <p>Require all new industrial and commercial projects that have the potential to emit TACs to be located an adequate distance from sensitive receptors</p>	<p>Planning & Building Services</p> <p>Project applicant</p>	<p>Within two years of the adoption of the General Plan</p> <p>During project design and development review</p>	<p>Planning & Building Services</p> <p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p>feet from sensitive land uses.</p> <ul style="list-style-type: none"> • Proposed auto body repair services shall be sited at least 500 feet from sensitive land uses. • Proposed gasoline dispensing stations with an annual throughput of less than 3.6 million gallons shall be sited at least 50 feet from sensitive land uses. Proposed gasoline dispensing stations with an annual throughput at or above 3.6 million gallons shall be sited at least 300 feet from sensitive land uses. 				
	<ul style="list-style-type: none"> • Other proposed sources of TACs including furniture manufacturing and repair services that use Methylene Chloride or other solvents identified as a TAC shall be sited at least 300 feet from sensitive land uses. • Proposed distribution centers with more than 100 trucks per day; more than 40 trucks with operating transport refrigeration units per day; or where transport refrigeration unit operations cumulatively exceed 300 hours per week should not be sited within 1,000 feet of sensitive land uses. • Proposed rail yards for major service and maintenance operations should not be sited within 1,000 feet of sensitive land uses. • Proposed chrome platers should not be sited within 1,000 feet of new sensitive land uses. • The City will support buffer zones between industrial areas and sensitive land uses, including port development. Proposed port developments should not site the heavily impacted areas immediately upwind (based on prevalent wind direction) of sensitive land uses. Siting of port developments that have the potential to emit TACs should be done in consultation with the BAAQMD to determine the need for a health risk assessment. • The City will support buffer zones between industrial areas and sensitive land uses, including refinery development. Proposed petroleum refineries should not site the heavily impacted areas immediately 				

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	upwind (based on prevalent wind direction) of sensitive land uses. Siting of refineries should be done in consultation with the BAAQMD to determine the need for a health risk assessment.				
	<p>c. Proposed sensitive land uses including schools, daycare facilities, congregate care facilities, hospitals, or other places of long term residency for people shall be sited:</p> <ul style="list-style-type: none"> • At least 500 feet from dry cleaners and film processing services that use Perchloroethylene. • A least 500 feet from auto body repair services. • At least 50 feet from existing gasoline dispensing stations with an annual throughput of less than 3.6 million gallons and 300 feet from existing gasoline dispensing stations with an annual throughput at or above 3.6 million gallons. • At least 300 feet from existing land uses that use Methylene Chloride or other solvents identified as a TAC, including furniture manufacturing and repair services. • At least 1,000 feet from distribution centers with more than 100 trucks per day; more than 40 trucks with operating transport refrigeration units per day; or where transport refrigeration unit operations cumulatively exceed 300 hours per week. In addition sensitive land uses should not be sited near facility entry and exit points. • At least 1,000 feet from major service and maintenance rail yards. • At least 1,000 feet from chrome plating facilities. • The City will support buffer zones between industrial areas and sensitive land uses, including port development. Avoid siting sensitive land uses immediately downwind (based on prevalent wind direction) from stationary TAC sources or primary loading areas located within the boundaries of existing port facilities. 	Implement mitigation measures identified to reduce exposure of sensitive receptor to pollutants	Project applicant	During project design and development review	Planning & Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<ul style="list-style-type: none"> • The City will support buffer zones between industrial areas and sensitive land uses, including refinery development. Avoid siting sensitive land uses immediately downwind (based on prevalent wind direction) from stationary TAC sources located within the boundaries of petroleum refineries. d. The City of Richmond shall consult with the BAAQMD to identify TAC sources and determine the need for and requirements of a health risk assessment for proposed developments. 	Identify TAC sources and determine the need for a health risk assessment	Planning & Building Services	During project design and development review	Planning & Building Services
3.5 Cultural Resources					
<p>3.5-1 Development activities associated with the proposed Richmond General Plan Update could cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5 of the CEQA Guidelines. Based on additional evaluation and clarified Mitigation Measure 3.5-1, the General Plan impact to historic resources is mitigated to a <i>less-than-significant</i> level.</p>	<p>3.5-1 Future projects shall implement the City's Historic Structures Code to minimize impacts on historical resources by requiring thorough scrutiny for compliance with applicable legal requirements, including but not limited to compliance with the General Plan's historic resource protection policies, and compliance with state and federal historic resource protection laws, before any resource may be demolished and ensuring that alteration conforms to the Secretary of the Interior's Standards for the Treatment of Historic Properties.</p>	Investigate historical resources before demolition and ensure that alteration conforms to the Secretary of the Interior's Standards for the Treatment of Historic Properties, and complies with General Plan policies and state and federal historic resource protection laws.	Project applicant	Prior to approval of application for demolition or alteration	Planning & Building Services
<p>3.5-2 Development activities associated with the proposed Richmond General Plan Update could cause a substantial adverse change in the significance of an archaeological resource as defined in section 15064.5 of the CEQA Guidelines or</p>	<p>3.5-2 a. The City shall require that impacts on unique archaeological resources be mitigated to a less-than-significant level through methods identified in Public Resources section 21083.2, including planning construction to avoid archaeological sites, deeding archaeological sites into permanent conservation easements, capping or covering archaeological sites with a layer of soil before building on the sites, or planning parks, greenspace, or other open space to incorporate archaeological sites.</p>	Comply with mitigation requirements regarding consultation and subsequent actions if archaeological resources are encountered	Construction contractor	Prior to grading activities and ongoing during construction	Planning & Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
<p>disturb human remains, including those interred outside of formal cemeteries. With the implementation of mitigation measures, this is considered a <i>less-than-significant</i> impact.</p>	<p>b. The City shall require new development within the City to evaluate the potential for impacts on human remains. The City shall require that the treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable state and federal laws, including notification of the County Coroner and, in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC).</p>	<p>Comply with mitigation requirements regarding consultation and subsequent actions if human remains are encountered</p>	<p>Construction contractor</p>	<p>Prior to grading activities and ongoing during construction</p>	<p>Planning & Building Services</p>
<p>3.5-3 Development activities associated with the proposed Richmond General Plan Update could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. With the implementation of mitigation measures, this is considered a <i>less-than-significant</i> impact.</p>	<p>3.5-3 The City shall require new development within areas of high sensitivity paleontological resources to evaluate the potential for impacts on significant paleontological resources. The City shall require that impacts on significant paleontological resources be mitigated to a less-than-significant level through data recovery or other methods determined adequate by a professional paleontologist.</p>	<p>Comply with mitigation requirements regarding consultation and subsequent actions if paleontological resources are encountered</p>	<p>Construction contractor</p>	<p>Prior to grading activities and ongoing during construction</p>	<p>Planning & Building Services</p>
3.6 Climate Change					
<p>3.6-1 Implementation of the proposed General Plan would result in the generation of GHGs that may have a significant impact on the environment. Implementation of BAAQMD BMPs would ensure that construction emissions of GHGs would be less-than-significant. New Mitigation Measure 3.6-1(q) is added to the EIR to further avoid, reduce or mitigate GHG impacts from General Plan</p>	<p>3.6-1 a. All construction projects shall incorporate the most recent Best Management Practices for Greenhouse Gas Emissions as indicated by the BAAQMD.</p> <p>b. All new development and all retrofits of single-family developments, multi-family developments of over 10 units, and all commercial/industrial remodels of over 10,000 square feet shall be required to exceed Title 24 standards by 20 percent by 2020 and 30 percent by 2030. This mitigation measure enhances General Plan Action EC3.C.</p> <p>Measures to reduce emissions can include, but are not limited to:</p> <ul style="list-style-type: none"> • Install energy efficient appliances, including air 	<p>Incorporate the most recent BMPs</p> <p>New development and all retrofits shall be required to exceed Title 24 standards by 20 percent by 2020 and 30 percent by 2030</p>	<p>Project applicant</p> <p>Project applicant</p>	<p>On-going during grading & construction</p> <p>During project design and development review</p>	<p>Planning & Building Services</p> <p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
<p>implementation. In addition, the City finds that mitigation measures to further reduce GHG impacts from General Plan implementation and cumulative conditions to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and not the City, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.</p>	<p>conditioning and heating units, dishwashers, water heaters, etc.;</p> <ul style="list-style-type: none"> • Install solar water heaters; • Install top quality windows and insulation; • Install energy efficient lighting; • Optimize conditions for natural heating, cooling and lighting by building siting and orientation; • Use features that incorporate natural ventilation; • Install light-colored "cool" pavements, and strategically located shade trees along all bicycle and pedestrian routes; and • Incorporate skylights, reflective surfaces, and natural shading in buildings design and layouts; • Replace inefficient air conditioning and heating units with new energy efficient models; • Replace older, inefficient appliances with new energy efficient models; • Replace old windows and insulation with top-quality windows and insulation; • Replace inefficient and incandescent lighting with energy efficient lighting; and • Weatherize existing buildings to increase energy efficiency. 				
	<p>c. Require all new City-owned and operated facilities and 50 percent of all new development to generate at least 10 percent of their energy use from renewable sources. Enhances General Plan Action EC3.B.</p>	<p>Require facilities to generate at least 10 percent of energy use from renewable sources</p>	<p>Project applicant</p>	<p>During project design and development review</p>	<p>Planning & Building Services</p>
	<p>d. All new commercial and multi-family developments installing boilers shall be required to install energy efficient boilers such that they achieve a minimum 4.5 percent reduction in energy usage. The same reductions shall be required of all remodeled multi-family developments of over 10 units and all commercial/industrial remodels of over 10,000 square feet.</p>	<p>Developments installing boilers shall be required to install energy efficient boilers</p>	<p>Project applicant</p>	<p>During project design and development review</p>	<p>Planning & Building Services</p>
	<p>e. Develop improved waste reduction and expanded recycling</p>	<p>Develop improved</p>	<p>Planning &</p>	<p>Within two</p>	<p>City Manager's</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p>smaller localized businesses to cooperate in establishing joint trip reduction plans. Enhances General Plan Actions EC2.F and EC2.I.</p> <p>i. Implement Citywide car and bicycle sharing programs. Collaborate with service providers to identify potential sites for locating carshares.</p>	<p>Implement Citywide car and bicycle sharing programs</p>	<p>Project Applicants/ Planning & Building Services/City Manager's Office</p>	<p>On-going</p>	<p>Planning & Building Services</p>
	<p>j. Require new local-serving mixed-use in residential areas to provide needed services and amenities close to where people live and work. Require new development and redevelopment projects to provide community amenities and uses that serve priority community needs. Enhances General Plan Policy EC4.1 and General Plan Actions EC4.A, EC4.B, and EC4.D.</p> <p>k. Require mixed-use development along transit-oriented corridors that attracts people and facilitates activity throughout the day. Prohibit isolated or gated communities in order to improve physical connectivity throughout the City, and remove barriers in existing gated areas. Maintain streets to ensure that neighborhoods and streets are safe and well used. Enhances General Plan Policy EC4.2 and Actions EC2.C, EC2.E, EC2.G, EC4.A, EC4.B, EC4.C and EC4.E.</p> <p>l. Collaborate with AC transit, BART, West Contra Costa Transit Agency, Amtrak, and major employers in Richmond that provide shuttle service to expand transit in the evenings and late nights, and for people with special needs. Enhance Richmond's paratransit service. Collaborate with major employers to provide employer-based "open-door" shuttles to BART, the planned ferry terminal and other transit hubs. Collaborate with regional and Contra Costa County transportation agencies to maintain and enhance service within the City and region. Explore strategies to address affordability, access, and safety. Expand outreach and</p>	<p>Include new local-serving mixed-use as part of development in residential areas</p> <p>Include mixed-use as part of development along transit-oriented corridors</p> <p>Collaborate with transit authorities and major employers in Richmond that provide shuttle service to expand transit in the evenings and late nights, and for people with special</p>	<p>Project applicant</p> <p>Project applicant/ Planning & Building Services</p> <p>Engineering Services Department/ Planning & Building Services</p>	<p>During project design and development review</p> <p>During project design and development review</p> <p>On-going</p>	<p>Planning & Building Services</p> <p>Planning & Building Services</p> <p>Engineering Services Department/ Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	information programs to promote transit use. Measure results in a 10 percent expansion of transit system, and an increase in service frequency	needs			
	and speed for 2020; and a 15 percent expansion by 2030. Expand outreach and information programs to promote transit use. Enhances General Plan Policy EC2.C. m. All new street lighting and all re-modeled or replaced street lighting shall consist of high-efficiency lamps that reduce energy consumption by a minimum of 16 percent. n. All new traffic lights and all replaced traffic lights shall consist of LED lights. This high efficiency lighting would reduce emissions from traffic lights by 90 percent. o. Require new development to incorporate water-saving measures demonstrating a minimum reduction of 20 percent in water use over a similar project completed within the previous five years. This measure enhances General Plan Action EC3.F. This measure would be enhanced by General Plan Action EC3.G.	Use high-efficiency lamps for street lighting Use LED technology for new traffic lights Incorporate water-saving measures in new development	Project applicant/ Engineering Services Department Project applicant/ Engineering Services Department Project applicant/ Engineering Services Department	On-going On-going During project design and development review	Engineering Services Department/ Planning and Building Services/City Manager's Office Engineering Services Department/ Planning and Building Services/City Manager's Office Engineering Services Department/ Planning & Building Services
	p. The City of Richmond shall adopt a Climate Action Plan within 18 months of the adoption of the General Plan Energy and Climate Change Element. The Climate Action Plan shall include the following pursuant to CEQA section 15183.5(b): a. The quantification of greenhouse gas emissions, both existing (2005) and projected for 2020 and General Plan horizon year (2030). These inventories and projections shall be used in the forthcoming Climate Action Plan. b. The Climate Action Plan shall define reduction	The City of Richmond shall prepare a Climate Action Plan	City Manager's Office/Planning & Building Services	Within 18 months of the adoption of the General Plan Energy and Climate Change Element	City Manager's Office/Planning & Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p>targets that are California State Assembly Bill 32 (AB 32) compliant and continue reducing emissions past 2020 in order to address cumulatively considerable impacts of greenhouse gas emissions. At a minimum, the Climate Action Plan shall set a target to reduce emissions to 1990 levels by 2020, which is anticipated to be a reduction of 15% from 2005 levels.</p> <p>c. The 2020 and 2030 Business As Usual (BAU) Inventories provide emissions by land use types and emission sectors based upon the anticipated changes and growth in land use within the General Plan Land Use and Urban Design Element, which fulfills the criteria of CEQA Guidelines 15183.5(b)(C). As such, the inventories shall provide quantities and context of the emissions that need to be reduced in order to achieve the reduction target. Reduction measures in the Climate Action Plan shall focus on reducing the emissions from the sectors and land use types identified in the 2020 and 2030 BAU inventories.</p>				
	<p>d. The Climate Action Plan shall specify reduction measures or groups of reduction measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the AB 32 compliant reduction target. To implement the goals and policies in the General Plan Energy and Climate Change Element, the Climate Action Plan shall include adaptation strategies that focus on potential local impacts of climate change, such as sea level rise, increased risk of flooding, diminished water supplies, and public health. Broader sustainability measures may include the preservation of local water quality, air quality, open space, and biodiversity. In addition, the following reduction strategies shall be incorporated into the Climate Action Plan:</p>				

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<ul style="list-style-type: none"> i. Require all new or renovated municipal buildings to seek California Green 2010 Tier 1 building standards or higher and require new development building design to be, at a minimum, compliant with California Green 2010 building standards. ii. Require all municipal fleet purchases to be fuel efficient vehicles for their intended use, based on the fuel type, design, size, and cost efficiency. iii. Require new development projects to implement a construction plan that demonstrates how activities will reduce waste through recycling and/or salvaging of nonhazardous construction and demolition debris at a minimum of 50%. 				
	<ul style="list-style-type: none"> e. In order to establish a mechanism to monitor the Climate Action Plan's progress towards achieving the reduction targets and to require amendment if the Climate Action Plan is not achieving the reduction targets, the Climate Action Plan shall include an implementation chapter describing how the reduction measures are to be implemented, emissions monitored, and the Climate Action Plan updated. Emissions inventories shall be conducted at minimum intervals of five years in order to evaluate the progress of the Climate Action Plan. The Climate Action Plan shall be updated together with future General Plan Updates or as necessary to implement new statewide reduction thresholds. f. The Climate Action Plan, including all updates, is a project subject to public review and comment under the California Environmental Quality Act. q. The City will continue to work proactively with BAAQMD, CARB and EPA to help these agencies enforce GHG prevention and control mandates within the City, and will work with the community to identify and advocate for GHG measures that are within the jurisdiction of these 	<p>Work proactively with other agencies to help enforce GHG prevention and control</p>	<p>City Manager's Office/Planning & Building Services</p>	<p>On-going</p>	<p>City Manager's Office/Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	agencies and can and should be implemented to further reduce GHG from the City.	mandates within the City; work with community			
3.9 Hydrology and Water Quality					
3.9-8 Development within the City could be subject to dam failure inundation and sea level rise flood hazards. Implementation of General Plan Policies and Implementing Actions, as well as the implementation of mitigation measures, would render this a <i>less-than-significant</i> impact.	3.9-8 a <u>For all projects within the inundation zone for maximum sea level rise as identified in Map 8.1 of Chapter 8 of the General Plan, the project site shall be graded such that finished floor elevations are 3.5 feet above the Base Flood Elevation (BFE), and streets and pads are 3 feet above BFE to allow for future sea level rise, thereby elevating all structures above the existing and potential future flood hazard area.</u>	Projects within the inundation zone for maximum sea level rise shall be graded such that finished floor elevations are 3.5 feet above the Base Flood Elevation (BFE), and streets and pads are 3 feet above BFE	Project applicant	On-going during grading and construction	Engineering Services Department/ Planning and Building Services
	b. <u>For all projects within the inundation zone for maximum sea level rise as identified in Map 8.1 of the General Plan, shoreline and public access improvements shall be designed to allow future increases in elevation along the shoreline edge to keep up with higher sea level rise values, should they occur. Design elements shall include providing adequate setbacks to allow for future elevation increases of at least 3 feet from the existing elevation along the shoreline. Before a Small Lot Final Map is approved, the project Applicant must petition the appropriate governing body to form (or annex into if appropriate) and administer a special assessment district or other funding mechanism to finance and construct future improvements necessary to ensure that the shoreline, public facilities, and public access improvements will be protected should sea level rise exceed 16 inches at the perimeter of the project. Prior to the sale of the first residential unit or lease of the first commercial or industrial space, the legislative body shall have acted upon the petition to include the property within the district boundary. The newly formed district shall also administer a Monitoring and Adaptive Management Plan to monitor sea level and implement and maintain the</u>	Projects within the inundation zone for maximum sea level rise, shall have shoreline and public access improvements designed to allow future increases in elevation along the shoreline edge to keep up with higher sea level rise values	Project applicant	On-going during grading and construction	Engineering Services Department/ Planning and Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p><u>protective improvements. All improvements shall be subject to approval by the City of Richmond planning and public works staff prior to issuance of building or grading permits. These improvements shall include, but are not limited, one or more of the following:</u></p>				
	<ul style="list-style-type: none"> • Construction of a shoreline protection system that is initially built to accommodate a mid-term rise in sea level of 16 inches, with a design that is adaptable to meet higher than anticipated values in the mid-term, as well as for the long-term; • Construction of a storm drainage system that is initially built to accommodate a mid-term rise in sea levels of 16 inches, with a design that is adaptable to meet higher than anticipated sea level rise values (similar to the first bullet); and • Construction of buildings and vital transportation infrastructure at elevations that would not be exceeded by flood waters, even if the shoreline protection does not function, for existing conditions and over a longer-term as compared to the two above. 				
3.10 Noise					
<p>3.10-1 Construction activities associated with the future land use changes under the proposed General Plan could generate noise levels that temporarily exceed acceptable noise levels. Implementation of noise limits in the City of Richmond Municipal Code would limit the exposure of sensitive receptors to temporary or periodic increases in noise levels. Revised Mitigation Measure 3.10-1 further mitigates and minimizes</p>	<p>3.10-1 Future projects shall incorporate project-specific mitigation measures to reduce the impact of construction noise</p> <p>(a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise and vibration construction activity minimization and mitigation plan for any multi-story development project located within a residential neighborhood, or located adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address high-noise or vibration construction activities such as pile-driving, and must address outdoor construction activities occurring outside normal weekday business hours. The plan must also address construction-related noise and vibration from current and concurrently with project-related construction activities to address potential cumulative noise and vibration</p>	<p>Comply with project-specific mitigation measures to reduce construction noise</p>	<p>Project applicant</p>	<p>During project design and development review</p>	<p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
<p>potentially significant future adverse impacts associated with noise levels that temporarily exceed the noise standards established by the City and that would expose sensitive receptors to substantial temporary or periodic increases in ambient noise levels. As a result of additional mitigation requirements, these impacts at the General Plan and cumulative level are mitigated to a less-than-significant level.</p>	<p>impacts. Excessive noise and vibration impacts from such construction-related activities (defined as noise and vibration impacts that would not occur from similar construction-related activities) shall be avoided or minimized to the extent feasible, and high-noise or vibration construction activities shall not occur during evenings or weekends adjacent to occupied residential units.</p> <p>(b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating noise and vibration impacts from construction activities, for use as appropriate in noise and vibration plans required under Mitigation Measure 3.10-1(a) above.</p> <p>(c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for construction-related noise and vibration impacts during daytime weekday hours, and will consider and include feasible conditions in building, demolition and grading permits to avoid or minimize excessive noise and vibration from construction activities.</p> <p>(d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal Code.</p>				
<p>3.10-2 Construction of future new land uses under the proposed General Plan could generate or expose persons or structures to temporary groundborne vibration. Revised Mitigation Measure 3.10-2 further mitigates and minimizes potentially</p>	<p>3.10-2 Future projects shall incorporate project-specific mitigation measures to reduce the impact of construction-related groundborne vibration.</p> <p>(a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise and vibration construction activity minimization and mitigation plan for any multi-story development project located within a residential neighborhood, or located</p>	<p>Comply with project-specific mitigation measures to reduce vibration</p>	<p>Project applicant</p>	<p>During project design and development review</p>	<p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
<p>significant future adverse noise and vibration impacts from construction activities. As a result of additional mitigation requirements, these impacts at the General Plan and cumulative level are mitigated to a less-than-significant level.</p>	<p>adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address high-noise or vibration construction activities such as pile-driving, and must address outdoor construction activities occurring outside normal weekday business hours. The plan must also address construction-related noise and vibration from current and concurrently with project-related construction activities to address potential cumulative noise and vibration impacts. Excessive noise and vibration impacts from such construction-related activities (defined as noise and vibration impacts that would not occur from similar construction-related activities) shall be avoided or minimized to the extent feasible, and high-noise or vibration construction activities shall not occur during evenings or weekends adjacent to occupied residential units.</p> <p>(b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating noise and vibration impacts from construction activities, for use as appropriate in noise and vibration plans required under Mitigation Measure 3.10-2(a) above.</p> <p>(c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for construction-related noise and vibration impacts during daytime weekday hours, and will consider and include feasible conditions in building, demolition and grading permits to avoid or minimize excessive noise and vibration from construction activities.</p> <p>(d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal Code.</p>				
<p>3.10-3 Implementation of the proposed General Plan could</p>	<p>3.10-3 (a) Future projects shall incorporate project-specific mitigation measures and maintain Quiet Zones to reduce the impact of</p>	<p>Comply with project-specific</p>	<p>Project applicant</p>	<p>During project design and</p>	<p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
<p>expose sensitive receptors to noise levels in excess of the existing noise standards established by the City. New Mitigation Measure 3.10-3(b) mitigates operational noise impacts at the General Plan implementation and cumulative level to a <i>less-than-significant</i> level. In addition, mitigating impacts from rail and roadway operations is within the jurisdiction and responsibility of other agencies, which can and should implement mitigation measures to further reduce noise levels.</p>	<p>train noise.</p> <p>(b) Future commercial and industrial projects shall incorporate project-specific mitigation measures to reduce operational noise levels for higher-noise sources such as commercial HVAC systems, generators, pumps and manufacturing activities.</p> <p>a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise minimization plan for any commercial or industrial project located within a residential neighborhood, or located adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address operational noise generating activities such as HVAC systems, generators and pumps. Excessive noise from such sources shall be avoided or minimized to the extent feasible.</p> <p>b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating operational noise from commercial and industrial projects, for use as appropriate in the noise minimization plan required under Mitigation Measure 3.10-3(b)(a) above.</p> <p>c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for urbanized ambient noise standards, and will consider and include feasible conditions in building and use permits to avoid or minimize excessive operational noise from commercial and industrial activities.</p> <p>d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal</p>	<p>mitigation measures to maintain Quiet Zones</p> <p>Comply with project-specific mitigation measures to reduce operational noise</p>	<p>Project applicant</p>	<p>development review</p> <p>During project design and development review</p>	<p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	Code.				
<p>3.10-5 Operation of new land uses under the proposed General Plan would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in the project vicinity. These impacts can be mitigated to <i>less-than-significant</i> with implementation of General Plan policies, mitigation measures, and mitigation measures within the jurisdiction and responsibility of other agencies, and not the City.</p>	<p>3.10-5 Future projects shall incorporate project-specific mitigation measures to promote non-motorized transportation to reduce the impact of traffic noise.</p>	<p>Incorporate project-specific mitigation to promote non-motorized transportation</p>	<p>Project applicant</p>	<p>During project design and development review</p>	<p>Planning & Building Services</p>
3.13 Public Utilities					
<p>3.13-3 Implementation of the General Plan Update could require the construction or expansion of wastewater treatment facilities or collection systems that could cause significant environmental impacts, absent project-specific mitigation measures. It is premature to conclude that the impacts of the expansion or construction would create significant unmitigated impacts. Therefore, with the implementation of General</p>	<p>3.13-3 (a) Future projects shall incorporate project-specific mitigation measures to reduce impacts from the construction of new wastewater collection and treatment facilities.</p> <p>(b) The City will work with affected stakeholders to avoid, minimize, or mitigate any significant adverse impacts to the environment that may occur as a result of increasing the capacity of the wastewater treatment and conveyance system. This is appropriately evaluated and implemented at the project-specific level for the treatment plant and conveyance systems.</p>	<p>Incorporate project-specific mitigation to reduce impacts from the construction of new facilities</p> <p>Work with stakeholders</p>	<p>Project applicant</p> <p>Planning & Building Services</p>	<p>During project design and development review</p> <p>During project design and development review</p>	<p>Planning & Building Services</p> <p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
<p>Plan policies and new and revised mitigation measures, including new Mitigation Measure 3.13-3(b), this impact is considered <i>less-than-significant</i>.</p>					
3.14 Transportation and Circulation					
<p>3.14-1 The proposed General Plan may result in traffic congestion that exceeds the previous City of Richmond traffic LOS standard of LOS D, as well as CCTA and WCCTAC LOS and MTOS standards. LOS and MTOS impacts can and should be mitigated to a <i>less-than-significant</i> level by CCTA and WCCTAC through the adoption of appropriate LOS and MTOS thresholds, which are beyond the City's jurisdiction and control.</p>	<p>3.14-1 Future projects shall incorporate project-specific mitigation measures to reduce traffic impacts.</p>	<p>Comply with project-specific mitigation measures to reduce traffic impacts</p>	<p>Project applicant</p>	<p>During project design and development review</p>	<p>Planning and Building Services</p>
<p>3.14-3 Implementation of the proposed General Plan would produce higher demand for transit service, increased demand for transit service falls within the jurisdiction and control of other transit agencies, and not the City, and these agencies can and should implement measures to continue to provide and expand transit service as needed to meet demand.</p>	<p>3.14-3 The City shall continue to cooperate and coordinate with transit agencies and work with the community to promote and advocate for improved transit services and increased transit capacity to meet anticipated General Plan implementation and cumulative impacts for transit service, and seek grant funding opportunities to supplement available transit service.</p>	<p>Cooperate and coordinate with transit agencies; work with the community</p>	<p>City Manager's Office/Planning and Building Services</p>	<p>On-going</p>	<p>City Manager's Office/Planning and Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
3.14-6 Traffic congestion may reduce emergency response access. With the addition of Mitigation Measure 3.14-6 and additional analysis, this impact is not considered significant and unavoidable.	3.14-6 The City will continue to support coordination among its departments and other agencies in planning for emergency access and response routes, and will periodically review and as appropriate update its emergency access and response route planning.	Continue to implement effective planning and procedures	City Manager's Office/Planning and Building Services	On-going	City Manager's Office/Planning and Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
3.15 Visual Resources					
<p>3.15-1 Development activities associated with the proposed General Plan could have a substantial adverse effect on a scenic vista or substantially degrade the existing visual character or quality of the site and its surroundings. New Mitigation Measure 3.15-1 assures that the evolving visual character of the City is recognized and preserved for future study. Based on additional analysis and mitigation requirements, impacts to scenic vistas and the visual character and quality of the City at the General Plan implementation and cumulative level are mitigated to a less-than-significant level.</p>	<p>3.15-1 As a condition of authorizing development within existing undeveloped areas, or demolishing commercial or industrial structures that were built prior to 1950, the City shall require the applicant to provide photographs or another appropriate form of visual record of the project location's existing physical setting, and a photograph or another appropriate form of visual record of one or more public vistas of the project location (e.g., views from public parks or civic buildings). These visual records shall be submitted to the Planning Department or its designee for appropriate storage and retrieval for future studies of the City's evolving urban character.</p>	<p>Require and store visual records for retrieval for future studies</p>	<p>Planning and Building Services</p>	<p>On-going</p>	<p>Planning and Building Services</p>
<p>3.15-2 The development of the proposed General Plan could create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. It is anticipated that the visual quality of the City will improve as the General Plan is implemented over time, so this impact is considered less-than-significant at the General Plan and cumulative levels.</p>	<p>3.15-2 a All street lighting shall be directed downward and shielded to prevent light spill onto surrounding properties, sky glow, and glare.</p> <p>b. The City shall restrict the use of high level outdoor lighting for new homes, particularly along the hillside ridges.</p> <p>c. Landscaping shall be incorporated along internal roads and near off-site homes to reduce spill light emanating from vehicles and buildings.</p> <p>d. The City shall require design review of any project containing reflective glass or metal building materials that exceed 50 percent of any building surface or the first three</p>	<p>Street lighting shall be directed downward</p> <p>Restrict the use of high level outdoor lighting</p> <p>Landscaping shall reduce spill light from vehicles and buildings</p> <p>Require design review if reflective glass or metal</p>	<p>Project applicant</p>	<p>During project design and development review</p>	<p>Planning and Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	floors.	building materials exceed 50 percent of any building surface			

CHAPTER 8 FINDINGS ON CHANGES TO THE DRAFT EIR AND RECIRCULATION

CHANGES TO THE DRAFT EIR

In response to comments from the public and other public agencies, minor modifications have been incorporated into the Draft EIR as part of the Final EIR. All of the changes to the Draft EIR are described in Chapter 2 of the Final EIR for the proposed General Plan.

CITY COUNCIL ANALYSIS AND REVISION AND ADDITION OF MITIGATION MEASURES

Based on City Council input, mitigation measures have been added to the EIR to reduce impacts of the Project to a less-than-significant level. In addition, these Findings explain why the certain General Plan impacts are no longer considered significant and unavoidable.

FINDINGS REGARDING THE FINAL EIR

Pursuant to CEQA, on the basis of the review and consideration of the Final EIR, all information added to the Final EIR in response to comments on the Draft EIR merely clarifies, amplifies or makes insignificant modifications to an already adequate EIR pursuant to CEQA Guidelines Section 15088.5(b) and that no significant new information has been received that would require recirculation.

Revisions to the Final EIR in response to City Council input include: (1) new mitigation measures and findings, which explain how the measures would reduce effects to below the significance level; (2) findings that explain why other impacts are properly characterized as less-than-significant; and (3) findings that establish and explain why mitigation is the responsibility of another agency. These revisions are designed to reduce impacts to a less-than-significant level. The revisions are not significant new information pursuant to CEQA Guidelines Section 15088.5(a) because they do not change the EIR in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect or a feasible way to mitigate or avoid such an effect that the project's proponents have declined to implement.

EXHIBIT A of City Council Resolution 51-12

CEQA FINDINGS OF FACT, STATEMENT OF SIGNIFICANCE, AND MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

RICHMOND GENERAL PLAN 2030
FINAL ENVIRONMENTAL IMPACT REPORT
(SCH NO. 2008022018)



Lead Agency:
City of Richmond
450 Civic Center Plaza
Richmond, CA 94804-1630

April 2012

TABLE OF CONTENTS

CHAPTER 1	4
INTRODUCTION	4
CERTIFICATION	4
ORGANIZATION OF CEQA FINDINGS OF FACT	5
RECORD OF PROCEEDINGS	7
CHAPTER 2	8
PROJECT DESCRIPTION	8
PROJECT OVERVIEW	8
PROJECT OBJECTIVES	9
PROPOSED GENERAL PLAN ELEMENTS	9
CHARACTERISTICS OF THE PROPOSED GENERAL PLAN	12
Major Activity Centers.....	12
Key Corridors.....	12
Districts	13
LAND USE MAP AND LAND USE CLASSIFICATIONS	13
Residential Neighborhoods	13
Corridors	13
Activity Centers.....	14
Business and Industry	14
Community	14
BUILDOUT PROJECTIONS FOR THE PROPOSED GENERAL PLAN	14
REQUIRED APPROVALS	15
CHAPTER 3	16
CEQA REVIEW AND PUBLIC OUTREACH	16
CHAPTER 4	17
FINDINGS ON ENVIRONMENTAL EFFECTS	17
AIR QUALITY	17
BIOLOGICAL RESOURCES	25
CULTURAL RESOURCES	28
CLIMATE CHANGE	33
GEOLOGY, SOILS, AND MINERALS	40
HAZARDOUS MATERIALS	45
HYDROLOGY AND WATER QUALITY	51
NOISE	57
PARKS AND RECREATION	65
PUBLIC SERVICES	67
PUBLIC UTILITIES	69
TRANSPORTATION AND CIRCULATION	76
VISUAL RESOURCES	80
CHAPTER 5 FINDINGS REGARDING PROJECT ALTERNATIVES	86
ALTERNATIVES DISMISSED FROM FURTHER CONSIDERATION	86
ALTERNATIVES CONSIDERED	86
ENVIRONMENTALLY SUPERIOR ALTERNATIVE	88
CHAPTER 6 STATEMENT OF SIGNIFICANCE	89
CHAPTER 7 FINDINGS ON MITIGATION MONITORING AND REPORTING PROGRAM	95

CHAPTER 8 FINDINGS ON CHANGES TO THE DRAFT EIR AND RECIRCULATION..... 119
CHANGES TO THE DRAFT EIR 119
CITY COUNCIL ANALYSIS AND REVISION AND ADDITION OF MITIGATION MEASURES 119
FINDINGS REGARDING THE FINAL EIR..... 119

CHAPTER 1 INTRODUCTION

The California Environmental Quality Act (CEQA), (Cal. Pub. Res. Code, §21080) and the CEQA Guidelines (Cal. Code Regs., Title 14, §15063) state that if it has been determined that a project may or will have significant impacts on the environment then an Environmental Impact Report (EIR) must be prepared. Accordingly, an EIR has been prepared by the City of Richmond (hereafter referred to as “the City”) to evaluate potential environmental effects that may result from implementation of the proposed Richmond General Plan 2030. The EIR has been prepared in accordance with the California Environmental Quality Act of 1970, as amended (Cal. Pub. Res. Code, §21000 et seq.), and implementing State CEQA Guidelines (Cal. Code Regs., Title 14, §15000 et seq.).

CERTIFICATION

In accordance with CEQA Guidelines Section 15090, the City of Richmond, as Lead Agency for the Richmond General Plan 2030 (hereafter referred to as “the proposed General Plan”), certifies that:

- a) The Final EIR for the proposed General Plan has been completed and processed in compliance with the requirements of CEQA;
- b) The Final EIR was presented to the City Council of the City of Richmond (hereafter referred to as “the City Council”), as the decision making body for the proposed General Plan, and the City Council reviewed and considered the information contained in the Final EIR prior to adopting the proposed General Plan; and
- c) The Final EIR reflects the City of Richmond’s independent judgment and analysis. The City has exercised independent judgment in accordance with Public Resources Code Section 21082.1(c) in retaining its own environmental consultant directing the consultant in the preparation of the EIR as well as reviewing, analyzing, and revising material prepared by the consultant.

These CEQA findings of fact (hereafter referred to as “Findings”), statement of significance, and mitigation monitoring and reporting program have been prepared in accordance with CEQA and the CEQA Guidelines. The purpose of these Findings is to satisfy the requirements of Public Resources Code Section 21081 and Sections 15090, 15091, 15092, and 15097 of the CEQA Guidelines, in connection with the adoption of the proposed General Plan.

Before approving a project (in this case, adoption of a general plan) an EIR must be certified pursuant to Section 15090 of the CEQA Guidelines. Prior to approving a project for which an EIR has been certified, and for which the EIR identifies one or more significant environmental impacts, the approving agency must make one or more of the following findings, accompanied by a brief explanation of the rationale, pursuant to Public Resources Code Section 21081 Section 15091 of the CEQA Guidelines, for each identified significant impact:

- 1) Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
- 2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- 3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

It is recommended that one or more of the specific written findings above be adopted regarding each significant impact associated with the proposed General Plan. Those findings are presented here, along with a presentation of facts in support of the findings. Concurrent with the adoption of these findings, it is recommended that the City Council adopt the Mitigation Monitoring and Reporting Program as presented in Chapter 5 of the Final EIR and Chapter 7 of these Findings.

Section 15092 of the CEQA Guidelines states that after consideration of an EIR, and in conjunction with the Section 15091 findings identified above, the lead agency may decide whether or how to approve or carry out the project. Based on City Council input, these Findings include (1) new and revised mitigation measures and findings, which explain how the measures would reduce effects to below the significance level (i.e., new Mitigation Measures 3.3-2(e), 3.6-1(q), 3.10-3(b), 3.13-3(b), 3.14-3, 3.14-6, and 3.15-1 and revised Mitigation Measures 3.5-1, 3.10-1, and 3.10-2); (2) findings that explain why other impacts are properly characterized as less-than-significant (i.e., air quality impact 3.3-1 and cumulative impacts, cultural resources cumulative impacts identified in EIR Section 3.5, public utilities wastewater treatment and conveyance systems impact 3.13-3 and cumulative impacts, public utilities landfill capacity cumulative impacts identified in EIR Section 3.13, and visual resources impact 3.15-2 and cumulative impacts); and (3) findings that establish and explain why mitigation is the responsibility of another agency and not the City, and that another agency can and should adopt a mitigation measure to reduce the impact to below the applicable significance level. Where an impact would be reduced to a less-than-significant level through implementation of mitigation measures within the responsibility and jurisdiction of another public agency and not the City, the impact is identified in these Findings as "LS-OA."

It is recommended that the City Council expressly finds the Final EIR for the proposed General Plan reflects the City's independent review and judgment, as required by CEQA. In accordance with the provisions of CEQA and the CEQA Guidelines, it is recommended that the City Council adopt these Findings as part of its certification of the Final EIR.

ORGANIZATION OF CEQA FINDINGS OF FACT

The Findings are organized into the following sections:

- **Chapter 1, Introduction** outlines the organization of this document and identifies the location and custodian of the record of proceedings.
- **Chapter 2, Project Description** describes the location, project overview, project objectives, and the required permits and approvals for the Project.
- **Chapter 3, CEQA Review and Public Outreach** describes the steps the City has undertaken to comply with the CEQA Guidelines as they relate to public input, review, and participation during the preparation of the Draft and Final EIRs.
- **Chapter 4, Findings on Environmental Effects** provides specific written findings and supporting explanations regarding each impact associated with the proposed General Plan.
- **Chapter 5, Findings Regarding Environmental Alternatives** provides a summary of alternatives dismissed for analysis in the EIR, the alternatives considered in the EIR, and the environmentally superior alternative, as well as brief summaries of proposed General Plan impacts that reflect the new and revised mitigation measures and analysis included in these Findings.
- **Chapter 6, Statement of Significance** provides a summary of impacts previously identified as significant, unavoidable and adverse that are reduced to a less-than-significant level through: (1) new and revised mitigation measures and findings, which explain how the measures would reduce effects to below the significance level (i.e., new Mitigation Measures 3.3-2(e), 3.6-1(q),

3.10-3(b), 3.13-3(b), 3.14-3, 3.14-6, and 3.15-1 and revised Mitigation Measures 3.5-1, 3.10-1, and 3.10-2); (2) findings that explain why other impacts are properly characterized as less-than-significant (i.e., air quality impact 3.3-1 and cumulative impacts, cultural resources cumulative impacts identified in EIR Section 3.5, public utilities wastewater treatment and conveyance systems impact 3.13-3 and cumulative impacts, public utilities landfill capacity cumulative impacts identified in EIR Section 3.13, and visual resources impact 3.15-2 and cumulative impacts); and (3) findings that establish and explain why mitigation is the responsibility of another agency and not the City, and that another agency can and should adopt a mitigation measure to reduce the impact to below the applicable significance level.

- **Chapter 7, Findings on Mitigation Monitoring and Reporting Program** provides a brief discussion of the project's compliance with the CEQA Guidelines regarding the adoption of a program for mitigation reporting and monitoring.
- **Chapter 8, Findings Regarding Changes to the Draft EIR and Recirculation** provides a summary of the changes to the Draft EIR in response to public comments received, and findings that changes to the Draft EIR and addition of mitigation measures and analysis based on City Council input do not require recirculation of the Draft EIR for public review.

RECORD OF PROCEEDINGS

The documents and other materials that constitute the record of proceedings upon which the City Council's project approval is based are located at: Richmond City Hall - Second Floor, 450 Civic Center Plaza, Richmond, CA 94804-1630. The City of Richmond Planning and Building Services Department is the custodian of such documents and other materials that constitute the record of proceedings. The record of proceedings is provided in compliance with Public Resources Code §21081.6 (a)(2) California Code of Regulations Title 14, §15091(e).

CHAPTER 2 PROJECT DESCRIPTION

PROJECT OVERVIEW

California Government Code Section 65300 et seq. mandates that all local jurisdictions prepare a general plan that establishes policies and standards for future development, housing affordability, and resource protection within the jurisdiction. Each jurisdiction’s general plan must include all of the following seven elements: Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety. Additional elements may be included in a general plan, at the discretion of the City. The City’s existing General Plan was adopted in 1994 and consists of the seven state-mandated elements and three optional elements as shown in Table 2.1, below:

Table 2.1 – 1994 General Plan Elements		
Elements	Mandatory	Optional
<i>Land Use</i>	✘	
<i>Circulation</i>	✘	
<i>Community Facilities</i>		✘
<i>Economic Development</i>		✘
<i>Growth Management</i>		✘
<i>Housing</i>	✘	
<i>Noise</i>	✘	
<i>Open Space and Conservation</i>	✘	
<i>Safety</i>	✘	

The proposed project is a comprehensive update of the 1994 Richmond General Plan. Beyond the seven state-mandated general plan elements, the proposed General Plan includes additional elements covering topic areas that have also been deemed critical to the community. Table 2.2, below, shows the required and optional elements that comprise the proposed General Plan. The proposed General Plan is intended to respond directly to changes experienced in the City since the preparation of the last General Plan in 1994 and to provide guidance for community development over the next 20 years.

Table 2.2 – General Plan 2030		
Elements	Mandatory	Optional
<i>Economic Development</i>		✘
<i>Education and Human Services</i>		✘
<i>Land Use and Urban Design</i>	✘	
<i>Circulation</i>	✘	
<i>Housing</i>	✘	
<i>Community Facilities and Infrastructure</i>		✘
<i>Conservation, Natural Resources, and Open Space</i>	✘	
<i>Energy and Climate Change</i>		✘
<i>Growth Management</i>		✘

<i>Parks and Recreation</i>		✘
<i>Community Health and Wellness</i>		✘
<i>Public Safety and Noise</i>	✘	
<i>Arts and Culture</i>		✘
<i>Historic Resources</i>		✘
<i>National Historical Park</i>		✘

PROJECT OBJECTIVES

The proposed General Plan addresses issues related to physical development, growth, and conservation of resources in the City and expresses the community's vision and goals for the future. The proposed General Plan aims to:

- Present strategies and specific implementing actions to achieve the community's overarching vision and long-term goals;
- Establish a basis for determining whether future development proposals and public projects align with the community's vision and long-term goals;
- Allow City departments, other public agencies, and private developers to design projects that will enhance community character and sustain and improve quality of life in accordance with particular values and principles defined in the proposed General Plan;
- Provide a basis for developing more detailed regulatory plans and implementing programs such as the Zoning Ordinance, capital improvement plans, facilities plans, community needs assessments, and specific plans; and
- Guide the City as well as public agencies that work with the City, such as school districts, regional boards, or state agencies, as well as private investors, as they contemplate future actions within the City.

PROPOSED GENERAL PLAN ELEMENTS

Following are brief descriptions of the purpose for each of the proposed General Plan elements.

1. The **Economic Development Element** establishes direction for short and long-term economic growth. It includes a range of strategies to sustain businesses and industries, diversify the economic base, accommodate job growth and increase access to employment for Richmond residents.
2. The **Education and Human Services Element** provides direction to improve educational opportunities and support social and emotional well-being through human service offerings. The Element seeks to ensure that Richmond residents have equitable access to a diverse range of educational opportunities and resources that are fully integrated with the City's long-term quality-of-life goals.
3. The **Land Use and Urban Design Element** presents a framework for governing future decisions about allowable, context-appropriate land use and desirable development patterns. Overarching goals focus on providing a vibrant urban core, active public spaces and enhanced neighborhood character in the context of balanced and compatible uses.

4. The **Circulation Element** seeks to ensure efficient mobility and access for all residents, workers and visitors through a safe, interconnected, multimodal transportation system. Goals, policies and implementing actions will guide management of transportation systems in a progressive, responsible and well-balanced way.
5. The **Housing Element** establishes a framework for protecting, maintaining and expanding quality and affordable housing options for current and future residents. It also seeks to provide adequate housing for groups with special needs and promote integrated neighborhoods that support families, seniors and people of all incomes. Due to extensive revisions necessary to meet requirements set forth by State housing element law, the Housing Element will not be adopted with the other General Plan Element described here.
6. The **Community Facilities and Infrastructure Element** presents a framework for the City to provide services, amenities and infrastructure for today's residents as well as future generations. Policies and implementing actions seek to responsibly improve educational and human service facilities, physical infrastructure and a range of public utilities and services to best meet community needs as Richmond grows.
7. The **Conservation, Natural Resources and Open Space Element** is designed to protect, maintain and enhance Richmond's natural resources and open spaces, and balance current community resource needs with critical conservation endeavors to benefit the common good.
8. The **Energy and Climate Change Element** provides strategic direction for the City to promote mitigation, sustainability and adaptation in response to Richmond's impact on climate change. The Element identifies goals, policies and implementing actions to address energy conservation, renewable energy production and use, sustainable business development, responsible community revitalization and reduction of climate change impacts in Richmond.
9. The **Growth Management Element** provides a framework for effective coordination of land use, transportation and infrastructure. This Element outlines a strategy to promote compact urban development, protect open space and provide adequate infrastructure and services to accommodate future community needs in Richmond.
10. The **Parks and Recreation Element** provides direction for developing and maintaining a comprehensive system of quality parks, recreational facilities, programs, support services and open space. General Plan goals, policies and implementing actions are designed to preserve resources and enrich parks and recreational offerings.
11. The **Community Health and Wellness Element** establishes a critical path for improving conditions that will foster the physical health and emotional well being of Richmond residents. The Element defines healthy living indicators, reviews current conditions in Richmond relative to those indicators, and sets forth specific policies and implementing actions tailored to critical health needs in the community.
12. The **Public Safety and Noise Element** seeks to minimize risks posed by environmental and human-caused hazards that may impact Richmond residents' health and welfare. These include crime, geologic and seismic hazards, flooding, fires, hazardous materials and noise.
13. The **Arts and Culture Element** presents Richmond's approach to integrating arts and culture into everyday community life, thereby strengthening Richmond's unique character and identity.

14. The **Historic Resources Element** provides a framework for preserving, restoring and leveraging Richmond's historic assets to maintain the City's sense of place and ensure that current and future residents and visitors can enjoy these assets.
15. The **National Historical Park Element** establishes a framework for fully developing the Rosie the Riveter/World War II Home Front National Historical Park. The National Historical Park honors and preserves Richmond's history and commemorates the millions who worked on the wartime home front.

CHARACTERISTICS OF THE PROPOSED GENERAL PLAN

The City of Richmond has few remaining opportunities for new greenfield development to accommodate growth. Consequently, the City has responded to increasing demand for growth through infill development in its downtown, along commercial corridors, and on underutilized brownfield parcels within the City's industrial areas. A preliminary assessment suggests that there are more than 1,200 acres of vacant and underutilized land in Richmond that may be available for infill development. The City is composed of several types of areas and the proposed General Plan includes an overarching development strategy for Richmond that includes stable areas, conservation areas, and 16 "change areas" in which it is anticipated that there will be varying degrees of new uses, development and redevelopment.

Land uses in the vast majority of the City are expected to remain stable. Many of the stable areas of the City are residential neighborhoods. However, areas that are not designated for a change in land use may benefit from improvements, such as community facility and infrastructure renovations or upgrades and the inclusion of neighborhood-serving retail, where appropriate.

Areas of the City with significant natural habitat, open space, parks and recreational resources, and agricultural lands have been identified for conservation, preservation, and environmental rehabilitation. Resources in these areas are valued by the community and will continue to be protected by the City and other public and regulatory agencies.

The 16 change areas identified in the proposed General Plan are deemed most suitable for a shift in intended use as compared to existing conditions, and may experience significant changes in land use and development character over the next 20 years. The proposed change areas largely represent areas that are underutilized, have incompatible land uses, high potential for redevelopment, or are inconsistent with current community goals and priorities. The proposed General Plan organizes the change areas into the three following urban design components: major activity centers, key corridors, and districts.

Major Activity Centers

Change areas that have been identified as major activity centers in the proposed General Plan will be the primary urban centers that provide a wide mix of retail, office, housing, and entertainment-related uses serving the City and the region overall. Richmond's major activity centers are envisioned as concentrated, high-intensity community hubs that generate revenue and jobs, and serve as the focal point of cultural, commercial and social activities. They are also envisioned as pedestrian and transit-oriented, with higher-density development that provides services and amenities to residents and visitors. Major activity centers will define Richmond's distinct identity and reflect the character of surrounding neighborhoods. The following change areas are identified as major activity centers. Refer to the Land Use and Urban Design Element of the proposed General Plan for detailed descriptions of each change area.

- Change Area 1 – Downtown/Macdonald Avenue
- Change Area 2 – Hilltop
- Change Area 3 – Ford Peninsula in Marina Bay

Key Corridors

Change areas that have been designated key corridors will be the commercial streets that provide local-serving retail, multi-family housing, and other community services within walking distance of residential neighborhoods. These corridors will also be pedestrian and transit-oriented, support multiple types of travel, and feature a balanced mix of uses and development intensities that will meet the needs of adjacent neighborhoods. The type and character of development along these corridors will promote activity along the street at all times of day. Key corridors will continue to link multiple neighborhoods to each other and to regional destinations. The following change areas are identified as key corridors. Refer to the Land Use and Urban Design Element of the proposed General Plan for detailed descriptions of each change area.

- Change Area 4 – San Pablo Avenue Corridor
- Change Area 5 – 23rd Street Corridor
- Change Area 6 – Marina Way Corridor
- Change Area 7 – Cutting Boulevard Corridor
- Change Area 8 – Harbour Way Corridor
- Change Area 9 – Ohio Avenue Corridor
- Change Area 10 – Carlson Boulevard Corridor

Districts

Change areas that have been designated districts will provide a unique mix of uses including industrial, office, retail, residential, and open space that serve the entire community. Districts will also represent geographic areas or zones where there will be a concentration of related or complementary activities and uses. The following change areas are identified as districts. Refer to the Land Use and Urban Design Element of the proposed General Plan for detailed descriptions of each change area.

- Change Area 11 – Northern Parkway
- Change Area 12 – Northshore
- Change Area 13 – San Pablo Peninsula Area
- Change Area 14 – Port Priority Use Area
- Change Area 15 – Regatta/Marina Bay
- Change Area 16 – Southern Gateway

LAND USE MAP AND LAND USE CLASSIFICATIONS

The Land Use and Urban Design Element of the proposed General Plan contains the land use map and land use classifications for the City. The land use map designates that proposed general location, distribution, and extent of land uses within the City. The proposed General Plan land use map and land use classifications indicate a maximum permissible density and intensity of development, but do not require development projects to be approved for the maximum density or intensity applicable to that land use classification. Site conditions as well as specific development standards that will be a part of the comprehensive update to the City's existing zoning ordinance following the adoption of the proposed General Plan may reduce development potential within the ranges stated for each land use classification. The proposed land use classifications are organized into the following broad categories: residential neighborhoods, corridors, activity centers, business and industry, and community. Each broad category is briefly discussed below. Refer to the Land Use and Urban Design Element of the proposed General Plan for detailed descriptions of each land use classification as well as density and intensity ranges for each classification.

Residential Neighborhoods

Richmond has a variety of residential neighborhoods that include multi-family and single-family housing. Residential land use designations encourage the development of complete, accessible, and diverse neighborhoods. The following land use classifications comprise the residential neighborhood category: hillside residential, low-density residential, medium-density residential, and neighborhood mixed-use.

Corridors

Richmond has several key corridors that serve as major routes of travel in the City and support a wide range of retail and community amenities as well as housing on adjacent parcels. Land use planning and major improvements in these areas would create a network of vibrant, mixed-use, higher density pedestrian and transit-oriented corridors that link major community centers in the City. The following land use classifications comprise the corridors land use category: medium-density mixed use (residential emphasis) and medium-intensity mixed-use (commercial emphasis).

Activity Centers

Richmond enjoys a central Bay Area location, strong regional transit connectivity and existing infrastructure. These assets provide important opportunities to enhance, revitalize, and develop new activity centers to serve both residents and visitors. Richmond's activity centers are intended to be pedestrian- and transit-friendly community hubs characterized by mixed-use and higher-density development capable of generating revenue and creating jobs, while providing services and amenities to residents, businesses, and visitors. This land use category includes the following three mixed-use classifications: medium-intensity mixed-use (commercial nodes and gateways), high-intensity mixed-use (major activity center), and regional commercial mixed-use.

Business and Industry

Richmond has a diverse local economy that includes a port, heavy and light industry, research and development, regional and local retail, agriculture, and commercial services. Businesses and industry are important parts of the regional economy and contribute to the City's tax base, local employment opportunities, and a balanced community. Land use regulations in the business and industry category are intended to encourage positive business growth and support economic development. This land use category includes the following land use classifications: live/work, business/light industrial, marine and waterfront commercial, industrial, and port.

Community

Richmond has a wide range of parks, open spaces, and civic uses that serve a diverse range of community needs. Natural areas such as the shoreline, hills, wetlands and creeks offer opportunities for preservation, conservation, recreation, and interpretation. Public facilities provide opportunities for social and community development. Land use planning in these areas will aim to improve these amenities and enhance accessibility for all City residents. The community category includes the following four land use classifications: open space, parks and recreation, public, cultural and institutional, and agriculture.

BUILDOUT PROJECTIONS FOR THE PROPOSED GENERAL PLAN

The term "buildout" refers to full development under the proposed General Plan. Although the proposed General Plan has a 20-year planning horizon, the proposed General Plan is not intended to specify or anticipate when buildout will actually occur; nor does the designation of a site for a certain use necessarily mean the site will be built or redeveloped within the next 20 years. In fact, due to the large amount of underutilized land in the City of Richmond, it is highly unlikely that the City would build out within the planning horizon. Therefore, to determine a realistic projection for future development in the City, population and job growth were estimated using a "regional share" approach for the 2030 planning horizon year. This methodology assumed that Richmond would capture some percentage of the projected regional growth in Contra Costa County based on the City's historical rates of growth. Between 1980 and 2005, Richmond's share of regional population growth was 8.39 percent. The Association for Bay Area Governments (ABAG) projects Richmond will capture 10.91 percent of regional growth by 2030. However, because of the goal to stimulate higher intensity development within the City, the EIR for the proposed General Plan assumes that Richmond will capture an even greater percentage of regional population growth – 13 percent. The number of jobs that would be generated was calculated based on ABAG's projected ratio of jobs to population for Richmond in 2030 (0.48 jobs per person). Based upon this methodology, the proposed General Plan could result in an increase in population of 30,147 and an additional 22,488 jobs over the next 20 years. It is also estimated that the proposed General Plan would add approximately 15,548 housing units within the City.

REQUIRED APPROVALS

Adoption of the proposed General Plan will require City Council certification of the EIR, adoption of the CEQA findings of fact and statement of significance, and adoption of a Mitigation Monitoring and Reporting Program (MMRP). Upon adoption of the proposed General Plan, the City will initiate a comprehensive update of its zoning ordinance and other sections of its municipal code to achieve consistency with the newly adopted General Plan. The updated zoning ordinance will further define land use classifications and performance standards applicable to those classifications. The updated zoning ordinance would also establish the land use entitlement process applicable to future development projects.

CHAPTER 3 CEQA REVIEW AND PUBLIC OUTREACH

The City has complied with CEQA and the CEQA Guidelines during the preparation of the EIR for the proposed General Plan. The Draft EIR, dated February 2011, was prepared after soliciting input from the public, responsible agencies, and affected agencies through the EIR scoping process. The “scoping” of the EIR was conducted utilizing several of the tools available under CEQA. In accordance with Sections 15063 and 15082 of the CEQA Guidelines, a Notice of Preparation (NOP) was prepared and distributed to the California Office of Planning and Research (State Clearinghouse), responsible agencies, affected agencies, and other interested parties on February 1, 2008. The NOP was posted in the Contra Costa County Clerk-Recorder’s Office for a period of 30 days. The NOP was also submitted to the State Clearinghouse to officially solicit participation in determining the scope of the EIR. In response to the NOP, numerous comment letters were received from various agencies, organizations, and individuals.

A public scoping meeting was held on February 28, 2008. The purpose of the meeting was to seek input from public agencies and the general public regarding the environmental issues and concerns that may potentially result from the proposed General Plan. A summary of the public comments and copies of the written comment letters are included in Appendix A of the Draft EIR.

The Draft EIR was circulated for public review and comment on February 14, 2011, initiating a 45-day public review period pursuant to CEQA and its implementing guidelines. The public review period provided interested public agencies, groups, and individuals the opportunity to comment on the contents and accuracy of the document. The document and Notice of Completion (NOC) was distributed to the State Clearinghouse. Relevant agencies also received copies of the document. A Notice of Availability (NOA) was distributed to interested parties informing them of where they could view the Draft EIR and how to comment on the document. The Draft EIR was made available to the public at the City of Richmond Planning and Building Services Department, the City of Richmond Public Library, and the City of Richmond’s General Plan Website.

A Final EIR has been completed and includes written comments received by mail and electronic mail on the Draft EIR, verbal comments received at the Draft EIR public hearing, written responses to the written and verbal comments, and changes to the Draft EIR.

CHAPTER 4 FINDINGS ON ENVIRONMENTAL EFFECTS

DEMOGRAPHICS

Impact 3.2-1:

Finding: The City Council finds that implementation of the proposed General Plan could result in physical impacts due to population growth beyond what is assumed in the Draft EIR. Implementation of Mitigation Measure 3.2-1 would ensure there would be *no impact* beyond those already addressed in the EIR.

- **Mitigation Measure 3.2-1:** The City shall continue to track the number of new housing units as building permits are issued to determine if new development exceeds the amount of development assumed in the EIR (15,548 housing units). As part of its annual Housing Element progress report City staff shall provide a report on the number of new housing units to the City Council annually. If the number of units approaches or exceeds 80 percent of the number assumed in the General Plan EIR (12,438 housing units), the City shall prepare an update to the General Plan and General Plan EIR to assess the environmental effects of additional projected growth.

Rationale/Supporting Explanation: Implementation of Mitigation Measure 3.2-1 would require the City to prepare an update to the proposed General Plan and General Plan EIR to assess the environmental effects of any population growth beyond what has been assumed in the General Plan EIR if new development exceeds the amount of development assumed in the EIR.

Impact 3.2-2:

Finding: The City Council finds that implementation of the proposed General Plan could result in physical impacts due to job growth beyond what is assumed in the Draft EIR. Implementation of Mitigation Measure 3.2-1 would ensure there would be *no impact* beyond those already addressed in the EIR.

- **Mitigation Measure 3.2-1:** Based on available U.S. Census or ABAG data, the City shall track the number of new jobs to determine if new development exceeds the amount of development assumed in the EIR (22,488 jobs). City staff shall provide a report on the number of new jobs to the City Council annually and if the number of jobs approaches or exceeds 80 percent of the number assumed in the General Plan EIR (9,950 jobs), the City shall prepare an update to the General Plan and General Plan EIR to assess the environmental effects of additional projected growth.

Rationale/Supporting Explanation: Implementation of Mitigation Measure 3.2-1 would require the City to prepare an update to the proposed General Plan and General Plan EIR to assess the environmental effects of any job growth beyond what has been assumed in the General Plan EIR if new development exceeds the amount of development assumed in the EIR.

AIR QUALITY

Impact 3.3-1:

Finding: The City Council finds that implementation of the proposed General Plan could provide new sources of regional air emissions that would conflict with or obstruct implementation of the Clean Air Plan. However, a conflict with the Clean Air Plan is not, itself, a significant unavoidable physical adverse impact to the environment for purposes of CEQA. Based on implementation of

General Plan policies and the following mitigation measures, as well as the analysis below, this impact is considered *less-than-significant*.

- **Mitigation Measure 3.3-1(a):** Encourage the inclusion of the ferry terminal within the shuttle service feasibility study and within the current transportation system to promote the use of public transportation and provide for convenience of use.
- **Mitigation Measure 3.3-1(b):** Promote reduced transit fares for daily commutes within the City, and encourage the cooperation between all modes of transportation to provide for ease of use, such as the institution of a monthly commuter pass that would provide access to the ferry, as well as bus, train, and/or BART systems.
- **Mitigation Measure 3.3-1(c):** Continue to expand the Bay Trail and other routes for bicycle and pedestrian travel.
- **Mitigation Measure 3.3-1(d):** Provide bicycle and pedestrian amenities, such as benches and bike storage, along routes leading to the Richmond and El Cerrito Del Norte BART stations to promote non-motorized travel to and from public transit.
- **Mitigation Measure 3.3-1(e):** Provide development incentives, such as reduced parking requirements, for businesses that provide transit incentives to employees.

Rationale/Supporting Explanation: The 2009 Clean Air Plan (CAP) discussed in the Air Quality Section of the Draft EIR was prepared to accommodate growth, to reduce the high levels of pollutants within areas under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), to return clean air to the region, and to minimize the impact of reduced air quality on the economy. Projects that are considered to be consistent with the CAP would not interfere with attainment because this growth is included in the projections used during the preparation of the CAP. Therefore, projects, uses, and activities that are consistent with the applicable assumptions used in the development of the CAP would not jeopardize attainment of the identified air quality levels, even if they exceed the BAAQMD's recommended thresholds.

Projects that are consistent with the employment or population projections identified in the Projections 2007 report prepared by ABAG are considered consistent with the CAP growth projections, since the 2007 Projections form the basis of the land use and transportation control portions of the CAP.

Another measurement tool in determining consistency with the CAP is to determine how a project accommodates the expected increase in population. Generally, if a project is planned in a way that results in the minimization of vehicle miles traveled (VMT), both within the project area and the surrounding area in which it is located, and minimizes air pollutant emissions, that aspect of the project is consistent with the CAP.

The BAAQMD CAP relies on population and employment projections supplied by ABAG. As the time frame for development anticipated in the proposed General Plan would be 2030, the CAP for the Basin may have to be updated to include accurate population and employment forecasts for the City. Additionally, the improvements planned under the proposed General Plan would serve to accommodate anticipated growth within the City of Richmond and in the Bay Area. The update would increase the variety of uses available within the 16 change areas of the City and work to decrease reliance on the automobile within the City by developing more residential areas that would allow employees to use other modes of transportation.

The existing VMT for the City of Richmond is 1,668,000. Development anticipated under the proposed General Plan would result in 2,503,000 VMT, an increase of slightly more than 50

percent, which is greater than the 21.95 percent population increase (from 107,000 in 2007 to 137,100 in 2030) over the proposed General Plan timeframe. The BAAQMD has instituted Transportation Control Measures (TCMs) in order to meet the requirements of the Bay Area Clean Air Plan and the California Clean Air Act. The TCMs are designed to reduce VMT and air pollution caused by automobiles and other transportation facilities including the maintenance and expansion of traffic signal timing programs and improving access to rail, constructing HOV and express bus lanes, and encouraging greater density development near transit centers. Contra Costa County has already incorporated a number of the TCMs into the existing transportation plan, and with the adoption of the Countywide Comprehensive Transportation Plan (CTP) of 2009, will include all feasible TCMs as indicated by the BAAQMD. With the implementation of these TCMs, all of the cities in Contra Costa County will be consistent with the transportation portion of the CAP. However, although the General Plan is consistent with the transportation portion of the CAP, the increase in VMT nevertheless exceeds the increase in population. Various land use and circulation policies incorporated into the proposed General Plan would reduce VMT within the City. However, because of the programmatic nature of the policies and available mitigation measures, quantifying the VMT reductions is not possible at this time. Although VMT is expected to decrease from the numeric values discussed, it cannot be guaranteed to be reduced to below a level of significance. Thus, it may result in an inconsistency with the transportation portion of the CAP. However, as discussed below, such an inconsistency is not in itself a significant impact.

The City's population increase under the full buildout scenario would be greater than projected regional growth the City anticipates it could capture within the General Plan's 2030 planning horizon. Although growth of the magnitude of full buildout is unlikely, if such growth were to occur, it would generate new sources of regional air emissions that would conflict with or obstruct implementation of the Clean Air Plan. Because the development under the full buildout scenario would be substantially more intense than the growth projected within the General Plan planning horizon, the emissions would be substantially greater than analyzed above.

However, a conflict with the CAP projection is not, itself, a significant unavoidable physical adverse impact to the environment for purposes of CEQA, but it does warrant more detailed consideration to evaluate the extent to which an impact may occur as a result of this plan conflict. Upon further analysis and mitigation as discussed below, this is no longer considered a significant unavoidable impact from General Plan implementation.

First, the CAP is periodically reviewed and updated, and this process is again underway and being informed by the regional Sustainable Communities Strategy (SCS) being prepared under SB 375 to reduce GHG emissions. Under all proposed SCS growth scenarios under consideration, higher density development in communities nearest regional job centers and served by transit results in a net air quality improvement by reducing VMT and corresponding emissions of toxic, criteria and greenhouse gas (GHG) vehicular pollutants. Concentrating more growth in Richmond, as proposed in the General Plan, will improve air quality at the local and regional (most relevant to criteria pollutants) and global (most relevant to GHG pollutants) levels. It is also anticipated that the next revision to the CAP will reflect the changed development patterns being proposed for the SCS. Because (1) the General Plan is consistent with the SCS growth scenarios under consideration, (2) it is reasonably foreseeable that the SCS will be timely adopted in 2012, as required by SB 375, and (3) it is reasonably foreseeable that the CAP will continue to be timely revised to include the growth forecasts in the SCS and the General Plan as required by applicable federal regulations that mandate integration of the "best available information" about land use development patterns into federal Clean Air Act plans and conformity determinations, the CAP inconsistency with the General Plan is considered temporary. Further, this temporary inconsistency will not result in any adverse air quality impacts, since the higher growth and density planned in the General Plan is not expected to be realized until well after 2012.

Finally, the temporary CAP inconsistency is not, itself, an adverse physical impact to the existing environment. This impact is no longer considered significant and unavoidable for General Plan implementation.

Moreover, the proposed General Plan includes policies that would reduce the emissions associated with development within the Plan Area. At this time, however, the extent of additional growth and the exact nature of future effects associated with this additional growth are unknown. Therefore, it would be speculative to attempt a more detailed analysis in the EIR. Any future development would be subject to rigorous review to determine impacts on air quality in accordance with CEQA. Future planning efforts and environmental analysis would address additional growth beyond the General Plan's planning horizon and the potential implications of this growth.

Impact 3.3-2:

Finding: The City Council finds that implementation of the proposed General Plan would result in construction and operational emissions that could contribute substantially to an existing or projected air quality violation. However, the General Plan includes policies that commit the City to supporting the regulatory efforts of air quality and public health enforcement agencies. New Mitigation Measure 3.3-2(e) is also added to the EIR to further avoid, reduce or mitigate air quality impacts from General Plan implementation. Notwithstanding these policies and mitigation measures, many sources of air pollution are outside the City's jurisdiction and control, and attainment of healthy air quality levels within the City requires the cooperation and regulatory support of several agencies charged with attaining and maintaining compliance with air quality standards. Therefore, the City finds that mitigation measures to further reduce the air quality impacts from General Plan implementation and cumulative conditions to a *less-than-significant* level are within the jurisdiction and control of air quality agencies including the BAAQMD, the California Air Resources Board (CARB) and the Environmental Protection Agency (EPA), and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.

- **Mitigation Measure 3.3-2(a):** All construction projects shall incorporate the most recent Best Management Practices as required by the BAAQMD.
- **Mitigation Measure 3.3-2(b):** Future development under the proposed General Plan shall be subject to review to determine construction air quality impacts in accordance with CEQA.
- **Mitigation Measure 3.3-2(c):** The City of Richmond shall continue to require individual developers to implement applicable new stationary source control measures as proposed in the most recent CAP, while conforming with existing BAAQMD stationary source regulations and requirements and complying with BAAQMD rules and regulations regarding indirect sources.
- **Mitigation Measure 3.3-2(d):** The City of Richmond shall consult with project proponents during the pre-application review process to ensure that uses with a high level of operational emissions are appropriately designed and sited to avoid impacts on neighboring uses and regional air quality.
- **Mitigation Measure 3.3-2(e):** The City will continue to work proactively with BAAQMD, CARB and EPA to help these agencies enforce air pollution prevention and control mandates within the City. The City will also work with the community to identify and advocate for air quality improvement measures that are within the jurisdiction of these agencies and can and should be implemented to improve Richmond's air quality to levels

that are protective of human health and the environment.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would result in generation of new emissions from construction activities. For plan level analysis of construction emissions, the BAAQMD indicates that a General Plan is less-than-significant for construction emissions with the incorporation of the most recently available BMPs as determined by the BAAQMD. Without implementation of these BMPs to the greatest extent feasible, a plan level project impact would be considered *significant*.

Implementation of Mitigation Measures 3.3-2(a) and 3.3-2(b) would require that individual projects developed under the proposed General Plan provide an air quality analysis for construction activities and incorporate the most recent Best Management Practices as indicated by the BAAQMD. With implementation of BMPs, the proposed General Plan would have a *less-than-significant* impact with respect to construction emissions.

The proposed General Plan would result in long-term operational impacts as determined by the continued operation of land uses allowed in the proposed General Plan. Thresholds of significance have been established by the BAAQMD for the control of these emissions. The BAAQMD has incorporated control measures into its 2005 Ozone Strategy that are incorporated into the 2009 CAP. As part of its significance threshold for plan level operational emissions, the BAAQMD requires that the proposed General Plan incorporate current CAP control measures as appropriate to the City of Richmond. The current control measures are detailed in Appendix C of the 2005 Ozone Strategy. The City of Richmond currently requires "...individual developers to closely coordinate with the BAAQMD in implementing applicable new stationary source control measures as proposed in the most recent CAP, while conforming with existing BAAQMD stationary source regulations and requirements and complying with BAAQMD rules and regulations regarding indirect sources."

The City of Richmond is taking several important steps in further reducing its operational long-term emissions through implementation of air quality related policies and actions such as General Plan Policy HW9.1 and Actions HW9.A through HW9.I. In addition, the City has implemented Green Building standards and adheres to BAAQMD guidelines. The incorporation of Mitigation Measures 3.3-2(c) and 3.3-2(d) would reduce the impacts from operational emissions. However, long-term operational impacts of the proposed General Plan would result in an increase in VMT within the City of Richmond. The rate of increase of VMT and associated emissions are higher than the rate of increase in population within the City as discussed in Impact 3.3-1.

Notwithstanding these General Plan policies and EIR mitigation measures, many sources of air pollution are outside the City's jurisdiction and control, and attainment of healthy air quality levels within the City requires the cooperation and regulatory support of several agencies charged with attaining and maintaining compliance with air quality standards, including BAAQMD, which generally regulates industries and other "stationary" sources of air pollution, CARB, which generally regulates pollutants from "mobile" sources of air pollution such as vehicles as well as from consumer products, and the EPA, which establishes minimum regulatory standards for stationary and mobile sources - CARB and BAAQMD standards are typically more stringent - and also regulates activities outside of CARB's and BAAQMD's jurisdiction, such as emissions from trains and ships. These air quality agencies, vested with legal jurisdiction over sources of air pollution in and outside the City under applicable federal, state and regional laws and regulations, can and should implement further mitigation measures to improve existing and future air quality. These air quality improvements and management measures are within the responsibility and control of these air quality agencies. They should continue to be implemented concurrently with the City's General Plan, and should address both General Plan implementation air quality impacts as well as planned future cumulative scenarios including the regional growth and development plans that have been or are being prepared by other regional agencies such as the Bay

Conservation and Development Commission in its Bay Plan, and the Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC) in the SCS being prepared under SB 375. The City finds that mitigation measures to further reduce the air quality impacts from General Plan implementation and cumulative conditions to a *less-than-significant* level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates. .

Impact 3.3-3:

Finding: The City Council find that operational activities under the proposed General Plan would not expose sensitive receptors to substantial pollutant concentrations in excess of the established thresholds. This impact would be considered *less-than-significant*.

- **Mitigation Measure 3.3-3(a):** The City of Richmond shall implement special overlay zones around all planned sources of TACs to minimize the potential impacts to sensitive receptors. Land Use diagrams within the adopted General Plan will indicate the Special Overlay Zones which shall include an overlay zone of at least 500 feet on either side of all freeways and high volume roadways (100,000 vehicles per day or more).
- **Mitigation Measure 3.3-3(b):** The City of Richmond shall require all new industrial and commercial development projects that have the potential to emit TACs to be located an adequate distance from existing and proposed development used by sensitive receptors—including residential, schools, day care facilities, congregate care facilities, hospitals, or other places of long-term residency. The determination of development projects that have the potential for TAC emissions and adequate distances from sensitive receptors as identified in CARB’s “Air Quality and Land Use Handbook—A Community Health Perspective (April 2005; CARB Guidance) are as follows:
 - Proposed dry cleaners and film processing services that use Perchloroethylene shall be sited at least 500 feet from sensitive land uses.
 - Proposed auto body repair services shall be sited at least 500 feet from sensitive land uses.
 - Proposed gasoline dispensing stations with an annual throughput of less than 3.6 million gallons shall be sited at least 50 feet from sensitive land uses. Proposed gasoline dispensing stations with an annual throughput at or above 3.6 million gallons shall be sited at least 300 feet from sensitive land uses.
 - Other proposed sources of TACs including furniture manufacturing and repair services that use Methylene Chloride or other solvents identified as a TAC shall be sited at least 300 feet from sensitive land uses.
 - Proposed distribution centers with more than 100 trucks per day; more than 40 trucks with operating transport refrigeration units per day; or where transport refrigeration unit operations cumulatively exceed 300 hours per week should not be sited within 1,000 feet of sensitive land uses.
 - Proposed rail yards for major service and maintenance operations should not be sited within 1,000 feet of sensitive land uses.
 - Proposed chrome platers should not be sited within 1,000 feet of new sensitive land uses.

- The City will support buffer zones between industrial areas and sensitive land uses, including port development. Proposed port developments should not site the heavily impacted areas immediately upwind (based on prevalent wind direction) of sensitive land uses. Siting of port developments that have the potential to emit TACs should be done in consultation with the BAAQMD to determine the need for a health risk assessment.
- The City will support buffer zones between industrial areas and sensitive land uses, including refinery development. Proposed petroleum refineries should not site the heavily impacted areas immediately upwind (based on prevalent wind direction) of sensitive land uses. Siting of refineries should be done in consultation with the BAAQMD to determine the need for a health risk assessment.
- **Mitigation Measure 3.3-3(c):** Proposed sensitive land uses including schools, daycare facilities, congregate care facilities, hospitals, or other places of long term residency for people shall be sited:
 - At least 500 feet from dry cleaners and film processing services that use Perchloroethylene.
 - A least 500 feet from auto body repair services.
 - At least 50 feet from existing gasoline dispensing stations with an annual throughput of less than 3.6 million gallons and 300 feet from existing gasoline dispensing stations with an annual throughput at or above 3.6 million gallons.
 - At least 300 feet from existing land uses that use Methylene Chloride or other solvents identified as a TAC, including furniture manufacturing and repair services.
 - At least 1,000 feet from distribution centers with more than 100 trucks per day; more than 40 trucks with operating transport refrigeration units per day; or where transport refrigeration unit operations cumulatively exceed 300 hours per week. In addition sensitive land uses should not be sited near facility entry and exit points.
 - At least 1,000 feet from major service and maintenance rail yards.
 - At least 1,000 feet from chrome plating facilities.
 - The City will support buffer zones between industrial areas and sensitive land uses, including port development. Avoid siting sensitive land uses immediately downwind (based on prevalent wind direction) from stationary TAC sources or primary loading areas located within the boundaries of existing port facilities.
 - The City will support buffer zones between industrial areas and sensitive land uses, including refinery development. Avoid siting sensitive land uses immediately downwind (based on prevalent wind direction) from stationary TAC sources located within the boundaries of petroleum refineries.
- **Mitigation Measure 3.3-3(d):** The City of Richmond shall consult with the BAAQMD to identify TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.

Rationale/Supporting Explanation: BAAQMD defines typical sensitive receptors as residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. When evaluating potential air quality impacts to sensitive receptors, the BAAQMD is primarily concerned with high localized concentrations of CO. Motor vehicles, and traffic- congested roadways and intersections are the primary source of high localized CO concentrations. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO “hotspots.”

Implementation of the proposed General Plan is not expected to expose existing or future sensitive uses within the City to substantial CO concentrations. As shown in Table 3.3-3 (Carbon Monoxide Concentrations at 2030 Buildout) of the Draft EIR, based on CO modeling using the simplified CALINE4 methodology at the 10 intersections expected to operate at LOS D or worse at 2030, CO concentrations would be substantially below the national 35.0 ppm and state 20.0 ppm 1-hour ambient air quality standards, and the national and state 9.0 ppm 8-hour ambient air quality standards when growth envisioned under the proposed General Plan occurs. Therefore, the proposed General Plan would result in a *less-than-significant* impact with respect to CO.

Toxic air contaminants of potential concern within the City of Richmond include diesel particulate matter, a form of PM_{2.5} emitted mostly from diesel-powered equipment during construction activities, and chemicals emitted from the industrial uses within the City. The individual projects that are included in the industrial development of the City have not been planned to the level of detail where pollution sources can be identified and emissions quantified. In the absence of specific project data, the BAAQMD Guidelines provide thresholds of significance for plan-level analysis. In order for General Plans to be considered less-than-significant with respect to potential TACs, special overlay zones need to be established around existing and proposed land uses that emit TACs. Mitigation Measure 3.3-3(a) would require the City of Richmond to implement special overlay zones around all planned sources of TACs to minimize the potential impacts to sensitive receptors. Additionally land use diagrams within the adopted General Plan would indicate the Special Overlay Zones which would include an overlay zone of at least 500 feet on either side of all freeways and high volume roadways (100,000 vehicles per day or more). The inclusion of this mitigation measure would reduce impacts from TACs to a *less-than-significant* level.

Impact 3.3-4:

Finding: The City Council finds that implementation of the proposed General Plan would not create objectionable odors that would affect a substantial number of people. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: The proposed General Plan does not include proposals for specific development projects and therefore lacks the level of detail necessary to identify and quantify odor sources. In the absence of specific project data, the BAAQMD Guidelines provide thresholds of significance for plan-level analysis. In order for General Plans to be considered less-than-significant with respect to potential odor emissions, a plan must identify the location of existing and planned odor sources in the plan area and include policies to reduce potential odor impacts in the plan area. The General Plan identifies areas of potential nuisance odor sources that could potentially affect nearby uses as the industrial area of the City in the vicinity of Harbor Way South, Marina Way South, Interstate 580, and Hall Avenue. The General Plan includes General Plan Policies LU5.3 and ED8.2 that are intended to minimize conflicts between land uses to protect human and environmental health and safety, preserve community character, and retain job generating activities.

The accompanying actions, General Plan Actions LU5.C and ED7.B, require new industrial uses adjacent to existing residential or commercial uses to incorporate measures, such as enclosure of

industrial activities in buildings, to minimize impacts on residential uses. New residential and commercial uses established adjacent to existing industrial uses must also incorporate measures to minimize impacts to the residents from odors. The City would review proposed uses for the potential to result in nuisance odors to ensure compliance with these actions. With these policies and actions in place to reduce exposure of sensitive receptors to nuisance odors, the proposed General Plan complies with the BAAQMD guidelines for odors and would, therefore, result in a *less-than-significant* impact related to odor.

The analysis presented in the Draft EIR assumes buildout of the General Plan. Therefore, impacts related to odors would be the same as discussed above. Future development would be subject to review to determine impacts related to odors in accordance with CEQA. Future planning efforts and environmental analysis would address additional growth beyond the General Plan's planning horizon and the potential implications of this growth.

BIOLOGICAL RESOURCES

Impact 3.4-1:

Finding: The City Council finds that the proposed General Plan would not have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The City of Richmond is occupied primarily by urban development, including commercial, residential, and industrial land uses that do not provide habitat for any state or federally listed, or other special-status species. However, undeveloped, natural land is present within the boundaries of the planning area including natural areas east of the City such as Wildcat Canyon Regional Park, San Pablo Ridge, Sobrante Ridge Manzanita Grove, and northwest of the City along the San Pablo Bay in areas such as the San Pablo Creek and Wildcat Creek Marshes, Point Pinole, Hoffman Marsh, and Brooks Island. These natural areas provide suitable habitat for a variety of state and federally listed and other special-status species such as pallid manzanita, soft bird's-beak, Santa Cruz tarplant, California red-legged frog, Alameda whipsnake, California black rail, California clapper rail, and salt-marsh harvest mouse, among others. Additionally, these natural areas provide habitat for a wide variety of common native plant and wildlife species.

The City of Richmond places great value on its remaining natural areas and the plant and wildlife species that they support. The proposed General Plan includes Policy CN1.1, which is intended to preserve and restore Richmond's natural habitat and associated range of plants and wildlife including wetlands, baylands, riparian areas, oak woodlands and other sensitive biological resources. The General Plan encourages restoration efforts such as controlling invasive species, re-establishing natives, restoring creeks, and reclaiming priority conservation areas. These actions are essential to maintaining critical habitat and biodiversity. Conservation, Natural Resources, and Open Space Actions in the General Plan include working with Contra Costa County and the East Bay Regional Park District to develop habitat conservation plans (General Plan Action CN1.A), identification of areas in the City with significant natural habitat, open space and recreation resources for conservation, preservation and environmental rehabilitation (General Plan Action CN1.B), and establishment of performance standards for creek corridors that allow for existing and created wildlife habitat and species sensitive to human disturbance, provide vegetative filtration for water quality and corridors for wildlife habitat linkage, and protection from runoff and other impacts of adjacent urban uses (General Plan Action CN1.C). These policies and actions would protect sensitive species and their habitat.

In addition, future planned development in the City would be primarily focused on urban infill of brownfields, undeveloped urban lots, and redevelopment of underused existing development where special-status species are not likely to occur. No development in natural areas, such as the eight County-designated ESUs or the one area of the City that may support the Alameda whipsnake, is proposed as a part of the proposed General Plan and none of the 16 change areas encroach into areas with moderate or high potential for a special-status species to occur. However, if any development were proposed in the vicinity of a natural area, that project would have to comply with applicable state and federal regulations regarding natural resources. Such compliance for any project, at a minimum, would require a survey of the project area by a qualified biologist to evaluate its potential to support any wetlands, sensitive habitats or special-status species known from the region. If such resources are found, the project applicant, and/or its consulting biologist, would be required to coordinate with the applicable state or federal resource agency to ensure that any potential impacts on those resources are either avoided, or are mitigated to a less-than-significant level through mitigation. Since compliance with these regulations is required on a project level, the proposed General Plan would not have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS. Therefore, this is considered a *less-than-significant* impact.

Impact 3.4-2:

Finding: The City Council finds that the proposed General Plan would not interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The planning area is occupied primarily by urban development, including commercial, residential, and industrial land uses that would not be of value as wildlife movement corridors, or wildlife nursery sites. However, natural land is present within the boundaries of the planning area. In particular, the open space areas in the San Francisco and San Pablo bays, along creeks, along the ridges, and in the regional preserves and parks provide areas for migratory birds and wildlife species.

The City of Richmond places great value on its remaining natural areas, and has, as discussed previously under Impact 3.4-1, included policies and actions related to conservation, natural resources, and open space that would protect natural habitat and biodiversity and preserve biological resources. As noted previously under Impact 3.4-1, future planned development in the City would be focused on urban infill of brownfields, undeveloped urban lots, and redevelopment of underused industrial development, with no development expected to occur in natural areas. Specific actions included as part of General Plan Policy CN1.1 call for protection of marshes, baylands, and creek corridors that would serve to protect wildlife migration corridors. Additionally, as described under Impact 3.4-1, any future projects would be required to comply with state and federal regulations pertaining to natural resources. To facilitate this compliance, project applicants will be required to retain a qualified biologist to evaluate whether a project would potentially interfere with wildlife movement, migration, or breeding/nesting. If potential to affect wildlife movement, migration, or nesting is discovered, project applicants or their consulting biologists would be required to coordinate with the appropriate resource agency to ensure that impacts are either avoided, or mitigated to a less-than-significant level. With development focused in infill areas and away from areas on ridgelines and the regional preserves and parks, and compliance with existing state and federal regulations pertaining to natural resources, the proposed General Plan would not result in the interference with the movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. As noted in General Plan Policy CN1.1, if there were proposed development or other improvements that could disturb wildlife movement, the City would require

mitigation of impacts on sensitive species in coordination with USFWS, CDFG, and other regulatory agencies, as appropriate. In addition, potential effects on migratory fish and bird species would be reduced through compliance with the California Fish and Game Code (Sections 5515 and 3511, respectively) and with the MBTA. Therefore, this is considered a *less-than-significant* impact.

Impact 3.4-3:

Finding: The City Council finds that the proposed General Plan would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Sensitive natural communities identified in the CNDDDB and East Bay California Native Plant Society in the vicinity of the City of Richmond include Eelgrass beds, Northern Coastal Salt Marsh, Northern Maritime Chaparral, Oak Woodlands, Coastal Prairie Grassland, and Valley Needlegrass Grassland. Additionally, riparian habitat occurs along portions of San Pablo Creek and Wildcat Creek. Although development within these known sensitive natural communities is not expected to occur as a result of the proposed General Plan, it is possible that future development and improvements may disturb these or other previously undocumented sensitive biological habitats. However, all future projects are required to comply with state and federal regulations regarding natural resources. Such compliance, at a minimum, would require that the project applicant retain a qualified biologist to evaluate the project site for the presence of sensitive natural communities such as riparian woodland or vernal pools. If such communities are found, the applicant or its consulting biologist is required to coordinate with the appropriate resource agency to ensure that impacts on these resources are either avoided or mitigated to a less-than-significant level.

Additionally, the proposed General Plan contains policies and actions that would avoid or reduce the impacts on biological resources to less-than-significant. In particular, General Plan Actions CN1.A through CN1.C, and CN1.H are protective of riparian habitats and natural communities.

General Plan Action CN1.B involves identification of areas in the City with significant natural habitat, open space, and recreation resources for conservation, preservation, and environmental rehabilitation, such as the sensitive natural communities identified above. General Plan Action CN.1J involves creation of a program to restore creek corridors in urban areas, in coordination with regional agencies and local nonprofits toward restoration of creeks currently diverted in culverts or hardened channels to their natural state, where feasible. This action also calls for adoption of regional guidelines for channel creation or modification to ensure that channels meander, have a naturalized side slope, and a varied channel bottom elevation. These measures would reduce potential effects on riparian areas and restore some creeks to a more natural condition.

Future planned development in the City would be focused on urban infill of brownfields, undeveloped urban lots, and redevelopment of underused existing development, outside of riparian areas. As stated above, any future development that could affect riparian areas or other sensitive natural communities would also be subject to applicable regulations designed to protect these resources. Specifically, the CDFG Lake and Streambed Alteration Agreements, the California Native Plant Protection Act, and CEQA would serve to avoid or reduce disturbances to riparian habitat and other natural communities. Therefore, the project would not result in a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS. Therefore, this is considered a *less-than-significant* impact.

Impact 3.4-4:

Finding: The City Council finds that the proposed General Plan would not have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Wetlands and other waters of the United States as defined by Section 404 of the Clean Water Act are present within the boundaries of the planning area. However, due to the occupation of the majority of the City by urban development, wetlands are generally limited to natural areas, such as the Wildcat Canyon Regional Park, San Pablo Creek and Wildcat Creek Marshes, Point Pinole, Hoffman Marsh, Brooks Island, and along Wildcat Creek and San Pablo Creek as they pass through the City of Richmond.

Future planned development in the City would be focused on urban infill of brownfields, undeveloped urban lots, and redevelopment of underused existing development, where federally protected wetlands are not expected to occur. However, as discussed in the Draft EIR, any activity that could affect waters of the United States would be subject to Section 404 of the Clean Water Act. Compliance with Section 404, which includes, at a minimum, an evaluation of each project area by a qualified biologist to determine if potential wetlands are present, followed by coordination with the Army Corps of Engineers and local RWQCB if potential impacts exist, would ensure that there would be no net loss of wetlands. Consequently, the project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means. Therefore, this is considered a *less-than-significant* impact.

Impact 3.4-5:

Finding: The City Council finds that the proposed General Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The City of Richmond is primarily occupied by urban development, but that development includes landscape trees that receive protection under the City of Richmond Municipal Code. The City of Richmond Municipal Code, Chapter 10.08 *Trimming, Pruning, Care, Planting, Removal and Moving of Trees, Shrubs or Plants* prohibits trimming or removing trees in or on any "street, park, pleasure ground, boulevard, alley or public place" without first obtaining a permit from the Recreation and Parks Director of the City of Richmond or any of his or her authorized deputies. Applicants for development permits under the proposed General Plan would be required by law to comply with the latest version of Municipal Code Chapter 10.08 by obtaining the necessary permits prior to trimming or removal of any trees related to development. Additionally, applicants would be required to place protective structures around any trees that would remain after construction to protect them from harm during construction of development projects. Since project applicants would be required by law to comply with all applicable provisions of Chapter 10.08 of the City of Richmond Municipal Code, the proposed General Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The City has no other policies or ordinances that explicitly protect biological resources. Because project applicants would be required to comply with all applicable provisions of the City of Richmond Municipal Code, this is considered a *less-than-significant* impact.

Impact 3.4-6:

Finding: The City Council finds that the proposed General Plan would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan since none exist. As a result, the proposed General Plan would have *no impact* on adopted conservation plans.

Rationale/Supporting Explanation: No Habitat Conservation Plans or Natural Community Conservation Plans have been designated within the City boundaries. The closest HCP/NCCP is the *East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan*, which is a joint venture between the cities of Brentwood, Clayton, Oakley, Pittsburg and the county of Contra Costa. The City of Richmond is not a part of this plan. Other nearby adopted habitat conservation plans include the San Francisco Bay Plan, the Suisun Marsh Protection Plan, and a variety of regional habitat and park plans by the East Bay Regional Park District, but the City of Richmond is outside the scope of these plans. Since no HCPs or NCCPs are currently included in the City of Richmond future development within the City of Richmond resulting from implementation of the General Plan would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, there would be *no impact*.

CULTURAL RESOURCES

Impact 3.5-1:

Finding: The City Council finds that the development activities associated with the proposed General Plan could cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. With the implementation of General Plan policies and actions and the following revised mitigation measure, this impact would be considered *less-than-significant*.

- **Mitigation Measure 3.5-1:** Future projects shall implement the City's Historic Structures Code to minimize impacts on historical resources by requiring thorough scrutiny for compliance with applicable legal requirements, including but not limited to compliance with the General Plan's historic resource protection policies, and compliance with state and federal historic resource protection laws, before any resource may be demolished and ensuring that alteration conforms to the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Rationale/Supporting Explanation: The City includes a number of properties and landmarks that have been determined significant at the local level. Some of these properties have been added to Richmond's Historical Register, including the Pullman District, Kaiser Field Hospital, Civic Center District, and Santa Fe Reading Room. Others are unofficial potential listings such as the International Hotel, the Fire Station at Cutting Boulevard, and the Chevron Refinery Administration Building and Laboratory.

Many of Richmond's historic and cultural resources have been officially recognized at federal and state levels through listing on the NRHP and the CRHR. Of particular significance are the resources that have become part of the establishing legislation for the Rosie the Riveter/World War II Home Front Historical National Park. These resources are recognized as having outstanding historic value and significance in relation to the World War II home front effort and they range from waterfront parks and structures associated with the shipyards to factory buildings, housing, and other community-serving facilities. An inventory of officially recognized national historical resources in the City is provided in Table 3.5-1 of the Draft EIR. The locations of these resources are shown on Figure 3.5-1 in the Draft EIR.

Because the City has not been comprehensively surveyed for historical resources, numerous buildings or structures of historic age (45 years old or older) that could qualify as historical resources pursuant to CEQA may be undocumented.

CEQA Guidelines Section 15064.5(b) states that “a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” The proposed General Plan focuses on change areas within the City that would be redesignated to accommodate growth in the proposed General Plan. Development activities have the potential to cause a substantial adverse change in the significance of an historical resource through demolition or alteration of a historical resource’s physical characteristics that convey its historical significance.

As detailed in the Draft EIR, there are a number of federal, state, and local policies, regulations, and institutions in place to protect historical resources in the City. The Richmond Historic Structures Code guides the City in protecting and restoring historic buildings, creating compatibility with historic districts, acknowledging Richmond’s industrial historic identity, and celebrating the City’s long-standing multicultural background. The Richmond Historic Structures Code establishes a Historic Preservation Commission for the purpose of recommending public policy related to historic resources and conducting historic resources surveys or studies. In addition, General Plan policies and actions such as General Plan Policies HR1.1 through HR1.3 and General Plan Actions HR1.A through HR1.E would further reduce the potential for impact on historic resources.

General Plan Policy HR1.1 seeks to protect, preserve and enhance the diverse range of historic, cultural, and archaeological sites and resources in the City for the benefit of current and future residents and visitors; General Plan Policy HR1.2 promotes adaptive reuse, rehabilitation, and retrofitting of historic buildings that are no longer in their original use; General Plan Policy HR1.3 promotes context-sensitive design that respects and celebrates the history and historical character of sites and resources. General Plan Action HR1.A encourages adaptive reuse of significant historical resources in the City and meeting all requirements to retain CLG status; General Plan Action HR1.B would develop an incentives program to encourage and support preservation of sites and resources of historic significance in the City that are not covered by the Historic Preservation Ordinance, but have community value; General Plan Action HR1.C calls for updating the comprehensive citywide inventory of historic resources and development of a citywide survey to identify structures that may be eligible for local, state and national historic resource designation; General Plan Action HR1.D calls for the establishment of a uniform archival program for documents, maps, and photographs of historic resources in the City; and General Plan Action HR1.E encourages strategic partnerships with local and state historic preservation groups to strengthen historic preservation efforts in the City.

The proposed General Plan policies are important to addressing adverse physical impacts on historic properties that could occur as a result of development activities associated with the proposed General Plan. However, the policies represent only a portion of an extensive and robust policy framework aimed at the protection of historical resources within the City. The City has successfully implemented historic resource protection and adaptive use measures to preserve and re-purpose historic structures. The Richmond Historic Structures Code furthers adaptive reuse and would ensure that development activities resulting from implementation of the proposed General Plan would undergo rigorous review to determine impacts on historical resources in accordance with CEQA and would encourage the avoidance of significant impacts through explicitly defined actions (e.g., adaptive reuse) and development incentives. Federal and state laws also preserve and protect designated categories of historic and cultural resources, and the City - and future projects implementing the General Plan - must comply with these federal and state legal requirements. Revised Mitigation Measure 3.5-1 requires conformance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties, and clarifies the

multiple layers of protection afforded the City's historical resources. Based on the analysis above and revised Mitigation Measure 3.5-1, the General Plan impact to historical resources is mitigated to a *less-than-significant* level. In addition, historical, cultural, and paleontological resources are location-specific (i.e., within the City boundaries), and there are no reasonably foreseeable projects beyond those that could or would occur in compliance with the General Plan that would adversely affect these resources. Accordingly, since the General Plan does not include any components that would cause a substantial adverse impact to a historical, cultural, or paleontological resource, and no such adverse impacts are reasonably foreseeable at a cumulative level, cumulative impacts to these resources are *less-than-significant*.

Impact 3.5-2:

Finding: The City Council finds that development activities associated with the proposed Richmond General Plan Update could cause a substantial adverse change in the significance of an archaeological resource as defined in section 15064.5 of the CEQA Guidelines or disturb human remains, including those interred outside of formal cemeteries. With the implementation of mitigation measures, this is considered a *less-than-significant* impact.

- **Mitigation Measure 3.5-2(a):** The City shall require that impacts on unique archaeological resources be mitigated to a less-than-significant level through methods identified in Public Resources section 21083.2, including planning construction to avoid archaeological sites, deeding archaeological sites into permanent conservation easements, capping or covering archaeological sites with a layer of soil before building on the sites, or planning parks, greenspace, or other open space to incorporate archaeological sites.
- **Mitigation Measure 3.5-2(b):** The City shall require new development within the City to evaluate the potential for impacts on human remains. The City shall require that the treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable state and federal laws, including notification of the County Coroner and, in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC).

Rationale/Supporting Explanation: The greater San Francisco Bay Area is known to be rich in subsurface archaeological resources, substantiated by an archaeological record that indicates a high level of habitation/seasonal habitation and resource use by Native Americans. Various locations in Richmond, including Point San Pablo, are known to contain archaeological sites connected to the Ohlone Indians, the earliest inhabitants of the Richmond area. Some of these sites have been determined eligible for NRHP listing, including the Ellis Landing Shellmound site, the Lower San Pablo Creek Archaeological District, and the Stege Mounds Archaeological District. However, the overall archaeological record is scattered and sparse due to the ground disturbance caused by intensive development during the years before modern archaeological studies and the application of environmental protection for cultural resources. Consequently, there is the possibility that important prehistoric and historic-age archaeological resources and Native American human remains could be found in the subsurface, especially beneath structures built before the application of environmental compliance laws requiring surveys prior to construction. For these reasons, the City is considered to be sensitive for the presence of archaeological resources and human remains.

Under CEQA, public agencies must consider the effects of their actions on "unique archaeological resources." Public Resources Section 21083.2 requires agencies to determine whether proposed projects would have effects on unique archaeological resources. PRC Section 21083.2(g), states that "unique archaeological resource" means an archaeological artifact, object, or site about

which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or has a special and particular quality such as being the oldest of its type or the best available example of its type; or is directly associated with a scientifically recognized important prehistoric or historic event or person.

The proposed General Plan focuses on 16 change areas within the City that would be re-designated to accommodate growth in the proposed General Plan. Given the sensitivity for the presence of archaeological resources and human remains throughout the City of Richmond, earth-disturbing development activities associated implementation of the proposed General Plan could inadvertently damage or destroy unique archaeological resources, and this would result in a significant impact pursuant to CEQA.

As detailed in the Draft EIR, there are a number of federal, state, and local policies, regulations, and institutions in place to protect archaeological resources and human remains in the City. The Historic Resources Element of the proposed General Plan includes General Plan Policy HR1.1 (see discussion under Impact 3.5-1), which seeks to protect, preserve, and enhance the diverse range of historic, cultural, and archaeological sites and resources in the City for the benefit of current and future residents and visitors. Nonetheless, because existing and proposed City policies do not explicitly prohibit actions that would cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the CEQA Guidelines or disturb human remains, impacts on archaeological resource and human remains are considered *potentially significant*.

Implementation of Mitigation Measures 3.5-2(a) and 3.5-2(b) which would prohibit any action that would cause a substantial adverse change in the significance of a unique archaeological resource as defined in Section 15064.5 of the CEQA Guidelines, and would require identification and mitigation of impacts on human remains, would reduce this impact to a *less-than-significant* level.

In addition, historical, cultural, and paleontological resources are location-specific (i.e., within the City boundaries), and there are no reasonably foreseeable projects beyond those that could or would occur in compliance with the General Plan that would adversely affect these resources. Accordingly, since the General Plan does not include any components that would cause a substantial adverse impact to a historical, cultural, or paleontological resource, and no such adverse impacts are reasonably foreseeable at a cumulative level, cumulative impacts to these resources are *less-than-significant*.

Impact 3.5-3:

Finding: The City Council finds that development activities associated with the proposed General Plan could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. With the implementation of the following mitigation measures, this impact is considered *less-than-significant*.

- **Mitigation Measure 3.5-3:** The City shall require new development within areas of high sensitivity paleontological resources to evaluate the potential for impacts on significant paleontological resources. The City shall require that impacts on significant paleontological resources be mitigated to a less-than-significant level through data recovery or other methods determined adequate by a professional paleontologist.

Rationale/Supporting Explanation: The sediment and rock formations underlying the City of Richmond are known to be rich in subsurface paleontological resources, as substantiated by the records of the University of California Museum of Paleontology. The relative sensitivity of the

formations can be established using the Society of Vertebrate Paleontology's (SVP) *Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontological Resources: Standard Guidelines, 2007* suggested procedures for the investigation, collection, preservation, and cataloguing of fossil-bearing sites. The SVP defines the level of potential as one of three sensitivity categories for sedimentary rocks: High, Moderate, and Low, as discussed in the Draft EIR. Two additional categories, Marginal and Zero, define non-sedimentary rocks.

In the context of CEQA, fossils of land-dwelling vertebrates and their environment are considered significant paleontological resources. Such fossils typically are found in river, lake, and bog deposits, although they may occur in nearly any type of sedimentary sequence. The undivided quaternary deposits in the study area (Area B as indicated on Figure 3.5-2 in the Draft EIR) fit the definition of High Sensitivity for both vertebrate and invertebrate paleontological resources. Because the Holocene and Pleistocene deposits are not differentiated, it is not possible to provide a systematic separation of the more sensitive Pleistocene deposits from the less sensitive Holocene deposits. The Bay Mud (Area A) and the Orinda formation (Areas E and F) also fit the definition of High Sensitivity for paleontological resources. For these areas, impacts on paleontological resources are considered *potentially significant*. Rocks of the Franciscan Complex (Areas C and D) fit the definition of low sensitivity. For these areas, impacts on paleontological resources are considered less-than-significant. For areas of high sensitivity (Areas B, E, and F) for the occurrence of paleontological resources, implementation of Mitigation Measure 3.5-3 would reduce this impact to a *less-than-significant* level.

In addition, historical, cultural, and paleontological resources are location-specific (i.e., within the City boundaries), and there are no reasonably foreseeable projects beyond those that could or would occur in compliance with the General Plan that would adversely affect these resources. Accordingly, since the General Plan does not include any components that would cause a substantial adverse impact to a historical, cultural, or paleontological resource, and no such adverse impacts are reasonably foreseeable at a cumulative level, cumulative impacts to these resources are *less-than-significant*.

CLIMATE CHANGE

Impact 3.6-1:

Finding: Implementation of the proposed General Plan would result in the generation of GHGs that may have a significant impact on the environment. Implementation of BAAQMD BMPs would ensure that construction emissions of GHGs would be *less-than-significant*. New Mitigation Measure 3.6-1(q) is added to the EIR to further avoid, reduce, or mitigate GHG impacts from General Plan implementation. Notwithstanding General Plan policies and EIR mitigation measures, many sources of GHG are outside the City's jurisdiction and control, and attainment of atmospheric concentrations of GHG that will reverse or reduce the effects of global climate change are likewise outside the City's jurisdiction and control. The City finds that mitigation measures to further reduce the GHG impacts from General Plan implementation and cumulative conditions to a *less-than-significant* level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.

- **Mitigation Measure 3.6-1(a):** All construction projects shall incorporate the most recent Best Management Practices for Greenhouse Gas Emissions as indicated by the BAAQMD.
- **Mitigation Measure 3.6-1(b):** All new development and all retrofits of single-family developments, multi-family developments of over 10 units, and all commercial/industrial remodels of over 10,000 square feet shall be required to exceed Title 24 standards by 20

percent by 2020 and 30 percent by 2030. This mitigation measure enhances General Plan Action EC3.C. This mitigation measure enhances General Plan Action EC3.C. Measures to reduce emissions can include, but are not limited to:

- Install energy efficient appliances, including air conditioning and heating units, dishwashers, water heaters, etc.;
 - Install solar water heaters;
 - Install top quality windows and insulation;
 - Install energy efficient lighting;
 - Optimize conditions for natural heating, cooling and lighting by building siting and orientation;
 - Use features that incorporate natural ventilation;
 - Install light-colored "cool" pavements, and strategically located shade trees along all bicycle and pedestrian routes; and
 - Incorporate skylights, reflective surfaces, and natural shading in buildings design and layouts;
 - Replace inefficient air conditioning and heating units with new energy efficient models;
 - Replace older, inefficient appliances with new energy efficient models;
 - Replace old windows and insulation with top-quality windows and insulation;
 - Replace inefficient and incandescent lighting with energy efficient lighting; and
 - Weatherize existing buildings to increase energy efficiency.
- **Mitigation Measure 3.6-1(c):** Require all new City-owned and operated facilities and 50 percent of all new development to generate at least 10 percent of their energy use from renewable sources. Enhances General Plan Action EC3.B.
 - **Mitigation Measure 3.6-1(d):** All new commercial and multi-family developments installing boilers shall be required to install energy efficient boilers such that they achieve a minimum 4.5 percent reduction in energy usage. The same reductions shall be required of all remodeled multi-family developments of over 10 units and all commercial/industrial remodels of over 10,000 square feet.
 - **Mitigation Measure 3.6-1(e):** Develop improved waste reduction and expanded recycling programs such that a 75 percent diversion rate is achieved by 2020 and an 85 percent diversion rate is achieved by 2030 for all non-construction waste streams. Potential measures could include: providing recycling containers in parks and public spaces; establishing computer reuse and recycling programs; enhancing recycling and green waste services for all residents; and providing locations for household hazardous wastes to be recycled. Enhances General Plan Actions EC3.D.

- **Mitigation Measure 3.6-1(f):** Develop a program that requires all construction and demolition activities to evaluate energy use and waste and to reduce or mitigate construction-related impacts by 75 percent. Enhances General Plan Actions EC3.E.
- **Mitigation Measure 3.6-1(g):** Implement an Anti-Idling Policy for heavy-duty diesel trucks, including local delivery trucks and long-haul truck transport within the City. This policy would prohibit idling of on and off-road heavy duty diesel vehicles for more than 5 minutes. This policy would be implemented by requiring signage at all loading docks and along truck routes informing drivers of the requirement to limit idle time to no more than five minutes at loading docks and parking areas. Variances to the policy would include the necessity to idle while in traffic lanes due to traffic congestion on the roadway, or during emergency situations. Employers who own and operate truck fleets would be required to inform their drivers of the anti-idling policy. Enhances General Plan Policy EC5.3.
- **Mitigation Measure 3.6-1(h):** Provide tax and development incentives for employers with more than 100 employees within the City to establish a trip reduction plan that would incorporate annual employee commute surveys, marketing of commute alternatives, ride matching assistance, and transit information at a minimum. Additional measures shall be incorporated such that vehicle trips are reduced by a minimum of 4%. Measures may include and implement secure bicycle parking, showers and lockers for employees who bike to work, among others. This measure would encourage building management companies and smaller localized businesses to cooperate in establishing joint trip reduction plans. Enhances General Plan Actions EC2.F and EC2.I.
- **Mitigation Measure 3.6-1(i):** Implement Citywide car and bicycle sharing programs. Collaborate with service providers to identify potential sites for locating carshares.
- **Mitigation Measure 3.6-1(j):** Require new local-serving mixed-use in residential areas to provide needed services and amenities close to where people live and work. Require new development and redevelopment projects to provide community amenities and uses that serve priority community needs. Enhances General Plan Policy EC4.1 and General Plan Actions EC4.A, EC4.B, and EC4.D.
- **Mitigation Measure 3.6-1(k):** Require mixed-use development along transit-oriented corridors that attracts people and facilitates activity throughout the day. Prohibit isolated or gated communities in order to improve physical connectivity throughout the City, and remove barriers in existing gated areas. Maintain streets to ensure that neighborhoods and streets are safe and well used. Enhances General Plan Policy EC4.2 and Actions EC2.C, EC2.E, EC2.G, EC4.A, EC4.B, EC4.C and EC4.E.
- **Mitigation Measure 3.6-1(l):** Collaborate with AC transit, BART, West Contra Costa Transit Agency, Amtrak, and major employers in Richmond that provide shuttle service to expand transit in the evenings and late nights, and for people with special needs. Enhance Richmond's paratransit service. Collaborate with major employers to provide employer-based "open-door" shuttles to BART, the planned ferry terminal and other transit hubs. Collaborate with regional and Contra Costa County transportation agencies to maintain and enhance service within the City and region. Explore strategies to address affordability, access, and safety. Expand outreach and information programs to promote transit use. Measure results in a 10 percent expansion of transit system, and an increase in service frequency and speed for 2020; and a 15 percent expansion by 2030. Expand outreach and information programs to promote transit use. Enhances General Plan Policy EC2.C.

- **Mitigation Measure 3.6-1(m):** All new street lighting and all re-modeled or replaced street lighting shall consist of high-efficiency lamps that reduce energy consumption by a minimum of 16 percent.
- **Mitigation Measure 3.6-1(n):** All new traffic lights and all replaced traffic lights shall consist of LED lights. This high efficiency lighting would reduce emissions from traffic lights by 90 percent.
- **Mitigation Measure 3.6-1(o):** Require new development to incorporate water-saving measures demonstrating a minimum reduction of 20 percent in water use over a similar project completed within the previous five years. This measure enhances General Plan Action EC3.F. This measure would be enhanced by General Plan Action EC3.G.
- **Mitigation Measure 3.6-1(p):** The City of Richmond shall adopt a Climate Action Plan within 18 months of the adoption of the General Plan Energy and Climate Change Element. The Climate Action Plan shall include the following pursuant to CEQA Guidelines Section 15183.5(b):
 - a) The quantification of greenhouse gas emissions, both existing (2005) and projected for 2020 and General Plan horizon year (2030). These inventories and projections shall be used in the forthcoming Climate Action Plan.
 - b) The Climate Action Plan shall define reduction targets that are California State Assembly Bill 32 (AB 32) compliant and continue reducing emissions past 2020 in order to address cumulatively considerable impacts of greenhouse gas emissions. At a minimum, the Climate Action Plan shall set a target to reduce emissions to 1990 levels by 2020, which is anticipated to be a reduction of 15% from 2005 levels.
 - c) The 2020 and 2030 Business As Usual (BAU) Inventories provide emissions by land use types and emission sectors based upon the anticipated changes and growth in land use within the General Plan Land Use and Urban Design Element, which fulfills the criteria of CEQA Guidelines 15183.5(b)(C). As such, the inventories shall provide quantities and context of the emissions that need to be reduced in order to achieve the reduction target. Reduction measures in the Climate Action Plan shall focus on reducing the emissions from the sectors and land use types identified in the 2020 and 2030 BAU inventories.
 - d) The Climate Action Plan shall specify reduction measures or groups of reduction measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the AB 32 compliant reduction target. To implement the goals and policies in the General Plan Energy and Climate Change Element, the Climate Action Plan shall include adaptation strategies that focus on potential local impacts of climate change, such as sea level rise, increased risk of flooding, diminished water supplies, and public health. Broader sustainability measures may include the preservation of local water quality, air quality, open space, and biodiversity. In addition, the following reduction strategies shall be incorporated into the Climate Action Plan:
 - i. Require all new or renovated municipal buildings to seek California Green 2010 Tier 1 building standards or higher and require new development building design to be, at a minimum, compliant with California Green 2010 building standards.

- ii. Require all municipal fleet purchases to be fuel efficient vehicles for their intended use, based on the fuel type, design, size, and cost efficiency.
 - iii. Require new development projects to implement a construction plan that demonstrates how activities will reduce waste through recycling and/or salvaging of nonhazardous construction and demolition debris at a minimum of 50%.
- e) In order to establish a mechanism to monitor the Climate Action Plan's progress towards achieving the reduction targets and to require amendment if the Climate Action Plan is not achieving the reduction targets, the Climate Action Plan shall include an implementation chapter describing how the reduction measures are to be implemented, emissions monitored, and the Climate Action Plan updated. Emissions inventories shall be conducted at minimum intervals of five years in order to evaluate the progress of the Climate Action Plan. The Climate Action Plan shall be updated together with future General Plan Updates or as necessary to implement new statewide reduction thresholds.
- f) The Climate Action Plan, including all updates, is a project subject to public review and comment under the California Environmental Quality Act.
- **Mitigation Measure 3.6-1(q):** The City will continue to work proactively with BAAQMD, CARB and EPA to help these agencies enforce GHG prevention and control mandates within the City, and will work with the community to identify and advocate for GHG measures that are within the jurisdiction of these agencies and can and should be implemented to further reduce GHG from the City.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would result in GHG emissions generated from construction activities. For plan-level analysis of construction emissions, the BAAQMD recommends quantification of the emissions and the implementation of BMPs to reduce those emissions. Although the proposed General Plan indicates population and employment growth, it does not have a detailed growth forecast as to the amount of square footage of commercial and industrial land uses. Because GHGs remain in the atmosphere for years, even the temporary emissions from construction activities would be cumulatively considerable without the implementation of the BAAQMD recommended BMPs and the General Plan policies and actions to reduce construction related GHG emissions. General Plan Policies EC2.1, EC2.2, EC3.2, EC3.3, and EC4.3 and General Plan Actions EC2.A, EC2.K, EC3.E, EC4.G, and EC4.H address construction related GHG emission reductions. Implementation of Mitigation Measure 3.6-1(a) would incorporate the most recent Best Management Practices as indicated by the BAAQMD. With implementation of the General Plan policies and actions as well as the BMPs, the proposed General Plan would have a less-than-significant impact with respect to construction related GHG emissions.

The proposed General Plan would result in long-term operational impacts from the generation of GHGs during the continued operation of land uses allowed in the proposed General Plan. Thresholds of significance have been established by the BAAQMD as 6.6 MT CO₂e per service population for plan-level emissions of GHGs. Service population for this analysis is defined as the total number of residents and employees anticipated in Richmond for the proposed General Plan's development. Based on the 2005 Greenhouse Gas Inventory for the City of Richmond, emissions for 2020 are anticipated to be approximately 2.4 MMT of CO₂e. Emissions for 2030 were not provided in the emissions inventory and were estimated based on estimated population and employment growth. Table 3.6-1 in the Draft EIR shows the City-wide emissions by sector compared to the BAAQMD threshold.

As shown in Table 3.6-1 of the Draft EIR, the City emissions without reductions exceed the BAAQMD operational threshold for GHG emissions. The State has implemented numerous policies that will provide reductions for all sectors of the City. In addition, the City has implemented numerous policies that will also provide reductions in GHG emissions.

The City of Richmond is in the process of developing a Climate Action Plan which will provide reduction strategies for the City to attain, at a minimum, the AB 32 goal of 29 percent below Business As Usual. It is anticipated that the quantification of the General Plan Policies and Actions that have not been quantified in this analysis will afford a minimum of an additional 13.6 percent reduction, thereby meeting the AB 32 threshold. Even with this additional reduction, the emissions per service population for 2020 and 2030 are anticipated to be 13.22 and 12.23 respectively, remaining above the 6.6 BAAQMD threshold.

The incorporation of the state measures, General Plan policies and actions, and the Mitigation Measures 3.6-1(b) through 3.6-1(l) would reduce the impacts from operational emissions. However, long-term operational impacts of the proposed General Plan would result in an increase in GHG emissions and would still exceed the BAAQMD's threshold of 6.6 MT CO₂e per service population..

Implementation of the Mitigation Measures 3.6-1(m) through 3.6-1(p) would further reduce impacts from GHG emissions. While the measures would provide a reduction in GHG emissions, the emissions reductions cannot be quantified. These measures either support measures that would further ensure the success of the General Plan actions and mitigation stipulated above, or are measures where there is not enough detail available in the 2005 Greenhouse Gas Emissions Inventory to determine a reduction percentage. Although not reiterated here, the General Plan Policies and Actions not identified in the quantified reduction measures will provide reductions in greenhouse gases.

While localized air pollutant impacts are addressed in the context of the Air Quality section of the EIR for traditional CEQA topics, such as the protection of human health and the environment, GHG is a category of air emissions that is unique in CEQA by contributing to an impact that is global in scale: climate change. Various studies have recognized that traditional CEQA approaches to minimizing GHG emissions at a project-by-project (or city-by-city) level fall short of meeting climate change challenges by perpetuating sprawl development patterns that contribute more per capita GHG emissions by, for example continuing to be dependent on single-occupancy automobile commutes and single-family, low-density housing types. (See, e.g., *Californians Tackle Global Warming: A Community's Guide to SB 375*, California League of Conservation Voters and Natural Resources Defense Council, 2009, Chapter 3.)

Thus, while typical CEQA mitigation strategies for downsizing proposed employment and population growth can be effective in minimizing and mitigating impacts to localized resources such as an air basin or a neighborhood, for GHG impacts this "downsizing" strategy backfires, on a regional, state, and even national scale, by missing the opportunity to reduce per capita GHG emissions by increasing the density and intensity of transit-oriented development in established, urbanized areas such as Richmond.

The Legislature recognized that climate change and GHG required special treatment under CEQA, and enacted SB 97 to direct the Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide greater direction on how CEQA should be applied to GHG emissions and climate change. In response, OPR developed revisions to the CEQA Guidelines, as well as explanatory guidance that concluded, for example, that GHG is most appropriately considered in the context of a cumulative impact analysis since no single project or plan is substantial enough in scale to affect atmospheric levels of GHG found to cause global climate change. (See *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines*

Addressing Analysis and Mitigation of Greenhouse Gas Emissions, Office of Planning & Research, 2009.)

OPR's revised CEQA Guidelines also direct agencies to evaluate compliance with future plans and policies for reducing GHG emissions, including a major ongoing process - reducing GHG emissions from the land use and transportation sectors through the development and implementation of the region's SCS by ABAG/MTC as required by SB 375. While the region's SCS has not yet been adopted, it is noteworthy that all early drafts under consideration call for substantially increasing the density of development in established urbanized areas adjacent to San Francisco Bay such as Richmond. This SCS development pattern promotes GHG reduction on a regional scale by accommodating more population and employment growth in areas that are already served by transit and already have a base development pattern that includes a broad range of both employment and housing types.

The increased density and intensity of development, the expansion of employment, and other core components of the General Plan are fully aligned with the proposed visions for the region's SCS. When the SCS is finalized and implemented, and the City's Climate Action Plan is finalized and implemented, the City's growth will have a *beneficial* impact on climate change with a land use pattern that reduces per capita GHG emissions and that meets cumulative regional targets for GHG reductions from the land use sector.

However, as discussed above and in the Air Quality section of the EIR with respect to air pollutants other than GHG, the City has limited jurisdiction over the many other sectors that contribute to GHG emissions. Accordingly, Mitigation Measure 3.6-1(q) is added to the EIR to further avoid, reduce, or mitigate GHG impacts from General Plan implementation.

Notwithstanding these General Plan policies and EIR mitigation measures, many sources of GHG are outside the City's jurisdiction and control, and attainment of atmospheric concentrations of GHG that will reverse or reduce the effects of global climate change are likewise outside the City's jurisdiction and control. BAAQMD, CARB, EPA, and the federal government working on international efforts with other countries, can and should implement further mitigation measures to reduce GHG and avoid or minimize adverse climate change impacts. These GHG improvements and management measures are within the responsibility and control of these air quality agencies specifically, and the federal government working in cooperation with other nations more generally, and can and should continue to be implemented concurrently with the City's General Plan, and should address both General Plan implementation GHG impacts as well as planned future cumulative scenarios including the regional growth and development plans that have been or are being prepared by other regional agencies such as the SCS.

The City finds that mitigation measures to further reduce GHG impacts from General Plan implementation and cumulative conditions to a *less-than-significant* level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.

Impact 3.6-2:

Finding: The City Council finds that construction and operation of the proposed General Plan could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Through the implementation of Mitigation Measures 3.3.1, 3.3-2, and 3.6-1 and General Plan Policies, it is anticipated that emissions would be reduced to a *less-than-significant* level and, therefore, would not be considered cumulatively considerable.

Rationale/Supporting Explanation: The construction and operation of the development under the proposed General Plan would result in the emission of greenhouse gases. Future

development within the City of Richmond will be required to comply with AB 32, and with the Richmond Climate Action Plan once developed. AB 32 requires a 29 percent reduction from Business As Usual emissions by 2020. Business as Usual is defined as the anticipated emissions for 2020 without the incorporation of policies and reduction measures that are not currently implemented. With the implementation of the mitigation measures as detailed above, the reductions to the anticipated citywide emissions for 2020 and 2030 are 15.4 and 20.03 percent respectively, which would result in a significant cumulative impact.

The City of Richmond is in the process of developing a Climate Action Plan which will provide reduction strategies for the City to attain, at a minimum, the AB 32 goal of 29 percent below Business As Usual. It is anticipated that the quantification of the General Plan Policies and Actions that have not been quantified in the Draft EIR analysis would afford a minimum of an additional 13.6 percent reduction resulting in a 29 percent reduction for 2020 and a 34.12 percent reduction for 2030. As the reductions would meet the AB 32 threshold, the future development under the General Plan's contribution would not be cumulatively considerable.

GEOLOGY, SOILS, AND MINERALS

Impact 3.7-1:

Finding: The City Council finds that the buildout of the proposed General Plan would not expose people or structures to fault rupture, strong seismic groundshaking, or seismic-related ground failure beyond an acceptable level of risk which is minimized through adherence to the California Building Code. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Within the City, there is one Earthquake Fault Zone encompassing the Hayward fault. The Hayward fault runs approximately along the west ridge of Wildcat Canyon, crossing through Parchester Village and extends into San Pablo Bay.

Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface. Fault rupture almost always follows preexisting faults, which are zones of weakness. Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Sudden displacements are more damaging to structures because they are accompanied by groundshaking. Projects within earthquake fault zones require geologic evaluation to determine if a potential hazard from any fault, whether previously recognized or not, exists.

From a review of regional and local geo-seismic conditions, it is apparent that the City would be subjected to at least one major earthquake during the life of the plan. The resulting vibration would cause damage to buildings and infrastructure (primary effects) and could cause ground failures in loose alluvium, landslide deposits, Bay Mud, or poorly compacted fill (secondary effects).

The most susceptible structures to these types of hazards are unreinforced masonry buildings or buildings constructed on unreinforced brick foundations, which could have been constructed before building codes were adopted. Some newer buildings constructed before earthquake-resistant provisions were included in the codes could also be damaged during an earthquake. Unless the buildings are identified and properly reinforced, building occupants, visitors, or workers could be exposed to potential hazards from falling debris or structural failure. Older masonry buildings without seismic reinforcement (unreinforced masonry) are the most susceptible to the type of structural failure that can result in injury or death. Wood-frame buildings one or two stories high (e.g., single-family dwellings) are considered to be the most structurally resistant to earthquake damage.

The policies and criteria of the State Mining and Geology Board state that no structure may be

placed across the trace of an active fault and an area within 50 feet of an active fault is presumed to be underlain by active branches of the fault unless proven otherwise.

To reduce the primary and secondary risks associated with seismically induced groundshaking, it is necessary to take the location and type of subsurface materials into consideration when designing foundations and structures. In the City of Richmond, commercial, institutional, and large residential buildings and all associated infrastructure are required to reduce the exposure to potentially damaging seismic vibrations through seismic-resistant design, in conformance with Chapters 16 and 16A, Structural Design, Section 1613, Earthquake Loads, of the CBC, as adopted by the City.

Adherence to the Building Code, as required by state and City regulations, would ensure maximum practicable protection available for users of buildings and associated infrastructure. Adherence would include:

- Use of CBC seismic standards as the minimum seismic-resistant design for all proposed facilities;
- Seismic-resistant earthwork and construction design criteria, based on the site-specific recommendations of a California-registered civil engineer in cooperation with the project's California-registered geotechnical and structural engineers (Section 1802 ff and 1802A ff);
- An engineering analyses that demonstrates satisfactory performance of alluvium or fill where either forms part or all of the support, especially where the possible occurrence of liquefiable soils exists; and
- An analysis of soil expansion potential and appropriate remediation (compaction, removal/replacement, etc.) prior to using any expansive soils for foundation support.

To address potential hazards associated with older buildings that may present seismic safety hazards, the City would be required to implement the provisions of its Code for the Seismic Retrofit of Hazardous Unreinforced Masonry Bearing Wall Buildings (Richmond Municipal Code Section 6.12). The design of the roads, bridges (vehicular and pedestrian overcrossings), and underground utilities (especially gas and water pipelines) would be required to comply with adopted design criteria, or with other accepted non-building structure standards to reduce the primary and secondary risks associated with seismically induced groundshaking. In addition to CBC regulations that are enforced and monitored at the local level, proposed General Plan Policy SN1.1 and General Plan Actions SN1.A through SN1.C, are specifically intended to regulate land use, development standards, and construction practices to reduce the risk to humans and property in the event of an earthquake or other geological activity.

The preceding explanations of seismic issues indicate that the Building Code requires a site-specific geotechnical investigation and report for each construction site that (a) identifies seismic hazards and (b) contains appropriate recommendations and design criteria that conform to the analysis and implementation criteria described in the CBC, Chapters 16, 16A, 18, and 18A. General Plan Action SN1.C would require the City review all development proposals for CBC compliance. Thus, a regulatory framework exists including the proposed General Plan, the CBC, and the Richmond Municipal Code to address seismic hazards issues, including the risk of fault rupture and strong groundshaking and related secondary hazards. In view of these requirements, implementation of the proposed General Plan would have a *less-than-significant* impact regarding exposing people or property to seismic hazards.

Impact 3.7-2:

Finding: The City Council finds that adherence to the California Building Code would ensure that development under the proposed General Plan would not be subject to risk from settlement and/or subsidence of land, lateral spreading, or expansive soils, which could create risks to life and property. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Available information on subsidence indicates that there is only slight subsidence risk in Richmond, in comparison to other waterfront areas around the San Francisco and San Pablo bays. However, the addition of fill to alluvial and Bay Mud areas could cause settlement and, as shown in Figure 3.7-4 of the Draft EIR, portions of the change areas are located in areas with liquefaction potential. Three types of settlement can occur: pile settlement caused by building loads; consolidation settlement in the layer of young soil of subsurface material; and seismically induced compaction settlement in artificial fill. Settlement can occur either uniformly or differentially. Uniform settlement in a building can create problems of poor drainage and potential failure of underground utility connections. Differential settlement can cause mechanical problems within a structure, although these can be minimized if the structural engineers are aware of the site conditions. For example, land that is subject to settlement can be surcharged before the building or road construction; that is, a calculated load of temporary dirt fill can be placed on the soil for a predetermined period of time. This has the effect of forcing consolidation of the underlying soils. Based on a review of subsurface conditions in the City, the possibility of settlement should be investigated during early planning stages prior to any project's construction. Such investigation and treatment is a requirement of the City's Building Code.

Expansive soil is prevalent in the Bay Plain area. Expansive soils result in the shrinking and swelling of soils in moisture conditions, which causes problems with building foundations, slabs-on-grade, and pavement unless identified and addressed during design and corrected during construction.

Seeps and springs on hillsides can cause problems if not investigated and proper drainage provided. In the Bay Plain area of Richmond, sand layers between clay layers build up artesian pressure that may burst through the soil layer above when excavation is undertaken above. Appropriate drainage measures may be necessary.

The variability in soil conditions and potential for soil-related geotechnical hazards could increase the risk to people and structures, if soil characteristics were not appropriately identified and accounted for in project design. For example, using unsuitable materials would have the potential to create heaving, subsidence, or collapse problems leading to excavation wall failure, building or bridge settlement, and/or utility line and pavement disruption. The risk of soils collapse and settlement would be highest in areas containing fill. Lateral spreading and collapse could occur in unsupported walls of pits excavated in the existing fill or loose alluvium.

To eliminate any adverse effects of weak materials in the alluvium on buildings or non-building structures for human occupancy, the buildings and structures would need foundations that do not depend on weak soils for support. This can be accomplished by such methods as removing any existing unstable alluvium and replacing it with select fill (non-expansive, non-organic, appropriately sized mix of materials); covering any existing unstable alluvium with select fill; extending the foundations below any existing fill using cast-in-place piers, piles, or similar deep-foundation design.

It is relatively common to re-engineer weak soils specifically for stability prior to use. This can be done for the support of surface parking areas and light structures. An acceptable degree of soil stability can be achieved for expansive material by the required incorporation of soil treatment programs (replacement, grouting, compaction, drainage control, etc.) in the grading and

construction plans to address site-specific soil conditions. A site-specific evaluation of soil conditions is required, as stated, above, and must contain recommendations for ground preparation and earthwork specific to the site, and incorporated into the construction design.

General Plan Policy SN1.1 and General Plan Actions SN1.C and SN1.D would reduce impacts related to expansive or unstable soils through development proposal compliance with the CBC and the geotechnical review guidelines. The Building Code requires a site-specific foundation investigation and report for each construction site that (a) identifies potentially unsuitable soil conditions and (b) contains appropriate recommendations for foundation type and design criteria that conform to the analysis and implementation criteria described in the CBC. As indicated, a regulatory framework exists to address soils issues, including the risk of soil expansion, subsidence, and settlement. In view of these requirements, implementation of the proposed General Plan would have a *less-than-significant* impact regarding exposing people or property to the hazards related to settlement and/or subsidence of land, lateral spreading, or expansive soils.

Impact 3.7-3:

Finding: The City Council finds that project-specific review and conformity with the City's Hillside Preservation Ordinance would ensure that development under the proposed General Plan would not result in soil erosion that would result in long-term safety concerns or slope instability beyond an acceptable level of risk. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Soil erosion is a naturally occurring process. The agents of soil erosion are water and wind, each contributing a significant amount of soil loss. The effects of erosion are intensified with an increase in slope (as water moves faster, it gains momentum to carry more debris), the narrowing of runoff channels (which increases the velocity of water), and by the removal of groundcover (which leaves the soil exposed to erosive forces). Development under the proposed General Plan would not result significant topsoil loss. The areas where topsoil could be present is generally limited to existing undeveloped areas designated agricultural lands, so development permitted under the proposed General Plan would not convert those lands to urban uses that could, in turn, reduce topsoil.

The potential for soil erosion can be accelerated and increased by cut-and-fill activities, such as may be needed for future development. When completed, surface improvements, such as buildings and paved roads, decrease the potential for erosion onsite, but can increase the rate and volume of runoff, potentially causing off-site erosion. If unmitigated, eroding soil can clog drainages and cause flooding, slope instability, and additional erosion by diverting water flow.

Grading for most structures that would be built under the proposed General Plan is expected to be minimal, however, consisting of grading for foundations, building pads, access roads, and utility trenches in areas that are already developed. Excavations for utility trenches and foundations typically involve less than five feet of change in ground surface elevations. Most road and pad grading typically would be less than two feet deep. Nonetheless, deeper excavations could accompany the emplacement of underground facilities in the flatlands or road cuts in the uplands.

Because one of the major effects associated with grading is sedimentation in receiving waters, erosion control standards are set by the RWQCB through administration of the National Pollution Discharge Elimination System (NPDES) permit process for storm drainage discharge. The NPDES permit requires implementation of nonpoint source control of stormwater runoff through the application of a number of Best Management Practices (BMPs). These BMPs are meant to reduce the amount of constituents, including eroded sediment, that enter streams and other water bodies. A Storm Water Pollution Prevention Plan (SWPPP), as required by the RWQCB, is required to describe the stormwater BMPs (structural and operational measures) that would

control the quality (and quantity) of stormwater runoff. Erosion and sedimentation issues are addressed more fully in Draft EIR Section 3.9, Hydrology and Water Quality.

General Plan Policies CN2.3 and CN2.6 and General Plan Action CN2.E would reduce impacts related to erosion. Policies CN2.3 and CN2.6 address erosion and the need for site controls. In addition, Richmond Municipal Code Section 12.44 contains provisions for excavation and grading that require measures to control erosion. Any project that involves disturbing more than 50 cubic yards of soil is required to obtain a grading permit pursuant to the City's grading ordinance. The permit requires the preparation of an erosion control plan. The City's Hillside Physical Constraint Area ordinance regulates development on hillside areas to preserve hills, ridges, and their natural features, which also helps reduce erosion potential. In addition, implementation of Mitigation Measure 3.9-4 would require additional measures such as construction scheduling and temporary and permanent sediment controls. Thus, erosion would not be a substantial hazard and implementation of the proposed General Plan would have a *less-than-significant* impact regarding soil erosion.

Impact 3.7-4:

Finding: The City Council finds that development under the proposed General Plan would not result in landslide hazards beyond an acceptable level of risk. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: There are three areas within the City that have been subject to major landslide activity in recent years: the El Sobrante Valley where landslides have occurred on both the San Pablo and Sobrante Ridges, the Point Richmond area along the San Pablo/Potrero Hill Range, and the Berkeley Hills. Other slides have occurred in the Hilltop area and along the more northern reaches of the San Pablo/Potrero Hills Ridge; however, the geology in these areas is generally more stable than in the Sobrante Ridge, San Pablo Ridge, and the Berkeley Hills. Development in those areas under the proposed General Plan could expose people and property to landslide hazards. As shown in Draft EIR Figure 3.7-5, portions of the City, including portions of some of the change areas, are located in areas categorized as unstable. General Plan Policies SN1.1 and CN2.3 and General Plan Action SN1.C would reduce impacts related to landslides.

General Plan Policy SN1.1 and General Plan Action SN1.C direct that land use, development standards, and construction practices are to be used to reduce the risk to humans and property from geological activity such as naturally occurring landslides. General Plan Policy CN2.3 is intended to protect hillside areas by regulating site preparation, grading, soils repair, foundation design and topographic alteration, quantities of cut and fill, placement of utility crossings, and removal of vegetation. The City's Hillside Physical Constraint Area ordinance regulates development on hillside areas to preserve hills, ridges and their natural features, which help reduce potential landslide hazard due to human activity.

As required under the Building Code, development in areas prone to landslides requires a geotechnical investigation involving both geological and soils evaluation to identify potentially unsuitable soil conditions, such as landslides, and to develop appropriate recommendations for mitigating associated hazards. For example, landslide repair typically involves removing soil, incorporating a crushed rock and piped drainage system, and replacing the soil as an engineered fill. Pile supported retaining walls are used to prevent soil creep. Swales and ditches are used to convey water away from the top of slopes prone to landslides. During design and construction, proper grading practices involving good compaction, keyways and benches in slopes, surcharging of downslope areas, proper subdrain system installation, flatter slopes, and the provision of toe support are important for avoidance of landsliding. It is also important to ensure that increases in impervious areas, such as paved and roofed areas, are limited and properly

addressed in design. Design includes consideration of ditching, landscape watering, and maintenance of drainage systems.

In view of these requirements and the availability of standard engineering methods to mitigate potential hazards, implementation of the proposed General Plan would have a *less-than-significant* impact regarding exposing people or property to landslide hazards.

Impact 3.7-5:

Finding: The City Council finds that development under the proposed General Plan would not affect mineral resource availability. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Sandstone and shale aggregates are present in the City, and the State has designated three MRZ-2 locations as regionally significant sectors (W-1, W-2, and W-3) in the San Pablo-Potrero Hills Ridge Area. There are potential sources of crushed rock in Sector W-1, but they cannot be mined because of the tank farm on the ridge to the west. Quarries in the other two sectors have ceased operations. Although extraction operations are limited, the sector and MRZ-2 designations remain in effect until changed by the State Mining and Geology Board.

The proposed General Plan does not propose any mineral extraction, nor would it involve any changes in existing extractive mineral resource operations within the City, including the change areas. Changes in land use or development at the designated sectors that would limit availability of or access to these sectors, if any, would be subject to the requirements of the Surface Mining and Reclamation Act (SMARA) sections 2762-2763, as described in the Draft EIR. In addition, General Plan Conservation, Natural Resource, and Open Space Policy CN2.8 would minimize the potential for future development to threaten the availability of mineral resources. Conservation, Natural Resource, and Open Space Policy CN2.8 would require that the best management practices available be used in order to avoid nuisances, hazards, or adverse environmental, public health, and safety impacts including development setbacks, buffers, screening and other appropriate measures. Therefore, potential impacts associated with availability of mineral resources and land use compatibilities would be less-than-significant.

Development under the proposed General Plan would increase the number of buildings, roadways, and other structures that would use aggregate materials in their construction. Aggregates are brought to Richmond from quarries in San Rafael, Vallejo, and the Livermore area. Future growth (with or without the project) would incrementally contribute to reduction of aggregate resources and the subsequent depletion of those resources. The depletion of aggregate resources could have economic effects by limiting future growth and employment opportunities. However, this would not result in a physical change in the environment within the planning area, and this is considered a *less-than-significant* impact.

HAZARDOUS MATERIALS

Impact 3.8-1:

Finding: The City Council finds that Implementation of the proposed General Plan would involve the routine use, storage, transportation, and disposal of hazardous materials in existing and proposed land uses. However, it would not create a significant hazard to the public or the environment. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The General Plan identifies change areas that would be designated to accommodate growth in the proposed General Plan, and it identifies the range of activities that could be expected to occur in proposed land use designations. The “Business/Light

Industrial” land use designation includes research and development, light industrial, and warehousing. The “Marine and Waterfront Commercial” land use designation supports water-oriented businesses and activities including boat repair and marinas. The “Industrial” land use designation supports activities that require large parcels for manufacturing, assembly, and storage of goods. This land use designation may allow for warehousing and civic uses such as corporation yards and water treatment plants. The “Port” land use designation supports activities related to a working waterfront including port terminals, warehousing, commercial fishing, ship repair, and related office uses. All of these land uses are likely to involve activities in which hazardous materials would be routinely used, stored, handled, and transported. Hazardous waste would also be generated.

The proposed General Plan promotes the continuation of existing industrial and commercial activities as a viable and necessary element for the City’s economic wellbeing. It does not, however, propose a substantial change in land use designations or identify specific target industries or businesses that would, in turn, substantially increase hazardous materials use beyond that which already occurs. Nonetheless, it is reasonably foreseeable that economic and employment growth under the General Plan could attract additional industries and commercial activities into the City, and provided such activities are consistent with the proposed General Plan’s land use designations and zoning, new development would involve routine hazardous materials use greater than under existing conditions. The precise increase in the types and volumes of hazardous materials that could be present city-wide as a result of implementation of the proposed General Plan is speculative, because the specific businesses that could operate in the planning area is not known, and because hazardous materials use is subject to continuous change as technologies evolve and as businesses change.

Residential and mixed-use development with neighborhood-serving retail, commercial, and office uses would also involve hazardous materials use, but at a reduced level, compared to industrial and manufacturing activities. Construction activities, regardless of the type or location of development, involve a variety of products and materials that may be a hazardous material. Wherever hazardous materials are used or stored, or hazardous waste generated, there is the potential for human exposure, and, under certain conditions, potential releases to the environment. In each situation, the potential hazards and the risks they would pose to people or the environment would depend on the nature and amount of the hazardous materials used, the location and containment measures where the materials would be used and stored, the processes and handling procedures for the materials, and the personnel dealing with the hazardous materials. The “exposure pathways” through which employees, the public, and the environment could be exposed include inhalation, ingestion, dermal contact, and accidental releases that allow the hazardous materials to become airborne or enter waterways.

The potential risks associated with hazardous materials handling and storage would generally be limited to the immediate area where the materials would be located, because this is where exposure would be most likely. For this reason, the individuals most at risk would be employees or others in the immediate vicinity of the hazardous materials, rather than residents or visitors. For the most part, the health and safety procedures that protect workers and other individuals in the immediate vicinity of hazardous materials would also protect the adjacent community and environment. The pathways through which the community or the environment (e.g., local air quality and biota) could be exposed to hazardous materials include air emissions, transport of hazardous materials to or from the site, waste disposal, human contact, and accidents. However, the only primary potential pathway for public exposure to hazardous materials would be airborne emissions under normal operations or upset conditions. As a result of hazardous materials use, there would be ongoing and likely an increase in the amount of hazardous waste generated with implementation of the proposed General Plan.

As the number of commercial, industrial, and governmental operations that handle hazardous materials increase, the frequency of accidental release incidents, both on the site of the operations and on the routes used during the transport of hazardous materials, would be expected to proportionally increase.

The General Plan does not identify industries and commercial businesses (including the refinery and port) that would be subject to more intense regulation and oversight than businesses (and households) that handle smaller quantities of more common materials.

The routes currently used for transportation of hazardous materials would continue to be used through the life of the proposed General Plan (roadway and rail), and the types of materials transported are not expected to change substantially because the location and development intensity of lands designated for industrial, commercial, research and development, and other hazardous materials-intensive uses would generally remain the same. The number of trips transporting hazardous materials would be expected to increase somewhat, however, because of the increased amount of hazardous materials generated by new commercial and industrial development. The potential for traffic accidents, due in part to the overall growth in traffic volume (to which the proposed project contributes) and congestion in the City and regional roadway network that traverses the city, would also be expected to increase. In addition, there may also be more sensitive receptors, such as those in residential uses, schools, home care facilities, and other buildings along these routes and near the businesses and government operations that handle hazardous materials. Taken as a whole, the frequency of accidental releases would be expected to increase. While the increase in the risk of exposure is most closely tied to the increases in residential population (i.e., number of people who may be exposed) and the amount of traffic on roads (i.e., frequency of traffic accidents involving vehicles carrying hazardous materials), the strongest correlation in potential accidental releases would be with the number of jobs that involve handling hazardous materials.

CFR Title 49, Parts 106 through 189, regulate the transport of hazardous substances on rail lines. Additionally, the rail industry, through the Association of American Railroads (AAR), has developed a detailed protocol on recommended railroad operating practices for the transportation of hazardous materials. The AAR issued the most recent version of this document, known as Circular OT-55-1, on August 26, 2005. The Circular details railroad operating practices for designating trains as "key trains" for certain types and amounts of hazardous substances, designating operating speed and equipment restrictions for key trains, designating "key routes" for key trains, and setting standards for track inspection and wayside defect detectors, assisting communities with emergency response training and information, and shipper notification procedures among others. These recommended practices were originally implemented by all of the Class I rail carriers operating in the United States; the most recent version of the circular also includes short-line railroads as signatories. Overall, the rail safety record has been extremely good. In 2005, 99.997 percent of rail hazardous substances shipments reached their final destination without a release caused by an accident. In fact, railroads have reduced hazmat accident rates by 86 percent from 1980 through 2005.¹²

A primary safety and security concern related to the rail transportation of hazardous materials is the catastrophic release or explosion in proximity to densely populated areas, including urban areas and events or venues with large numbers of people in attendance. Also of major concern is the release or explosion of a rail car in proximity to iconic buildings, landmarks, or environmentally significant areas. Such a catastrophic event could be the result of an accident, or a deliberate act of terrorism. The causes of intentional and unintentional releases of hazardous material are very different; however, in either case the potential consequences of such releases could be substantial. The consequences of an intentional release of hazardous material by a criminal or terrorist action are likely to be more severe than the consequences of an unintentional release because an intentional action is designed to inflict the most damage possible.

The Homeland Security Act of 2002 authorized the Secretary of Transportation to prescribe regulations for the safe transportation, including security, of hazardous material in intrastate, interstate, and foreign commerce. In November 2008, the Transportation Security Administration (TSA) issued a final rule to enhance the security of the Nation's rail transportation system. This rule, codified in Title 49 of the CFR, Parts 1520 and 1580, established security requirements for freight railroad carriers; rail transit systems; and rail operations at certain, fixed-site facilities that ship or receive specified hazardous materials by rail. This rule codified the scope of TSA's existing inspection program and requires regulated parties to allow TSA and Department of Homeland Security (DHS) officials to enter, inspect, and test property, facilities, conveyances, and records relevant to rail security. This rule also requires that regulated parties designate rail security coordinators and report significant security concerns. This rule further requires that freight rail carriers and certain facilities handling specified hazardous materials be able to report location and shipping information to TSA upon request and implement chain of custody requirements to ensure a positive and secure exchange of specified hazardous materials. TSA also clarifies and amends the sensitive security information (SSI) protections to cover certain information associated with rail transportation.

Additionally, the Freight Rail Security Program is an innovative public-private partnership dedicated to assessing policies and technologies for enhancing security throughout the freight rail industry. One product of this partnership is the development of the Rail Corridor Risk Management Tool (RCRMT). The RCRMT will leverage existing technologies and accepted risk management practices where feasible, and incorporate new technologies and elements as appropriate. A second project of the Freight Rail Security Program is the Rail Corridor Hazmat Response and Recovery Tool (RCHRRT), which will integrate geographical information and risk modeling. The RCHRRT is being developed through a grant to the Railroad Research Foundation and will include participation from the rail industry. When fully developed, these tools will provide a formal methodology to assist the rail carriers in complying with the enhanced safety and security planning requirements.

The proposed General Plan includes land use designations that would permit schools. New schools could be sited near locations where hazardous materials would be or are used, stored, or transported. The California Education Code (Section 17210 et seq.) outlines the requirements of siting school facilities near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste. The code requires that, prior to commencing the acquisition of property for a new school site, an environmental site investigation be completed to determine the health and safety risks (if any) associated with a site.

Implementation of the proposed General Plan could increase the types and amounts of hazardous materials in the City relative to existing conditions. The proposed General Plan could also result in siting sensitive land uses near facilities that use hazardous materials. As a result, people could be exposed to potential health and safety risks associated with hazardous materials use, storage, transport, and waste through routine use, or through accidental releases. However, the existing regulatory framework, which is monitored and enforced at the State and local level, was designed to minimize the risks associated with hazardous materials use, and the Draft EIR analysis assumes the City will ensure compliance with adopted laws and regulations. Further, the General Plan proposes policies and actions, such as SN1.3, CN6.1, CN6.B, CN6.C, and SN1.G through SN1.K, that establish standards for siting of facilities with hazardous materials or wastes, as well as reinforcing the City's hazardous materials and waste compliance programs. Compliance with existing regulations in addition to the proposed General Plan policies and actions would minimize the risks associated with hazardous materials and reduce this impact to *less-than-significant*.

Impact 3.8-2:

Finding: The City Council finds that development under the proposed General Plan would include demolition or renovation of existing structures that could contain asbestos-containing materials, lead-based paint, PCBs, or other building materials containing hazardous substances that could expose people or the environment to risks associated with those materials. However, project-specific review and implementation of best management practices and project-specific mitigation measures would ensure that these activities would not result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would allow urban infill and redevelopment, along with the intensification of development within the City. As a result, existing structures may need to be demolished prior to the construction of new buildings. Depending on their age, these structures could contain asbestos in building materials such as roofing, floors, and pipe coverings, lead-based paint, or PCBs in electrical equipment.

Inadvertent releases of friable asbestos, lead, or PCBs contained in materials or items removed during demolition activities could expose people to these hazardous materials, which could result in various adverse health effects if exposures were of sufficient quantity and duration. In addition, some of the debris may meet criteria for hazardous waste and must be disposed of properly. To reduce potential human exposures to acceptable levels and to protect the environment, development activities would be required to comply with regulations and guidelines pertaining to abatement of and protection from exposure to asbestos and lead, as discussed in the Draft EIR, as appropriate (e.g., Cal/OSHA has regulations on worker exposure to both substances). Items containing PCBs, mercury, or other hazardous substances that are intended for disposal must be managed as hazardous waste and must be handled in accordance with OSHA worker protection requirements.

Implementation of applicable regulations and standards would ensure that potential health and environmental hazards associated with asbestos, lead, or PCBs in buildings and structures to be demolished or renovated would be reduced to the extent required by law. Because these demolition and construction activities would not result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, impacts would be *less-than-significant*.

Impact 3.8-3:

Finding: The City Council finds that there are locations within the City that are included on the list of hazardous materials sites (Cortese List) compiled pursuant to Government Code section 65962.5, as well as other locations where hazardous materials-related environmental contamination may be present, but the sites are not yet listed. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The Cortese List sites located within the City contain environmental contamination from the release of hazardous substances that can present a human health and environmental risk unless properly managed. Some of these sites have been cleaned up and others are still being investigated. Because of the extent of industrial and commercial activity within the City, there may be other sites where contaminants may be present at levels that can pose public health and safety impacts. There has not been a city-wide survey to identify all possible sites, because such studies must be performed on a site-specific basis when land use, ground disturbance, and development footprints are known. Additionally, it is possible that underground storage tanks (USTs) that were in use prior to permitting and record keeping

requirements may be present. The grading, excavation, and dewatering of sites for new development in the City could expose construction workers and the public to such known or potentially unknown hazardous substances present in the soil or groundwater. In the event undiscovered hazardous material contamination is found in the soil or groundwater during construction activities for new development in the City, such contamination could cause various short-term or long-term adverse health effects in persons exposed to the hazardous substances. In addition, exposure to contaminants could occur if the contaminants migrated from the contaminated zone to surrounding areas either before or after the surrounding areas were developed, or if contaminated zones were disturbed by future development at the contaminated location.

Contamination (if any) must be properly identified and managed prior to any development activities on any of these sites to prevent exposure of people and the environment to these hazards. The investigation and cleanup of a contaminated site would be subject to federal and State laws and regulations that are administered at the local level. Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, State, and local hazardous materials laws and regulations. DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. The standards identify approaches to determining if a release of hazardous wastes/substances exists at a site and delineating the general extent of contamination; estimating the potential threat to public health and/or the environment from the release and providing an indicator of relative risk; determining if an expedited response action is required to reduce an existing or potential threat; and completing preliminary project scoping activities to determine data gaps and identifying possible remedial action strategies. If remediation is necessary, work plans would be developed to identify the approach to clean up the site. Because remedial actions that could involve removing soil or groundwater also have the potential to create human health and environmental hazards, a health and safety plan for remediation and construction workers would be required, and, where appropriate, contingency plans would be prepared to address unknown hazards. In addition, any actions that have the potential to generate air emissions would be subject to BAAQMD review.

Compliance with applicable regulations governing the investigation and remediation of contaminated sites is mandatory. Nonetheless, proposed General Conservation, Natural Resources, and Open Space Policy CN6.1 and associated Conservation, Natural Resources, and Open Space Actions CN6.A and CN6.B establish a process that must be followed to address contaminated sites that could be affected by development.

The City requires those who apply to develop potentially contaminated sites to retain a Registered Environmental Assessor (i.e., a professional environmental scientist or engineer registered as an REA in California) to inspect the sites for the presence of hazardous materials and wastes. The investigations must take the form of environmental audits, and must include, at a minimum, site inspections for hazardous materials, examination of historic records, and reviews of public agency records. Reports detailing the results of the inspections are required to be submitted to the City for review. The report preparer must either certify that the site is free of hazards or recommend preparation of a site mitigation plan. If the results of the environmental audit indicate a potential for contaminated soils, the City requires the applicant to work with appropriate state and regional agencies to fully analyze the site and remediate the problem. The City checks that inspection reports are on file prior to project approval and prior to any excavation or construction. Acceptance of the site inspections report allows the proposed development to proceed to the permitting stage. All activities under this mitigation must be done in conformance with the policies and procedures presented in Chapter 11 of the County Hazardous Waste Management Plan.

In the event that site inspections uncover pesticide contamination, underground storage tanks, abandoned drums, or other hazardous materials or wastes in the project area, the inspection report preparer is required to notify the City and the City is responsible for notifying the Contra Costa County Health Services Department. Under the direction of the appropriate agencies, a site remediation plan must be prepared by the project applicant that would (1) specify measures to be taken to protect workers and the public from exposure to potential site hazards both during construction and for future maintenance and (2) certify that the proposed remediation measures would clean up the wastes, dispose of the wastes, and protect public health in accordance with federal, state, and local requirements.

Permitting or work in the areas of potential hazard is not allowed to proceed until the site remediation plan is on file with the City. In accordance with OSHA requirements, any activity performed at a contaminated site must be preceded by preparation of a separate site health and safety plan (prepared by the project applicant and filed with the City) for the protection of workers and the public. All activities under this mitigation must be done in conformance with policies and procedures in Chapter 11 of the County Hazardous Waste Management Plan.

The potential for future activities in the City to cause or contribute to soil or groundwater contamination would be reduced through Conservation, Natural Resources, and Open Space Action CN6.C, which encourages pollution prevention by informing residents, businesses and industry about pollution prevention, disposal of hazardous waste and chemicals, liability and clean-up.

With the existing regulatory framework and City of Richmond requirements to address contaminated sites, implementation of the proposed General Plan would not create a significant hazard to the public or the environment. Impacts would be *less-than-significant*.

HYDROLOGY AND WATER QUALITY

Impact 3.9-1:

Finding: The City Council finds that development under the proposed General Plan would not result in violation of waste discharge requirements (WDRs), because of existing measures to ensure compliance with the WDRs and the proposed policies and implementing actions included as part of the General Plan. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The relevant WDRs are the Municipal NPDES Permit or Regional Municipal Stormwater Permit, as applicable, the revised Construction General Permit, Industrial General Permit, and Recycled Water General Permit and the Richmond Municipal Sewer District, West County Wastewater District, East Bay Municipal Utility District, and Stege Sanitary District individual NPDES Permits. The relevant water quality standards are listed in the Basin Plan. The WDRs are considered protective of water quality. General Plan Policies and Actions CN3.1, CN3.A, CF1.1, CF1.D, and CF1.E would reduce the potential for violation of WDRs.

Compliance with the WDRs would ensure that substantial violation of water quality standards would not occur. Additionally, the CWA Section 305(b) requires biannual evaluation of water quality to determine whether water quality is degrading, which would further ensure that water quality standards are not violated. Compliance with existing regulations and incorporation of measures included in the respective permits would ensure that this would be a *less-than-significant* impact.

Impact 3.9-2:

Finding: The City Council finds that new development under the proposed General Plan would not be expected to substantially reduce groundwater recharge or increase groundwater use within the City. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: New development under the proposed General Plan could increase the amount of impervious surfaces and reduce groundwater recharge by limiting the area where precipitation could infiltrate. Increased growth and development, including increased green space and park areas, could also increase the amount of water used for potable water supplies and irrigation. As discussed in Draft EIR Section 3.13 Utilities, the City obtains its water supplies from EBMUD. EBMUD water supplies are derived primarily from the Mokelumne River. A secondary source of water is runoff from local watersheds. No new groundwater wells are planned for implementation of the proposed General Plan. Therefore, increased growth is not expected to result in increased groundwater use or lowering of groundwater tables. As noted above, the soils in the City are generally fine grained with slow to very slow permeability. Because the infiltration rate of soils in the City tends to be quite slow, stormwater runoff would be naturally high and infiltration relatively low. Thus, changes in pervious surfaces in the City would not substantially affect groundwater recharge. General Plan Policies and Actions CN1.1, CN1.I, and CN2.A through CN2.E would further reduce the potential for impacts on reduced groundwater recharge, including through the protection of open space.

As noted above, no new groundwater sources are proposed under the proposed General Plan. The General Plan policies and actions referenced above would further reduce the potential for groundwater impacts by preserving open space areas and increasing and enhancing open space and park acreage in the City. This would be a *less-than-significant* impact.

Impact 3.9-3:

Finding: The City Council finds that construction and operation of development under the proposed General Plan could substantially alter drainage patterns that could result in substantial erosion or siltation. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Construction and development under the proposed General Plan would substantially alter drainage patterns by changing the land cover, land slope, drainage pathways, and susceptibility of materials to erosive forces. Clearing, grading, and grubbing construction activities would expose bare soil to wind and water erosion. These disturbed areas would remain susceptible to erosion and sediment transport until stabilized or covered. Development on steep slopes would increase the potential for erosion because bare surfaces on steep slopes are more susceptible to erosion, and cut and fill activities could lead to unstable slopes and enhanced erosion potential. Unless designed correctly and until stabilized, stream restoration and/or creek daylighting projects would remove engineered erosion protection and expose stream beds and banks to erosive forces from stormwater runoff. Increased impervious surfaces associated with development could also increase the rate and amount of stormwater runoff, further exacerbating the potential for creek bed and bank erosion. General Plan Policies and Actions CN1.1, CN1.D, CN1.E, CN2.3, CN2.6, CN3.1, and CN3.A and would reduce the impact on erosion.

Implementation of the referenced General Plan policies and actions would help reduce erosion impacts of the proposed General Plan. These policies call for regulating allowable methods of site preparation, grading, soils repair, foundation design and topographic alteration. They also require the use of BMPs to reduce erosion potential, that creek channel configuration and vegetation can withstand storm flows, that facilities are designed so conveyance capacity is not impeded, and that facilities are monitored, inspected, and maintained to ensure long-term continued function.

These policies would ensure impacts from erosion is *less-than-significant*.

Impact 3.9-4:

Finding: The City Council finds that implementation of the proposed General Plan could alter drainage patterns and cause or contribute to increased runoff and flooding. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Increased impervious surfaces, insufficient flood flow capacity in restored/daylighted creeks, changes in slope, and more efficient routing of stormwater runoff could all increase the rate and amount of stormwater runoff to the storm drain system or local creeks. The capacity of storm drains and creeks in the City is already exceeded in many locations. Increased runoff rate or volume could exacerbate these flood issues or cause or contribute to new areas of flooding and storm drain system capacity exceedance. If the Municipal Regional Stormwater Permit is adopted, it would only limit increased stormwater runoff when discharge is to a drainage feature susceptible to erosion; it would not limit increases in runoff to an engineered system, such as an underground pipe or lined channel. Restored/daylighted streams could also reduce storm flow conveyance because stream channels may be designed to reduce stream velocity to prevent erosion and high flows may have to be routed around restored/daylighted creeks. General Plan Policies and Actions CF1.1, CF1.4, CF1.B, CF1.D, CF1.J, CF2.4, CF2.B, and CF2.C would reduce the impact on runoff and flooding.

Implementation of the referenced General Plan policies and actions reduce impacts associated with flooding and storm drain system capacity constraints. The proposed General Plan policies and actions would ensure that stormwater conveyance capacity constraints are remediated and maintained as development under the General Plan occurs, and that restored/daylighted creeks do not contribute to additional capacity constraints. Impacts on flooding and storm drain system capacities would, therefore, be *less-than-significant*.

Impact 3.9-5:

Finding: The City Council finds that buildout of the proposed General Plan could increase the amount of runoff and pollution in runoff. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Pollutants in stormwater runoff depend upon the type of associated land use and cover conditions. Where the land use type does not greatly change, the type and amount of pollutants in stormwater runoff would not be substantially altered. If development were to substantially increase the amount of runoff, even if the type of land use (and therefore, the type and amount of pollutants in stormwater runoff) were not altered, the total load (or quantity) of pollutants discharged to receiving waters could increase.

Construction activities, such as clearing and grubbing, pavement removal and replacement, excavation and trenching for foundations and utilities, soil compaction, cut and fill activities, and grading, would all temporarily disturb soils. Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport from the site. Erosion and sedimentation affect water quality through interference with photosynthesis, oxygen exchange, and the respiration, growth, and reproduction of aquatic species. Other pollutants, such as nutrients, trace metals, and hydrocarbons, can attach to sediment and be transported with sediment to downstream locations. Sediment-associated pollutants could also cause or contribute to degradation of water quality.

The delivery, handling, and storage of construction materials and wastes, as well as the use of construction equipment, could also introduce a risk for stormwater contamination that could impact water quality. Spills or leaks from heavy equipment and machinery can result in oil and

grease contamination, and some hydrocarbon compound pollution associated with oil and grease can be toxic to aquatic organisms at low concentrations. Staging areas or building sites can be sources of pollution because of the use of paints, solvents, cleaning agents, and metals during construction. Impacts associated with metals in stormwater include toxicity to aquatic organisms, such as bioaccumulation, and the potential contamination of drinking supplies. Pesticide use (including herbicides and fungicides) associated with site preparation work (as opposed to pesticide use for landscaping) is another potential source of stormwater contamination during construction. Pesticide impacts to water quality include toxicity to aquatic species and bioaccumulation in larger species.

Larger pollutants, such as trash, debris, and organic matter, are additional pollutants that could be associated with construction activities. Impacts include health hazards and aquatic ecosystem damage associated with bacteria, viruses, and vectors, and physical changes to the aquatic ecosystem. Construction impacts on water quality are potentially significant and could lead to exceedance of water quality objectives or criteria.

Following construction, the major source of pollution in stormwater runoff would be contaminants that have accumulated on rooftops and other impervious surfaces, such as driveways and pedestrian walkways. These include nutrients, oil and grease, metals, organics, pesticides, gross pollutants (including trash, debris, and bacteria), and, in some cases, chemicals associated with industrial processes.

Nutrients that may be present in post-construction stormwater include nitrogen and phosphorous from fertilizers applied to landscaping, gross debris, and debris from atmospheric deposition of airborne sources. Excess nutrients can impact water quality by promoting excessive and/or rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides can also enter stormwater after application on landscaped areas or overspray on impervious surfaces. Pesticides are toxic to aquatic organisms and can bioaccumulate in larger species, such as birds and fish. Erosion of unprotected surfaces can contribute sediment to runoff and off-site drainage systems. Oil and grease can enter stormwater from vehicle leaks, traffic, and maintenance activities. Metals may enter stormwater as surfaces corrode, decay, or leach. Potential gross pollutants associated with operational activities include clippings associated with landscape maintenance, street litter, and pathogens (bacteria). Pathogens (from sanitary sewer overflows, spills, and leaks from portable toilets, pets, wildlife, and human activities) can affect beneficial uses such as water contact recreation, noncontact water recreation, and shellfish harvesting. Toxic chemicals in soils can also be picked up by stormwater as it passes over or through the contaminated areas.

As discussed in the Draft EIR, for construction activities that would disturb more than one acre of land, contractors would be required to obtain and comply with the State General Construction Activity Stormwater Permit. General Permit applicants are required to prepare and implement a SWPPP and retain it at the construction site. This requirement would reduce potential construction impacts on runoff and pollution in runoff. The Municipal NPDES Permit includes Provision C.3. for new development and redevelopment post-construction stormwater quality BMPs to reduce the potential for pollutants in stormwater runoff. The Industrial General Permit requires preparation and implementation of a SWPPP and monitoring program for all regulated industrial operations. These permits are intended to ensure compliance with state water quality standards and water protection laws and regulations. In addition, General Plan Policies and Actions CN3.1, CN3.2, CN6.1, CN6.A through CN6.C, CF1.1, and CF1.F would further minimize the potential for pollutants in stormwater runoff.

Compliance with existing regulation related to stormwater runoff and implementation of the above Policies and Implementing Actions would reduce impacts related to polluted runoff. Implementation of the regulations, policies, and actions listed above would ensure compliance

with state water quality standards and water protection laws and regulations. Impacts related to runoff and pollution in runoff would be less-than-significant.

Impact 3.9-6:

Finding: The City Council finds that construction and operation of development under the proposed General Plan could contribute to groundwater quality degradation. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: The depth to groundwater within the Bay Plain area can be within one foot below ground surface. Development under the proposed General Plan may result in increased use of recycled water for non-potable water uses, such as landscape irrigation, that could migrate to groundwater. Recycled water typically has a higher salt content than potable water. Sea water intrusion already occurs and limits the depth of potable groundwater resources. Additional salt loads would further reduce groundwater quality. Compliance with the Recycled Water General Permit, including requirements for an Operations Plan and an Irrigation Management Plan, would reduce potential impacts. Additionally, groundwater quality can be affected by spills and leaks of contaminants and construction activities that could expose contaminated soils to rainfall that could wash contaminants out of soils and into groundwater. General Plan Policies and Actions CN1.2, CN1.G, CN1.H, CN3.1, CN3.4, CN3.A, SN1.3, and SN1.G through SN1.K would protect groundwater during construction, reduce use of recycled water for landscape irrigation, reduce potential for contaminants in soil and water, and reduce impacts to groundwater.

Implementation of the regulations, General Plan policies and actions referenced above would protect groundwater during construction, reduce use of recycled water for landscape irrigation, and reduce potential for contaminants in soil and water, thereby reducing impacts on groundwater quality. Implementation of these regulations and policies would ensure impacts related to ground water quality would be *less-than-significant*.

Impact 3.9-7:

Finding: The City Council finds that construction and operation of development under the proposed General Plan could expose people and structures to 100-year flood hazards. This impact is considered *less-than-significant*.

Rationale/Supporting Explanation: Areas within the City are located within 100-year flood hazard areas as identified by FEMA. Development within these areas would expose people, residences, and structures to risks from a 100-year flood event or greater. However, existing floodplain development regulations and General Plan Policies and Actions SN1.2, SN1.D SN3.1, SN3.3, SN3.A, and SN3.B would reduce effects of development within 100-year flood hazard areas to less-than-significant. Furthermore, there are no floodways as delineated in the FEMA June 2009 flood hazard maps. Therefore, there would be no impact on floodways and flood flows.

Implementation of the regulations, policies, and actions listed above would reduce effects of development within 100-year flood hazard areas by requiring installation and maintenance of flood control measures on all creeks and watersheds in coordination with the Flood Control District. Impacts related to exposure of people and structures to 100-year flood hazards would, therefore, be less-than-significant.

Impact 3.9-8:

Finding: The City Council finds that Development within the City could be subject to dam failure inundation and sea level rise flood hazards. With implementation of General Plan Policies and Actions and the following mitigation measures, this impact is considered *less-than-significant*.

- **Mitigation Measures 3.9-8(a):** For all projects within the inundation zone for maximum sea level rise as identified in Map 8.1 of Chapter 8 of the General Plan, the project site shall be graded such that finished floor elevations are 3.5 feet above the Base Flood Elevation (BFE), and streets and pads are 3 feet above BFE to allow for future sea level rise, thereby elevating all structures above the existing and potential future flood hazard area.
- **Mitigation Measure 3.9-8(b):** For all projects with in the inundation zone for maximum sea level rise as identified in Map 8.1 of the General Plan, shoreline and public access improvements shall be designed to allow future increases in elevation along the shoreline edge to keep up with higher sea level rise values, should they occur. Design elements shall include providing adequate setbacks to allow for future elevation increases of at least 3 feet from the existing elevation along the shoreline. Before a Small Lot Final Map is approved, the project Applicant must petition the appropriate governing body to form (or annex into if appropriate) and administer a special assessment district or other funding mechanism to finance and construct future improvements necessary to ensure that the shoreline, public facilities, and public access improvements will be protected should sea level rise exceed 16 inches at the perimeter of the project. Prior to the sale of the first residential unit or lease of the first commercial or industrial space, the legislative body shall have acted upon the petition to include the property within the district boundary. The newly formed district shall also administer a Monitoring and Adaptive Management Plan to monitor sea level and implement and maintain the protective improvements. All improvements shall be subject to approval by the City of Richmond planning and public works staff prior to issuance of building or grading permits. These improvements shall include, but are not limited, one or more of the following:
 - Construction of a shoreline protection system that is initially built to accommodate a mid-term rise in sea level of 16 inches, with a design that is adaptable to meet higher than anticipated values in the mid-term, as well as for the long- term;
 - Construction of a storm drainage system that is initially built to accommodate a mid-term rise in sea levels of 16 inches, with a design that is adaptable to meet higher than anticipated sea level rise values (similar to the first bullet); and
 - Construction of buildings and vital transportation infrastructure at elevations that would not be exceeded by flood waters, even if the shoreline protection does not function, for existing conditions and over a longer-term as compared to the two above.

Rationale/Supporting Explanation: The City is located within the dam failure inundation area of the San Pablo Reservoir dam. Failure of the San Pablo dam would inundate the City west of 23rd Street and between 23rd Street and I-80 from about Macdonald Avenue to between San Pablo Dam Road and Hilltop Drive and along San Pablo Creek, east of I-80. As noted in the Draft EIR, the San Pablo Reservoir dam was structurally unstable. However, EBMUD completed a seismic upgrade consisting of a larger buttress and improvements to the foundation to seismically strengthen the dam. The San Pablo Dam Seismic Upgrade was completed in September 2010 and the reservoir level limits have been returned to their pre-2004 status and the dam and

reservoir are now fully operational.

As noted in the Draft EIR, sea level rise could occur, which could result in coastal flooding at a greater frequency and to a larger extent than currently occurs. These flood risks would also include erosion and destructive forces from wave action. Development of structures and public uses within coastal areas would be subject to greater risks. General Plan Policies Actions SN1.1, SN1.C, SN1.2, SN1.D, SN1.E, SN3.1, SN3.A through SN3.E, CF2.4, CF2.D, CF1.1, and CF1.F would reduce the impact of dam failure inundation are identified below and would reduce potential flood hazards to less-than-significant. General Plan Policies and Actions that would reduce the impact of sea level rise inundation to less-than-significant include EC6.2, EC6.A, EC6.3, CF2.4, CF2.D, CN3.3, CN3.D, SN1.2, and SN1.D.

Implementation of the referenced General Plan policies and actions require special design features to prevent damage from flooding for all new development located within the areas subject to flood hazard and coordination with East Bay Municipal Utility District regarding flood potential and EBMUD's Emergency Action Plan. The policies also include management of low-lying areas that are likely to be affected by sea level rise and storm surges and encourage development patterns, infrastructure, and flood management practices to adapt to potential climate change impacts. Impacts related to exposure of people and structures to flood hazards from dam inundation and sea level rise would be *less-than-significant*.

Impact 3.9-9:

Finding: The City Council finds the proposed General Plan would require infrastructure improvements to accommodate increased stormwater runoff and drainage needs, the construction of which could result in physical impacts. With the implementation of standard construction measures and Best Management Practices, this impact is considered *less-than-significant*.

Rationale/Supporting Explanation: New storm drains to serve new and existing development would be constructed under the proposed General Plan. Construction of the new storm drain systems would be subject to the same regulatory requirements and proposed General Plan policies and actions as referenced under Impacts 3.9-1, 3.9-3, 3.9-4, and 3.9-5. This would ensure that adequate drainage would be provided for new development under the General Plan and that the design would incorporate BMPs and ensure a *less-than-significant* impact related to stormwater runoff and drainage infrastructure.

NOISE

Impact 3.10-1:

Finding: The City Council finds that the construction activities associated with the future land use changes under the proposed General Plan would continue exposure to urbanized noise sources.. Implementation of noise limits in the City of Richmond Municipal Code would limit the exposure of sensitive receptors to temporary or periodic increases in noise levels. With the implementation of General Plan policies and the following revised Mitigation Measure 3.10-1, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a *less-than-significant* level.

- **Mitigation Measure 3.10-1:** Future projects shall incorporate project-specific mitigation measures to reduce the impact of construction noise.

(a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise and vibration construction activity minimization and

mitigation plan for any multi-story development project located within a residential neighborhood, or located adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address high-noise or vibration construction activities such as pile-driving, and must address outdoor construction activities occurring outside normal weekday business hours. The plan must also address construction-related noise and vibration from current and concurrently with project-related construction activities to address potential cumulative noise and vibration impacts. Excessive noise and vibration impacts from such construction-related activities (defined as noise and vibration impacts that would not occur from similar construction-related activities) shall be avoided or minimized to the extent feasible, and high-noise or vibration construction activities shall not occur during evenings or weekends adjacent to occupied residential units.

(b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating noise and vibration impacts from construction activities, for use as appropriate in noise and vibration plans required under Mitigation Measure 3.10-2(a) above.

(c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for construction-related noise and vibration impacts during daytime weekday hours, and will consider and include feasible conditions in building, demolition and grading permits to avoid or minimize excessive noise and vibration from construction activities.

(d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal Code.

Rationale/Supporting Explanation: The City of Richmond is an established, urbanized area in which periodic exposure to construction-related noise and vibration effects are existing conditions, as are exposures to both ongoing and periodic operational urbanized noise sources such as regional highways, industrialized and Port activities, emergency services, school, athletic events, and other urban uses. Implementation of the proposed General Plan would potentially increase the level of intensity of land uses within the City and result in additional construction activities that may exceed noise levels established in the City's Municipal Code. Development of future projects under the proposed General Plan would require the use of heavy equipment for demolition, site excavation, installation of utilities, site grading, paving, and building fabrication. Construction activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary based on the amount of equipment in operation and the location of the activity.

The EPA has compiled data regarding the noise-generating characteristics of specific types of construction equipment and typical construction activities. These data are presented in Draft EIR Tables 3.10-11 and 3.10-12. These noise levels would diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance for construction equipment, as identified by the EPA.

Noise that would be experienced by sensitive uses due to construction activities associated with implementation of the proposed General Plan is determined at the property lines. The nearest sensitive uses would vary at different locations in and around the City. Specific development plans have not yet been determined at individual sites; however, there is the potential that future construction activities could occur within 50 feet of sensitive receptors. Sensitive receptors within the vicinity of individual development projects would potentially experience noise levels up to 98 dBA Leq as a result of routine construction activities and up to 107 dBA Leq if pile driving

activities were required.

Measures to reduce construction-related noise and vibration are included in both the General Plan and EIR. Additionally, the Municipal Code includes a Noise Ordinance that allows construction activity noise during designated times and days, and also includes noise limits that are exceeded by existing and reasonably foreseeable future construction activities. The City of Richmond Municipal Code Section 9.52.110 allows for noise resulting from construction activities if they are conducted at certain times during the day and on certain days (see Draft EIR Tables 3.10-8 and 3.10-9). However, the potential exposure as a result of construction activities could still exceed the highest noise standard (80 dBA for multi-family residential) allowed by R.M.C. Section 9.52.110 by up to 18 dBA (or 27 dBA if pile driving activities occur for brief intervals). To reduce the potential impacts of construction noise on nearby sensitive receptors, the proposed General Plan includes the following policies and actions: SN4.1, SN4.B, SN4.C, and SN4.E.

With the implementation of General Plan Policies and Actions SN4.1, SN4.B, SN4.C, and SN4.E, which emphasize the need to mitigate construction noise on a site-specific and project-specific basis, the temporary or periodic increase in ambient noise levels would be limited and the impact on sensitive receptors minimized. However, as discussed under the “Thresholds of Significance” section of the Draft EIR, the Draft EIR assumes that an increase of 5.0 dBA or greater over ambient noise levels is substantial and significant. As shown in Draft EIR Table 3.10-3, the highest existing daytime ambient noise level monitored in the City was 70.3 dBA Leq at 23rd Street and Bush Avenue. With additional mitigation requirements included in revised Mitigation Measure 3.10-1, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a *less-than-significant* level. Any project for which noise or vibration impacts is not reduced to a *less-than-significant* level requires appropriate environmental review and further feasible project-level mitigation. Finally, implementation of the General Plan does not authorize any construction activities, and implementation of the General Plan will not, itself, cause a significant adverse noise or vibration construction impact.

Impact 3.10-2:

Finding: The City Council finds that the construction of future new land uses under the proposed General Plan would continue to generate or expose persons or structures to temporary groundborne vibration. With the implementation of General Plan policies and the following revised Mitigation Measure 3.10-2, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a *less-than-significant* level.

- **Mitigation Measure 3.10-2:** Future projects shall incorporate project-specific mitigation measures to reduce the impact of construction-related groundborne vibration.

(a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise and vibration construction activity minimization and mitigation plan for any multi-story development project located within a residential neighborhood, or located adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address high-noise or vibration construction activities such as pile-driving, and must address outdoor construction activities occurring outside normal weekday business hours. The plan must also address construction-related noise and vibration from current and concurrently with project-related construction activities to address potential cumulative noise and vibration impacts. Excessive noise and vibration impacts from such construction-related activities (defined as noise and vibration impacts that would not occur from similar construction-related activities) shall be avoided or minimized to the extent feasible, and high-noise or vibration construction activities shall not occur during evenings or weekends adjacent to occupied residential units.

(b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating noise and vibration impacts from construction activities, for use as appropriate in noise and vibration plans required under Mitigation Measure 3.10-2(a) above.

(c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for construction-related noise and vibration impacts during daytime weekday hours, and will consider and include feasible conditions in building, demolition and grading permits to avoid or minimize excessive noise and vibration from construction activities.

(d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal Code.

Rationale/Supporting Explanation: Construction-related vibration has two potential effects. First, vibration at high enough levels can result in human annoyance. Second, groundborne vibration can potentially damage the foundations and exteriors of older and potentially historic structures. Groundborne vibration that can cause this kind of damage is typically limited to impact equipment, such as pile drivers. Construction activities that would occur under the proposed project have the potential to generate low levels of groundborne vibration. Draft EIR Table 3.10-13 (Vibration Source Levels for Construction Equipment) identifies various vibration velocity levels for the types of construction equipment that would operate within the City during construction.

Groundborne vibration would attenuate at a rate of approximately 6 VdB per doubling of distance. The groundborne vibration generated during construction activities would primarily impact existing sensitive uses that are located adjacent to or within the vicinity of specific projects. These sensitive uses could sometimes be located within 50 feet of the construction site or as far as several hundred feet away. Based on the information presented in Draft EIR Table 3.10-13, vibration levels could reach up to 87 VdB for typical construction activities and up to 104 VdB if pile driving activities were to occur. For sensitive uses that are located within 25 feet of potential project construction sites, sensitive receptors at these locations may experience vibration levels during construction activities that exceed the FTA's vibration impact threshold of 85 VdB for human annoyance. If construction occurs more than 50 feet from sensitive receptors, the impact associated with groundborne vibration generated by the typical construction equipment would be below 85 VdB and thus would be less-than-significant. However, as development projects, equipment types, and construction schedules under the proposed General Plan are unknown at this time, and the proposed General Plan includes no policies or actions to prevent impacts from groundborne vibration, it is possible that construction activities could occur as close as 25 feet from sensitive receptors or pile driving activities could occur. This would result in these sensitive receptors experiencing vibration levels beyond the 85 VdB threshold for human annoyance. While there will be an increase in ambient noise and vibration levels from these construction activities, any measurable or discernible increase in construction-related ambient noise or vibration levels is not inherently significant for CEQA purposes. Measures to reduce construction-related noise and vibration are included in both the General Plan and Final EIR. Additionally, the Municipal Code includes a Noise Ordinance that allows construction activity noise during designated times and days, and also includes noise limits that are exceeded by existing and reasonably foreseeable future construction activities. In addition to the General Plan Noise Element, the Final EIR, and the Noise Ordinance included in the Municipal Code, revised Mitigation Measure 3.10-2 further mitigates and minimizes potentially significant future adverse noise and vibration impacts from construction activities. As a result of the additional mitigation requirements implemented through revised Mitigation Measure 3.10-2, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a *less-than-significant* level. Any project for

which noise or vibration impacts is not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Finally, implementation of the General Plan does not authorize any construction activities, and implementation of the General Plan will not, itself, cause a significant adverse noise or vibration construction impact.

Impact 3.10-3:

Finding: The City Council finds that Richmond is an urbanized area and General Plan implementation will result in increases to ambient noise levels including potential increases in excess of noise standards included in the City's existing Noise Ordinance. As a result of additional mitigation requirements implemented through new Mitigation Measure 3.10-3(b), operational noise impacts at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level. In addition, the City finds and determines that mitigating impacts from rail and roadway operations is within the jurisdiction and responsibility of other agencies, including Caltrans, the Public Utilities Commission, and the Federal Railroad Administration. These agencies can and should implement mitigation measures to further reduce noise levels associated with highway and railway operations to a *less-than-significant* level.

Mitigation Measure 3.10-3:

(a) Future projects shall incorporate project-specific mitigation measures and maintain Quiet Zones to reduce the impact of train noise.

(b) Future commercial and industrial projects shall incorporate project-specific mitigation measures to reduce operational noise levels for higher-noise sources such as commercial HVAC systems, generators, pumps and manufacturing activities.

a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise minimization plan for any commercial or industrial project located within a residential neighborhood, or located adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address operational noise generating activities such as HVAC systems, generators and pumps. Excessive noise from such sources shall be avoided or minimized to the extent feasible.

b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating operational noise from commercial and industrial projects, for use as appropriate in the noise minimization plan required under Mitigation Measure 3.10-3(b)(a) above.

c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for urbanized ambient noise standards, and will consider and include feasible conditions in building and use permits to avoid or minimize excessive operational noise from commercial and industrial activities.

d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal Code.

Rationale/Supporting Explanation: Due to the existing traditional development pattern of the City, residential, commercial, and industrial uses are located relatively close to one another and, in some instances, two or more of these uses co-exist on the same site. The proposed General Plan would allow increased density and/or mixed uses in specific areas. In general, the most significant land use changes would occur within the 16 proposed change areas described in the

General Plan Land Use and Urban Design Element.

Operational sources of noise generated by implementation of the proposed General Plan would include new stationary sources, such as rooftop HVAC systems for office, commercial, and mixed-use development. Large HVAC systems associated with development can result in noise levels that average between 50 and 65 dBA Leq at 50 feet from the equipment. As 24-hour CNEL noise levels are about 6.7 dBA greater than 24-hour Leq measurements, this means that the HVAC equipment associated with the retail-commercial buildings could generate community noise levels that average between 57 to 72 dBA CNEL at 50 feet when the equipment is operating constantly over 24 hours. General Plan Policies and Actions SN4.1, SN4.2, SN4.A, SN4.B, and SN4.C, would require design considerations and measures to be incorporated into new development that would restrict operational noise levels associated with stationary equipment to ensure that existing noise levels would be maintained.

Implementation of the proposed General Plan could also involve an increase in the delivery of goods to commercial, retail, and industrial developments. Two noise sources would be associated with delivery operations: the noise of the diesel engines of the delivery trucks and the backup beeper alarm that sounds when a truck is put in reverse, as is required and regulated by Cal-OSHA. The noise generated by idling diesel engines typically ranges between 64 and 66 dBA Leq at 75 feet. This noise would be temporary in nature, typically lasting no more than five minutes. Backup beepers, intended to warn persons who are behind the vehicle when it is backing up, are required by Cal-OSHA to be at least 5 dBA above ambient noise levels. These devices are highly directional in nature, and, when in reverse, the trucks and the beeper alarm would be directed towards the loading area and adjacent commercial structures.

As a result of additional mitigation requirements implemented through new Mitigation Measure 3.10-3(b), operational noise impacts at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level. Any project for which noise or vibration impacts is not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Finally, implementation of the General Plan does not authorize any construction activities, and implementation of the General Plan will not, itself, cause a significant adverse noise or vibration construction impact.

With respect to potential impacts from rail operations, under the proposed General Plan, additional sensitive uses (primarily residential structures) could be located in close proximity to the existing rail lines discussed in the Draft EIR. Typical commuter train noise produces a noise level of 80 dBA at 50 feet from the tracks, while a stopped commuter train would produce a noise level of 65 dBA. Per the Federal Railway Administration, noise levels associated with trains are anticipated to attenuate/reduce at a rate of 4.5 dBA for each doubling of distance. As such, noise-sensitive uses, such as residential structures, in the vicinity of rail operations would likely experience noise levels ranging from 60.5 to 75.5 dBA due to the physical movement and idling of commuter trains along the existing rail lines.

In addition to movement and idling noise levels, trains are required to use horns at any at-grade crossing for safety reasons. Depending on the type of horn used, noise levels could reach 110 dBA at a distance of 100 feet. Under the proposed General Plan, sensitive uses could be located within areas that may experience excessive noise levels due to train horns. Under new construction practices, noise levels inside structures, such as residential buildings, can be expected to be 30 dBA less than exterior noise levels. As such, the instantaneous interior noise levels attributable to residential units located within 100 feet of an existing rail line would be reduced to approximately 80 dBA when a train horn blows. This noise level would be in excess of City noise standards as established in the Municipal Code by approximately 15 dBA for instantaneous noise. However, General Plan Action SN4.D is included as part of the proposed General Plan to address the potential impact of train horns.

The study of quiet zones would not, in and of itself, reduce potential noise impacts. General Plan Policies and Actions SN4.1 through SN4.3, and SN4.A through SN4.C would reduce potential impacts with respect to rail operations. Nonetheless, the potential for rail horns to affect nearby sensitive receptors, especially along Grant Boulevard and Carlson Boulevard, would still exist, even with implementation of the proposed General Plan policies and actions. As stated previously, the proposed General Plan contains General Plan Policy SN4.1, the intent of which is to reduce or mitigate objectionable noise sources and require new noise sources to comply with noise standards. This policy would encourage developers to protect and preserve any existing neighborhoods and the sensitive residential uses contained within from traffic noise, and encroachment activities associated with future new land uses allowed under the proposed General Plan. However, mitigating these impacts from rail and roadway operations lies within the jurisdiction and responsibility of other agencies, including Caltrans, the Public Utilities Commission, and the Federal Railroad Administration. These agencies can and should implement mitigation measures to further reduce noise levels associated with highway and railway operations, such as using roadbed and rail materials that dampen or otherwise reduce noise levels, developing and implementing safety measures with lower noise levels than existing equipment such as rail whistles and crossing alarms, and working with manufacturers and operators of rail and vehicular equipment to reduce operational equipment noise levels to a *less-than-significant* level.

Impact 3.10-4:

Finding: The City Council finds that the operation of new land uses under the proposed General Plan would not generate and expose sensitive receptors on- or off-site to excessive groundborne vibration or groundborne noise levels. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: During the life of the proposed General Plan, background operational vibration levels would be expected to average approximately 50 VdB throughout the majority of the City and especially within the residential neighborhoods, as discussed in the Draft EIR. This is substantially less than the applicable 85 VdB threshold. Groundborne vibration resulting during the life of the proposed General Plan would primarily be generated by trucks making periodic deliveries to and from uses within City limits. However, these types of deliveries would be consistent with deliveries that are currently made along roadways to commercial uses within the City currently and would not be expected increase groundborne vibration substantially above existing levels. In addition, because potential operational vibration would be attributed to primarily commercial and industrial uses, General Plan Policies and Action SN4.1, SN4.2, SN4.3, and SN4.A through SN4.C would further ensure that nearby sensitive receptors would not be exposed to excessive groundborne vibration or noise.

Therefore, with inclusion of the proposed General Plan policies, operation of the proposed project would not expose sensitive receptors on or off site to excessive groundborne vibration or groundborne noise levels, and this impact would be *less-than-significant*.

Impact 3.10-5:

Finding: The City Council finds that operation of new land uses under the proposed General Plan would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in the project vicinity. However, operational noise impacts at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level with implementation of General Plan policies and the following mitigation measure, as well as with implementation of mitigation measures within the jurisdiction and responsibility of other agencies, including Caltrans.

- **Mitigation Measures 3.10-5:** Future projects shall incorporate project-specific mitigation measures to promote non-motorized transportation to reduce the impact of traffic noise.

Rationale/Supporting Explanation: Future noise levels within the City would continue to be dominated by vehicular traffic on the adjacent roadways. Other sources of noise would include new stationary sources (such as rooftop HVAC equipment) and increased human activity throughout the City.

Locations in the vicinity of the individual projects within the City could experience slight changes in noise levels as a result of an increase in the on-site population and intensification of land use densities and a concentration of vehicle trips in the immediate vicinity of a project site that could occur due to the potential new land uses allowed under the proposed General Plan. Existing traffic noise levels are identified in Draft EIR Table 3.10-4. Noise levels associated with traffic generated from existing conditions within the City are calculated at the selected locations along the study-area roadway segments using traffic data from the traffic study (included in Appendix E of the Draft EIR). As stated in the “Thresholds of Significance” section of the Draft EIR, where ambient noise levels are 60 dBA CNEL or less, a 5.0 dBA CNEL increase would be considered a substantial increase; where ambient noise levels are between 60 dBA and 65 dBA CNEL, an increase of 3 dBA would be considered a substantial increase; and if ambient noise levels are 65 dBA CNEL or greater, an increase of 1.5 dBA would be considered a substantial increase. Draft EIR Table 3.10-14 (Future Roadway Noise Levels Compared to Ambient Future Noise Levels) presents the average daily noise levels associated with these roadways under the proposed project and compares them to future without development of the proposed General Plan. Draft EIR Figure 3.10-4 depicts the future noise levels under the proposed General Plan with cumulative regional vehicle traffic.

As shown in Draft EIR Table 3.10-14, six roadway segments are expected to experience a significant increase over existing conditions with the addition of future traffic volumes due to implementation of the proposed General Plan and regional growth. The increases along these six segments would constitute a substantial permanent increase in ambient noise levels due to implementation of the proposed General Plan. General Plan Policies and Actions SN4.1, SN4.2, SN4.3, SN4.B, and SN4.C would serve to reduce associated noise levels at nearby sensitive receptors.

Exterior noise levels in existing and proposed noise-sensitive areas can be remediated by relocating roadways, building sound walls, providing buffer zones, retrofitting older homes with insulation or applying appropriate window treatments (i.e., double-paned windows, interior storm windows, etc.) or choosing development sites in quiet areas. For new development, it is anticipated that many City standards could be met and substantial noise increases could be avoided by incorporating some of the strategies listed above. However, it would not be possible to guarantee success in all cases because funding may not be available for sound wall construction, land may not be available for buffer zones, or it may be cost prohibitive to relocate existing roadways. While project-specific measures, as required through Mitigation Measure 3.10-5, could reduce noise effects from transportation noise at new development, it may not be possible or feasible to include noise reduction strategies to address an increase in noise levels for existing residences located in areas adjacent to roadways or other noise generating sources. The City finds that mitigating impacts from roadway operations is within the jurisdiction and responsibility of other agencies, including Caltrans. These agencies can and should implement mitigation measures (i.e., using roadbed materials that dampen or otherwise reduce noise levels) to further reduce noise levels associated with highway operations to a *less-than-significant* level.

PARKS AND RECREATION

Impact 3.11-1:

Finding: The City Council finds that implementation of the proposed General Plan would increase the use of existing neighborhood and regional parks or other recreational facilities but would not substantially accelerate or result in substantial physical deterioration of the facilities. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: An increase in population resulting from implementation of the proposed General Plan would place a greater demand on existing neighborhood and regional parks or other recreational facilities such that deterioration of these facilities could be accelerated. Chapter 15.08.400 of the City of Richmond Municipal Code establishes a standard of three acres of property for each 1,000 residents residing within the City to be devoted to local park and recreational purposes. The City has a total local parklands inventory of 251 acres, not including joint-use facilities acreage. Regional park acreage and any other jurisdiction's facility acreage are not included in this inventory. The City currently maintains a local parkland to population ratio of 2.44 acres per 1,000 residents (251 acres of parkland and 102,700 residents), which is below the City's standard of 3 acres of local parkland per 1,000 residents. Implementation of the proposed General Plan would result in a direct population increase of 30,147 residents, resulting in a resident population in Richmond of 132,847 in 2030. As stated above, the parkland ratio for City-owned parkland is below the City's standard of 3 acres of local parkland per 1,000 residents. However, this standard does not take into account the 4,029 acres of regional and state parks located in the City, which supplements local parks and recreational facilities for Richmond residents. The proposed General Plan includes a conceptual system of parks, but does not include plans for specific park development. The proposed General Plan would, however, allow for future development resulting in direct and indirect population growth and creating a need for parklands in the City. Assuming an additional population of 30,147, the proposed General Plan would create a demand for 90.4 acres of parkland at 3 acres per 1,000 residents. In order to mitigate impacts created by additional demands on existing park and recreation services due to the increase in new residential development in the City, the City imposes a development impact fees to fund parks and recreation, as permitted by Chapter 15.08.400 of the City of Richmond Municipal Code. As a condition of approval of a final map or parcel map, the developer is required to either dedicate land or pay a fee for park or recreational purposes. The amount of land to be provided is determined pursuant to Formula 15.08.400(4)(a) of the Municipal Code, or developers may pay an in-lieu of fee equal to the value of the land prescribed. Payment of an in-lieu of fee or dedication of land to be used for recreation purposes would ensure that new development in the City would provide adequate park facilities. The physical impacts of the construction of new parks within the City are assumed as part of the proposed General Plan and analyzed in the technical sections of the Draft EIR at a program level. General Plan Policies and Actions PR1.3, PR1.4, PR1.A through PR1.C, PR1.F, and PR1.G would further reduce the potential for impacts on parks and recreation facilities.

General Plan Policy PR1.3 maintains the parkland development standard of three acres of community or neighborhood parkland per 1,000 residents in each neighborhood planning area, and encourages the development of compact parks, play lots and plazas in order to increase access to recreation opportunities for residents. General Plan Policy PR1.4 promotes shared access to non-city operated parks and recreational facilities, and pursuing additional joint-use opportunities. Additionally, General Plan Action PR1.F, which supports Policy PR1.4, pursues joint-use agreements with WCCUSD, EBRPD, neighboring cities, public agencies or nonprofit organizations to maximize use of existing facilities in the community, would increase the City's parkland inventory while sharing various costs.

General Plan Actions PR1.B, and PR1.C allow for the preparation of a Parks Master Plan, as well as several other planning documents that would identify the recreation needs of the City and facilitate the development of additional parks. Implementation of General Plan Action PR1.G calls for an update of the parkland dedication ordinance to require new development and redevelopment projects to pay a fair share to cover cost of parkland acquisition and improvement if adequate parkland within the project is not provided. This action also prioritizes park dedication over impact fees, and describes a provision to prevent a net loss of parklands in the City by requiring at 1 for 1 replacement if there is any loss of public open space and parkland due to redevelopment. Implementation of these policies and actions would ensure the continued collection of fees and dedication of land in order to develop additional parks and facilities throughout the City to serve the needs of the residents.

Because the parks that serve the City of Richmond, including regional parks, far exceed the City's per-resident parkland standard, the City would be adequately served in the future. In addition, the implementation of the goals and policies in the proposed General Plan, as well as the dedication of land or payment of an in-lieu fee for future residential subdivisions, would further reduce the effect from increased demand and use resulting from an increase in citywide population. Therefore, the proposed General Plan would not significantly accelerate the deterioration of existing recreational facilities. This impact would be less-than-significant.

Impact 3.11-2:

Finding: The City Council finds that implementation of the proposed General Plan would not create a demand for the construction or expansion of park facilities beyond that anticipated in the General Plan. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would result in a direct population increase of 30,147 residents by 2030 over the 2005 population of 102,700, resulting in a resident population in Richmond of 132,847 in 2030. The City currently maintains a parkland-to-population ratio of 2.44 acres per 1,000 residents for local parks, which is below the City's standard, and represents a deficit of approximately 57.1 acres of parkland.

Provisions of the proposed General Plan would ensure that future residential growth in the City would provide a minimum of 3 acres of parkland per 1,000 residents, so that future park facilities would be provided commensurate with local growth in Richmond. Specifically, as explained under Impact 3.11-1, all future private developers proposing residential subdivisions within the City would be required to either dedicate land for park facilities or pay a fee in lieu of providing parkland. The current park and recreation dedication and fees are collected by the City as part of the development review process and used only for the purpose of developing new park facilities to serve the development for which the fees were paid. Policies and implementation actions contained in the proposed General Plan would also reduce impacts on recreational facilities by outlining the ways in which the City would acquire the funds and the land to increase the City's parkland inventory in order to better serve the community.

The policies set forth in the General Plan are designed to ensure that future development in the City would not create a need for recreation facilities beyond that anticipated in the General Plan. The physical effects of providing the required park acreage, such as construction emissions and effects on biological resources, are considered in the other technical sections of the Draft EIR. This impact is less-than-significant.

PUBLIC SERVICES

Impact 3.12-1:

Finding: The City Council finds that the implementation of the proposed General Plan would increase the demand for fire protection and emergency services and/or create a demand for additional fire stations, department personnel, and/or equipment, but would not reduce the level of protection. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: As discussed in the Land Use and Urban Design Element of the proposed General Plan, the change areas can be characterized as urban and would not substantially alter the interface between development and undeveloped areas such that the increase for wildland fire would increase. However, significant changes in land use and development character are proposed as part of the proposed General Plan within the targeted change areas. The proposed General Plan would increase the population and development intensity in the change areas. However, an increase in population, by itself, would not increase demand for fire protection services. The demand for fire stations and firefighting services vary more as a function of the geographic distribution of development than of population increases. Thus, the Richmond Fire Department's (RFD) service goals are based on accepted service levels of distance and time, rather than firefighters or stations per capita. As stated in the Draft EIR, the RFD is currently operating at acceptable levels of fire protection services of five minutes. In light of this service standard, it is more relevant to examine the location of the change areas relative to existing fire stations than to consider the additional personnel needed to support the projected population increase in the City by 2030.

The proposed General Plan would increase the intensity of development in the change areas, but these areas are already currently served by fire protection services. As a result, new development under the proposed General Plan would not cause the RFD to travel farther or require additional time to reach the new development; the new development within the change areas would occur as infill. To further reduce the impact of new development on the existing RFD facilities, equipment, and personnel, the City requires that the proposed structures, access, and water supply meet the California State Fire Code and City building requirements. In addition, project developers would be required to pay development impact fees as established by City ordinance. The City of Richmond would mitigate impacts on the existing RFD facilities, equipment, and personnel by imposing development impact fees to fund public facilities, including fire facilities. General Plan Policies and Actions SN1.B, SN2.2, SN2.3, SN2.C, SN2.D, SN2.F, SN2.G, and SN3.1 would further reduce potential impacts on fire protection services.

The policies contained in the proposed General Plan require that adequate infrastructure be provided as new development occurs. For example, compliance with General Plan Policy SN2.2 would ensure that growth and development would be coordinated with the provision of adequate infrastructure. Thus, fire staffing and facilities would be expanded commensurately to serve the needs of new development to maintain the current response time. General Plan Action SN2.B would evaluate the response times for fire and emergency medical calls annually to gauge the need for additional facilities, equipment, and personnel, and identify specific geographic areas of the City that may not be adequately served.

Additionally, new development would be required to comply with state and local regulations governing the provision of fire protection services, including adequate fire access, fire flows, and number of hydrants. The City of Richmond has adopted the 2010 California Fire Code with City amendments and some exceptions. These provisions include construction standards in new structures and remodels, road widths and configurations designed to accommodate the passage of fire trucks and engines, and requirements for minimum fire flow rates for water mains. Finally, if new facilities would need to be constructed to accommodate increased demand on fire protection

services, further environmental review would be required as specific facilities are proposed. In addition, all significant new development would be subject to the City's environmental review process, which includes project-specific assessment of fire protection services. Compliance with applicable regulations and policies contained in the proposed General Plan would ensure impacts on fire services remain *less-than-significant*.

Impact 3.12-2:

Finding: The City Council finds that the implementation of the proposed General Plan would increase the demand for police protection services and create a demand for additional police stations, department personnel, and/or equipment, but would not reduce the level of protection. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: Currently, there are 1.6 sworn officers per every 1,000 City residents, and the Richmond Police Department (RPD) currently maintains an acceptable level of service. Projected growth under the proposed General Plan would result in an additional 30,147 residents by 2030. Based on current personnel-per-capita ratios, this population growth would require 48 additional sworn officers. The proposed General Plan would increase the intensity of development in the change areas, but these areas are already currently served by police protection services and thus would not result in an increase in response times for various calls for service.

The RPD's ability to support the needs of future growth is dependent upon its ability to hire and train police personnel and to redefine district and patrol beats to maintain a manageable call load. General Plan Policies and Actions SN2.1, SN2.2, SN2.A, SN2.B, SN2.C, and SN3.1 would further reduce the potential for impact on police protection services.

Policies and actions in the proposed General Plan require that adequate infrastructure be provided as new development occurs. Compliance with General Plan Policy SN2.2 would ensure that growth and development would be coordinated with the provision of adequate service and equipment. Thus, police staffing and facilities would be expanded commensurately to serve the needs of new development to maintain acceptable response times. General Plan Action SN2.B would evaluate the response times for police annually to gauge the need for additional facilities, equipment and personnel, and identify specific geographic areas of the City that may not be adequately served. In addition, all significant new development would be subject to the City's environmental review process, which includes project-specific assessment of police services. Compliance with applicable regulations and policies contained in the proposed General Plan would ensure impacts on police services remain *less-than-significant*.

Impact 3.12-3:

Finding: The City Council finds that the implementation of the proposed General Plan could generate additional students, but the demand for new school facilities would be fully mitigated with required payment of school fees. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: The proposed General Plan could add as many as 15,548 housing units in the City by 2030. Using WCCUSD student generation factors shown in Draft EIR Table 3.12-4, the proposed General Plan could result in a student population increase of approximately 10,448 students by 2030.

Impacts due to increases in school enrollment would be reduced through the payment of school impact fees, required for all new development. These fees would be based on the use and size of a project. Additionally, the proposed General Plan policies and actions that require adequate school infrastructure be provided as new development occurs, which would further reduce the

potential for impact on school facilities. In particular, compliance with General Plan Policy CF1.4 would require new development to provide school facilities and infrastructure improvements as the new development occurs. Thus, school staffing and facilities would be expanded to serve the needs of new development to maintain adequate service levels.

As school fees are collected from residential, commercial, and industrial uses, developers are required to fund necessary school service and facility improvements to accommodate anticipated population and student enrollment. If new facilities need to be constructed to accommodate increased student enrollment, further environmental review would be required as project-specific plans are developed. In addition, all significant new development would be subject to the City's environmental review process, which includes project-specific assessment of student growth and impacts on schools. This environmental review, combined with developer fees and applicable policies and actions in the proposed General Plan, would ensure impacts on schools remain *less-than-significant*.

Impact 3.12-4:

Finding: The City Council finds that the implementation of the proposed General Plan would create an additional demand for library services, but would not result in a substantial adverse environmental impact associated with the provision of new or physically altered libraries or the need for new or physically altered libraries. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: The City of Richmond currently has no standard for library services. Increased development in the City does not necessarily equate to an increase in need for total volumes or square feet of library space. General Plan Policies and Actions CF1.1, CF4.2, EH1.A, EH3.7 would reduce potential impacts on library services.

Compliance with the above policies and implementation actions in the proposed General Plan would assure library needs would be addressed and plans to improve existing facilities would be undertaken. The City of Richmond mitigates impacts on existing library services from new residential and commercial structures in the City by imposing library impact fees to fund library facilities. As such, impacts associated with library services would be *less-than-significant*.

PUBLIC UTILITIES

Impact 3.13-1:

Finding: The City Council finds that implementation of the proposed General Plan would not require or result in the construction and/or expansion of water supply facilities, the construction of which could cause significant environmental impacts, or require water supplies in excess of existing entitlements. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: As discussed in the Draft EIR, the City of Richmond's water supply is provided by EBMUD. More than 90 percent of the water delivered to EBMUD's customers originates from the Mokelumne River watershed, and approximately 10 percent originates as runoff from the protected watershed lands in the East Bay Area. EBMUD has six water treatment plants that can filter and process more than 375 million gallons of water daily.

Additional development accommodated under the proposed General Plan would increase water use within the City, thus increasing the need for water treatment services. The 2040 Demand Study takes into account the growth in water demand in the City of Richmond as well as the other areas served by EBMUD. Existing water supply, combined with the three projects currently under construction or in the feasibility phase, would be substantially augmented, as the FRWP would increase EBMUD supplies during drought years by 100 mgd; the Bayside Groundwater project

would store an annual average of 1 mgd during its initial phase; and the Bay Area Regional Desalination Project would provide a total capacity of 71 mgd.

As noted above, EBMUD compared the proposed General Plan with the 2040 Demand Study's land use database and the projected General Plan land use matched very closely, and determined that the EBMUD 2040 Demand Study is a good predictor of water demands in the City of Richmond. Therefore, from a cumulative perspective, the WSMP 2040 would meet citywide demand in Richmond. Specific project assessments pursuant to SB 221 and SB 610 would provide further review of the long-term adequacy of the water supply to meet the needs of individual projects as they are submitted for consideration by the City. General Plan Policies and Actions CF1.4, CN3.4, CN3.B, CN3.H, PR3.D, and EC3.4 would further reduce the potential for impacts on water supply.

The proposed General Plan Update policies and implementing actions direct the City to implement water conservation measures to assist in water conservation efforts to meet the current and projected future daily and peak water demands. For example, Policy CN3.4 promotes and encourages residents, businesses, and industry to conserve water, especially during drought years. The proposed General Plan Update Policy CF1.4 requires new development to provide proportionate facilities and infrastructure improvements as the new development occurs, including water treatment and conveyance facilities. In addition, EBMUD's WSMP 2040 policies and programs are designed to provide sufficient water supplies to serve future development out to 2040, including development associated with the proposed General Plan, so the proposed General Plan would not require new or expanded water entitlements. Lastly, EBMUD would provide verification of adequate water supply for subsequent projects as they are proposed. As such, adequate water supply and infrastructure would be provided for all development under the proposed General Plan Update. These impacts would be less-than-significant.

Impact 3.13-2:

Finding: The City Council finds that implementation of the proposed General Plan would not exceed wastewater treatment requirements of the Regional Water Quality Control Board. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: The City of Richmond requires NPDES permits, as administered by the SFBRWQCB, according to Federal regulations for both point source discharges (a municipal or industrial discharge at a specific location or pipe) and nonpoint source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the United States. For point source discharges, such as sewer outfalls, each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. The wastewater Districts that serve the City of Richmond would be required to comply with all requirements in the NPDES permit to ensure that any discharges would not exceed wastewater treatment requirements of the Regional Water Quality Control Board. In addition, General Plan Action CN3.A would further reduce the potential for impact related to wastewater discharges.

Wastewater from new development under the proposed General Plan would be directed to existing facilities, which would continue to comply with all provisions of the NPDES program, as enforced by the SFBRWQCB. Therefore, the proposed General Plan would not result in an exceedance of wastewater treatment requirements. All future projects under the proposed General Plan would be required to comply with all applicable wastewater discharge requirements issued by the State Water Resources Control Board (SWRCB) and SFBRWQCB. Therefore, implementation of the proposed General Plan would not exceed applicable wastewater treatment requirements of the SFBRWQCB with respect to discharges to the sewer system or stormwater system within the City. Consequently, because future development under the proposed General Plan would be required to adhere to existing regulations, the impact would be *less-than-*

significant.

Impact 3.13-3:

Finding: Implementation of the General Plan Update could require the construction or expansion of wastewater treatment facilities or collection systems that could cause significant environmental impacts, absent project-specific mitigation measures. However, since the impacts of this project are not yet known, it is premature to conclude that the impacts of the expansion or construction will create significant unmitigated adverse impacts to the environment. Therefore, with implementation of General Plan policies and mitigation measures, including new Mitigation Measure 3.13-3(b), this impact is considered *less-than-significant*.

- **Mitigation Measure 3.13-3:**

(a) Future projects shall incorporate project-specific mitigation measures to reduce impacts from the construction of new wastewater collection and treatment facilities.

(b) The City will work with affected stakeholders to avoid, minimize or mitigate any significant adverse impacts to the environment that may occur as a result of increasing the capacity of the wastewater treatment and conveyance system. This is appropriately evaluated and implemented at the project-specific level for the treatment plant and conveyance systems.

Rationale/Supporting Explanation: Wastewater service within City of Richmond is provided by three sanitary sewer districts. RMSD is managed by the City of Richmond. As described in the Draft EIR, WCWD plant has a dry weather design capacity of 12.5 mgd; RMSD WWTP has a dry weather design capacity of 24 mgd; and EBMUD's Wastewater Treatment Plant, which provides treatment for the SSD collection facility, has a maximum flow of 168 mgd.

According to the 2040 Demand study, the EBMUD service area would require 229 mgd of water by 2030 and 230 mgd of water by 2040. Regions AN, AS, GC, and GN encompass the City of Richmond and would generate 120 mgd by 2040. This would yield an estimated wastewater generation of 108 mgd for the regions AN, AS, GC, and GN, which also includes demand from other cities that have other wastewater service providers and the City of Richmond would yield only a small percentage of this estimate. The RMSD, WCWD, and EBMUD's combined wastewater flow capacity is over 200 mgd. General Plan Policies and Actions CF1.4, CF2.4, CF2.B, and CF3.A would reduce the potential for impact on wastewater.

The General Plan policies and actions such as General Plan Policy CF1.4 would require new development to provide proportionate facilities and infrastructure improvements as the new development occurs. In addition, the City of Richmond mitigates impacts created from additional demands on services due to the increase in new residential and commercial structures in the City by imposition of sewer service fees to provide sewer services.

As noted, RMSD, WCWD, and EBMUD's combined wastewater flow capacity is over 200 mgd, compared to an estimated 229 mgd wastewater generation in the service area. In addition, as discussed above, the RMSD WWTP currently experiences wet weather flows that exceed the plant's treatment capacity. With implementation of the proposed General Plan policies and the City's development fee imposed by the City's municipal code, wastewater facilities would be funded as development occurs. However, because some improvements would be required in order to accommodate growth in the City absent project-specific mitigation measures, there is potential for physical effects associated with the construction of new or expansion of existing facilities. The extent to which environmental impacts associated with any new infrastructure would be ascertained at a later time, prior to implementation of any improvements. However, it is

premature to conclude that these infrastructure improvements will cause significant, unmitigated adverse impacts to the environment. Accordingly, with implementation of new Mitigation Measure 3.13-3(b), this impact is considered *less-than-significant*.

Impact 3.13-4:

Finding: The City Council finds that implementation of the proposed General Plan would not result in a determination by the wastewater treatment provider that it does not have adequate capacity to serve the project's demand in addition to the provider's existing commitments. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would generate additional demand on the existing sewer system from increased sewage flows. The proposed General Plan could result in a net increase of residential and non-residential developments by the proposed General Plan horizon year of 2030. The City contribution to the daily wastewater received by the treatment facilities resulting from the implementation of the proposed General Plan would increase from the current City's daily wastewater flow. Any request for service resulting from new development would be subject to a site-specific evaluation of the existing wastewater system's capacity to service the development. If improvements to the existing wastewater system are required or additional facilities are needed, the property developer would be required to pay its fair share of the cost of the needed improvements. General Plan Policies and Actions CF1.4, CF2.4, CF2.B, and CN3.A would further reduce the potential for impact on wastewater facilities.

As discussed in the Draft EIR (pages 3.13- 12 through 3.13-14), three sanitary sewer agencies serve areas within the geographical boundaries of the City of Richmond: West County Wastewater District, Stege Sanitary District, and the Richmond Sanitary Sewer District. All three agencies are responsible for maintenance of their collection and treatment systems, and all three agencies have enacted regulations to ensure that private property owners are tasked with maintaining private sewer laterals. Through enforcement of regulations affecting private property owners, the imposition of development impact fees, the use of bond financing, and the collection of fees for services, all three sewer districts meet their obligations to maintain, repair, expand and upgrade their collections and treatment systems.

The Richmond Sanitary Sewer District operates a wastewater treatment plant within the City of Richmond. The treatment plant is operated and maintained to meet all requirements of federal and state law.

The Draft EIR acknowledges on pages 3.13-12 and 3.13-13 that under existing conditions, wet weather flows exceed the capacity of the wastewater treatment plant due to inflow and infiltration (I & I). This, however, is the existing condition and not a result of the proposed General Plan. To remedy this existing condition and reduce the potential for infrastructure shortcomings to result in violations of wastewater discharge requirements, the City has developed Sanitary Sewer and Wastewater Treatment Plant Master Plans that address wet weather storage, long and short-term improvement projects, as well as funding strategies for short-term and long-term Capital Improvement Projects. Projects are identified and prioritized to comply with all regulatory agency requirements and/or mandates as well as the terms of the Baykeeper Settlement Agreement. Additional improvements have been identified to address on-going rehabilitation and replacement of collection and treatment system facilities. The City issued municipal bonds to finance projects over the next three years, and is developing a long term financial plan which identifies methods for funding additional, on-going improvements. The City has also implemented a Lateral Compliance Program (RMC 12.17), which is based on "point-of-sale" for homes and businesses located in the Richmond Municipal Sewer District (RMSD). There are currently over 18,000 lateral connections in the RMSD, totaling an estimated 270 miles in length. Poorly

operating or failing laterals allow I & I into the sanitary sewer system during wet weather contributing to system capacity problems and increased potential for sanitary sewer overflows. Repairing and/or replacing these laterals significantly reduces I&I of groundwater and stormwater into the sewer system.

The City policy is to work closely with developers to identify opportunities to include infrastructure improvements as part of proposed developments. The City's Planning and Engineering Departments work with developers to incorporate these improvements utilizing methods that will not be cost prohibitive. Therefore, the City's current plans to repair and replace poorly operating or failing laterals would substantially reduce the existing conditions that result in violations of wastewater discharge requirements. In addition, requirements placed on new development to include adequate infrastructure to accommodate that new development would ensure that implementation of the proposed General Plan would improve the condition of the sanitary sewer collection and treatment systems in the City and reduce the risk of unpermitted wastewater discharges. For these reasons, the Draft EIR concluded that implementation of the proposed General Plan would have a *less-than-significant* impact on wastewater services.

As discussed, because treatment capacity is limited, expansion of treatment facilities would be required to accommodate the proposed General Plan. The General Plan policies and implementation actions, such as Policy CF1.4 (Concurrent Infrastructure Development) would require new development to provide proportionate facilities and infrastructure improvements as the new development occurs. With implementation of the proposed General Plan policies and the City's development fee imposed by the City's municipal code, projects would be required to fund any required improvements to wastewater treatment facilities associated with increased growth in the City. Because policies and implementing measures contained in the proposed General Plan would ensure that adequate treatment facilities would be provided for growth in the City, this impact is considered *less-than-significant*. The physical effects of constructing wastewater treatment facilities are addressed in Impact 3.13-3.

Impact 3.13-5:

Finding: The City Council finds that implementation of the proposed General Plan could result in the generation of additional solid waste, but there is sufficient landfill capacity to accommodate the increased demand for solid waste service. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: Implementation of the proposed General Plan would produce 55,796 tons of solid waste in 2030 (or 152.9 tons per day), which would be an increase of 12,662 tons (or 34.7 tons per day) from 2005. As discussed in the Draft EIR, the Potrero Hills Landfill has been approved to expand its original capacity by approximately 61.6 million cubic yards for a total capacity of 83.1 million cubic yards, which would extend the capacity by approximately 35 years. In addition, the WCCIWMA has utilized other landfills besides Potrero Hills Landfill in 2008 and Draft EIR Table 3.13-2 (Disposal Facilities Used by WCCIWMA in 2008), shows four landfills with closure dates past the proposed General Plan horizon year of 2030, each of which with substantial remaining capacity. Bakersfield Metropolitan (Bena) SLF is scheduled to close on December 31, 2038 with a permitted daily capacity of 4,500 tons with remaining capacity of 44,818,958 (84.6 percent). Keller Canyon Landfill is scheduled to close on December 31, 2030 with a permitted daily capacity of 3,500 tons with remaining capacity of 63,408,410 (84.5 percent). Pacheco Pass Landfill is scheduled to close on December 31, 2066 with a permitted daily capacity of 3,000 tons with remaining capacity of 40,600,000 (97.1 percent). Redwood Sanitary Landfill is scheduled to close on January 1, 2039 with a permitted daily capacity of 2,300 tons with remaining capacity of 12,900,000 (67.5 percent).

As shown in Table 3.13-2 (Draft EIR page 3.13-23), the 14 landfills that served the City have a daily permitted capacity of 51,716 tons/day. As discussed on Draft EIR page 3.13-25, it is

estimated that the City would generate 152.9 tons/day of solid waste in 2030, an increase of 34.7 tons/day. The total daily solid waste generated in the City, including existing waste generation, would represent 0.3 percent of the daily capacity of the listed landfills and the increase generated by the General Plan would represent 0.07 percent of that capacity. This is not a significant increase relative to available capacity. It should also be noted that landfills regularly undergo expansions to increase capacity, though the Draft EIR analysis does not consider expansions beyond those already approved. The landfills themselves consider more than one source in calculating the daily and total capacities of the landfill, so the contributions of other jurisdictions are already considered in those capacities.

With the approval of the expansion of the Potrero Hills Landfill, there would be sufficient landfill capacity to serve the proposed General Plan. Even without the additional capacity at the Potrero Hills Landfill, there are other landfills that could accommodate the proposed General Plan: the additional 34.7 tons per day anticipated to be generated by the proposed General Plan would comprise only a small percent of the daily permitted landfill capacity at Bakersfield Metropolitan, Keller Canyon Landfill, Pacheco Pass Landfill, or Redwood Sanitary Landfill. Existing landfill facilities are adequate to serve the City through the General Plan horizon year 2030. Because adequate landfill capacity exists to accommodate solid waste generated by proposed General Plan growth, this impact would be *less-than-significant*.

Impact 3.13-6:

Finding: The City Council finds that implementation of the proposed General Plan would comply with all applicable federal, state, and local statutes and regulations related to solid waste. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: State law requires a 50 percent diversion of solid waste from landfills. The City of Richmond, as part of the WCCIWMA, has met the 50 percent waste diversion goal in 2006. The RecycleMore program continues to work to maintain this level of diversion. WCCIWMA diverted at least 50 percent in 2006. Therefore, the City, as part of WCCIWMA, is in compliance with state law. In addition, the City remains committed to continuing its existing waste reduction programs and minimization efforts with the General Plan policies and actions. General Plan Policies and Actions CF1.E, CN5.3, CN5.D, and CN5.F would reduce the potential for impacts related to solid waste.

General Plan Policy CN5.3 and Actions CN5.D and CN5.F would ensure that waste reduction and recycling programs would be enhanced and practiced within the City of Richmond. Thus, implementation of the proposed General Plan would have no conflict with federal, State, or local statutes or regulations related to solid waste disposal. Therefore, the impact would be less-than-significant.

Impact 3.13-7:

Finding: The City Council finds that implementation of the General Plan would increase the demand for electricity and natural gas, but would not require or result in the construction of new energy production or transmission facilities, the construction of which could cause a significant environmental impact. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: The implementation of the General Plan would result in new development and would increase the use of electricity in the City of Richmond to light, heat, ventilate, and air condition the new buildings. The total annual electricity consumption by during the life of the proposed General Plan is estimated to be approximately 656,943,000 kWh of electricity per year, which would be an increase of 149,080,000 kWh of electricity from 2005. The state has experienced constraints related to energy supply and delivery. These constraints have

generally been limited to peak demand days during the summer months, such that for the majority of the days during the year adequate energy supplies are reliably provided to consumers. Implementation of the General Plan would increase use of electricity in the City of Richmond, in particular, the demand for electricity to light, heat, ventilate, and air condition new buildings.

There are many sources of electrical energy, and it is likely that various sources would be used by the City. For example, PG&E has entered into a contract with El Dorado Energy, LLC, a subsidiary of Sempra Generation, to purchase 48 megawatts (MW) of photovoltaic solar power produced at the Copper Mountain Solar facility, which will produce an average of 100 gigawatt-hours of electricity each year, equal to the annual consumption of more than 14,000 average homes. PG&E also obtains energy from hydroelectric, nuclear, and fossil facilities.

Development under the proposed General Plan would be required to comply with the energy conservation measures contained in Title 24 of the California Code of Regulations, and General Plan polices would implement energy saving practices. General Plan Policies and Actions CF1.4, CF.F, CN5.1, CN5.2, CN5.A, CN5.C, EC3.1, EC3.2, EC3.A, and EC3.C would further reduce the potential for impact on energy.

The construction of new electric facilities could be required to serve new development within the City. The physical impacts from the construction of these facilities are assumed as part of the proposed General Plan development and are analyzed in the Draft EIR. The referenced policies require energy efficiency and conservation and require the City to collaborate with utility and partner agencies to develop a program to reduce energy demand and promote energy conservation. Implementation of the referenced policies and actions would further reduce demands for electricity and would ensure that impacts related to electricity supply would be less-than-significant

Under the proposed General Plan, the City of Richmond would require approximately 389,212,000 Therms of natural gas per year, which would be an increase of 88,324,000 Therms of natural gas from 2005. The planning area would be served by natural gas lines approved by PG&E. As PG&E declares itself a “reactive” utility that provides natural gas as customers request its services, PG&E does not envision any problems with adequate supply of natural gas available to serve the City of Richmond. Any expansion of service necessitated by implementation of the proposed General Plan would be in accordance with PG&E’s policies and extension rules on file with the California Public Utilities Commission at the time contractual agreements are made.

For the reasons discussed above, the proposed General Plan would not require or result in the construction of new energy production or transmission facilities, the construction of which could cause a significant environmental impact. In addition, PG&E has provided a “will serve” letter for the proposed General Plan that natural gas and electric service is available and extension of any facilities will be made in accordance with PG&E’s gas and electric rules and regulations on file with the State of California Public Utilities Commission at the time natural gas and electric service is requested. This impact is considered *less-than-significant*.

Impact 3.13-8:

Finding: The City Council finds that the implementation of the proposed General Plan would not result in the wasteful or inefficient use of energy. This is considered a *less-than-significant* impact.

Rationale/Supporting Explanation: As discussed Draft EIR, all new buildings are required to comply with the energy conservation standards specified in CCR Title 24. In order to conform to CCR Title 24, efficient energy use would be enforced. In addition, the General Plan Policies and Actions CF1.4, CF1.F, CN5.1, CN5.2, EC3.1, EC3.2, EC3.A, and EC3.C would further reduce the potential for impact on energy.

General Plan Policy CN5.1 would require energy efficiency and conservation and General Plan Policy CN5.2 would encourage construction and building development practices that reduce resource expenditures throughout the life-cycle of a structure. Adherence to existing regulations and the General Plan's goals, policies and actions would ensure that there would be a *less-than-significant* impact with respect to the wasteful or unnecessary use of energy under the proposed General Plan.

TRANSPORTATION AND CIRCULATION

Impact 3.14-1:

Finding: The City Council finds that the proposed General Plan may result in traffic congestion that exceeds the previous City of Richmond traffic LOS standard of LOS D, as well as CCTA and WCCTAC LOS and MTOS standards. Although the CCTA and WCCTAC LOS and MTOS standards are beyond the City's jurisdiction and control, these agencies can and should adopt alternative thresholds with appropriate roadway service metrics for urbanized, transit-oriented communities. The City finds and determines that LOS and MTOS impacts from General Plan implementation can and should be mitigated to a *less-than-significant* level by CCTA and WCCTAC through the adoption of alternative, appropriate LOS and MTOS thresholds for urbanized areas seeking to improve transit, pedestrian and bicycle transit modes and seeking to discourage reliance on private automobile usage. Adoption of appropriate LOS and MTOS thresholds by these other agencies is beyond the jurisdiction and authority of the City.

- **Mitigation Measure 3.14-1:** Future projects shall incorporate project-specific mitigation measures to reduce traffic impacts.

Rationale/Supporting Explanation: As shown in Draft EIR Table 3.14-10, three roadway segments are projected to exceed the LOS standard based on the City's current LOS standard and other regional agencies' standards. They are: 23rd Street between Sanford and Grant (LOS E); San Pablo Dam Road between Barranca and El Portal (LOS F); and I-580 between Western Drive and the San Rafael Bridge (LOS F).

All of these roadways would exceed capacity with or without implementation of the proposed General Plan – that is, they exceed capacity in the No Project case also. The actual exceedances are due to traffic growth from within the City and other regional sources. On 23rd Street, regional traffic (that is, trips with both ends outside the City limits) makes up approximately 17 percent of the daily volume; on San Pablo Dam Road, the regional traffic constitutes approximately 42 percent of the daily volume; and on I-580, the regional traffic constitutes approximately 68 percent of the daily volume. While the current LOS standard used by the City is LOS D, the proposed General Plan, particularly through Policy CR1.9 and Action CR1.N, makes clear that the City's circulation system should be managed, going forward, to ensure balanced access to all modes of travel, and that vehicle capacity and LOS would not be the sole criterion by which physical and operational improvements are planned and implemented. General Plan Policies and Actions CR1.1 through CR1.8, and CR1.A through CR1.N would contribute to the mitigation of this impact.

In particular, General Plan Action CR1.N requires the City to classify all streets in the City to conform to the place-based classification system articulated in the Circulation Element of the General Plan and establish multi-modal level of service (MMLOS) standards consistent with each street's intended function and character, which should occur before any significant improvements or realignments are approved. In addition, General Plan Actions CR1.A, CR1.B, and CR1.H address working with regional planning agencies (such as Caltrans, CCTA and WCCTAC, and transit agencies) to develop and implement improvements that would mitigate impacts on roadways either partly or fully under other agencies' jurisdictions.

Proposed policies and implementing actions would reduce the impact by converting more trips to alternative modes and optimizing roadway and intersection capacity within the constraints of the "Place Based" street classification and evaluation policy. However, the impacts would not be reduced to a less than-significant level, due to potential for LOS impacts to remain on 23rd Street between Sanford and Grant and roadways under non-City jurisdiction or monitoring.

Increasing the density and intensity of development consistent with transit-oriented development patterns, and promoting walkable community design, are inherently incompatible with a LOS metric that requires ever expanding roadways designed to avoid delays even at peak utilization periods. This LOS metric is also incompatible with the increasingly urbanized development pattern required of the region's Bayfront cities to reduce the region's VMT. Although the CCTA and WCCTAC LOS and MTOS standards are beyond the City's jurisdiction and control, these agencies can and should adopt alternative thresholds with appropriate roadway service metrics for urbanized, transit-oriented communities. The City finds and determines that LOS and MTOS impacts from General Plan implementation can and should be mitigated to a *less-than-significant* level by CCTA and WCCTAC through the adoption of alternative, appropriate LOS and MTOS thresholds for urbanized areas seeking to improve transit, pedestrian and bicycle transit modes and seeking to discourage reliance on private automobile usage. Adoption of appropriate LOS and MTOS thresholds by these other agencies is beyond the jurisdiction and authority of the City.

Impact 3.14-2:

Finding: The City Council finds that the proposed General Plan's Planned Roadway Improvements would improve mobility and safety for all modes, fulfilling the proposed General Plan's goals and policies regarding safety and provision of a multi-modal circulation system. This is a *less-than-significant* impact.

Rationale/Supporting Explanation: Draft EIR Figure 3.14-7 shows Map 4.3 from the proposed General Plan Circulation Element. It identifies a new roadway connection through the South Shoreline area, connecting to the I-580/Bayview/Carlson interchange; three potential railroad/roadway grade separation (bridge) projects; freeway interchange improvement and/or reconstruction projects planned by Caltrans; and several streetscape projects that would implement the proposed General Plan's vision of multi-modal, place-based street design. With the exception of the Marina Bay Parkway grade separation, which is substantially funded and in design, the other improvements have not had funding fully identified. Without adequate funding, some of the improvements identified in the proposed General Plan may not be implemented, which could result in inadequate transportation infrastructure to serve the proposed General Plan. This would be a significant impact. It is not expected that the long-term improvements in a General Plan have a full funding and implementation plan identified upon adoption, but rather that the Plan contains policies and actions to ensure that the City take the proper steps toward funding and implementing the improvements.

Proposed General Plan Action CR1.G recognizes high priority projects for the Capital Improvement Plan, and states that the CIP should be regularly updated. In addition, General Plan Action CR1.H would reduce congestion for all modes of transportation by enhancing the public transportation system, promoting mixed-use development patterns to reduce vehicle miles traveled and by implementing transportation demand management strategies to increase mobility options. General Plan Policy CR3.3 and General Plan Action CR3.C require that new development within Richmond contribute to infrastructure improvements through a circulation fee. With these policies and actions, the City would provide funding mechanisms to support the proposed transportation infrastructure improvements, which would ensure the impact is *less-than-significant*.

Impact 3.14-3:

Finding: The City Council finds that implementation of the proposed General Plan would produce higher demand for transit service, but there is no evidence that General Plan implementation will exceed the capacity of transit service providers, nor is there evidence that transit service providers will be unable to continue to meet future cumulative transit demand. Mass transit service within the City is within the jurisdiction and control of other agencies, including primarily Alameda-Contra Costa Transit District (AC Transit), Bay Area Rapid Transit (BART), and AMTRAK. Notwithstanding the General Plan policies and the following new Mitigation Measure 3.14-3, increased demand for transit service falls within the jurisdiction and control of the other transit agencies identified above, and these agencies can and should implement measures to continue to provide and expand transit service as needed to meet demand.

- **Mitigation Measure 3.14-3** The City shall continue to cooperate and coordinate with transit agencies and work with the community to promote and advocate for improved transit services and increased transit capacity to meet anticipated General Plan implementation and cumulative impacts for transit service, and seek grant funding opportunities to supplement available transit service.

Rationale/Supporting Explanation: The proposed General Plan contains several inter-related policies and actions that, taken together, promote higher transit use among Richmond residents, employees, and visitors. These include General Plan Policy CR1.4 and its supporting actions, supporting expanded and affordable public transit; General Plan Policy CR1.7 and its supporting actions, supporting regional ferry service to Richmond; General Plan Policy CR1.8 and its supporting actions, promoting the place-based roadway classification system, which would include transit-priority streets; and the following additional General Plan Policies and Actions CR2.2, CR2.C, CR3.1, CR5.1, CR5.A, CR1.L, and CR1.J.

The effect of these proposed General Plan Circulation Element policies and actions, in combination with the residential and employment growth projected by 2030 within the 16 change areas, would be to substantially increase the demand for transit. The current bus frequencies, at typical 30-to-60-minute headways and high passenger loading of certain key routes, would not be sufficient to support the transit demand generated by the proposed General Plan growth patterns.

The same policies and actions referenced above that promote transit use would be instrumental in helping the City push for the service increases needed to serve the new demand. Mass transit service within the City is within the jurisdiction and control of other agencies, including primarily AC Transit, BART, and AMTRAK. AC Transit, BART, and AMTRAK all operate under state or federal law, all qualify for federal transportation funding, and all have jurisdiction to establish rates, routes and transit service patterns to meet regional needs. These agencies also work cooperatively with other regional transportation planning agencies, such as MTC and ABAG, and with the state (Caltrans) and the federal government (Department of Transportation, including the Federal Transportation Administration and the Federal Railway Administration).

Notwithstanding new Mitigation Measure 3.14-3, increased demand for transit service falls within the jurisdiction and control of the other transit agencies identified above, and these agencies can and should implement measures to continue to provide and expand transit service as needed to meet demand.

Impact 3.14-4:

Finding: The City Council finds that implementation of the proposed General Plan would provide enhanced facilities to serve pedestrians and bicyclists, increasing connectivity and safety for these modes. The project would result in *no impact*.

Rationale/Supporting Explanation: The Land Use and Circulation Element are consistent in the vision of a development pattern and circulation system that promote and support bicycling and walking. By concentrating new development within key corridors and change areas, the density and urban design of new land uses would be more conducive to non-auto modes of travel than typical suburban land use patterns. The Circulation Element responds to the land use plans by implementing a “place based” circulation system that ensures the appropriate transportation infrastructure is provided to serve adjacent land uses within a corridor or development area. In addition, General Plan Policies and Actions CR1.5, CR1.6, CR1.D, and CR1.E, promote pedestrian and bicycle improvements and incentives. General Plan Policies and Actions CR2.2, CR2.3, CR2.A through CR2.F, and CR3.1 would also support bicycling and walking in Richmond.

As shown in Draft EIR Figure 3.11-9, the planned pedestrian and bicycle facilities in the proposed General Plan Circulation Element include improvements to several key bicycle route crossings of major barriers – higher volume roadways and railroad tracks. These barriers have historically been a safety and mobility concern for the City. The crossings would provide much better connectivity citywide, enabling longer bicycle trips for a variety of recreational and utilitarian purposes. The proposed General Plan bicycle network is consistent with the Contra Costa Countywide Bicycle and Pedestrian Plan. The Pedestrian Improvement Districts shown for the Hilltop Mall, Downtown/ MacDonald, and Ford Peninsula/South Shoreline areas would focus attention on providing better pedestrian facilities (sidewalks, crosswalks, benches, buffers between the pedestrian and vehicle realms, etc.) in these key mixed-use change areas.

The proposed General Plan would not disrupt existing bicycle and pedestrian facilities, would not interfere with planned bicycle/pedestrian facilities, and is consistent with the adopted Countywide Bicycle and Pedestrian Plan. The proposed General Plan would improve safety for non-vehicular travel modes and would result in no impact.

Impact 3.14-5:

Finding: The City Council finds the proposed General Plan would reduce the potential for conflicts at rail/roadway crossings, improving safety for all modes. The project would result in *no impact*.

Rationale/Supporting Explanation: Draft EIR Figure 3.14-7 shows the proposed General Plan’s priority grade separation projects, at Harbor Way, Marina Way South, and Marina Bay Parkway. The latter location is already in the design stage. However, there are several other crossing locations in the City that could benefit from additional safety measures to limit the potential for train-vehicle, train-pedestrian, and train-bicycle conflicts. General Plan Policy CR3.1 and Action CR3.A provide the direction for the City to study, design, and implement these measures, which could include upgrades to the existing railroad crossing warning devices, modifications to the traffic control devices at the crossing, provision of enhanced pedestrian barriers and/or better pedestrian routing, or changes to the street system, including street closures and provision of better roadway connections that avoid or reduce the crossing conflicts. The City will need to work with the railroad owners and operators and the California Public Utilities Commission in these efforts.

As discussed under Impact 3.14-2, the City currently does not have a full funding program for the grade separation projects or for safety improvements at other at-grade crossings. However, the General Plan Policies and Actions noted under Impact 3.14-2 – specifically, General Plan Actions CR1.G and CR1.H, General Plan Policy CR3.3, and General Plan Action CR3.C – will ensure that the City would work to provide funding mechanisms to support the proposed transportation infrastructure improvements. Therefore, with these General Plan Policies and Actions, there would be no impact.

Impact 3.14-6:

Finding: The City Council finds that the proposed General Plan would increase congestion and reduce travel speeds on various roadways throughout the City, including some that are on primary emergency response routes (i.e. freeways and arterials). However, with the addition of new Mitigation Measure 3.14-6, and based on the analysis below, this impact is *less-than-significant*.

- **Mitigation Measure 3.14-6** The City will continue to support coordination among its departments and other agencies in planning for emergency access and response routes, and will periodically review and as appropriate update its emergency access and response route planning.

Rationale/Supporting Explanation: The City and its Departments (e.g., Police, Fire and Planning) coordinate emergency preparedness and response planning activities, and also participate in emergency response training and planning activities with other agencies. Emergency access and emergency response vehicular routing is also addressed as an important component of emergency response and planning activities. The two thresholds of significance for emergency vehicle response are (1) provide inadequate design features to accommodate emergency vehicle access and circulation, and (2) cause a substantial decrease in travel speeds on primary emergency response routes such that emergency vehicles would be significantly delayed. The first criterion is not triggered by the proposed General Plan, as the policies and actions guiding street improvements and design would ensure that emergency vehicles are physically accommodated. With respect to the second criterion, the City has a very accessible grid of localized streets as well as multiple freeways, arterial and bypass routes that can be used in the event of an emergency. Established emergency vehicle equipment such as sirens and flashing lights are effective in helping clear access even in congested emergency conditions (e.g., freeway accidents). There is no evidence that the increased congestion resulting from anticipated General Plan Buildout will result in congestion levels that significantly impede emergency vehicle access on emergency response routes. To further reduce the potential that this impact may occur, new Mitigation Measure 3.14-6 is added to the EIR. Also, the proposed General Plan policies and actions regarding roadway improvements and capacity management are designed to provide mixed-use urban streets that balance public transit, walking and bicycling with other modes of travel to alleviate the impacts of congestion as population and job growth occurs. General Plan Action CR1.H, listed under Impact 3.14-1, discusses providing street capacity and infrastructure improvements to address congestion. This action would reduce this impact,. Apart from the issue of emergency access, the existence of roadway congestion is common in urbanized areas, and congestion itself does not constitute a significant impact. With the addition of Mitigation Measure 3.14-6 and the additional analysis noted above, this impact is *less-than-significant*.

VISUAL RESOURCES

Impact 3.15-1:

Finding: The City Council finds that the City is an evolving urban environment, and development activities associated with the proposed General Plan do not equate to significant adverse aesthetic impacts for CEQA purposes. Based on the analysis below and new Mitigation Measure 3.15-1, impacts to scenic vistas and the visual character and quality of the City at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level.

- **Mitigation Measure 3.15-1** As a condition of authorizing development within existing undeveloped areas, or demolishing commercial or industrial structures that were built prior to 1950, the City shall require the applicant to provide photographs or another

appropriate form of visual record of the project location's existing physical setting, and a photograph or another appropriate form of visual record of one or more public vistas of the project location (e.g., views from public parks or civic buildings). These visual records shall be submitted to the Planning Department or its designee for appropriate storage and retrieval for future studies of the City's evolving urban character.

Rationale/Supporting Explanation: The General Plan provides the framework for development of the City and establishes a vision for the community's urban form and development patterns and outlines the community's land uses, street network, prototypical housing types, and a system of parks and trails. As discussed in the Draft EIR, various points throughout the City of Richmond have views of the shoreline or the hillside that would constitute a locally recognized scenic vista or corridor. To the extent that development would occur in the "stable areas," (areas not included in the change areas), it would remain generally consistent with existing land use types, which would result in similar visual characteristics as existing development. Development within the designated change areas - the activity centers, the improvement districts, and the corridor areas - would be allowed at a higher density and would allow maximum building heights ranging from 55 feet to 135 feet, which is an increase over the existing maximum building height range of 35 to 75 feet. The tallest buildings (135 feet) could only be developed within the three activity center areas that include the "High-Intensity Mixed-Use" land use designation. This potential increase in building height would create a more urban feel and could result in a substantial change in the character of the change areas as well as those areas that have views of and beyond those change areas. It is possible that existing residents could have existing views of the shorelines or hillsides that would either be fully or partially obscured by buildings developed under the proposed General Plan due to the increase in the number of buildings developed, as well as the increase in building height. However, the City is an evolving urban environment where change is the only constant, including for example: the evolving emphasis on green technology, renewable energy, sustainable practices, transit-oriented higher density development patterns, and reduced reliance on private automobile use. These and other evolving urbanized activities also result in visual change.

The General Plan provides a development model that encourages infill development in blighted and underutilized areas. The proposed General Plan would provide for the development of structural, artistic, cultural, and transit uses that would serve as a catalyst for high-density, mixed-use development indicative of a modern, urban, 24-hour downtown. Despite the many potential benefits of the General Plan, the proposed infill development identified in the General Plan could result in change in the existing visual character of the City. The promotion of new higher-density mixed uses and transit-oriented development uses would be considered by some residents to improve the look of City, particularly in the Downtown/Macdonald Avenue, Hilltop, and Ford Peninsula in Marina Bay change areas, and in district and corridor improvement areas, and other centrally located areas. However, the overall development would ultimately alter the skyline and views of the City for both residents and off-site receptors. While many improvements may occur from certain vantage points, some of the aforementioned scenic views and corridors could be obscured, particularly from residents on the eastern portion of the City. In addition, the proposed General Plan allows for some additional residential development within existing vacant hillside areas, which could alter the visual character of the eastern portion of the City. Residential development along the hillside would be restricted to designated areas and would be clustered in a manner that preserves more open space. However, while some may equate change to existing private or public vistas or to the existing visual character of an area to a significant adverse environmental impact, as lead agency, the City does not agree that change equates to significant adverse aesthetic impacts. The General Plan, City ordinances, the City's discretionary permit and Design Review process, and the CEQA process all have components designed to protect and enhance the visual character of the City while embracing the changes inherent in an urbanized area. While some vistas should be preserved unchanged in perpetuity (e.g., Yosemite Valley), the changing visual character of the City is protected by its ongoing evolution and implementation of

adopted policies and standards. The changing visual character of the city is protected by its ongoing evolution and implementation of adopted policies and standards.

As detailed in the Draft EIR, the Richmond Municipal Code provides development standards that guide the City in its development practices and protects valued scenic corridors and views. The municipal code guidelines aim to create standards that allow for the development of new and innovative structures that allow for the maintenance of establish natural and man-made views that help define the City of Richmond. General Plan Policies and Actions LU1.1, LU1.2, LU1.4, LU1.B, LU1.D, LU1.H, LU2.2, LU2.B, LU3.4, LU3.E, LU3.G, LU4.1, LU4.2, LU5.2, LU5.3, LU5.B, CN2.3, and AC2.2 would reduce the potential for impact on scenic resources and visual character.

General Plan Policy LU1.1 aims to protect, preserve, and enhance visual character within the City by encouraging the development of high-density mixed-use products on vacant and blighted property; General Plan Policy LU1.2 promotes adaptive reuse of historic buildings and the use of public art as a means of improving the visual character of blighted areas. General Plan Policy LU1.4 promotes the provision of street benches, street lighting, and shade trees in a manner that promotes context-sensitive design while improving the visual character of the community. General Plan Action LU1.B requires that design guidelines be incorporated into the corridor improvement plans. General Plan Action LU1.D requires that urban design guidelines be incorporated into the Downtown Specific Plan; General Plan Action LU1.H would encourage the City to prepare an inventory of blighted and underutilized properties and evaluate their redevelopment potential; General Plan Policy LU2.2 would provide visual amenities such as sidewalks street trees, street lighting and landscaping improvements to improve pedestrian views; General Plan Action LU2.B would incorporate green design elements such as bioswales and planter strips street elements into streetscape design; General Plan Policy LU3.4 aims to protect, preserve, and enhance visual character within the City by encouraging the development of job creating structures on vacant and blighted property; General Plan Action LU3.E promotes the preparation of a Shoreline Specific Plan to guide the design and development standards for the various shoreline areas; General Plan Action LU3.G promotes the preparation of a Hilltop Specific Plan to guide the design and development standards for the area; General Plan Policy LU4.1 promotes the preservation of scenic viewsheds, such as Point San Pablo, by maintaining the existing condition and limiting proposed shoreline development; General Plan Policy LU4.2 promotes the preservation of scenic viewsheds along the hillsides and the shoreline through preservation, enhancement, and restoration of the City's open space areas; General Plan Action LU4.A promotes the preparation of shoreline specific plans to guide the design and development standards for the shoreline areas. The goal of these plans is to increase local access and visibility of the shoreline. General Plan Policy LU5.2 promotes the creation of districts along the waterfront that include designs that highlight the visual character of the shoreline through interpretive displays and use of rehabbed historic structures; General Plan Policy LU5.3 promotes the development of compatible adjacent uses in terms of size, scale, and use of buildings; General Plan Action LU5.B aims to prepare design guidelines that focus on the visual compatibility of contemporary and historic uses; General Plan Policy CN2.3 aims to protect the natural topography of the area, with a specific focus on the hillside and regulate the grading and site design concepts that are allowable within the City's hillsides; and General Plan Policy AC2.2 would provide façade improvements in an effort to visually define the City's Art and Culture character.

The proposed City of Richmond General Plan policies and implementation actions are important in addressing the potentially adverse physical impacts on visual resources resulting from development by ensuring visual compatibility, promoting design standards and building height restrictions, and incorporating building façade and streetscape improvements. The impacts of development on visible hillsides would be protected through implementation of proposed General Plan Policy CN2.3, which calls for protection of these ridgelines and visible hillsides from inappropriate development and preservation of these viewsheds.

While embracing change, the City recognizes the value of recording the visual history and evolution of the City. To assure that the evolving visual character of the City is recognized and preserved for future study, new Mitigation Measure 3.15-1 is added to the EIR. As a result of this analysis and the additional mitigation requirement, impacts to scenic vistas and the visual character and quality of the City at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level. Any project with aesthetic impacts that are not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Finally, implementation of the General Plan does not authorize any new development activities, and implementation of the General Plan will not itself cause a significant adverse aesthetic impact.

On the pedestrian level, the changes that would occur within the change areas of the City would result in physical improvements and a reduction in blighted conditions, which most viewers would find an improvement in the overall visual character of those areas. However, at greater distances, the physical changes could dramatically affect the scale of development in the City, which could block views and substantially alter the character of the City. As discussed above, the City does not agree that change equates to significant adverse aesthetic impacts. The General Plan, City ordinances, the City's discretionary permit and Design Review process, and the CEQA process all have components designed to protect and enhance the visual character of the City while embracing the changes inherent in an urbanized areas. The changing visual character of the city is protected by its ongoing evolution and implementation of adopted policies and standards.

As a result of this analysis and the addition of new Mitigation Measure 3.15-1, impacts to scenic vistas and the visual character and quality of the City at the General Plan implementation and cumulative level are mitigated to a *less-than-significant* level.

Impact 3.15-2:

Finding: The City Council finds that the development of the proposed General Plan could create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. As discussed in Impact 3.15-1 above, changing urbanized conditions result in different distributions of potential light and nighttime glare impacts. Also as discussed above, the General Plan, City ordinances, the City's discretionary permit and Design Review process, and the CEQA process, itself each have components designed to protect and enhance the visual character of the City while embracing the changes inherent an in urbanized area. The City's General Plan, ordinances, discretionary permit and Design Review processes, and CEQA process must all be implemented as applicable to future project-level decisions. It is anticipated that the visual quality of the City will improve, and not be the subject of "substantial degradation," as the General Plan is implemented over time. Accordingly, with the implementation of General Plan policies and actions and the following mitigation measures, this impact is considered *less-than-significant* at the General Plan and cumulative levels.

- **Mitigation Measures 3.15-2(a):** All street lighting shall be directed downward and shielded to prevent light spill onto surrounding properties, sky glow, and glare.
- **Mitigation Measures 3.15-2(b):** The City shall restrict the use of high level outdoor lighting for new homes, particularly along the hillside ridges.
- **Mitigation Measures 3.15-2(c):** Landscaping shall be incorporated along internal roads and near off-site homes to reduce spill light emanating from vehicles and buildings.
- **Mitigation Measure 3.15-2(d):** The City shall require design review of any project containing reflective glass or metal building materials that exceed 50 percent of any building surface or the first three floors.

Rationale/Supporting Explanation: The City of Richmond is primarily built-out, and a significant amount of light and glare from urban uses already exists. However, new development permitted under the proposed General Plan could create new sources of glare from paved surfaces, glare from reflective building surfaces, exterior building lighting, lighted recreation facilities (such as outdoor ball fields), new street lighting, parking lot lights, and headlights of vehicular traffic. These new sources would be more noticeable from new development in large infill areas and previously undeveloped sites outside of the downtown area. As a result, these new sources of glare could affect the day or nighttime views of adjacent sensitive land uses. These sensitive land uses could generally be undeveloped lands and residential uses adjacent to commercial or industrial areas.

As development under the General Plan occurs, it would primarily result in development of infill of vacant or underutilized parcels, as well as intensification and reuse of existing developed sites. The majority of the development would occur within the change areas, which are primarily in urbanized parts of the City. New development would be located in areas that commonly experience at least minimal impacts from existing light sources. The only exception to this would be development in those few outlying areas that are currently undeveloped along the shoreline and the hillside.

Under the proposed General Plan, there would be some construction of residential uses adjacent to commercial uses, which could result in some lighting impacts on new receptors. Commercial facilities typically involve lighting for building exteriors and parking lots, which could result in light spillover onto adjacent residential properties.

Because the City is primarily built-out, a significant amount of ambient light already exists, especially near the downtown area. With an emphasis on infill development within the City, additional light sources would be concentrated within existing lighted areas and would not result in extensive use of lighting in outlying areas of the City. It is reasonable to assume that the increase in development density, particularly in activity areas, could result in spill light impacts, in comparison to the existing ambient light already present in the City. This is particularly true due to the General Plan's desire to add street lighting throughout the change areas, and create a 24-hour lifestyle within the proposed activity centers. Due to the anticipated increase in night activity associated with the Plan, as well as the uncertainty and lack of specificity of the mechanisms in place aimed at reducing the impacts of light on surrounding uses including residential and roadways, this impact is considered *potentially significant*.

Daytime glare could be produced by the increased amount of surface area of proposed commercial and residential structures, which could reflect or concentrate sunlight. While the majority of development would be focused within the defined change areas, the increase in maximum building heights within the defined activity centers could result in the development of structures of up to 135 feet. Because details of the type of building materials to be used are unknown, exterior materials used to construct new buildings could include materials that could result in glare if the surfaces are highly reflective. In particular, proposed high-rise buildings in the downtown area could produce glare if significant amounts of glass and other reflective materials are used on the exterior of the building. These types of projects would be required to go through the City's Design Review process as well as undergo project level CEQA analysis once project-specific information is available. However, because the extent to which future development could contribute to glare is not known, this is considered a *potentially significant impact*.

General Plan Policies and Actions LU5.3 and LU5.B would reduce the potential for impact on light and glare. General Plan Policy LU5.3 and General Plan Action LU5.B, require Design Guidelines to address all aspects of land use compatibility, including lighting compatibility. Compliance with Mitigation Measure 3.15-2 would reduce glare associated with new development, particularly in the downtown area, but could not ensure that impacts would be reduced to *less-than-significant*.

Daytime glare from built surfaces, such as reflective glass or public art, and nighttime glare from indoor and outdoor light sources exist and will continue to occur under evolving conditions in the future (e.g., new and retrofit structures with reflective exteriors, new and retrofit outdoor lighting of parks and other public and private spaces, and new and retrofit indoor lighting). These changes, however, including increasing the overall density and intensity of the City's development pattern, do not equate to a significant adverse impact for CEQA purposes. Aesthetic impacts are unique in CEQA because judgment about whether a particular change is significant is inherently variable based on the aesthetic sensibilities and values of the individual perceiving the change. While an informed disagreement may occur at a project-level scale (e.g., in a debate about the aesthetic merit of a piece of public art, or the design of a building or park), this debate is particularly difficult at the General Plan level since design aesthetics of individual projects are not yet known and, thus, cannot be debated. This is even more true at the cumulative impact level, when aesthetic impacts from other communities near the City and in the region are taken into account.

The City's General Plan, ordinances, discretionary permit and Design Review processes, and CEQA process must all be implemented as applicable to future project-level decisions. It is anticipated that the visual quality of the City will improve, and not be the subject of "substantial degradation," as the General Plan is implemented over time. Accordingly, this impact is considered *less-than-significant* at the General Plan and cumulative levels.

CHAPTER 5 FINDINGS REGARDING PROJECT ALTERNATIVES

Pursuant to CEQA Guidelines Section 15126.6, an EIR must evaluate the comparative merits of a reasonable range of alternatives to the proposed project, or to the location of the proposed project that could feasibly attain most of the basic objectives of the project while avoiding or substantially lessening any of the significant effects of the project. This Chapter sets forth findings regarding the project alternatives considered in the Draft EIR for the proposed General Plan. The findings considered in the Draft EIR were based on impacts of the proposed General Plan identified in the Draft EIR. As discussed in Chapter 4, these Findings include new and revised mitigation measures and analysis based on City Council input. Accordingly, for the sake of comparison, this Chapter also includes brief summaries of proposed General Plan impacts that reflect the new and revised mitigation measures and analysis included in these Findings.

ALTERNATIVES DISMISSED FROM FURTHER CONSIDERATION

Consistent with the CEQA Guidelines, primary consideration was given to alternatives that would reduce significant impacts while still meeting most of the project objectives. Alternatives that would have impacts identical to or more severe than the proposed project, or that would not meet most of the project objectives, were rejected from further consideration. The significant impacts identified in the Draft EIR for the proposed General Plan are related to air quality, cultural resources, noise, wastewater, transportation/traffic, and visual resources. Alternatives that would exceed the significance thresholds for the aforementioned issue areas, including an alternative that would increase the intensity of development, would not substantially lessen any significant environmental impacts identified in Chapter 4 of the Draft EIR and were rejected from further analysis.

The alternatives analyzed include a “No Project Alternative” and two other scenarios, each of which was developed as part of an extensive community visioning process where individuals, organizations, and agencies from the community were able to express their expectations for the City of Richmond’s future. Three land use alternatives, the proposed project and the two alternatives discussed below, were carried forward as part of the community visioning process. The two alternatives represent a reduction in density and intensity compared to the proposed project. Community opinion regarding alternatives that would include more intense development than the proposed project was that the larger scale development associated with such an alternative would alter the scale and character of the City and would be inconsistent with the vision developed for the proposed General Plan. Because an increased intensity alternative would not be consistent with the vision and objectives of the proposed General Plan, the Draft EIR did not analyze an increased intensity alternative.

ALTERNATIVES CONSIDERED

Although a number of alternatives could be designed that could result in the reduction or elimination of project impacts, three representative alternatives were evaluated in the Draft EIR. The alternatives include a No Project Alternative and two other scenarios that represent a reduction in the level of development intensity compared to the proposed project. The alternatives are summarized below.

- **No Project (1994 General Plan Alternative)** – Under this alternative, development for the proposed General Plan would not occur. Development would be guided by continued implementation of the existing General Plan.

- **Alternative 1:** This alternative assumed a lower intensity of development in the City with a lower share of the County’s growth, 8.39 percent of the population growth in Contra Costa County. Between 1980 and 2005, Richmond’s share of regional population growth was 8.39 percent, so this alternative represents no change from the past growth trend.

- **Alternative 2:** This alternative assumed that Richmond would capture 10.19 percent of population growth for the County over the next 20 years. This growth rate is higher than the historic growth rate in the region (8.39 percent) and is a moderate growth rate.

The discussion found in Draft EIR pages 5-3 through 5-38 describes each of the alternatives considered. Each discussion is followed by an assessment of the alternative’s impacts relative to the proposed project. For the purposes of brevity, this discussion is incorporated into these Findings by reference. The focus of the analysis is the difference between the alternative and the proposed project, with an emphasis on addressing the significant impacts identified under the proposed project. For each issue area, the analysis in the Draft EIR indicates which mitigation measures would be required of the alternative and which significant and unavoidable impacts would be avoided. If necessary, the Draft EIR analysis indicates what additional mitigation measures would be required for the alternative being discussed, and what significant impacts would be more or less severe. Unless otherwise indicated, the level of significance and required mitigation would be the same for the alternative as for the proposed project and no further statement of the level of significance is made. Table 5.1, below, provides a summary comparison of the severity of impacts for each alternative by topic. Impacts for the Proposed General Plan are identified in two ways: first, impacts identified in these Findings (which reflect additional or revised mitigation measures or City Council analysis of impacts); and second, impacts analyzed in the Draft EIR (which were considered in the Draft EIR’s alternatives analysis).

Table 5.1 – Alternative Impact Comparison

Issue Area	Proposed General Plan (Impacts Conclusions in Findings)	Proposed General Plan (Analyzed in Draft EIR)	No Project/1994 General Plan	Alternative 1	Alternative 2
Air Quality	LS, LS-OA, NLS	SU	Reduced	Reduced	Reduced
Biological Resources	LS	LS	Equal	Equal	Equal
Climate Change	LS-OA	SU	Reduced	Reduced	Reduced
Cultural Resources	LS, NLS	SU	Equal	Equal	Equal
Geology, Soils, Mineral Resources	LS	LS	Equal	Equal	Equal
Hazards and Hazardous Materials	LS	LS	Equal	Equal	Equal
Hydrology and Water Quality	LS	LS	Greater	Equal	Equal
Noise	LS, LS-OA	SU	Reduced	Reduced	Reduced
Parks and Open Space	LS	LS	Equal	Equal	Equal
Public Services	LS	LS	Equal	Equal	Equal
Public Utilities	NLS	SU	Reduced	Reduced	Reduced
Transportation and Circulation	LS, LS-OA	SU	Reduced	Reduced	Reduced
Visual Resources	LS, NLS	SU	Reduced	Equal	Equal

Notes:

SU = Significant and Unavoidable – if any impact was identified as significant and unavoidable in the technical analysis.
 LS = Less-than-significant – if all impacts were identified as less-than-significant in the technical analysis.
 LS-OA = Impact reduced to a less-than-significant level through implementation of mitigation measures that are within the jurisdiction or control of other public agencies.
 NLS = No longer significant, based on additional analysis in Findings.
 NI = No impact would occur when compared to the proposed project.
 Equal = Level of significance is equal or similar to the proposed project.
 Greater = Level of significance is greater than the proposed project.
 Reduced = Level of significance is reduced compared to the proposed project, but not necessarily to a less-than-significant level.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As discussed in the Draft EIR, significant impacts identified for the proposed General Plan would be related to air quality, cultural resources, climate change, noise, wastewater, solid waste, traffic, and visual resources. The No Project (1994 General Plan Alternative) would be consistent with the 2009 Clean Air Plan, but without Mitigation Measure 3.9-4, impacts related to runoff under the No Project (1994 General Plan Alternative) would be greater than those of the proposed General Plan, and impacts could be *significant*. Alternatives 1 and 2 would result in reduced environmental impacts due to reduced development intensity, but would not reduce significant impacts to less-than-significant levels.

Transportation and air quality impacts are directly related to population and reductions in population, as well as improving alternative travel modes, which would reduce these impacts. However, impacts related to cultural resources would occur if historic structures or if currently undiscovered remains or artifacts are encountered during construction. Consequently, any alternative that includes development could potentially impact these resources. Similarly, the wastewater treatment plant currently experiences flows beyond capacity during wet weather, so any alternative that would generate wastewater flows would result in an impact. The only alternative, therefore, that could eliminate impacts on cultural resources and wastewater would be the No Project/No Development Alternative. However, the No Project/No Development Alternative would halt all development within the City, regardless of the status of entitlements. By stopping all future development, this alternative would eliminate growth in traffic impacts, greenhouse gas (GHG) emissions, demand for public infrastructure and services, and impacts on environmental resources, such as air quality, noise, biological, and cultural resources. However, while a No Project/No Development Alternative could be an option for an individual development project, eliminating all future development in the entire City would not be a realistic alternative.

Although the other alternatives would reduce some of the impacts compared to the proposed General Plan, none would eliminate a significant impact identified in the Draft EIR. Infrastructure improvements that could result in physical effects would be required for any of these alternatives. The Draft EIR concluded that the proposed General Plan was found through the planning process to be most consistent with the objectives of the plan and would serve the greatest population, while still potentially resulting in significant effects disclosed above.

As explained in these Findings, the City Council has added and revised mitigation measures and findings, which explain how the measures would reduce effects to below the significance level (i.e., new Mitigation Measures 3.3-2(e), 3.6-1(q), 3.10-3(b), 3.13-3(b), 3.14-3, 3.14-6, and 3.15-1 and revised Mitigation Measures 3.5-1, 3.10-1, and 3.10-2). The City Council has also made findings that explain why other impacts are properly characterized as less-than-significant (i.e., air quality impact 3.3-1 and cumulative impacts, cultural resources cumulative impacts identified in EIR Section 3.5, public utilities wastewater treatment and conveyance systems impact 3.13-3 and cumulative impacts, public utilities landfill capacity cumulative impacts identified in EIR Section 3.13, and visual resources impact 3.15-2 and cumulative impacts). Finally, the City Council has made findings that establish and explain why mitigation is the responsibility of another agency and not the City, and that another agency can and should adopt a mitigation measure to reduce the impact to below the applicable significance level. Based on additional and revised mitigation measures and findings, the proposed General Plan would not have any significant and unavoidable impacts.

Therefore, the proposed General Plan would be the environmentally superior alternative.

CHAPTER 6 STATEMENT OF SIGNIFICANCE

The City of Richmond has considered the information and analysis set forth in the EIR and reiterated in Chapter 4 of these Findings, as well as City Council input regarding additional and revised mitigation measures that reduce impacts of the proposed General Plan to a less-than-significant level, findings that certain General Plan impacts are no longer considered significant and unavoidable, and findings that certain mitigation measures are within the responsibility and jurisdiction of another public agency. Based on this information and analysis, the following project-specific significant impacts related to air quality, cultural resources, climate change, noise, public utilities, transportation and circulation, and visual resources identified as significant and unavoidable in the Draft EIR are no longer considered significant and unavoidable.

- **3.3-1:** The CAP is periodically reviewed and updated, and this process is again underway and being informed by the regional SCS being prepared under SB 375 to reduce GHG emissions. Under all proposed SCS growth scenarios under consideration, higher density development in communities nearest regional job centers and served by transit results in a net air quality improvement by reducing VMT and corresponding emissions of toxic, criteria and GHG vehicular pollutants. Concentrating more growth in Richmond, as proposed in the General Plan, will improve air quality at the local and regional (most relevant to criteria pollutants) and global (most relevant to GHG pollutants) levels. It is also anticipated that the next revision to the CAP will reflect the changed development patterns being proposed for the SCS. Because (1) the General Plan is consistent with the SCS growth scenarios under consideration, (2) it is reasonably foreseeable that the SCS will be timely adopted in 2012, as required by SB 375, and (3) it is reasonably foreseeable that the CAP will continue to be timely revised to include the growth forecasts in the SCS and the General Plan as required by applicable federal regulations that mandate integration of the "best available information" about land use development patterns into federal Clean Air Act plans and conformity determinations, the CAP inconsistency with the General Plan is considered temporary. Further, this temporary inconsistency will not result in any adverse air quality impacts, since the higher growth and density planned in the General Plan is not expected to be realized until well after 2012. Finally, the temporary CAP inconsistency is not, itself, an adverse physical impact to the existing environment. Accordingly, this impact is no longer considered a significant and unavoidable impact from General Plan implementation.
- **3.3-2:** New Mitigation Measure 3.3-2(e) is added to the EIR to further avoid, reduce, or mitigate air quality impacts from General Plan implementation. In addition, mitigation measures to further reduce the air quality impacts from General Plan implementation and cumulative conditions to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.
- **3.5-1:** The General Plan includes policies to protect historical resources. In addition, the City has successfully implemented historic resource protection and adaptive use measures to preserve and re-purpose historic structures, and has a Historic Structures Code to further such adaptive use. Federal and state laws also preserve and protect designated categories of historic and cultural resources, and the City and future projects implementing the General Plan must comply with these federal and state legal requirements. Mitigation Measure 3.5-1 is revised in the EIR to clarify the multiple layers of protection afforded the City's historical resources. Based on this evaluation and clarified mitigation measure, the General Plan impact to historical resources is mitigated to a less-than-significant level.
- **3.6-1:** The General Plan includes policies to reduce GHG emissions, to commit the City to preparing a Climate Action Plan, to reduce GHG emissions and per capita VMT, to increase the density and intensity of development to support and promote transit, and to support the

regulatory efforts of air quality enforcement agencies such as BAAQMD, CARB and EPA. In addition, development patterns in the region's draft SCS promotes GHG reduction on a regional scale. The increased density and intensity of development, the expansion of employment, and other core components of the General Plan are fully aligned with the proposed visions for the region's SCS. When the SCS is finalized and implemented, and the City's Climate Action Plan is finalized and implemented, the City's growth will have a beneficial impact on climate change with a land use pattern that reduces per capita GHG emissions and that meets cumulative regional targets for GHG reductions from the land use sector. The City has limited jurisdiction over the many sectors that contribute to GHG emissions. Accordingly, new Mitigation Measure 3.6-1(q) is added to the EIR to further avoid, reduce or mitigate GHG impacts from General Plan implementation. Notwithstanding these General Plan policies and EIR mitigation measures, mitigation measures to further reduce GHG impacts from General Plan implementation to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB, and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.

- **3.10-1:** In addition to the General Plan Noise Element, the Final EIR, and the Noise Ordinance included in the Municipal Code, Mitigation Measure 3.10-1 is revised to further mitigate and minimize potentially significant future adverse noise and vibration impacts from construction activities. As a result of these additional mitigation requirements, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a less-than-significant level. Any project for which noise impacts are not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any new development activities, and implementation of the General Plan will not itself cause a significant adverse noise impact..
- **3.10-2:** In addition to the General Plan Noise Element, the Final EIR, and the Noise Ordinance included in the Municipal Code, Mitigation Measure 3.10-2 is revised to further mitigate and minimize potentially significant future adverse noise and vibration impacts from construction activities. As a result of these additional mitigation requirements, construction-related noise and vibration impacts at the General Plan and cumulative level are mitigated to a less-than-significant level. Any project for which noise impacts are not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any new development activities, and implementation of the General Plan will not itself cause a significant adverse noise impact.
- **3.10-3:** New Mitigation Measure 3.10-3(b) is added to further mitigate and minimize potentially significant future adverse noise and vibration impacts associated with exposure of sensitive receptors to noise levels in excess of the noise standards established by the City of Richmond. As a result of these additional mitigation requirements, operational noise impacts at the General Plan implementation and cumulative level are mitigated to a less-than-significant level. Any project for which noise impacts are not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any new development activities, and implementation of the General Plan will not itself cause a significant adverse noise impact. In addition, the City finds and determines that mitigating impacts from rail and roadway operations is within the jurisdiction and responsibility of other agencies, including Caltrans, the Public Utilities Commission, and the Federal Railroad Administration. These agencies can and should implement mitigation measures to further reduce noise levels associated with highway and railway operations to a less-than-significant level.
- **3.10-5:** Any project for which noise impacts are not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any new development activities, and

implementation of the General Plan will not itself cause a significant adverse noise impact. Therefore impacts associated with increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in the project vicinity are mitigated to a less-than-significant level. Additionally, measures to reduce roadway noise impacts are within the jurisdiction and responsibility of other agencies, including Caltrans. These agencies can and should implement mitigation measures to further reduce noise levels associated with highway operations.

- **3.13-3:** The EIR acknowledges the recognized need for additional wastewater treatment and conveyance capacity, but it is premature to conclude that these infrastructure improvements will cause significant unavoidable impacts. Accordingly, with implementation of new Mitigation Measure 3.13-3(b), this impact is considered *less-than-significant*.
- **3.14-1:** Increasing the density and intensity of development consistent with transit-oriented development patterns, and promoting walkable community design, are incompatible with a LOS metric that requires expansion of roadways to avoid traffic congestion. The LOS metric is also incompatible with the increasingly urbanized development pattern required of the region's Bayfront cities to reduce the region's VMT. Although the CCTA and WCCTAC LOS and MTOS standards are beyond the City's jurisdiction and control, these agencies can and should adopt alternative thresholds with appropriate roadway service metrics for urbanized, transit-oriented communities. The City finds and determines that LOS and MTOS impacts from General Plan implementation can and should be mitigated to a less-than-significant level by CTA and WCCTAC through adoption of alternative, appropriate LOS and MTOS thresholds for urbanized areas seeking to improve transit, pedestrian and bicycle transit modes and seeking to discourage reliance on private automobile usage. Adoption of appropriate LOS and MTOS thresholds by these other agencies is beyond the City's jurisdiction and authority.
- **3.14-3:** New Mitigation Measure 3.14-3 is added to the EIR to further minimize potential adverse impacts on transit services. Notwithstanding this additional mitigation measure, increased demand for transit service falls within the jurisdiction and control of other transit agencies including the AC Transit, BART, and AMTRAK. These agencies can and should implement measures to continue to provide and expand transit service as needed to meet demand.
- **3.14-6:** The City and its Departments (e.g., Police, Fire and Planning) coordinate emergency preparedness and response planning activities, and also participate in emergency response training and planning activities with other agencies. Emergency access and emergency response vehicular routing is also addressed as an important component of emergency response and planning activities. Increased roadway congestion will occur as part of the General Plan Buildout and cumulative scenarios, but the City has a very accessible grid of localized streets as well as multiple freeways, arterial and bypass routes that can be used in the event of an emergency. Additionally, established emergency vehicle equipment such as sirens and flashing lights are effective in helping clear access even in congested emergency conditions (e.g., freeway accidents). There is no evidence that the increased congestion resulting from anticipated General Plan Buildout will result in congestion levels that significantly impede emergency vehicle access on emergency response routes. New Mitigation Measure 3.14-6 is added to the EIR, to further reduce the potential that this impact may occur. With this analysis and addition of new Mitigation Measure 3.14-6, this impact is less-than-significant.
- **3.15-1:** The City has determined that change does not equate to significant adverse aesthetic impacts. The General Plan, City ordinances, and the City's discretionary permit and Design Review process, and the CEQA process all have components designed to protect and enhance the visual character of the City while embracing the changes inherent in an urbanized area. While embracing change, the City recognizes the value of recording the visual history and evolution of the City. To assure that the evolving character of the City is recognized and preserved for future

study, new Mitigation Measure 3.15-1 is added to the EIR. As a result of this additional evaluation and the additional mitigation requirement, impacts to scenic vistas and the visual character and quality of the City at the General Plan implementation and cumulative level are mitigated to a less-than-significant level. Any project with aesthetic impacts not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any new development activities, and implementation of the General Plan will not itself cause a significant adverse aesthetic impact.

- **3.15-2:** The General Plan, City ordinances, and the City's discretionary permit and Design Review process, and the CEQA process all have components designed to protect and enhance the visual character of the City while embracing the changes inherent in an urbanized area. The General Plan, ordinances, and discretionary permit and Design Review processes, and CEQA processes must be implemented as applicable to future project-level decisions. It is anticipated that the visual quality of the City will improve, and not be the subject of "substantial degradation" as the General Plan is implemented over time. Therefore, visual resources impacts associated with new sources of substantial light or glare that would adversely affect day or nighttime views in the area are considered less-than-significant at the General Plan level.

In addition, the following significant cumulative impacts related to air quality, cultural resources, climate change, noise, public utilities, transportation and circulation, and visual resources identified in the Draft EIR are no longer considered significant and unavoidable impacts.

Air Quality

For the reasons noted above, a conflict with the Clean Air Plan projection is not considered a significant and unavoidable impact from General Plan implementation. Because a conflict with the CAP projection is not a significant and unavoidable impact, the proposed General Plan's contribution to cumulative effects on the CAP is likewise not considered a significant and unavoidable cumulative impact.

The emissions associated with vehicle miles traveled are higher than the rate of increase in population within the City. Thus it may result in an inconsistency with the transportation portion of the CAP. However, such an inconsistency is not in itself a significant impact..

New Mitigation Measure 3.3-2(e) is added to the EIR to further avoid, reduce, or mitigate air quality impacts from General Plan implementation. In addition, mitigation measures to further reduce the air quality impacts from General Plan implementation and cumulative conditions to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates. With implementation of these mitigation measures, implementation of the proposed General Plan is not expected to result in a cumulatively considerable net increase of criteria pollutants (ozone, carbon monoxide, nitrogen dioxide, and inhalable particulates) for which the region is in nonattainment under an applicable federal or state ambient air quality standard.

Cultural Resources

Significant adverse impacts to historical, cultural and paleontological resources are mitigated to a less-than-significant level under the General Plan and EIR. These resources are location-specific (i.e., within the City boundaries), and there are no reasonably foreseeable projects beyond those that could or would occur in compliance with the General Plan that would adversely affect these resources. Accordingly, since the General Plan does not include any components that would cause a substantial adverse impact to a historical, cultural, or paleontological resource, and no such adverse impacts are reasonably foreseeable at a cumulative level, cumulative impacts to these resources are less-than-significant.

Climate Change

As noted above, the increased density and intensity of development, the expansion of employment, and other core components of the General Plan are fully aligned with the proposed visions for the region's SCS. When the SCS is finalized and implemented, and the City's Climate Action Plan is finalized and implemented, the City's growth will have a beneficial impact on climate change with a land use pattern that reduces per capita GHG emissions and that meets cumulative regional targets for GHG reductions from the land use sector. New Mitigation Measure 3.6-1(q) is added to the EIR to further avoid, reduce, or mitigate GHG impacts from General Plan implementation. Notwithstanding these General Plan policies and EIR mitigation measures, many sources of GHG are outside the City's jurisdiction and control. The City finds that mitigation measures to further reduce GHG impacts from General Plan implementation and cumulative conditions to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB, and EPA.

Noise

As a result of additional mitigation requirements implemented through revised Mitigation Measures 3.10-1 and 3.10-2, construction-related noise and vibration impacts at the cumulative level are mitigated to a less-than-significant level. Any project for which noise or vibration impacts is not reduced to a less-than-significant level requires appropriate environmental review and further feasible project-level mitigation. Implementation of the General Plan does not authorize any construction activities, and implementation of the General Plan will not, itself, cause a significant adverse noise or vibration construction impact.

The City finds and determines that mitigating impacts from rail and roadway operations is within the jurisdiction and responsibility of other agencies, including Caltrans, the Public Utilities Commission, and the Federal Railroad Administration. These agencies can and should implement mitigation measures to further reduce noise levels associated with highway and railway operations, such as using roadbed and rail materials that dampen or otherwise reduce noise levels, developing and implementing safety measures with lower noise levels than existing equipment such as rail whistles and crossing alarms, and working with manufacturers and operators of rail and vehicular equipment to reduce operational equipment noise levels.

Public Utilities

It is premature to conclude that infrastructure improvements will cause significant unavoidable impacts. Accordingly, with implementation of new Mitigation Measure 3.13-3(b), this impact is considered *less-than-significant*. The General Plan and EIR include policies and mitigation requirements to minimize levels of solid waste requiring landfill disposal, which in turn reduce landfill demand and extend the operational capacity of existing landfill. The City is a member of the West Contra Costa Integrated Waste Management Authority (WCCIWMA), a regional entity that disposes of solid waste within the region at several landfill facilities including the Potrero Hills Landfill in Solano County. The expansion of the Potrero Hills Landfill was approved in 2010, and provided the landfill with approximately 35 years of additional capacity (to 2045). WCCIWMA also uses other regional landfill facilities, as described in the EIR. Because the EIR concludes that adequate landfill capacity exists through and beyond the horizon year of the General Plan, it is not the case that regional landfill capacity will be significantly and unavoidably impacted during this period. Accordingly, the cumulative impact associated with the General Plan's contribution to solid waste generation is not significant and unavoidable.

Transportation and Circulation

As noted above, increasing the density and intensity of development consistent with transit-oriented development patterns, and promoting walkable community design and the increasingly urbanized development pattern required of the region's Bayfront cities to reduce the region's VMT are incompatible with a LOS metric that requires expansion of roadways to avoid traffic congestion. LOS and MTOS

impacts from General Plan implementation can and should be mitigated to a less-than-significant level by CTA and WCCTAC through adoption of alternative, appropriate LOS and MTOS thresholds for urbanized areas seeking to improve transit, pedestrian and bicycle transit modes and seeking to discourage reliance on private automobile usage. Adoption of appropriate LOS and MTOS thresholds by these other agencies is beyond the City's jurisdiction and authority.

Similarly, notwithstanding the addition of new Mitigation Measure 3.14-3, increased demand for transit service falls within the jurisdiction and control of the other transit agencies identified above. These agencies can and should implement measures to continue to provide and expand transit service as needed to meet demand.

There is no evidence that the increased congestion resulting from anticipated General Plan buildout will result in congestion levels that significantly impede emergency vehicle access on emergency response routes. With the additional analysis noted above and the addition of Mitigation Measure 3.14-6, the cumulative impact associated with increased congestion and reduced travel speeds on various roadways throughout the City, including some that are on primary emergency response routes (i.e. freeways and arterials) is no longer considered significant and unavoidable.

Visual Resources

As noted above, the General Plan, City ordinances, and the City's discretionary permit and Design Review process, and the CEQA process all have components designed to protect and enhance the visual character of the City while embracing the changes inherent in an urbanized area. To assure that the evolving character of the City is recognized and preserved for future study, new Mitigation Measure 3.15-1 is added to the EIR. As a result of this additional evaluation and the additional mitigation measure, impacts to scenic vistas and the visual character and quality of the City at the cumulative level are mitigated to a less-than-significant level.

It is anticipated that the visual quality of the City will improve, and not be the subject of "substantial degradation" as the General Plan is implemented over time. Therefore, visual resources impacts associated with new sources of substantial light or glare that would adversely affect day or nighttime views in the area are considered less-than-significant at the cumulative level.

CHAPTER 7

FINDINGS ON MITIGATION MONITORING AND REPORTING PROGRAM

Pursuant to Section 15091(a)(1) of the CEQA Guidelines, implementation of the mitigation measures identified in the Final EIR would substantially lessen the significant environmental impacts resulting from the project. These mitigation measures have been required in, or incorporated into the proposed General Plan. In accordance with Section 15091(d), and Section 15097 of the CEQA Guidelines, which require a public agency to adopt a program for reporting or monitoring required changes or conditions of approval to substantially lessen significant environmental effects, the Mitigation Monitoring and Reporting Program provided in this chapter is hereby adopted as the mitigation monitoring and reporting program for the proposed General Plan.

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
3.2 Demographics					
3.2-1 Implementation of the proposed General Plan could result in new physical impacts due to population growth.	3.2-1 The City shall continue to track the number of new housing units as building permits are issued to determine if new development exceeds the amount of development assumed in the EIR (15,548 housing units). As part of its annual Housing Element progress report City staff shall provide a report on the number of new housing units to the City Council annually. If the number of units approaches or exceeds 80 percent of the number assumed in the General Plan EIR (12,438 housing units), the City shall prepare an update to the General Plan and General Plan EIR to assess the environmental effects of additional projected growth.	Track the number of new housing units as building permits are issued to determine if new development exceeds the amount of development assumed in the EIR	Planning & Building Services	Annually	Planning & Building Services
3.2-2 Implementation of the proposed General Plan could result in new physical impacts due to job growth.	3.2-2 Based on available U.S. Census or ABAG data, the City shall track the number of new jobs to determine if new development exceeds the amount of development assumed in the EIR (22,488 jobs). City staff shall provide a report on the number of new jobs to the City Council annually and if the number of jobs approaches or exceeds 80 percent of the number assumed in the General Plan EIR (9,950 jobs), the City shall prepare an update to the General Plan and General Plan EIR to assess the environmental effects of additional projected growth.	Track the number of new jobs to determine if new development exceeds the amount of development assumed in the EIR	Planning & Building Services	Annually	Planning & Building Services
3.3 Air Quality					
3.3-1 Implementation of the proposed General Plan could provide new sources of regional air emissions that would conflict with or obstruct implementation of the Clean Air Plan. The temporary CAP inconsistency is not, itself, an adverse physical impact to the existing environment and is not considered significant and unavoidable.	3.3-1 <ul style="list-style-type: none"> a. Encourage the inclusion of the ferry terminal within the shuttle service feasibility study and within the current transportation system to promote the use of public transportation and provide for convenience of use. b. Promote reduced transit fares for daily commutes within the City, and encourage the cooperation between all modes of transportation to provide for ease of use, such as the institution of a monthly commuter pass that would provide access to the ferry, as well as bus, train, and/or BART systems. c. Continue to expand the Bay Trail and other routes for bicycle and pedestrian travel. d. Provide bicycle and pedestrian amenities, such as benches and bike storage, along routes leading to the Richmond and 	Include the ferry terminal within the shuttle service feasibility study Promote reduced transit fares for daily commutes within the City Expand routes for bicycle and pedestrians Provide bicycle and pedestrian	Planning & Building Services City Manager's Office Project Applicant/Engineering Services Department Project applicant/Engineering	During preparation of feasibility study On-going On-going On-going	Planning & Building Services City Manager's Office/Planning & Building Services Planning & Building Services Planning & Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p>El Cerrito Del Norte BART stations to promote non-motorized travel to and from public transit.</p> <p>e. Provide development incentives, such as reduced parking requirements, for businesses that provide transit incentives to employees.</p>	<p>amenities along routes leading to BART stations</p> <p>Provide incentives for businesses that provide transit incentives</p>	<p>Services Department</p> <p>City Manager's Office/Planning & Building Services</p>	<p>Within 18 months of the adopting of the General Plan</p>	<p>Planning & Building Services</p>
<p>3.3-2 Implementation of the proposed General Plan would result in construction and operational emissions that could contribute substantially to an existing or projected air quality violation. New Mitigation Measure 3.3-2(e) further reduces or mitigates air quality impacts from General Plan implementation. In addition, the City finds that mitigation measures to further reduce air quality impacts from General Plan implementation and cumulative conditions to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and not the City, and these agencies can and should adopt more stringent air pollution and air quality improvement mandates.</p>	<p><u>Construction</u></p> <p>3.3-2 a. All construction projects shall incorporate the most recent Best Management Practices as required by the BAAQMD.</p> <p>b. Future development under the proposed General Plan shall be subject to review to determine construction air quality impacts in accordance with CEQA.</p> <p><u>Operational</u></p> <p>c. The City of Richmond shall continue to require individual developers to implement applicable new stationary source control measures as proposed in the most recent CAP, while conforming with existing BAAQMD stationary source regulations and requirements and complying with BAAQMD rules and regulations regarding indirect sources.</p> <p>d. The City of Richmond shall consult with project proponents during the pre-application review process to ensure that uses with a high level of operational emissions are appropriately designed and sited to avoid impacts on</p>	<p>Incorporate the most recent BMPs</p> <p>Future projects shall be reviewed to determine air quality impacts</p> <p>Require developers to implement stationary source control measures as proposed in the most recent CAP</p> <p>Ensure that uses with a high level of operational emissions are designed and sited</p>	<p>Project applicant</p> <p>Project applicant</p> <p>Project applicant</p> <p>Project applicant</p>	<p>On-going during grading and construction</p> <p>During project design and development review</p> <p>During project design and development review</p> <p>During project design and development review</p>	<p>Planning & Building Services/ BAAQMD</p> <p>Planning & Building Services</p> <p>Planning & Building Services</p> <p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p>neighboring uses and regional air quality.</p> <p>e. The City will continue to work proactively with BAAQMD, CARB and EPA to help these agencies enforce air pollution prevention and control mandates within the City. The City will also work with the community to identify and advocate for air quality improvement measures that are within the jurisdiction of these agencies and can and should be implemented to improve Richmond's air quality to levels that are protective of human health and the environment.</p>	<p>to avoid impacts on neighboring uses and regional air quality</p> <p>Work proactively with other agencies to help enforce air pollution prevention and control mandates within the City; work with the community</p>	<p>City Manager's Office/Planning & Building Services</p>	<p>On-going</p>	<p>City Manager's Office/Planning & Building Services</p>
<p>3.3-3 Operational activities under the proposed General Plan would not expose sensitive receptors to substantial pollutant concentrations in excess of the established thresholds. This impact would be considered <i>less-than-significant</i>.</p>	<p>3.3-3 a. The City of Richmond shall implement special overlay zones around all planned sources of TACs to minimize the potential impacts to sensitive receptors. Land Use diagrams within the adopted General Plan will indicate the Special Overlay Zones which shall include an overlay zone of at least 500 feet on either side of all freeways and high volume roadways (100,000 vehicles per day or more).</p> <p>b. The City of Richmond shall require all new industrial and commercial development projects that have the potential to emit TACs to be located an adequate distance from existing and proposed development used by sensitive receptors—including residential, schools, day care facilities, congregate care facilities, hospitals, or other places of long-term residency. The determination of development projects that have the potential for TAC emissions and adequate distances from sensitive receptors as identified in CARB's "Air Quality and Land Use Handbook—A Community Health Perspective (April 2005; CARB Guidance) are as follows:</p> <ul style="list-style-type: none"> Proposed dry cleaners and film processing services that use Perchloroethylene shall be sited at least 500 	<p>Implement special overlay zones around all planned sources of TACs</p> <p>Require all new industrial and commercial projects that have the potential to emit TACs to be located an adequate distance from sensitive receptors</p>	<p>Planning & Building Services</p> <p>Project applicant</p>	<p>Within two years of the adoption of the General Plan</p> <p>During project design and development review</p>	<p>Planning & Building Services</p> <p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p>feet from sensitive land uses.</p> <ul style="list-style-type: none"> • Proposed auto body repair services shall be sited at least 500 feet from sensitive land uses. • Proposed gasoline dispensing stations with an annual throughput of less than 3.6 million gallons shall be sited at least 50 feet from sensitive land uses. Proposed gasoline dispensing stations with an annual throughput at or above 3.6 million gallons shall be sited at least 300 feet from sensitive land uses. 				
	<ul style="list-style-type: none"> • Other proposed sources of TACs including furniture manufacturing and repair services that use Methylene Chloride or other solvents identified as a TAC shall be sited at least 300 feet from sensitive land uses. • Proposed distribution centers with more than 100 trucks per day; more than 40 trucks with operating transport refrigeration units per day; or where transport refrigeration unit operations cumulatively exceed 300 hours per week should not be sited within 1,000 feet of sensitive land uses. • Proposed rail yards for major service and maintenance operations should not be sited within 1,000 feet of sensitive land uses. • Proposed chrome platers should not be sited within 1,000 feet of new sensitive land uses. • The City will support buffer zones between industrial areas and sensitive land uses, including port development. Proposed port developments should not site the heavily impacted areas immediately upwind (based on prevalent wind direction) of sensitive land uses. Siting of port developments that have the potential to emit TACs should be done in consultation with the BAAQMD to determine the need for a health risk assessment. • The City will support buffer zones between industrial areas and sensitive land uses, including refinery development. Proposed petroleum refineries should not site the heavily impacted areas immediately 				

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	upwind (based on prevalent wind direction) of sensitive land uses. Siting of refineries should be done in consultation with the BAAQMD to determine the need for a health risk assessment.				
	<p>c. Proposed sensitive land uses including schools, daycare facilities, congregate care facilities, hospitals, or other places of long term residency for people shall be sited:</p> <ul style="list-style-type: none"> • At least 500 feet from dry cleaners and film processing services that use Perchloroethylene. • A least 500 feet from auto body repair services. • At least 50 feet from existing gasoline dispensing stations with an annual throughput of less than 3.6 million gallons and 300 feet from existing gasoline dispensing stations with an annual throughput at or above 3.6 million gallons. • At least 300 feet from existing land uses that use Methylene Chloride or other solvents identified as a TAC, including furniture manufacturing and repair services. • At least 1,000 feet from distribution centers with more than 100 trucks per day; more than 40 trucks with operating transport refrigeration units per day; or where transport refrigeration unit operations cumulatively exceed 300 hours per week. In addition sensitive land uses should not be sited near facility entry and exit points. • At least 1,000 feet from major service and maintenance rail yards. • At least 1,000 feet from chrome plating facilities. • The City will support buffer zones between industrial areas and sensitive land uses, including port development. Avoid siting sensitive land uses immediately downwind (based on prevalent wind direction) from stationary TAC sources or primary loading areas located within the boundaries of existing port facilities. 	Implement mitigation measures identified to reduce exposure of sensitive receptor to pollutants	Project applicant	During project design and development review	Planning & Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<ul style="list-style-type: none"> • The City will support buffer zones between industrial areas and sensitive land uses, including refinery development. Avoid siting sensitive land uses immediately downwind (based on prevalent wind direction) from stationary TAC sources located within the boundaries of petroleum refineries. d. The City of Richmond shall consult with the BAAQMD to identify TAC sources and determine the need for and requirements of a health risk assessment for proposed developments. 	Identify TAC sources and determine the need for a health risk assessment	Planning & Building Services	During project design and development review	Planning & Building Services
3.5 Cultural Resources					
3.5-1 Development activities associated with the proposed Richmond General Plan Update could cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5 of the CEQA Guidelines. Based on additional evaluation and clarified Mitigation Measure 3.5-1, the General Plan impact to historic resources is mitigated to a less-than-significant level.	3.5-1 Future projects shall implement the City's Historic Structures Code to minimize impacts on historical resources by requiring thorough scrutiny for compliance with applicable legal requirements, including but not limited to compliance with the General Plan's historic resource protection policies, and compliance with state and federal historic resource protection laws, before any resource may be demolished and ensuring that alteration conforms to the Secretary of the Interior's Standards for the Treatment of Historic Properties.	Investigate historical resources before demolition and ensure that alteration conforms to the Secretary of the Interior's Standards for the Treatment of Historic Properties, and complies with General Plan policies and state and federal historic resource protection laws.	Project applicant	Prior to approval of application for demolition or alteration	Planning & Building Services
3.5-2 Development activities associated with the proposed Richmond General Plan Update could cause a substantial adverse change in the significance of an archaeological resource as defined in section 15064.5 of the CEQA Guidelines or	3.5-2 a. The City shall require that impacts on unique archaeological resources be mitigated to a less-than-significant level through methods identified in Public Resources section 21083.2, including planning construction to avoid archaeological sites, deeding archaeological sites into permanent conservation easements, capping or covering archaeological sites with a layer of soil before building on the sites, or planning parks, greenspace, or other open space to incorporate archaeological sites.	Comply with mitigation requirements regarding consultation and subsequent actions if archaeological resources are encountered	Construction contractor	Prior to grading activities and ongoing during construction	Planning & Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
disturb human remains, including those interred outside of formal cemeteries. With the implementation of mitigation measures, this is considered a <i>less-than-significant</i> impact.	b. The City shall require new development within the City to evaluate the potential for impacts on human remains. The City shall require that the treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable state and federal laws, including notification of the County Coroner and, in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC).	Comply with mitigation requirements regarding consultation and subsequent actions if human remains are encountered	Construction contractor	Prior to grading activities and ongoing during construction	Planning & Building Services
3.5-3 Development activities associated with the proposed Richmond General Plan Update could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. With the implementation of mitigation measures, this is considered a less-than-significant impact.	3.5-3 The City shall require new development within areas of high sensitivity paleontological resources to evaluate the potential for impacts on significant paleontological resources. The City shall require that impacts on significant paleontological resources be mitigated to a less-than-significant level through data recovery or other methods determined adequate by a professional paleontologist.	Comply with mitigation requirements regarding consultation and subsequent actions if paleontological resources are encountered	Construction contractor	Prior to grading activities and ongoing during construction	Planning & Building Services
3.6 Climate Change					
3.6-1 Implementation of the proposed General Plan would result in the generation of GHGs that may have a significant impact on the environment. Implementation of BAAQMD BMPs would ensure that construction emissions of GHGs would be less-than-significant. New Mitigation Measure 3.6-1(q) is added to the EIR to further avoid, reduce or mitigate GHG impacts from General Plan	3.6-1 a. All construction projects shall incorporate the most recent Best Management Practices for Greenhouse Gas Emissions as indicated by the BAAQMD. b. All new development and all retrofits of single-family developments, multi-family developments of over 10 units, and all commercial/industrial remodels of over 10,000 square feet shall be required to exceed Title 24 standards by 20 percent by 2020 and 30 percent by 2030. This mitigation measure enhances General Plan Action EC3.C. Measures to reduce emissions can include, but are not limited to: <ul style="list-style-type: none"> • Install energy efficient appliances, including air 	Incorporate the most recent BMPs New development and all retrofits shall be required to exceed Title 24 standards by 20 percent by 2020 and 30 percent by 2030	Project applicant Project applicant	On-going during grading & construction During project design and development review	Planning & Building Services Planning & Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
<p>implementation. In addition, the City finds that mitigation measures to further reduce GHG impacts from General Plan implementation and cumulative conditions to a less-than-significant level are within the jurisdiction and control of air quality agencies including BAAQMD, CARB and EPA, and not the City, and these agencies can and should adopt more stringent air pollution reduction and air quality improvement mandates.</p>	<p>conditioning and heating units, dishwashers, water heaters, etc.;</p> <ul style="list-style-type: none"> • Install solar water heaters; • Install top quality windows and insulation; • Install energy efficient lighting; • Optimize conditions for natural heating, cooling and lighting by building siting and orientation; • Use features that incorporate natural ventilation; • Install light-colored "cool" pavements, and strategically located shade trees along all bicycle and pedestrian routes; and • Incorporate skylights, reflective surfaces, and natural shading in buildings design and layouts; • Replace inefficient air conditioning and heating units with new energy efficient models; • Replace older, inefficient appliances with new energy efficient models; • Replace old windows and insulation with top-quality windows and insulation; • Replace inefficient and incandescent lighting with energy efficient lighting; and • Weatherize existing buildings to increase energy efficiency. <p>c. Require all new City-owned and operated facilities and 50 percent of all new development to generate at least 10 percent of their energy use from renewable sources. Enhances General Plan Action EC3.B.</p> <p>d. All new commercial and multi-family developments installing boilers shall be required to install energy efficient boilers such that they achieve a minimum 4.5 percent reduction in energy usage. The same reductions shall be required of all remodeled multi-family developments of over 10 units and all commercial/industrial remodels of over 10,000 square feet.</p> <p>e. Develop improved waste reduction and expanded recycling</p>	<p>Require facilities to generate at least 10 percent of energy use from renewable sources</p> <p>Developments installing boilers shall be required to install energy efficient boilers</p> <p>Develop improved</p>	<p>Project applicant</p> <p>Project applicant</p> <p>Planning &</p>	<p>During project design and development review</p> <p>During project design and development review</p> <p>Within two</p>	<p>Planning & Building Services</p> <p>Planning & Building Services</p> <p>City Manager's</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p>programs such that a 75 percent diversion rate is achieved by 2020 and an 85 percent diversion rate is achieved by 2030 for all non-construction waste streams. Potential measures could include: providing recycling containers in parks and public spaces; establishing computer reuse and recycling programs; enhancing recycling and green waste services for all residents; and providing locations for household hazardous wastes to be recycled. Enhances General Plan Actions EC3.D.</p> <p>f. Develop a program that requires all construction and demolition activities to evaluate energy use and waste and to reduce or mitigate construction-related impacts by 75 percent. Enhances General Plan Actions EC3.E.</p>	<p>waste reduction and expanded recycling programs</p> <p>Require construction and demolition activities to evaluate energy use and waste</p>	<p>Building Services/City Manager's Office</p> <p>Planning & Building Services/City Manager's Office</p>	<p>years of adoption of the General Plan</p> <p>Within two years of adoption of the General Plan</p>	<p>Office</p> <p>City Manager's Office</p>
	<p>g. Implement an Anti-Idling Policy for heavy-duty diesel trucks, including local delivery trucks and long-haul truck transport within the City. This policy would prohibit idling of on and off-road heavy duty diesel vehicles for more than 5 minutes. This policy would be implemented by requiring signage at all loading docks and along truck routes informing drivers of the requirement to limit idle time to no more than five minutes at loading docks and parking areas. Variances to the policy would include the necessity to idle while in traffic lanes due to traffic congestion on the roadway, or during emergency situations. Employers who own and operate truck fleets would be required to inform their drivers of the anti-idling policy. Enhances General Plan Policy EC5.3.</p> <p>h. Provide tax and development incentives for employers with more than 100 employees within the City to establish a trip reduction plan that would incorporate annual employee commute surveys, marketing of commute alternatives, ride matching assistance, and transit information at a minimum. Additional measures shall be incorporated such that vehicle trips are reduced by a minimum of 4%. Measures may include-secure bicycle parking, showers and lockers for employees who bike to work, among others. This measure would encourage building management companies and</p>	<p>Implement an Anti-Idling Policy for heavy-duty diesel trucks</p> <p>Provide tax and development incentives for employers with more than 100 employees to establish a trip reduction plan</p>	<p>City Manager's Office</p> <p>Planning & Building Services/City Manager's Office</p>	<p>Within two years of adoption of the General Plan</p> <p>Within two years of adoption of the General Plan</p>	<p>City Manager's Office</p> <p>City Manager's Office</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p>smaller localized businesses to cooperate in establishing joint trip reduction plans. Enhances General Plan Actions EC2.F and EC2.I.</p> <p>i. Implement Citywide car and bicycle sharing programs. Collaborate with service providers to identify potential sites for locating carshares.</p>	<p>Implement Citywide car and bicycle sharing programs</p>	<p>Project Applicants/ Planning & Building Services/City Manager's Office</p>	<p>On-going</p>	<p>Planning & Building Services</p>
	<p>j. Require new local-serving mixed-use in residential areas to provide needed services and amenities close to where people live and work. Require new development and redevelopment projects to provide community amenities and uses that serve priority community needs. Enhances General Plan Policy EC4.1 and General Plan Actions EC4.A, EC4.B, and EC4.D.</p> <p>k. Require mixed-use development along transit-oriented corridors that attracts people and facilitates activity throughout the day. Prohibit isolated or gated communities in order to improve physical connectivity throughout the City, and remove barriers in existing gated areas. Maintain streets to ensure that neighborhoods and streets are safe and well used. Enhances General Plan Policy EC4.2 and Actions EC2.C, EC2.E, EC2.G, EC4.A, EC4.B, EC4.C and EC4.E.</p> <p>l. Collaborate with AC transit, BART, West Contra Costa Transit Agency, Amtrak, and major employers in Richmond that provide shuttle service to expand transit in the evenings and late nights, and for people with special needs. Enhance Richmond's paratransit service. Collaborate with major employers to provide employer-based "open-door" shuttles to BART, the planned ferry terminal and other transit hubs. Collaborate with regional and Contra Costa County transportation agencies to maintain and enhance service within the City and region. Explore strategies to address affordability, access, and safety. Expand outreach and</p>	<p>Include new local-serving mixed-use as part of development in residential areas</p> <p>Include mixed-use as part of development along transit-oriented corridors</p> <p>Collaborate with transit authorities and major employers in Richmond that provide shuttle service to expand transit in the evenings and late nights, and for people with special</p>	<p>Project applicant</p> <p>Project applicant/ Planning & Building Services</p> <p>Engineering Services Department/ Planning & Building Services</p>	<p>During project design and development review</p> <p>During project design and development review</p> <p>On-going</p>	<p>Planning & Building Services</p> <p>Planning & Building Services</p> <p>Engineering Services Department/ Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	information programs to promote transit use. Measure results in a 10 percent expansion of transit system, and an increase in service frequency	needs			
	<p>and speed for 2020; and a 15 percent expansion by 2030. Expand outreach and information programs to promote transit use. Enhances General Plan Policy EC2.C.</p> <p>m. All new street lighting and all re-modeled or replaced street lighting shall consist of high-efficiency lamps that reduce energy consumption by a minimum of 16 percent.</p> <p>n. All new traffic lights and all replaced traffic lights shall consist of LED lights. This high efficiency lighting would reduce emissions from traffic lights by 90 percent.</p> <p>o. Require new development to incorporate water-saving measures demonstrating a minimum reduction of 20 percent in water use over a similar project completed within the previous five years. This measure enhances General Plan Action EC3.F. This measure would be enhanced by General Plan Action EC3.G.</p>	<p>Use high-efficiency lamps for street lighting</p> <p>Use LED technology for new traffic lights</p> <p>Incorporate water-saving measures in new development</p>	<p>Project applicant/ Engineering Services Department</p> <p>Project applicant/ Engineering Services Department</p> <p>Project applicant/ Engineering Services Department</p>	<p>On-going</p> <p>On-going</p> <p>During project design and development review</p>	<p>Engineering Services Department/ Planning and Building Services/City Manager's Office</p> <p>Engineering Services Department/ Planning and Building Services/City Manager's Office</p> <p>Engineering Services Department/ Planning & Building Services</p>
	<p>p. The City of Richmond shall adopt a Climate Action Plan within 18 months of the adoption of the General Plan Energy and Climate Change Element. The Climate Action Plan shall include the following pursuant to CEQA section 15183.5(b):</p> <p>a. The quantification of greenhouse gas emissions, both existing (2005) and projected for 2020 and General Plan horizon year (2030). These inventories and projections shall be used in the forthcoming Climate Action Plan.</p> <p>b. The Climate Action Plan shall define reduction</p>	<p>The City of Richmond shall prepare a Climate Action Plan</p>	<p>City Manager's Office/Planning & Building Services</p>	<p>Within 18 months of the adoption of the General Plan Energy and Climate Change Element</p>	<p>City Manager's Office/Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<p>targets that are California State Assembly Bill 32 (AB 32) compliant and continue reducing emissions past 2020 in order to address cumulatively considerable impacts of greenhouse gas emissions. At a minimum, the Climate Action Plan shall set a target to reduce emissions to 1990 levels by 2020, which is anticipated to be a reduction of 15% from 2005 levels.</p> <p>c. The 2020 and 2030 Business As Usual (BAU) Inventories provide emissions by land use types and emission sectors based upon the anticipated changes and growth in land use within the General Plan Land Use and Urban Design Element, which fulfills the criteria of CEQA Guidelines 15183.5(b)(C). As such, the inventories shall provide quantities and context of the emissions that need to be reduced in order to achieve the reduction target. Reduction measures in the Climate Action Plan shall focus on reducing the emissions from the sectors and land use types identified in the 2020 and 2030 BAU inventories.</p>				
	<p>d. The Climate Action Plan shall specify reduction measures or groups of reduction measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the AB 32 compliant reduction target. To implement the goals and policies in the General Plan Energy and Climate Change Element, the Climate Action Plan shall include adaptation strategies that focus on potential local impacts of climate change, such as sea level rise, increased risk of flooding, diminished water supplies, and public health. Broader sustainability measures may include the preservation of local water quality, air quality, open space, and biodiversity. In addition, the following reduction strategies shall be incorporated into the Climate Action Plan:</p>				

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	<ul style="list-style-type: none"> i. Require all new or renovated municipal buildings to seek California Green 2010 Tier 1 building standards or higher and require new development building design to be, at a minimum, compliant with California Green 2010 building standards. ii. Require all municipal fleet purchases to be fuel efficient vehicles for their intended use, based on the fuel type, design, size, and cost efficiency. iii. Require new development projects to implement a construction plan that demonstrates how activities will reduce waste through recycling and/or salvaging of nonhazardous construction and demolition debris at a minimum of 50%. 				
	<ul style="list-style-type: none"> e. In order to establish a mechanism to monitor the Climate Action Plan's progress towards achieving the reduction targets and to require amendment if the Climate Action Plan is not achieving the reduction targets, the Climate Action Plan shall include an implementation chapter describing how the reduction measures are to be implemented, emissions monitored, and the Climate Action Plan updated. Emissions inventories shall be conducted at minimum intervals of five years in order to evaluate the progress of the Climate Action Plan. The Climate Action Plan shall be updated together with future General Plan Updates or as necessary to implement new statewide reduction thresholds. f. The Climate Action Plan, including all updates, is a project subject to public review and comment under the California Environmental Quality Act. q. The City will continue to work proactively with BAAQMD, CARB and EPA to help these agencies enforce GHG prevention and control mandates within the City, and will work with the community to identify and advocate for GHG measures that are within the jurisdiction of these 	<p>Work proactively with other agencies to help enforce GHG prevention and control</p>	<p>City Manager's Office/Planning & Building Services</p>	<p>On-going</p>	<p>City Manager's Office/Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	agencies and can and should be implemented to further reduce GHG from the City.	mandates within the City; work with community			
3.9 Hydrology and Water Quality					
3.9-8 Development within the City could be subject to dam failure inundation and sea level rise flood hazards. Implementation of General Plan Policies and Implementing Actions, as well as the implementation of mitigation measures, would render this a less-than-significant impact.	3.9-8 a For all projects within the inundation zone for maximum sea level rise as identified in Map 8.1 of Chapter 8 of the General Plan, the project site shall be graded such that finished floor elevations are 3.5 feet above the Base Flood Elevation (BFE), and streets and pads are 3 feet above BFE to allow for future sea level rise, thereby elevating all structures above the existing and potential future flood hazard area.	Projects within the inundation zone for maximum sea level rise shall be graded such that finished floor elevations are 3.5 feet above the Base Flood Elevation (BFE), and streets and pads are 3 feet above BFE	Project applicant	On-going during grading and construction	Engineering Services Department/ Planning and Building Services
	b. For all projects within the inundation zone for maximum sea level rise as identified in Map 8.1 of the General Plan, shoreline and public access improvements shall be designed to allow future increases in elevation along the shoreline edge to keep up with higher sea level rise values, should they occur. Design elements shall include providing adequate setbacks to allow for future elevation increases of at least 3 feet from the existing elevation along the shoreline. Before a Small Lot Final Map is approved, the project Applicant must petition the appropriate governing body to form (or annex into if appropriate) and administer a special assessment district or other funding mechanism to finance and construct future improvements necessary to ensure that the shoreline, public facilities, and public access improvements will be protected should sea level rise exceed 16 inches at the perimeter of the project. Prior to the sale of the first residential unit or lease of the first commercial or industrial space, the legislative body shall have acted upon the petition to include the property within the district boundary. The newly formed district shall also administer a Monitoring and Adaptive Management Plan to monitor sea level and implement and maintain the	Projects within the inundation zone for maximum sea level rise, shall have shoreline and public access improvements designed to allow future increases in elevation along the shoreline edge to keep up with higher sea level rise values	Project applicant	On-going during grading and construction	Engineering Services Department/ Planning and Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	protective improvements. All improvements shall be subject to approval by the City of Richmond planning and public works staff prior to issuance of building or grading permits. These improvements shall include, but are not limited, one or more of the following:				
	<ul style="list-style-type: none"> • Construction of a shoreline protection system that is initially built to accommodate a mid-term rise in sea level of 16 inches, with a design that is adaptable to meet higher than anticipated values in the mid-term, as well as for the long-term; • Construction of a storm drainage system that is initially built to accommodate a mid-term rise in sea levels of 16 inches, with a design that is adaptable to meet higher than anticipated sea level rise values (similar to the first bullet); and • Construction of buildings and vital transportation infrastructure at elevations that would not be exceeded by flood waters, even if the shoreline protection does not function, for existing conditions and over a longer-term as compared to the two above. 				
3.10 Noise					
3.10-1 Construction activities associated with the future land use changes under the proposed General Plan could generate noise levels that temporarily exceed acceptable noise levels. Implementation of noise limits in the City of Richmond Municipal Code would limit the exposure of sensitive receptors to temporary or periodic increases in noise levels. Revised Mitigation Measure 3.10-1 further mitigates and minimizes	3.10-1 Future projects shall incorporate project-specific mitigation measures to reduce the impact of construction noise <ul style="list-style-type: none"> (a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise and vibration construction activity minimization and mitigation plan for any multi-story development project located within a residential neighborhood, or located adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address high-noise or vibration construction activities such as pile-driving, and must address outdoor construction activities occurring outside normal weekday business hours. The plan must also address construction-related noise and vibration from current and concurrently with project-related construction activities to address potential cumulative noise and vibration 	Comply with project-specific mitigation measures to reduce construction noise	Project applicant	During project design and development review	Planning & Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
<p>potentially significant future adverse impacts associated with noise levels that temporarily exceed the noise standards established by the City and that would expose sensitive receptors to substantial temporary or periodic increases in ambient noise levels. As a result of additional mitigation requirements, these impacts at the General Plan and cumulative level are mitigated to a <i>less-than-significant</i> level.</p>	<p>impacts. Excessive noise and vibration impacts from such construction-related activities (defined as noise and vibration impacts that would not occur from similar construction-related activities) shall be avoided or minimized to the extent feasible, and high-noise or vibration construction activities shall not occur during evenings or weekends adjacent to occupied residential units.</p> <p>(b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating noise and vibration impacts from construction activities, for use as appropriate in noise and vibration plans required under Mitigation Measure 3.10-1(a) above.</p> <p>(c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for construction-related noise and vibration impacts during daytime weekday hours, and will consider and include feasible conditions in building, demolition and grading permits to avoid or minimize excessive noise and vibration from construction activities.</p> <p>(d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal Code.</p>				
<p>3.10-2 Construction of future new land uses under the proposed General Plan could generate or expose persons or structures to temporary groundborne vibration. Revised Mitigation Measure 3.10-2 further mitigates and minimizes potentially</p>	<p>3.10-2 Future projects shall incorporate project-specific mitigation measures to reduce the impact of construction-related groundborne vibration.</p> <p>(a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise and vibration construction activity minimization and mitigation plan for any multi-story development project located within a residential neighborhood, or located</p>	<p>Comply with project-specific mitigation measures to reduce vibration</p>	<p>Project applicant</p>	<p>During project design and development review</p>	<p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
<p>significant future adverse noise and vibration impacts from construction activities. As a result of additional mitigation requirements, these impacts at the General Plan and cumulative level are mitigated to a <i>less-than-significant</i> level.</p>	<p>adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address high-noise or vibration construction activities such as pile-driving, and must address outdoor construction activities occurring outside normal weekday business hours. The plan must also address construction-related noise and vibration from current and concurrently with project-related construction activities to address potential cumulative noise and vibration impacts. Excessive noise and vibration impacts from such construction-related activities (defined as noise and vibration impacts that would not occur from similar construction-related activities) shall be avoided or minimized to the extent feasible, and high-noise or vibration construction activities shall not occur during evenings or weekends adjacent to occupied residential units.</p> <p>(b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating noise and vibration impacts from construction activities, for use as appropriate in noise and vibration plans required under Mitigation Measure 3.10-2(a) above.</p> <p>(c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for construction-related noise and vibration impacts during daytime weekday hours, and will consider and include feasible conditions in building, demolition and grading permits to avoid or minimize excessive noise and vibration from construction activities.</p> <p>(d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal Code.</p>				
<p>3.10-3 Implementation of the proposed General Plan could</p>	<p>3.10-3 (a) Future projects shall incorporate project-specific mitigation measures and maintain Quiet Zones to reduce the impact of</p>	<p>Comply with project-specific</p>	<p>Project applicant</p>	<p>During project design and</p>	<p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
<p>expose sensitive receptors to noise levels in excess of the existing noise standards established by the City. New Mitigation Measure 3.10-3(b) mitigates operational noise impacts at the General Plan implementation and cumulative level to a <i>less-than-significant</i> level. In addition, mitigating impacts from rail and roadway operations is within the jurisdiction and responsibility of other agencies, which can and should implement mitigation measures to further reduce noise levels.</p>	<p>train noise.</p> <p>(b) Future commercial and industrial projects shall incorporate project-specific mitigation measures to reduce operational noise levels for higher-noise sources such as commercial HVAC systems, generators, pumps and manufacturing activities.</p> <p>a) As part of its discretionary approval and environmental review process for future projects, the City will require a noise minimization plan for any commercial or industrial project located within a residential neighborhood, or located adjacent to a residence, school, or hospital or other sensitive receptor. The plan must address operational noise generating activities such as HVAC systems, generators and pumps. Excessive noise from such sources shall be avoided or minimized to the extent feasible.</p> <p>b) The City will compile and periodically update best management practices ("BMPs") for minimizing and mitigating operational noise from commercial and industrial projects, for use as appropriate in the noise minimization plan required under Mitigation Measure 3.10-3(b)(a) above.</p> <p>c) The City will consider and may adopt appropriate modifications to the Noise Ordinance to establish criteria for urbanized ambient noise standards, and will consider and include feasible conditions in building and use permits to avoid or minimize excessive operational noise from commercial and industrial activities.</p> <p>d) This mitigation measure does not eliminate or supersede any other applicable legal requirement, including but not limited to the Noise Ordinance included in the Municipal</p>	<p>mitigation measures to maintain Quiet Zones</p> <p>Comply with project-specific mitigation measures to reduce operational noise</p>	<p>Project applicant</p>	<p>development review</p> <p>During project design and development review</p>	<p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	Code.				
<p>3.10-5 Operation of new land uses under the proposed General Plan would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in the project vicinity. These impacts can be mitigated to <i>less-than-significant</i> with implementation of General Plan policies, mitigation measures, and mitigation measures within the jurisdiction and responsibility of other agencies, and not the City.</p>	<p>3.10-5 Future projects shall incorporate project-specific mitigation measures to promote non-motorized transportation to reduce the impact of traffic noise.</p>	<p>Incorporate project-specific mitigation to promote non-motorized transportation</p>	<p>Project applicant</p>	<p>During project design and development review</p>	<p>Planning & Building Services</p>
3.13 Public Utilities					
<p>3.13-3 Implementation of the General Plan Update could require the construction or expansion of wastewater treatment facilities or collection systems that could cause significant environmental impacts, absent project-specific mitigation measures. It is premature to conclude that the impacts of the expansion or construction would create significant unmitigated impacts. Therefore, with the implementation of General</p>	<p>3.13-3 (a) Future projects shall incorporate project-specific mitigation measures to reduce impacts from the construction of new wastewater collection and treatment facilities.</p> <p>(b) The City will work with affected stakeholders to avoid, minimize, or mitigate any significant adverse impacts to the environment that may occur as a result of increasing the capacity of the wastewater treatment and conveyance system. This is appropriately evaluated and implemented at the project-specific level for the treatment plant and conveyance systems.</p>	<p>Incorporate project-specific mitigation to reduce impacts from the construction of new facilities</p> <p>Work with stakeholders</p>	<p>Project applicant</p> <p>Planning & Building Services</p>	<p>During project design and development review</p> <p>During project design and development review</p>	<p>Planning & Building Services</p> <p>Planning & Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
<p>Plan policies and new and revised mitigation measures, including new Mitigation Measure 3.13-3(b), this impact is considered <i>less-than-significant</i>.</p>					
3.14 Transportation and Circulation					
<p>3.14-1 The proposed General Plan may result in traffic congestion that exceeds the previous City of Richmond traffic LOS standard of LOS D, as well as CCTA and WCCTAC LOS and MTOS standards. LOS and MTOS impacts can and should be mitigated to a <i>less-than-significant</i> level by CCTA and WCCTAC through the adoption of appropriate LOS and MTOS thresholds, which are beyond the City's jurisdiction and control.</p>	<p>3.14-1 Future projects shall incorporate project-specific mitigation measures to reduce traffic impacts.</p>	<p>Comply with project-specific mitigation measures to reduce traffic impacts</p>	<p>Project applicant</p>	<p>During project design and development review</p>	<p>Planning and Building Services</p>
<p>3.14-3 Implementation of the proposed General Plan would produce higher demand for transit service, increased demand for transit service falls within the jurisdiction and control of other transit agencies, and not the City, and these agencies can and should implement measures to continue to provide and expand transit service as needed to meet demand.</p>	<p>3.14-3 The City shall continue to cooperate and coordinate with transit agencies and work with the community to promote and advocate for improved transit services and increased transit capacity to meet anticipated General Plan implementation and cumulative impacts for transit service, and seek grant funding opportunities to supplement available transit service.</p>	<p>Cooperate and coordinate with transit agencies; work with the community</p>	<p>City Manager's Office/Planning and Building Services</p>	<p>On-going</p>	<p>City Manager's Office/Planning and Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
3.14-6 Traffic congestion may reduce emergency response access. With the addition of Mitigation Measure 3.14-6 and additional analysis, this impact is not considered significant and unavoidable.	3.14-6 The City will continue to support coordination among its departments and other agencies in planning for emergency access and response routes, and will periodically review and as appropriate update its emergency access and response route planning.	Continue to implement effective planning and procedures	City Manager's Office/Planning and Building Services	On-going	City Manager's Office/Planning and Building Services

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
3.15 Visual Resources					
<p>3.15-1 Development activities associated with the proposed General Plan could have a substantial adverse effect on a scenic vista or substantially degrade the existing visual character or quality of the site and its surroundings. New Mitigation Measure 3.15-1 assures that the evolving visual character of the City is recognized and preserved for future study. Based on additional analysis and mitigation requirements, impacts to scenic vistas and the visual character and quality of the City at the General Plan implementation and cumulative level are mitigated to a <i>less-than-significant</i> level.</p>	<p>3.15-1 As a condition of authorizing development within existing undeveloped areas, or demolishing commercial or industrial structures that were built prior to 1950, the City shall require the applicant to provide photographs or another appropriate form of visual record of the project location's existing physical setting, and a photograph or another appropriate form of visual record of one or more public vistas of the project location (e.g., views from public parks or civic buildings). These visual records shall be submitted to the Planning Department or its designee for appropriate storage and retrieval for future studies of the City's evolving urban character.</p>	<p>Require and store visual records for retrieval for future studies</p>	<p>Planning and Building Services</p>	<p>On-going</p>	<p>Planning and Building Services</p>
<p>3.15-2 The development of the proposed General Plan could create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. It is anticipated that the visual quality of the City will improve as the General Plan is implemented over time, so this impact is considered <i>less-than-significant</i> at the General Plan and cumulative levels.</p>	<p>3.15-2 a All street lighting shall be directed downward and shielded to prevent light spill onto surrounding properties, sky glow, and glare.</p> <p>b. The City shall restrict the use of high level outdoor lighting for new homes, particularly along the hillside ridges.</p> <p>c. Landscaping shall be incorporated along internal roads and near off-site homes to reduce spill light emanating from vehicles and buildings.</p> <p>d. The City shall require design review of any project containing reflective glass or metal building materials that exceed 50 percent of any building surface or the first three</p>	<p>Street lighting shall be directed downward</p> <p>Restrict the use of high level outdoor lighting</p> <p>Landscaping shall reduce spill light from vehicles and buildings</p> <p>Require design review if reflective glass or metal</p>	<p>Project applicant</p>	<p>During project design and development review</p>	<p>Planning and Building Services</p>

RICHMOND GENERAL PLAN MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure(s)	Action(s)	Implementing Party	Timing	Monitoring and Enforcement
	floors.	building materials exceed 50 percent of any building surface			

CHAPTER 8 FINDINGS ON CHANGES TO THE DRAFT EIR AND RECIRCULATION

CHANGES TO THE DRAFT EIR

In response to comments from the public and other public agencies, minor modifications have been incorporated into the Draft EIR as part of the Final EIR. All of the changes to the Draft EIR are described in Chapter 2 of the Final EIR for the proposed General Plan.

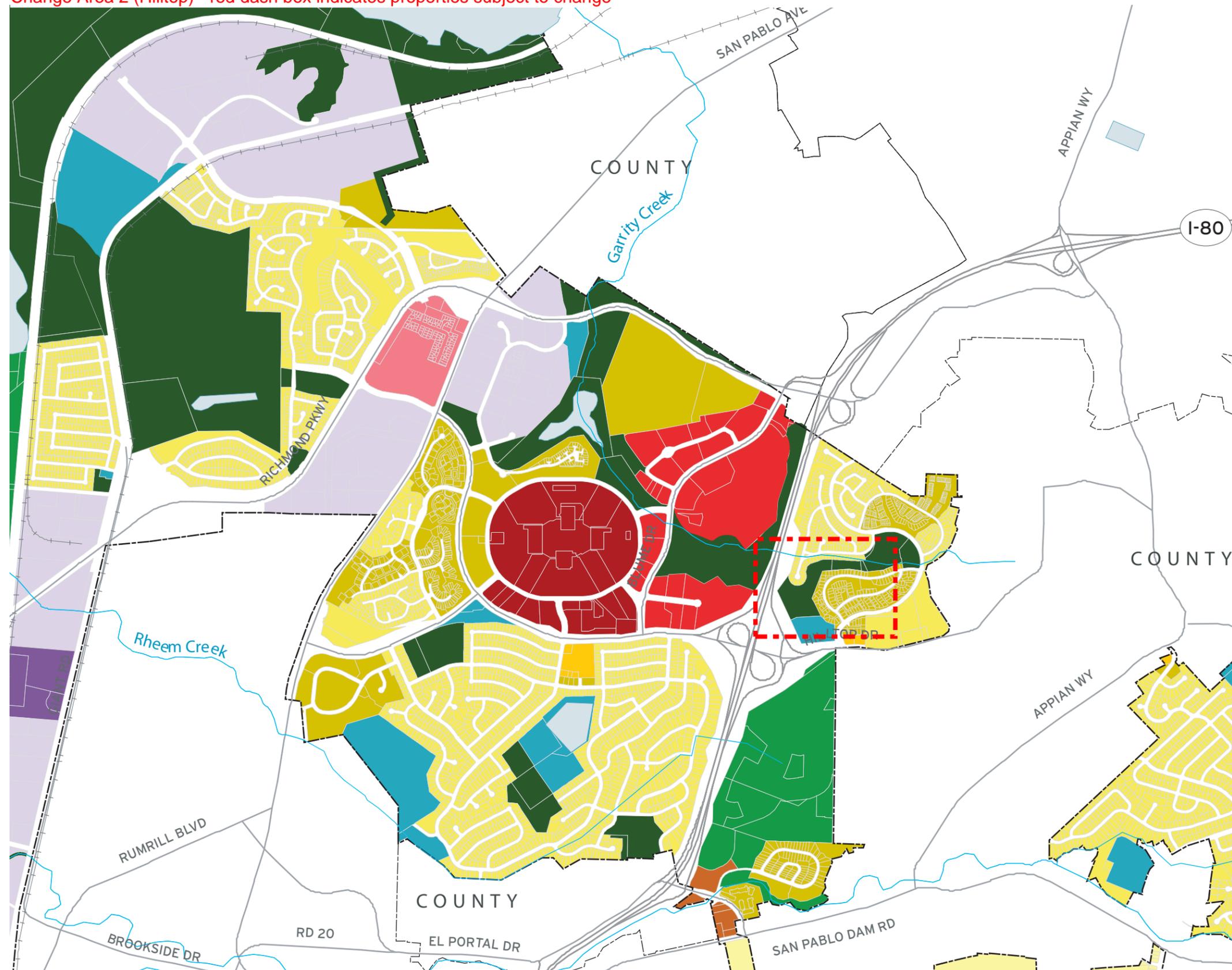
CITY COUNCIL ANALYSIS AND REVISION AND ADDITION OF MITIGATION MEASURES

Based on City Council input, mitigation measures have been added to the EIR to reduce impacts of the Project to a less-than-significant level. In addition, these Findings explain why the certain General Plan impacts are no longer considered significant and unavoidable.

FINDINGS REGARDING THE FINAL EIR

Pursuant to CEQA, on the basis of the review and consideration of the Final EIR, all information added to the Final EIR in response to comments on the Draft EIR merely clarifies, amplifies or makes insignificant modifications to an already adequate EIR pursuant to CEQA Guidelines Section 15088.5(b) and that no significant new information has been received that would require recirculation.

Revisions to the Final EIR in response to City Council input include: (1) new mitigation measures and findings, which explain how the measures would reduce effects to below the significance level; (2) findings that explain why other impacts are properly characterized as less-than-significant; and (3) findings that establish and explain why mitigation is the responsibility of another agency. These revisions are designed to reduce impacts to a less-than-significant level. The revisions are not significant new information pursuant to CEQA Guidelines Section 15088.5(a) because they do not change the EIR in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect or a feasible way to mitigate or avoid such an effect that the project's proponents have declined to implement.



Map 3.4
Change Area 2
 Hilltop

-  City of Richmond

- Residential Neighborhoods**

 -  Hillside Residential
 -  Low-Density Residential
 -  Medium Density Residential
 -  Neighborhood Mixed-Use

- Key Corridors**

 -  Medium Density Mixed-Use (Residential Emphasis)
 -  Medium Intensity Mixed-Use (Commercial Emphasis)

- Activity Centers**

 -  Medium Intensity Mixed-Use (Gateway and/or Community Node)
 -  High Intensity Mixed-Use (Major Activity Center)
 -  Regional Commercial Mixed-Use

- Business and Industry**

 -  Live/Work
 -  Business/Light Industrial
 -  Marine and Waterfront Commercial
 -  Industrial
 -  Port

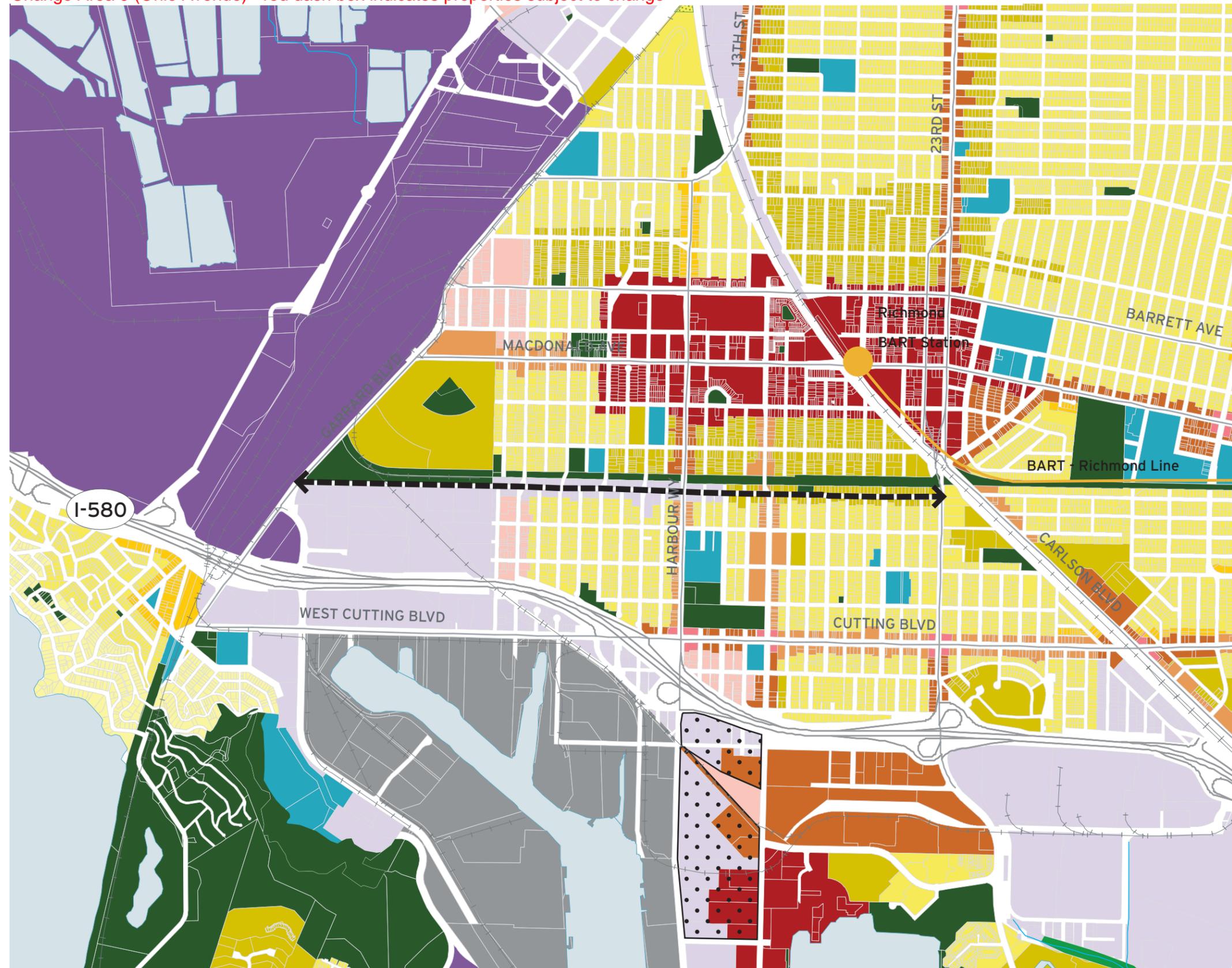
- Community**

 -  Agriculture
 -  Open Space
 -  Parks and Recreation
 -  Public, Cultural and Institutional

- Overlay Zones**

 -  Transition Zone Overlay District (TZOD)
 Pursuant to Ordinance No. 1808, residential uses are prohibited within this zone.

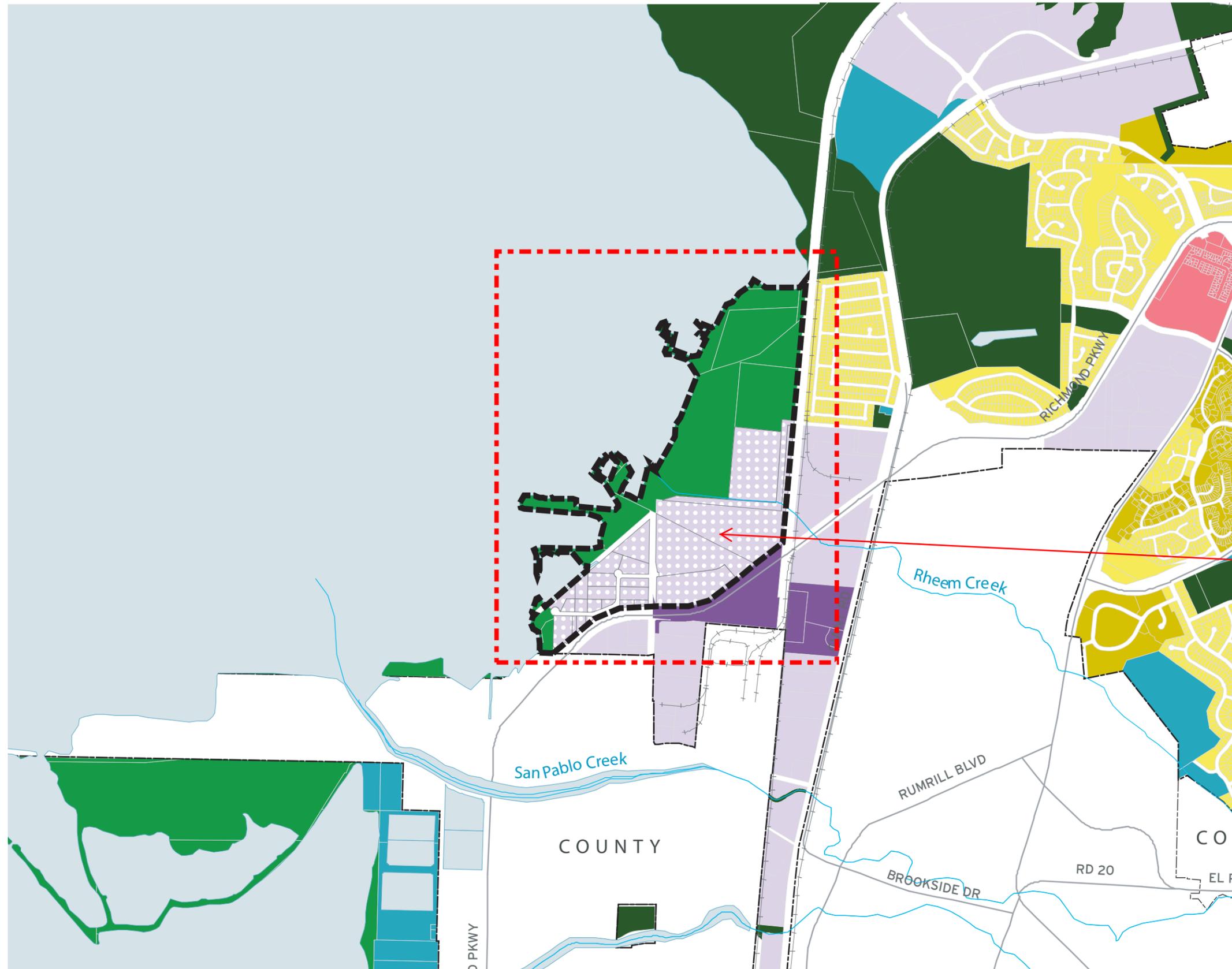




Map 3.11
Change Area 9
 Ohio Avenue Corridor

-  City of Richmond
- Residential Neighborhoods**
 -  Hillside Residential
 -  Low-Density Residential
 -  Medium Density Residential
 -  Neighborhood Mixed-Use
- Key Corridors**
 -  Medium Density Mixed-Use (Residential Emphasis)
 -  Medium Intensity Mixed-Use (Commercial Emphasis)
- Activity Centers**
 -  Medium Intensity Mixed-Use (Gateway and/or Community Node)
 -  High Intensity Mixed-Use (Major Activity Center)
 -  Regional Commercial Mixed-Use
- Business and Industry**
 -  Live/Work
 -  Business/Light Industrial
 -  Marine and Waterfront Commercial
 -  Industrial
 -  Port
- Community**
 -  Agriculture
 -  Open Space
 -  Parks and Recreation
 -  Public, Cultural and Institutional
- Overlay Zones**
 -  Transition Zone Overlay District (TZOD)
 Pursuant to Ordinance No. 1808, residential uses are prohibited within this zone.





Map 3.14
Change Area 12
 Northshore

- City of Richmond
- Residential Neighborhoods**
 - Hillside Residential
 - Low-Density Residential
 - Medium Density Residential
 - Neighborhood Mixed-Use
- Key Corridors**
 - Medium Density Mixed-Use (Residential Emphasis)
 - Medium Intensity Mixed-Use (Commercial Emphasis)
- Activity Centers**
 - Medium Intensity Mixed-Use (Gateway and/or Community Node)
 - High Intensity Mixed-Use (Major Activity Center)
 - Regional Commercial Mixed-Use
- Business and Industry**
 - Live/Work
 - Business/Light Industrial
 - Low Intensity Business/Light Industrial
 - Marine and Waterfront Commercial
 - Industrial
 - Port
- Community**
 - Agriculture
 - Open Space
 - Parks and Recreation
 - Public, Cultural and Institutional
- Overlay Zones**
 - Transition Zone Overlay District (TZOD)
 Pursuant to Ordinance No. 1808, residential uses are prohibited within this zone.

