

# Richmond Livable Corridors Form-Based Code Project

Addendum to the City of Richmond General Plan 2030  
Environmental Impact Report

SCH #2008022018

*prepared by*

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# 1 Introduction

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This document is an addendum to the *City of Richmond General Plan 2030 Final Environmental Impact Report (EIR)* (State Clearinghouse #2008022018), which was certified by the City of Richmond City Council in April 2012 (“2012 EIR”). This addendum addresses the proposed Richmond Livable Corridors Form-Based Code (FBC) project (“proposed project”). The proposed project would implement the City’s 2030 General Plan by adopting an FBC and other updates to the City’s zoning and subdivision regulations to encourage mixed-use and residential infill development and improve the public realm along major corridors.

In accordance with Section 15164 of the California Environmental Quality Act (CEQA) Guidelines, codified in Sections 15000 et seq. of Title 14 of the California Code of Regulations, a lead agency must prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. Under Section 15162(a), where an EIR has been certified for a project, no subsequent EIR shall be prepared for the project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, that there are substantial changes in the project or circumstances or substantially important new information that will cause the project to have significant new impacts or substantially increase previously identified significant impacts.

The addendum does not need to be circulated for public review but can be included in or attached to the final EIR (Section 15164(c)). The decision-making body must consider the addendum with the final EIR prior to making a decision on the project (Section 15164(d)). A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162, supported by substantial evidence, should be included in the addendum, the lead agency's findings on the project, or elsewhere in the record (Section 15164(e)). A discussion on this topic can be found in Section 4, Decision Not to Prepare a Subsequent Environmental Impact Report, of this addendum.

This addendum has been prepared in accordance with relevant provisions of CEQA (California Public Resources Code Section 21000, *et seq.*) and the *CEQA Guidelines*. It describes the proposed project and compares its impacts to those identified in the 2012 General Plan EIR. The analysis demonstrates that the proposed project does not require the preparation of a subsequent or supplemental EIR.

## 2 Background

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This section provides an overview of the 2030 General Plan and its EIR to provide context for this addendum.

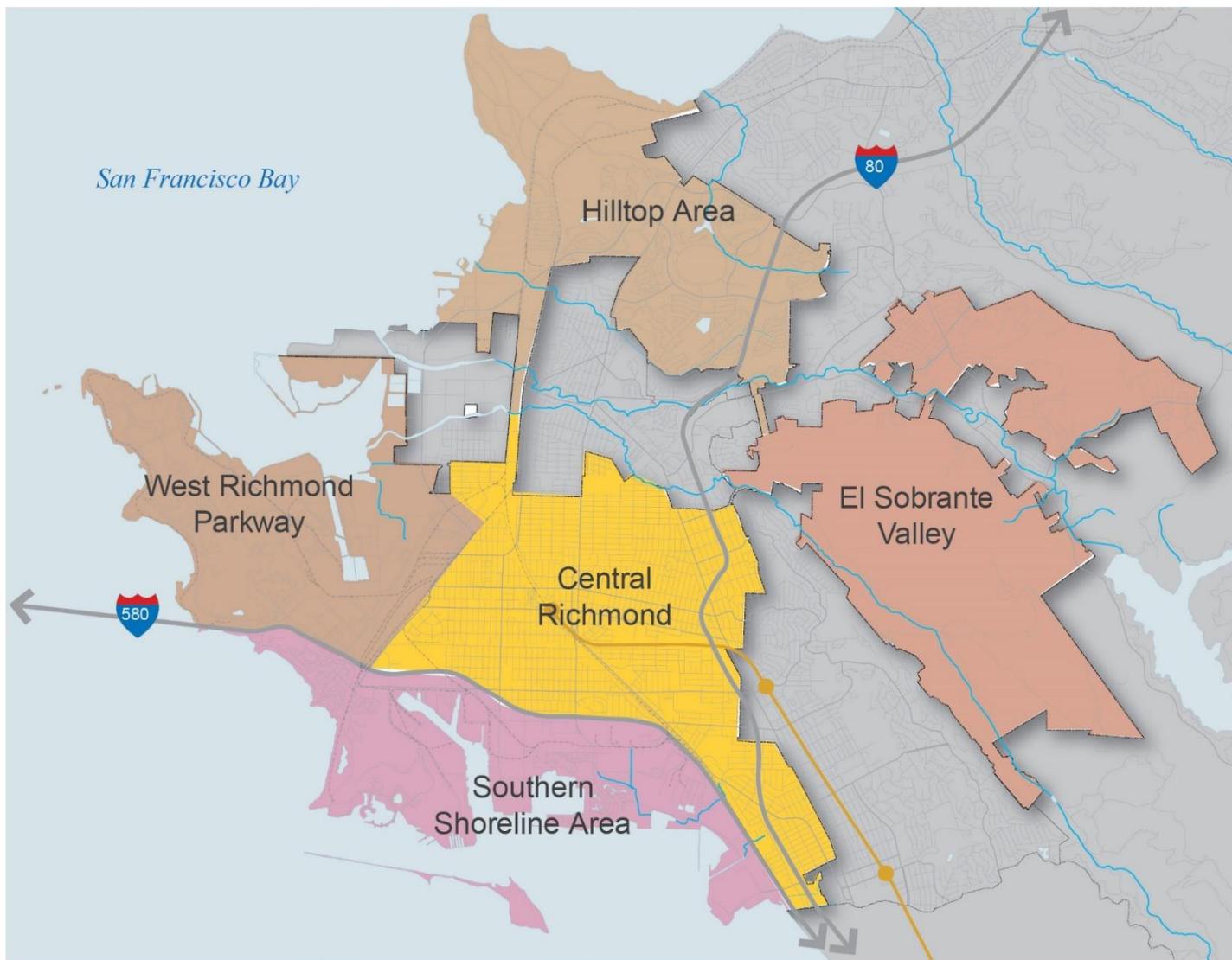
### 2.1 2030 General Plan

On April 25, 2012, the City Council of the City of Richmond (City) approved the Richmond General Plan 2030. The City's General Plan 2030 provides goals, policies, and programs intending to guide development in the City for 20 years through the planning horizon year of 2030. The General Plan includes 15 elements, including Economic Development; Education and Human Services; Land Use and Urban Design; Circulation; Community Facilities and Infrastructure; Housing; Conservation, Natural Resources, and Open Space; Energy and Climate Change; Growth Management; Parks and Recreation; Community Health and Wellness; Public Safety and Noise; Arts and Culture; Historic Resources; and National Historical Park, which comprise those General Plan elements required by State law (Land Use, Circulation, Housing, Open Space, Conservation, Noise, and Safety), as well as seven additional elements. The General Plan includes the following main objectives:

- Present strategies and specific implementing actions to achieve the community's overarching vision and long-term goals;
- Establish a basis for determining whether specific development proposals and public projects align with the community's vision and long-term goals;
- Empower 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 General Plan;
- Provide a basis for developing more detailed plans and implementing programs such as the Zoning Ordinance, capital improvement plans, facilities plans, community needs assessments, and specific plans; and
- Guide 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 in the area.

Richmond's City limits cover a geographically dispersed area that stretches from the San Francisco and San Pablo bays to the San Pablo and Sobrante ridges. For purposes of the General Plan, the City is organized into five planning areas: Central Richmond; Hilltop; El Sobrante Valley; Southern Shoreline; and West Richmond Parkway. Figure 1 shows the boundaries of the planning areas identified in the General Plan, which align with the boundaries of the City of Richmond.

Figure 1 General Plan Boundaries



Source: Richmond General Plan, 2009.

Not to Scale 

## 2.2 2030 General Plan EIR

The City Council certified the EIR for the General Plan (“2012 EIR”) when the General Plan was adopted in April 2012. The 2012 EIR evaluated potential environmental consequences associated with the General Plan, focusing in depth on the following environmental issue areas:

- Land Use Consistency and Compatibility
- Demographics
- Air Quality
- Biological Resources
- Climate Change
- Cultural Resources
- Geology, Soils, and Minerals
- Hazards, Public Safety, and Flooding
- Hydrology and Water Quality
- Noise
- Parks and Recreation
- Public Services
- Public Utilities
- Transportation and Circulation
- Visual Resources

The 2012 EIR found that the General Plan’s goals, policies, and programs as well as required mitigation measures would reduce most of the potential environmental impacts that would occur due to buildout of the General Plan. However, impacts related to air quality, cultural resources, climate change, noise, public utilities, transportation and circulation, and visual resources were determined to be significant and unavoidable. Accordingly, the City adopted a Statement of Overriding Considerations for these significant and unavoidable impacts as required under *CEQA Guidelines* Section 15093.

The analysis in the EIR was based on a projection that the 2030 General Plan could result in an increase in population of 30,147 and an additional 22,488 jobs. Overall, the General Plan projected an increase of 15,548 housing units, for a total housing supply in the City of 51,128 housing units by 2030.

## 2.3 Documents Incorporated by Reference

The General Plan Update Draft EIR and Final EIR evaluated impacts associated with the City’s General Plan, including cumulative impacts associated with future development occurring under the General Plan. These documents, in their entirety, as well as the technical reports and appendices prepared in conjunction with the previous General Plan DEIR and FEIR, are incorporated by reference into this addendum. Technical document supporting the General Plan DEIR and FEIR and this addendum are available for review at the City of Richmond Planning and Building Services Department. The General Plan DEIR and FEIR are also available online at:

<https://www.ci.richmond.ca.us/2608/General-Plan-2030>.

## 3 Proposed Richmond Livable Corridors Form-Based Code Project

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The proposed project would involve adoption by the Richmond City Council of a Form-Based Code (FBC) for several of the city's commercial corridors and surrounding areas. Form-Based Codes are land development regulations that have an emphasis on high-quality public realms by using physical form (e.g., building massing, exterior design) as the organizing principle. Transect zones within the FBC differ from traditional zoning regulations because they primarily control physical form instead of allowed uses.

The FBC would be adopted as series 400 in Article 15 of the Richmond Municipal Code (RMC). The intent of the proposed FBC is to create walkable mixed-use neighborhoods, consistent with the intent of the City's General Plan.

### 3.1 Project Location

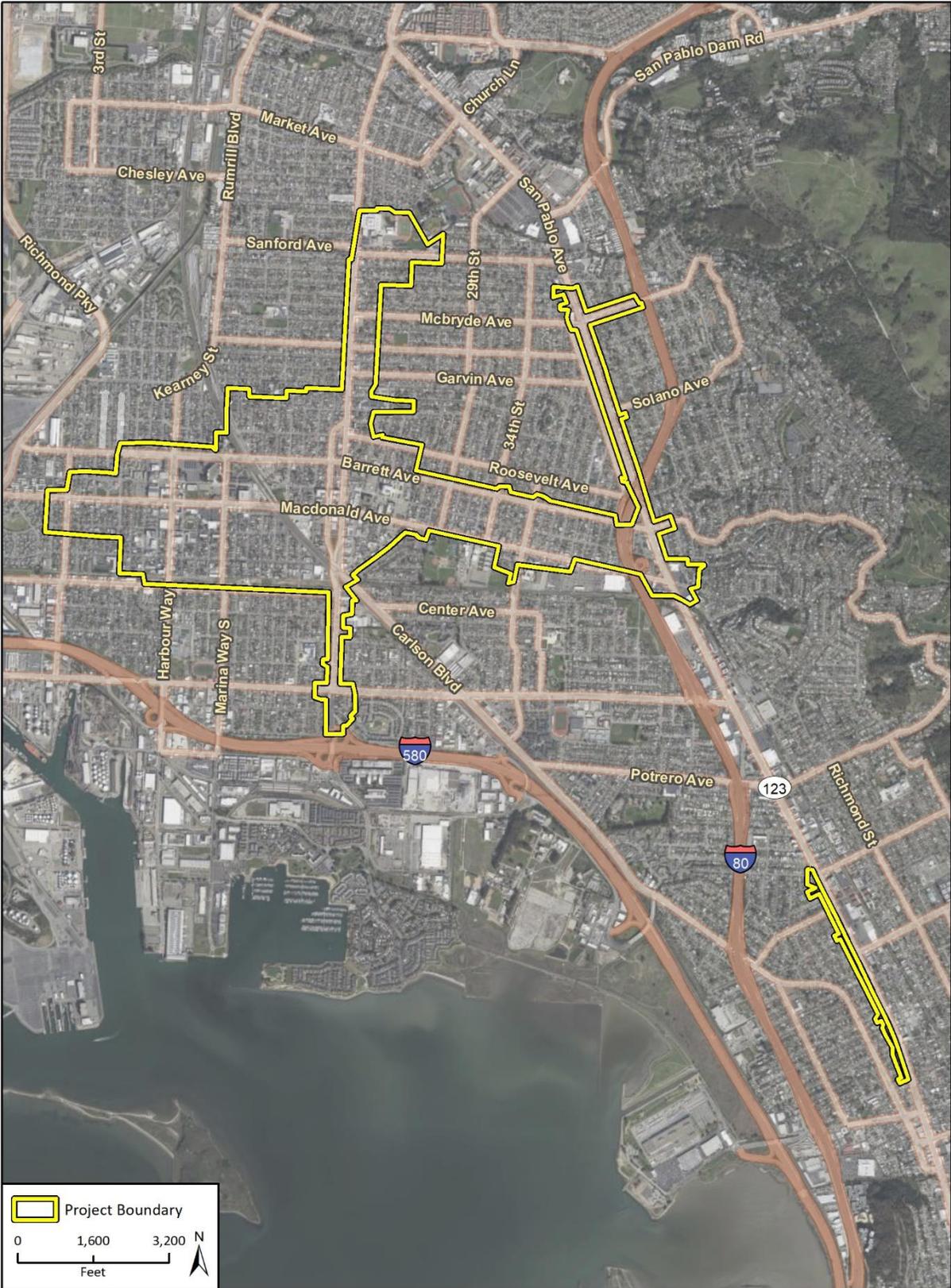
Figure 2 shows the project location, also referred to in this addendum as the project area, which is the area of the City in which the proposed FBC would apply. The proposed FBC would apply to parcels in two main areas within the City, which together comprise the project location. Both areas are located in Central Richmond along main commercial and residential corridors. One area includes parcels between South 2<sup>nd</sup> Street to the west, Interstate-580 to the south, Interstate-80 to the east, and Stanford Avenue to the north, including parcels along Barrett Avenue, Macdonald Avenue, San Pablo Avenue and 23<sup>rd</sup> Avenue. The other area includes parcels along San Pablo Avenue between Manila Avenue to the north and El Dorado Avenue to the south.

### 3.2 Components of the FBC

The proposed FBC includes the following components:

- The **Preamble**, which provides the overall intent of the FBC as it is applied within the City. The Preamble provides a definition of FBCs and an overview of transect zones, building types, and frontage types, which are regulated in other articles of the FBC.
- The **Transect Zones Article**, which includes information and standards for the transect zones. This article organizes dimensional standards for each zone (e.g., building placement, building form, parking placement and ratios, architectural styles, allowed frontages, and encroachments) with the allowed uses in each zone.
- The **Building Types Article**, which provides form standards for different building types, which supplement the standards found in the Transect Zones Article.
- The **Frontage Types Article**, which provides form standards for frontages, which supplement the standards found in the Transect Zones Article.
- The **Architectural Standards Article**, which provides standards for characteristic architectural styles, which supplement the standards found in the Transect Zones Article. This Article also provides additional standards for the treatment of building and frontage types found in the Building Types Article and the Frontage Types Article.

Figure 2 Project Location



Imagery provided by Microsoft Bing and its licensors © 2021.

Fig. 2 Project Location

- The **General to Large Sites Article**, which includes standards and regulations for applicants proposing large infill and community-scaled plans, including standards for thoroughfare networks, connectivity, the development and location of civic and open spaces, and the design of blocks and lots. The standards are designed to promote the development of walkable places.

Additional detail on each of the FBC components is provided below.

### 3.3 Transect Zones

The Transect Zones Article of the proposed FBC provides regulatory standards governing building form and land use within each of the proposed transect zones. Transect Zones are based on the rural-to-urban transect, a spatial organizing principal designed to promote appropriate transitions between higher-intensity and lower-intensity zones. Zones are arranged primarily by intensity. For Richmond, the transect zones range from neighborhood zones, including low and medium residential areas, to the core transect zone, which includes higher density land uses in the downtown. Each transect zone would include different standards related to allowed uses and building form, including maximum building height, maximum and minimum setbacks, and required parking spaces. Building form, including size, massing, open space, frontages visible from the public right of way, and access, would be further regulated based on proposed building types (e.g., cottage, duplex, townhouse, multi-plex) explained further below.

Figure 3 provides an excerpt from the proposed FBC showing the identified Transect Zones, Figure 4 shows a map of the Transect Zones, and Table 1 summarizes the regulatory standards for each zone.

### 3.4 Building Types

The Building Types Article of the proposed FBC sets standards applicable to the development of each building type. The building types include carriage house, detached house, cottage, bungalow court, duplex, rowhouse, multi-plex (small and large), stacked flats, courtyard building (small and large), live/work, main street building, mid-rise, and high-rise. The intent of the standards is to ensure development that reinforces walkability, relationships with the built environment, and the highly valued existing character and scale of Richmond's historic neighborhoods and downtown. The standards would apply to all proposed development within the Transect Zones.

Table 2 and Table 3 provide an overview of the building types and their respective development standards.

### 3.5 Architectural Standards

The Architectural Design Standards Article of the proposed FBC includes design standards for the six allowed architectural styles: Contemporary, Industrial, Main Street Classical, Art Deco, Spanish Revival, and Victorian. While architectural guidelines may be applied to non-FBC zones, the architectural standards in the Livable Corridors FBC would be regulatory. The standards address aspects of individual building design including roofs and roof pitch, eaves, cornices, walls, base of walls, dormers, openings and doors, storefronts, porches, and balconies. Each building proposed under the FBC would be required to be designed in compliance with one of the allowed architectural styles.

**Figure 3 Summary of Transect Zones**

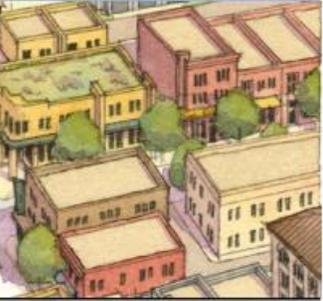
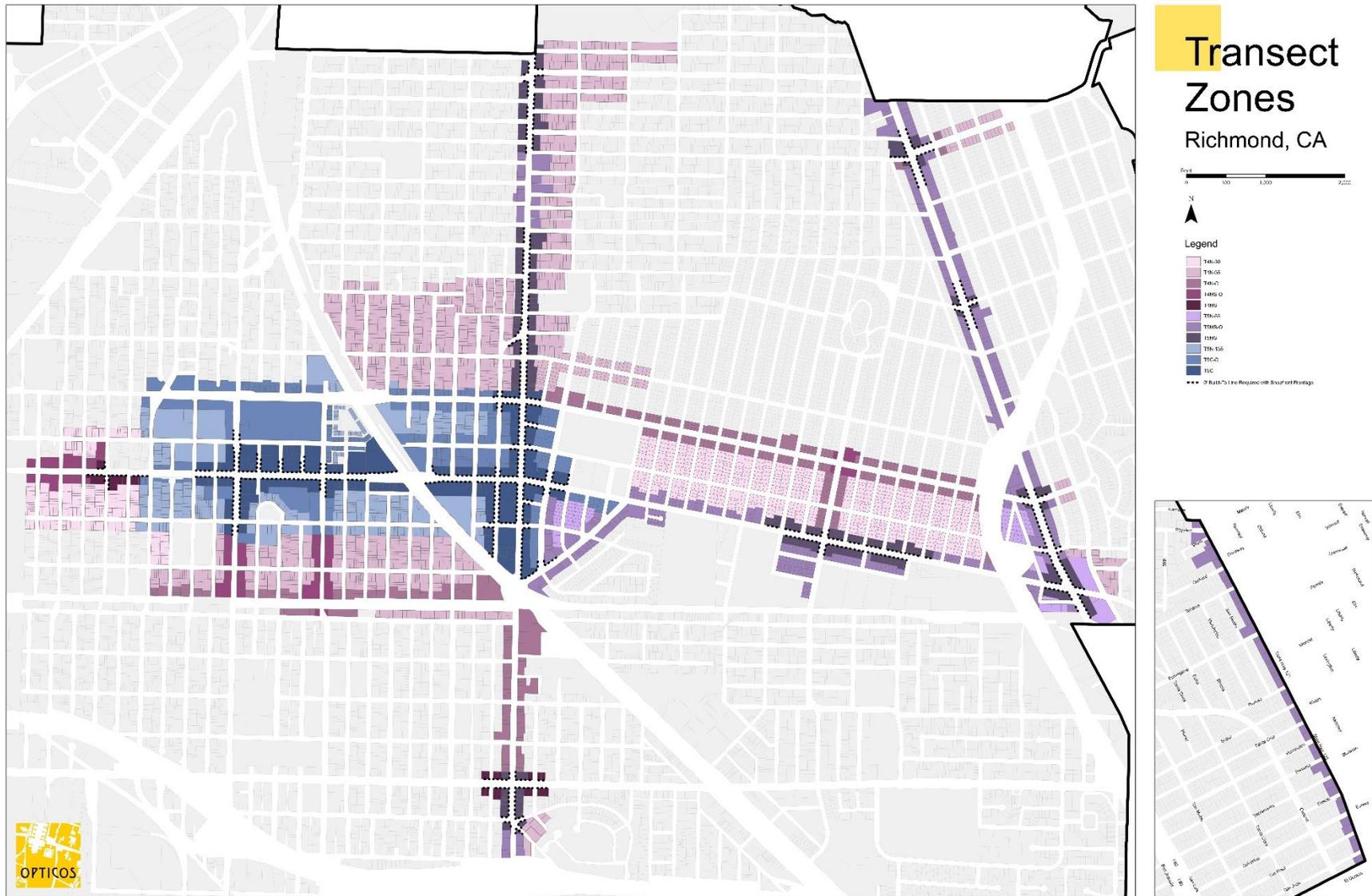
T4 Neighborhood-30' T4N-30	T4 Main Street T4MS	T5 Neighborhood-55' T5N-55	T5 Main Street T5MS	T5 Core T5C
T4 Neighborhood-35' T4N-35	T4 Main Street-Open T4MS-O	T5 Neighborhood-135' T5N-135	T5 Main Street-Open T5MS-O	T5 Core-Open T5C-O
T4 Neighborhood-Open T4N-O				
				
<b>Intent</b>	<b>Intent</b>	<b>Intent</b>	<b>Intent</b>	<b>Intent</b>
To provide a walkable, predominantly single-family neighborhood that integrates appropriate medium-density building types such as duplexes, multiplexes, and bungalow courts within walking distance to transit and commercial areas.	To provide a vibrant main-street mixed-use environment that serves as the focal point for the surrounding neighborhood and provides access to day-to-day amenities within walking distance.	To provide medium- to high-density housing in building types such as multiplexes, courtyard buildings, and mid-rise buildings (high-rise buildings in some areas) that transition from the surrounding lower-density neighborhoods to the higher-density mixed-use neighborhoods.	To provide a vibrant, walkable urban main street commercial area that provides locally- and regionally-serving commercial, retail, entertainment uses, and civic and public uses, as well as a variety of urban housing choices.	To provide a high-density, vibrant, urban downtown that provides locally- and regionally-serving commercial, entertainment, and civic and public uses, as well as a variety of urban housing choices in main street mixed-use, mid-rise, and high-rise building types.
The open sub-zone provides the same building form but allows for a more diverse mix of uses.	The open sub-zone provides the same building form but allows for a more diverse mix of uses.	The sub-zones allow different height limits for different neighborhood contexts.	The open sub-zone allows for a more diverse mix of uses and building types.	The open sub-zone provides the same building form but allows for a more diverse mix of uses.
<b>Desired Form</b>	<b>Desired Form</b>	<b>Desired Form</b>	<b>Desired Form</b>	<b>Desired Form</b>
Detached or Attached	Attached	Detached or Attached	Attached	Attached
Narrow-to-Medium Lot Width	Simple Wall Plane along Street	Simple Wall Plane along Street	Simple Wall Plane along Street	Simple Wall Plane along Street
Small-to-Medium Footprint	Small-to-Large Footprint	Small-to-Large Footprint	Small-to-Large Footprint	Medium-to-Large Footprint
Small-to-Medium Front Setback	Buildings at ROW	Buildings at or close to ROW	Buildings at or close to ROW	Buildings at or close to ROW
Small-to-No Side Setback	Small-to-No Side Setback	Small-to-No Side Setback	No Side Setback	No Side Setback
Up to 30' (35' in some areas)	Up to 45'	Up to 55' (135' in some areas)	Up to 55'	Up to 135'
Elevated Ground Floor	Flush Ground Floor	Elevated Ground Floor	Flush Ground Floor	Flush Ground Floor
Diverse Mix of Residential Frontages	Primarily with Shopfronts	Stoops, Forecourts, and Dooryards	Primarily with Shopfronts	Primarily with Shopfronts
<b>General Use</b>	<b>General Use</b>	<b>General Use</b>	<b>General Use</b>	<b>General Use</b>
Primarily residential with some home occupation uses and neighborhood-supporting uses in ancillary buildings	Ground floor commercial that may have residential or additional commercial uses above or behind	Primarily residential with home occupation uses and neighborhood-supporting uses in ancillary buildings	Vertical Mixed Use: Commercial on the ground floor with residential or commercial uses on upper floors	Vertical Mixed Use: Commercial on the ground floor with residential or commercial uses on upper floors

Figure 4 Map of Transect Zones



**Table 1 Summary of Proposed Regulatory Standards for Each Transect Zone**

	<b>T4 Neighborhood (T4N)</b>	<b>T4 Main Street (T4MS)</b>	<b>T5 Neighborhood (T5N)</b>	<b>T5 Main Street (T5MS)</b>	<b>T5 Core (T5C)</b>
<b>Allowed Building Types</b>					
Building Types	Carriage House (ADU) Detached House Cottage Bungalow Court Duplex Rowhouse Multi-Plex: Small Courtyard Building: Small	Carriage House (ADU) Cottage (ADU) Courtyard Building: Large Live/Work Main Street Building	Carriage House (ADU) Cottage (ADU) Rowhouse Multi-Plex: Small Multi-Plex: Large Stacked Flats Courtyard Building: Large Mid-Rise High-Rise	Carriage House (ADU) Rowhouse Multi-Plex: Small Multi-Plex: Large Stacked Flats Courtyard Building: Large Live/Work Main Street Building Mid-Rise	Rowhouse Multi-Plex: Small Multi-Plex: Large Stacked Flats Courtyard Building: Large Live/Work Main Street Building Mid-Rise High-Rise
<b>Setbacks (Distance from ROW/Lot Line for Principal Building)</b>					
Front	10 ft min, 15 ft max	0 ft min, 10 ft max	0 ft min, 15 ft max	0 ft min, 10 ft max	0 ft min, 10 ft max
Side Street	5 ft min, 10 ft max	0 ft min, 10 ft max	0 ft min, 15 ft max	0 ft min, 10 ft max	0 ft min, 10 ft max
Side	5 ft	0 ft	0 ft	0 ft	0 ft
Rear	5 ft	0 – 10 ft	0 – 5ft	0 – 10 ft	0 – 10 ft
<b>Height (Principal Building)</b>					
Stories	2.5 max.	4 max.	5 max., 12 max in T5N-135	5 max.	12 max.
Overall	30 ft max.; 35’ max in T4N-35 and T4N-O	45 ft max	55 ft max.; 135’ max in T5N-135	55 ft max.; 35’ for T5MS-O on San Pablo abutting RL2	135 ft max.
<b>Parking (Required Spaces)</b>					
Residential Uses	1/1,000 sf min.	1/1,000 sf min	1.25/unit max.	1.25/unit max.	1.25/unit max.
Lodging Uses	0.5/room min	1/room max	0.5/room min.	1/room max.	1/room max.
Retail or Service Uses	None specified	2/1,000 sf min.; none required for retail/ service under 5,000 sf	None required for retail/ service under 5,000 sf	2/1,000 sf min.; none required for retail/ service under 5,000 sf	2/1,000 sf min; none required for retail/ service under 5,000 sf
<b>Architectural Styles</b>					
Allowed architectural styles	Art Deco Contemporary Spanish Revival Victorian	Art Deco Contemporary Industrial Main Street Classical Spanish Revival Victorian	Art Deco Contemporary Spanish Revival Victorian	Art Deco Contemporary Main Street Classical Spanish Revival Victorian	Art Deco Contemporary Main Street Classical Spanish Revival Victorian

Notes: sf = square foot, ft = foot, ADU = Accessory Dwelling Unit

**Table 2 Summary of Proposed Regulatory Standards for Carriage House, Detached House, Cottage, Bungalow Court, Duplex, Rowhouse, and Multi-Plex Building Types**

	<b>Carriage House</b>	<b>Detached House</b>	<b>Cottage</b>	<b>Bungalow Court</b>	<b>Duplex</b>	<b>Rowhouse</b>	<b>Multi-Plex: Small</b>	<b>Multi-Plex: Large</b>
<b>Description</b>								
Description	Secondary structure typically located at the rear of the lot.	Medium-sized detached structure on a medium-sized lot.	Small, detached structure either occupying a small lot or built as an accessory dwelling unit	A series of small, detached structures, providing multiple units arranged to define a shared court	Small- to medium-sized structure that consists of two side-by-side units with a shared property line, both facing the street and with a single-building massing	Small- to medium-sized structure consisting of 3-8 rowhouses placed side-by-side and sharing a common party wall.	Medium-sized structure that consists of 3-6 side-by-side and/or stacked units, typically with one shared entry or individual entries along the front.	Medium- to large-sized structure that consists of 7-18 side-by-side and/or stacked units, typically with one shared entry.
Allowed Transect Zone	T4N, T4MS, T5N, T5MS	T4N	T4N, T4MS <sup>1</sup> , T5N <sup>1</sup>	T4N	T4N	T4N, T5N, T5MS-O, T5C-O	T4N, T5N, T5MS-O, T5C-O	T5N, T5MS-O, T5C-O
<b>Number of Units</b>								
Units per building	1 max.	Multiple	Multiple	1 or 2 max	2 max.	Multiple	3 min.	7 min.
Buildings per lot	1 max.	1 max.	1 max.	3 min, 9 max	1 max	1 max	1 max.	1 max.
<b>Main Body Massing/Footprint</b>								
Width	36 ft max.	48 ft max.	36 ft max	32 ft max	48 ft max	18 ft min, 36 ft max	48 ft max	80 ft max
Depth	30 ft max.	N/A	N/A	24 ft max	N/A	N/A	48 ft max	75 ft max
Stories	2 max.	Per zone	1½ max.	1½ max.	Per zone	5 max.	3 max.	5 max.
<b>Open Space</b>								
Width	Determined by principal building on the lot	20 ft min.	15 ft min.	20 ft min.	15 ft per unit min.	8 ft min.	8 ft min.	10 ft min.
Depth		20 ft min.	15 ft min.	20 ft min.	15 ft per unit min.	8 ft min.	8 ft min.	10 ft min.
Area		500 sf min.	300 sf min.	400 sf min.	300 sf min.	100 sf min.	100 sf min.	200 sf min.
Notes: sf = square foot, ft = foot, N/A = not specified in the code								
<sup>1</sup> Allowed when built as an Accessory Dwelling Unit								

**Table 3 Summary of Proposed Regulatory Standards for Stacked Flats, Courtyard, Live/Work, Main Street, Mid-Rise, and High-Rise Building Types**

	Stacked Flats	Courtyard Building, Small	Courtyard Building, Large	Live/Work	Main Street Building	Mid-Rise	High-Rise
<b>Description</b>							
Description	Medium- to large-sized structure that consists of multiple units.	Detached, house-scale structure that consists of attached and/or stacked units, accessed from shared courtyard.	Detached or attached block-style structure that consists of attached and/or stacked units, accessed from one or more shared courtyards	Small- to medium-sized attached or detached structure that consists of one unit above and/or behind a flexible ground floor space that can be used for residential, service, or retail uses.	Small- to medium-sized structure, typically attached, intended to provide a vertical mix of uses with ground-floor commercial, service, or retail uses and upper-floor commercial, service, or residential uses.	Medium- to large-sized structure, 4-8 stories tall, built on a large lot. It can incorporate a vertical mix of uses, accommodating ground-floor retail, service, and/or structured parking with the upper-floors housing service or residential uses.	Large-sized structure, more than 8 stories tall, built on a large lot that incorporates structured parking. It is used to provide a vertical mix of uses, with ground-floor retail or service uses and upper-floor commercial, service, or residential uses.
Allowed Transect Zone	T5N, TSMS-O, T5C-O	T4N	T4MS, T5N, T5MS, T5C	T4MS, T5MS, T5C	T4MS, T5MS, T5C	T5N, T5MS, T5C	T5N-135, T5C
<b>Number of Units</b>							
Units per building type	12 min.	Unrestricted	Unrestricted	N/A; must be Live-Work unit(s)	Unrestricted	Unrestricted	Unrestricted
Buildings per lot				1 max.			
<b>Main Body Massing/Footprint</b>							
Width	200 ft max.	100 ft max.	150 ft max	18 ft min, 36 max	150 ft max	250 ft max	300 ft max
Depth	200 ft max.	40 ft max.	40 ft max	N/A	150 ft max	250 ft max	300 ft max
Stories	8 max.	2 min; 2½ max.	2 min.; 5 max.	2 min.; 5 max.	8 max.	8 max.	9 min.
<b>Open Space</b>							
Width	20 ft min.	12 ft min.	12 ft min.	8 ft min		20 ft min.	
Depth	40 ft min.	12 ft min.	12 ft min.	8 ft min	Private balconies	40 ft min.	Private balconies
Area	50 sf/du min.	50 sf/du min.	50 sf/du min.	200 sf min.		N/A	
Notes: sf = square foot, ft = foot, N/A = not specified in the code							

### 3.6 General to Large Sites

The General to Large Sites Article of the proposed FBC is intended to “generate a walkable environment through the establishment of new blocks and thoroughfares and to provide a set of civic space types and their associated standards to use within the transect zones.” The standards would apply to all proposed development within the transect zones exceed two acres in size.

### 3.7 Projected Buildout under the FBC

For any given parcel within the project area, the proposed FBC would not allow increased building area or height compared to what is currently allowed under the General Plan for that parcel.

Based on an analysis of opportunity sites in the project area and taking into account the likelihood of redevelopment on these sites, the proposed project is assumed to involve a probable residential buildout of approximately 5,151 dwelling units and 2,212,543 square feet of non-residential space by year 2040.

**Error! Not a valid bookmark self-reference.** below provides a comparison of buildout under the General Plan, growth that has occurred since certification of the General Plan EIR in 2012, and anticipated buildout under the FBC. The 2012 EIR identified anticipated growth of 30,147 residents, 15,548 residential units, and 22,488 jobs between 2012 and 2030. Anticipated buildout under the proposed FBC would include approximately 16,483 residents, 5,151 residential units, and 5,294 jobs by year 2040. Given growth that has occurred since 2012, buildout under the FBC would be within the buildout anticipated under the General Plan and analyzed in the 2012 EIR.

**Table 4 Project Buildout**

	2011	2021	Growth between 2011 and 2021	Assumed General Plan Buildout	Total Year 2030	Proposed Project
Population (number of people)	104,792 <sup>1</sup>	110,130 <sup>1</sup>	5,338	30,147 <sup>6</sup>	132,600 <sup>2</sup>	16,483 <sup>3</sup>
Housing (number of units)	39,377 <sup>1</sup>	40,125 <sup>1</sup>	748	15,548 <sup>6</sup>	51,128	5,151
Employment (number of jobs)	40,660 <sup>4</sup>	46,500 <sup>5</sup>	5,840	22,488 <sup>6</sup>	64,120 <sup>4</sup>	5,294 <sup>7</sup>

<sup>1</sup> California Department of Finance, E-5 Population and Housing Estimates (May 2021)

<sup>2</sup> General Plan Housing Element, Table 5.1

<sup>3</sup> Assuming approximately 3.2 persons per household, consistent with information provided by Fehr & Peers, 2021

<sup>4</sup> General Plan Housing Element Table 5.9 (data for year 2010)

<sup>5</sup> State of California Employment Development Department, 2021, Monthly Labor Force Data for Cities and Census Designated Places (CDP), April 2021

<sup>6</sup> General Plan EIR

<sup>7</sup> Assuming 2 jobs per 1,000 square feet (ksf) for retail, 3.3 job/ksf for office, and 1 job/ksf for industrial uses

## 4 Decision Not to Prepare a Subsequent Environmental Impact Report

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As outlined in Section 15164 of the *CEQA Guidelines*, a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in *CEQA Guidelines* Section 15162 calling for preparation of a subsequent EIR have occurred. The conditions described in Section 15162 include the following:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
  - a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
  - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The impact analysis that follows demonstrates that the proposed zoning amendments to include the FBC in the RMC would not result in new, significant environmental impacts beyond those that have already been identified and characterized in the 2012 EIR, and that there are no substantial changes in the project or circumstances or substantially important new information that would cause the project to have significant new impacts or substantially increase previously identified significant impacts. None of the conditions described above in *CEQA Guidelines* Section 15162 that would call for preparation of a subsequent EIR have occurred or would occur as a result of the proposed project. Therefore, this addendum is the appropriate level of environmental documentation under CEQA. This addendum will be considered by the City decision-making body in its consideration of the proposed project.

## 5 Environmental Impacts

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This addendum evaluates potential environmental impacts that could result from the proposed project in the context of/compared to the growth projects and impacts studied in the 2012 EIR. The existing environmental conditions in and around the project area are substantially the same under present conditions as described in the 2012 EIR. The analysis below provides updates where necessary to characterize potential impacts.

Appendix G of the *CEQA Guidelines* provides a checklist of environmental issue areas suggested for assessment in CEQA analyses. Since preparation of the 2012 EIR, revisions to the *CEQA Guidelines* have occurred to include environmental issue areas pertaining to energy, vehicle miles traveled (VMT), tribal cultural resources, and wildfire. To provide a thorough and conservative analysis of potential impacts associated with the proposed project, this addendum addresses the 20 environmental issue areas suggested by Appendix G of the 2021 *CEQA Guidelines*, listed below.

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Potential environmental impacts of the proposed project are analyzed to determine whether they are consistent with the impact analysis provided in the 2012 EIR, and whether additional mitigation measures are required to minimize or avoid further potential impacts. Where the following analysis identifies impacts, discussion of previously identified mitigation measures from the 2020 EIR and existing applicable policies and regulations are discussed, as relevant, with respect to mitigating potential impacts from the proposed project.

### 5.1 Aesthetics

#### Impacts Identified in the 2012 EIR

As discussed under Impact 3.15-1 in Section 3.15, *Visual Resources*, of the 2012 EIR (pages 3.15-1 through 3.15-20), 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 city and its surroundings. The General Plan would allow development in some areas with a maximum height ranging from 55 feet to 135 feet. This new development could fully or partially obscure existing views of the shorelines and hillsides. In addition, the infill development expected under the General Plan could result in an adverse change in the existing visual character of the City. Moreover, the 2012 EIR concludes that while the RMC and General Plan provides standards

and policies related to view preservation, visual character, and project-specific development and design review, there is no guarantee that the scenic view impacts and visual character impacts would be eliminated or reduced to a less than significant level given the information available at the program level. The 2012 General Plan EIR concludes that there would be no feasible mitigation measures to reduce impacts, and impacts related to scenic vistas and visual character would be significant and unavoidable.

As discussed under Impact 3.15-1 in Section 3.15, *Visual Resources*, of the 2012 EIR, 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. To reduce impacts related to light and glare, the 2012 EIR identifies the mitigation measure below. However, even with implementation of the mitigation measure, the 2012 EIR concludes that impacts would be significant and unavoidable.

*Mitigation Measure 3.15-2*

- a. All street lighting shall be directed downward and shielded to prevent light spill onto surrounding properties, sky glow, and glare.
- b. The City shall restrict the use of high level outdoor lighting for new homes, particularly along the hillside ridges.
- c. Landscaping shall be incorporated along internal roads and near off-site homes to reduce spill light emanating from vehicles and buildings.
- 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.

**Impacts of the Proposed Project**

The proposed FBC would not allow increased building area or height beyond what is currently allowed under the General Plan. Moreover, as described in Chapter 3, *Proposed Richmond Livable Corridors Form-Based Code*, buildout under the FBC would be within buildout allowed under the General Plan and analyzed in the 2012 EIR. Therefore, the proposed project would not allow or facilitate development that would be taller, larger, or denser, or have more intense or different lighting, than development under the General Plan. Development allowed under the FBC would also be subject to RMC requirements and General Plan policies related to design review and neighborhood compatibility. Impacts related to vistas, scenic resources, visual character, and light and glare would therefore be consistent with impacts anticipated under the General Plan and studied in the 2012 EIR.

The proposed FBC is specifically intended to ensure that proposed development is compatible with existing development on neighboring properties and consistent with the vision of the General Plan, including goals and policies in the General Plan related to visual character and aesthetics. The FBC would accomplish this by regulating building form (e.g., height, size, location) based on the existing character of neighborhoods and desired types of buildings, styles, and massing. The FBC would also include architectural standards intended to refine building form and characters through regulations related to massing, style, and exterior façade design and articulation. Compliance with these requirements would ensure that the new development would not substantially degrade the existing visual character in Richmond, damage existing scenic resources, or create light or glare that would adversely affect views to a greater extent than development under the General Plan. Applications

submitted pursuant to the proposed amendments would require project-level CEQA review, which would identify and require mitigation for potential site-specific impacts. Thus, the proposed project would not result in new or substantially more severe impacts to aesthetics compared to the findings of the 2012 EIR.

## Conclusion

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to aesthetics than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. Mitigation Measures 3.15-2 from the 2012 EIR would continue to apply to the proposed project, and no new mitigation measures are necessary.

## 5.2 Agriculture and Forest Resources

### Impacts Identified in the 2012 EIR

The 2012 EIR does not include a chapter or section dedicated to analysis of agriculture and forestry resources. However, it does note that the General Plan includes an Agriculture land use designation, which allows land for grazing, crop production, small-scale farming, community gardens, and some residential development. Moreover, as describes in Section 2, *Project Description*, of the 2012 EIR, implementation of the General Plan EIR would not result in substantial changes to agricultural areas.

### Impacts of the Proposed Project

The proposed FBC would not include uses or activities related to agriculture and forestry and would not introduce uses or activities to areas designated for agriculture or forestry. The project area includes transportation corridors that are developed with urban uses and are not zoned for agriculture. There are no forest lands within Richmond. The proposed FBC would encourage infill development that is compatible with existing development, not new development in areas with existing open space and agricultural uses. Thus, the proposed project would not result in loss or conversion of farm or agricultural land.

## Conclusion

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to agriculture and forest resources than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 5.3 Air Quality

### Impacts Identified in the 2012 EIR

As discussed under Impact 3.3-1 in Section 3.3, *Air Quality*, of the 2012 EIR (page 3.3-1 through 3.3-32), implementation of the General Plan could introduce new sources of regional air emissions that would conflict with or obstruct implementation of the Bay Area Air Quality Management District (BAAQMD) 2009 Clean Air Plan (BAAQMD 2010), because the increase in vehicle miles

traveled (VMT) would exceed the increase in population under buildout of the General Plan. To reduce impacts related to air quality, the 2012 EIR identifies the mitigation measure below. However, the 2012 EIR concludes that there is insufficient evidence to quantify the effect of the identified mitigation impacts, and impacts would be significant and unavoidable.

*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.
- 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 system.
- 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 El Cerrito Del Norte BART stations to promote non-motorized travel to and from public transit.
- e. Provide development incentives, such as reduced parking requirements, for businesses that provide transit incentives to employees.

As discussed under Impact 3.3-2 in Section 3.3, *Air Quality*, of the 2012 EIR, implementation of the General Plan would result in construction emissions that would be significant but mitigable. The 2012 EIR required the following mitigation measure which would reduce air pollutant emissions to a less than significant level.

*Mitigation Measure 3.3-2*

- a. All construction projects shall incorporate the most recent Best Management Practices as required by the BAAQMD.
- b. Future development under the proposed General Plan shall be subject to review to determine construction air quality impacts in accordance with CEQA.

The 2012 EIR also describes that implementation of the General Plan would result operational emissions that would contribute substantially to an existing or projected air quality violation and impacts that would be significant and unavoidable. The 2012 EIR required the following mitigation measures to reduce air pollutant emissions to the extent feasible.

*Mitigation Measure 3.3-2*

- a. 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.
- b. 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.

As discussed under Impact 3.3-3 in Section 3.3, *Air Quality*, of the 2012 EIR, operational activities under the General Plan impacts related to exposure of sensitive receptors to substantial pollutant concentrations, include carbon monoxide (CO) and toxic air contaminants (TACs) would be significant but mitigable. The 2012 EIR required the following mitigation measure, which would reduce air pollutant emissions to a less than significant level.

*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).
- 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.
  - Proposed port developments should not site the heavily impacted areas immediately upwind of sensitive land uses. Siting of port developments should be done in consultation with the BAAQMD.
  - Proposed petroleum refineries should not site the heavily impacted areas immediately upwind of sensitive land uses. Siting of refineries should be done in consultation with the BAAQMD.

**Richmond Livable Corridors Form-Based Code Project**

- 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.
  - Avoid siting sensitive land uses immediately downwind from the most heavily impacted areas of existing port facilities.
  - Avoid siting sensitive land uses immediately downwind from 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.

Finally, as discussed under Impact 3.3-4 in Section 3.3, Air Quality, of the 2012 EIR, implementation of the proposed General Plan would not create objectionable odors that would affect a substantial number of people, and impacts would be less than significant. The RMC includes special overlay zones that identify land uses that emit odors; according the BAAQMD guidelines, implementation of such overlay zones would ensure that impacts would not be significant.

**Impacts of the Proposed Project**

As with buildout under the General Plan, implementation of the proposed FBC could result in new sources of regional air emissions that would conflict with or obstruct implementation of the BAAQMD Clean Air Plan. In addition, implementation of the FBC could facilitate new development that would generate operational emissions and would contribute substantially to an existing or projected air quality violation. However, individual projects allowed under the FBC would be subject to mitigation measures 3.3-1 and 3.3-2, which would reduce emissions to the extent feasible. Nonetheless, consistent with the analysis in the 2012 EIR, impacts would remain significant and unavoidable. Because future development under the proposed project would be within the buildout assumed under the General Plan, the proposed project would not adversely affect air quality to a greater extent than buildout under the General Plan and analyzed in the 2012 EIR.

As with buildout under the General Plan, future development under the proposed FBC would result in emissions during construction activities that would temporarily affect air quality. However, projects allowed under the FBC would be subject to Mitigation Measure 3.3-2, including required compliance with BAAQMD Best Management Practices for construction, which would ensure impacts would remain less than significant.

Operational activities under the FBC could result in exposure of sensitive receptors to substantial pollutant concentrations. However, individual projects would be subject to Mitigation Measure 3.3-3, including siting sensitive land uses away from land uses that emit pollutants, would ensure impacts would be less than significant. In addition, new development under the FBC would be subject to Chapter 9.64 of the RMC, which prohibits the use of natural gas in new buildings, which would reduce natural gas and associated air pollution emissions in future development.

Finally, as with buildout under the General Plan, individual projects under the FBC would be subject to overlay zones in the RMC; therefore, impacts related to objectionable odors would remain less than significant.

## Conclusion

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to air quality than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. Mitigation Measures 3.3-1, 3.3-2, and 3.3-3 from the 2012 EIR would continue to apply to future development under the proposed project, and no new mitigation measures are necessary.

## 5.4 Biological Resources

### Impacts Identified in the 2012 EIR

As discussed under Section 3.4, *Biological Resources*, of the 2012 EIR (page 3.4-1 through 3.4-38), implementation of the General Plan would not result in a substantial adverse effect on federal or state-listed or other designated species or on riparian habitat or sensitive natural communities. Implementation of the General Plan would also not interfere with the movement of native resident or migratory fish or wildlife species or have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act. Furthermore, the 2030 General Plan would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and would not conflict with a Habitat Conservation Plan or Natural Community Conservation Plan since none exist in Richmond. Moreover, activity on undeveloped, natural land present within the boundaries of the General Plan Update area would have to comply with policies under the General Plan as well as state and federal regulations. The 2012 EIR concludes that no mitigation measures are required as impacts would be less than significant.

### Impacts of the Proposed Project

The proposed project would not change the development footprint or increase allowed areas of development or disturbance compared to what is allowed under the 2030 General Plan and analyzed in the 2012 EIR. Implementation of the proposed FBC would focus development on urban infill, undeveloped urban lots and redevelopment of underused existing development where special-status species are not likely to occur. The project area is located in the more urbanized portions of the City; it is not located within riparian habitat, wetlands, migratory corridors or nursery sites, or habitat conservation plan or natural community plans (U.S. Fish and Wildlife Service 2022a, U.S. Fish and Wildlife Service 2022b, California Department of Fish and Wildlife 2019). As a result, implementation of the FBC would not result in substantial adverse effects on federal or state-listed and designated species and would not interfere with the movement of native resident or

migratory fish or wildlife species as well as native resident or migratory wildlife corridors. Implementation of the proposed FBC would not affect federally protected wetlands defined by section 404 of the Clean Water Act.

Development within known sensitive communities would not be allowed or facilitated under the proposed FBC and there would not be a substantial adverse effect on riparian habitat or other sensitive natural communities. Moreover, the proposed FBC would not conflict with any local policies or ordinances protecting biological resources, and would not conflict with an approved or adopted Habitat Conservation Plans since none exist in Richmond. The proposed FBC would not directly or indirectly affect natural areas or wetlands identified in the General Plan as shown in Figure 3.4-1 of the 2012 EIR. Finally, consistent with the analysis in the 2012 EIR, projects proposed under the proposed FBC would be required to comply with General Plan policies and Implementing Actions that serve to reduce impacts and protect natural communities and biological resources.

## **Conclusion**

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to biological resources than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 5.5 Cultural Resources

### **Impacts Identified in the 2012 EIR**

As discussed under Impact 3.5-1 in Section 3.5, *Cultural Resources*, of the 2012 EIR (pages 3.5-1 through 3.5-28), implementation of the General Plan would result in development activities that could cause a substantial adverse change in the significance of a historical resource and result in impacts that would be significant and unavoidable. The 2012 EIR required the following mitigation measure to protect and reduce impacts on historical resources to the extent feasible.

#### *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 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.

As discussed under Impact 3.5-2 in Section 3.5, *Cultural Resources*, of the 2012 EIR (pages 3.5-1 through 3.5-28), implementation of the General Plan would result in development activities that could cause a substantial adverse change in the significance of an archaeological resource or disturb human remains, and result in impacts that would be significant but mitigable. The 2012 EIR required the following mitigation measures which would reduce impacts on archaeological resources and human remains to a less than significant level.

#### *Mitigation Measure 3.5-2a*

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 3.5-2b*

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).

As discussed under Impact 3.5-3 in Section 3.5, *Cultural Resources*, of the 2012 EIR (pages 3.5-1 through 3.5-28), implementation of the General Plan would result in development activities that could directly or indirectly destroy a unique paleontological resource or site or unique geological feature, and result in impacts that would be significant but mitigable. The 2012 EIR required the following mitigation measures which would protect and reduce impacts on buried or submerged paleontological resources to a less than significant level.

#### *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.

### **Impacts of the Proposed Project**

Development under the proposed FBC would occur in the same areas as those analyzed in the General Plan and would not increase areas of development or disturbance compared to what is allowed under the 2030 General Plan and analyzed in the 2012 EIR. Nonetheless, development activities under the FBC could directly or indirectly have the potential to cause a substantial adverse change to the significance of a historical resources through demolition or alternation of a historical resource's physical characteristics that convey its historical significance, similar to General Plan buildout. As shown in Figure 3.5-1 of the 2012 EIR, at the time the EIR was prepared there were approximately five officially recognized National Historical Park resources and approximately eight officially recognized historic resources of State or local significance within or near the project area. Projects under the FBC would be subject to Mitigation Measure 3.5-1, which would protect and reduce impacts on historical resources to the extent feasible. Nonetheless, future development under the proposed project could involve demolition or other impacts to historic resources, to the same extent as implementation of the General Plan. As with development under the General Plan, mitigation is not certain to reduce impacts to a less than significant level, therefore, impacts related to the proposed project would be significant and unavoidable.

The proposed FBC could also substantially change the significance of an archaeological resource or disturb human remains. However, Mitigation Measures 3.5-2a and 3.5-2b would prohibit any actions that would cause a substantial change and reduce impacts to a less than significant level.

Furthermore, implementation of the proposed FBC would result in development activities that could directly or indirectly destroy a unique paleontological resource or site or geological feature.

However, Mitigation Measure 3.5-3 would prevent any potentially significant adverse effect on buried or submerged paleontological resources and reduce impacts to a less than significant level.

Finally, consistent with the analysis in the 2012 EIR, projects proposed under the proposed FBC would be required to comply with General Plan policies and Implementing Actions that serve to reduce impacts related to historical, archaeological, and paleontological resources.

## **Conclusion**

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to cultural resources than were identified in the 2012 EIR. The 2012 EIR identified a significant impact with respect to historic resources; this impact would remain under the proposed project. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. Mitigation Measures 3.5-1, 3.5-2a, 3.5-2b and 3.5-3 from the 2012 EIR would continue to apply to the proposed project, and no new mitigation measures are necessary.

## 5.6 Energy

### **Impacts Identified in the 2012 EIR**

Since Energy was added to the 2019 CEQA guidelines as a separate environmental issue area, the 2012 EIR does not include a chapter or section dedicated to analysis of energy impacts. However, it does analyze such impacts in Chapter 3, Section 3.13, *Public Utilities*, of the 2012 EIR.

As discussed under Impact 3.13-7 in Section 3.13, *Public Utilities*, of the 2012 EIR (pages 3.13-1 through 3.13-38), 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. General Plan policies require the City to develop a program to reduce energy demand and promote energy conservation, which would reduce impacts related to electricity supply. The 2012 EIR concludes that no mitigation measures are required as impacts would be less than significant.

As discussed under Impact 3.13-8 in Section 3.13, *Public Utilities*, of the 2012 EIR (pages 3.13-1 through 3.13-38), implementation of the General Plan would not result in the wasteful or inefficient use of energy. General Plan policies and regulatory framework exist to reduce the potential for impact on energy. The 2012 EIR concludes that no mitigation measures are required as impacts would be less than significant.

### **Impacts of the Proposed Project**

The proposed FBC would not allow increased building area or height than is currently allowed under the General Plan. Moreover, as described in Chapter 3, *Proposed Richmond Livable Corridors Form-Based Code*, buildout under the FBC would be within buildout allowed under the General Plan and analyzed in the 2012 EIR. Consistent with buildout under the General Plan, future development under the proposed FBC would increase demand for electricity and natural gas but would not require the construction of new energy production or transmission facilities. The proposed FBC would also not result in the wasteful or inefficient use of energy. Finally, consistent with the analysis

in the 2012 EIR, projects proposed under the proposed FBC would be required to comply with General Plan policies and Implementing Actions that serve to reduce impacts on energy and electricity supply to a less than significant level.

## Conclusion

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to energy than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 5.7 Geology and Soils

### Impacts Identified in the 2012 EIR

As discussed under Section 3.7, *Geology, Soils, and Minerals*, of the 2012 EIR (pages 3.7-1 through 3.7-32), implementation of the General Plan would not be subject to seismically-induced ground shaking and other seismic hazards, or result in soil erosion that would result in long-term safety concerns or slope instability beyond an acceptable level of risk. Moreover, implementation of the General Plan would not subject development to risk from settlement and/or subsidence of land, lateral spreading, or expansive soils, and would not result in landslide hazards beyond an acceptable level of risk. Adherence to the Building Code as well as General Plan policies and Implementing Actions would address soil issues and reduce risk to property and human health. The 2012 EIR concludes that no mitigation measures are required as impacts would be less than significant.

### Impacts of the Proposed Project

Development under the proposed FBC would occur in the same areas as those analyzed in the General Plan and would not increase areas of development or disturbance compared to what is allowed under the 2030 General Plan and analyzed in the 2012 EIR. Buildout under the proposed FBC would be within buildout allowed under the General Plan and analyzed in the 2012 EIR. As with development under the General Plan, all structures are subject to stringent building codes established in State and local regulations regarding seismic safety, landslides, settlement and expansive soils. In addition to Building Code regulations, existing General Plan policies and implementing actions regulate land use, development standards, and construction practices to reduce the risk to humans and property in the event of an earthquake or other seismic activity. Also, there are existing State and local regulations established to minimize erosion. Erosion control standards are set by the Regional Water Quality Control Board (RWQCB) through administration of the National Pollution Discharge Elimination System (NPDES) permit process for storm drainage discharge. At the local level, the existing General Plan includes measures to minimize soil erosion. Therefore, with adherence to existing requirements and General Plan policies and measures, implementation of the FBC would not expose people or structures to fault rupture or seismic-related groundshaking or ground failure and would not subject development to risk from settlement and/or subsidence of land, lateral spreading, or expansive soils. Consistent with the analysis in the 2012 EIR, projects proposed under the proposed FBC would be required to comply with General Plan policies and Implementing Actions that serve to reduce impacts related to geology and soils to a less than significant level.

## Conclusion

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to geology and soils than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 5.8 Greenhouse Gas Emissions

### Impacts Identified in the 2012 EIR

As discussed under Impact 3.6-1 in Section 3.6, *Climate Change*, of the 2012 EIR (pages 3.6-1 through 3.6-34), implementation of the General Plan would result in the generation of GHGs in both construction and operational phases that may have a significant impact on the environment. Implementation of BAAQMD BMPs would regulate GHGs from construction emissions. The 2012 EIR required the following mitigation measure which would reduce GHGs from the construction phase to a less than significant level.

#### *Mitigation Measure 3.6-1a*

All construction projects shall incorporate the most recent Best Management Practices for Greenhouse Gas Emissions as indicated by the BAAQMD.

The 2012 EIR also discussed the implementation of the General Plan on operational phase GHG emissions, which even with the implementation of all feasible mitigation measures would still have a significant and unavoidable effect on the environment. The 2012 EIR required the following mitigation measures to reduce operation phase GHGs to the extent feasible.

#### *Mitigation Measure 3.6-1b*

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:

- 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 3.6-1c*

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 3.6-1d*

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 3.6-1e*

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 3.6-1f*

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 3.6-1g*

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. Enhances General Plan Policy EC5.3.

*Mitigation Measure 3.6-1h*

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, and implement secure bicycle parking, showers and lockers for employees who bike to work. This measure could encourage smaller businesses to cooperate in establishing joint trip reduction plans. Enhances General Plan Actions EC2.F and EC2.I.

*Mitigation Measure 3.6-1i*

Implement Citywide car and bicycle sharing programs. Collaborate with service providers to identify potential sites for locating carshares.

*Mitigation Measure 3.6-1j*

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 3.6-1k*

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 3.6-1l*

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 3.6-1m*

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 3.6-1n*

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 3.6-1o*

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.

As discussed under Impact 3.6-2 in Section 3.6, *Climate Change*, of the 2012 EIR (pages 3.6-1 through 3.6-34), implementation of the General Plan could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. However, through General Plan policies and the implementation of Mitigation Measures 3.3-1, 3.3-2 and 3.6-1, GHG emissions would be reduced and would not result in a significant cumulative impact. The 2012 EIR concludes that no mitigation measures are required as impacts would be less than significant.

### **Impacts of the Proposed Project**

Development under the proposed FBC would occur in the same areas as those analyzed in the General Plan and would not change the size, type, or location of development compared to what is allowed under the 2030 General Plan and analyzed in the 2012 EIR. Buildout under the FBC would be within buildout allowed under the General Plan and analyzed in the 2012 EIR. As with development under the General Plan, development under the proposed FBC would result in the generation of GHGs that may have a significant impact on the environment. Although implementation of BAAQMD BMPs would ensure construction emissions of GHGs would be less than significant, impacts of operational emissions would still be uncertain resulting in significant and unavoidable impacts. However, Mitigation Measure 3.6-1a would reduce GHGs from the construction phase to a less than significant level. Mitigation Measure 3.6-1b to Mitigation Measure 3.6-1o on the other hand would reduce operation phase GHGs to the extent feasible. Moreover, implementation of the proposed FBC could conflict with applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. However, Mitigation Measures 3.3-1, 3.3-2 and 3.6-1 would ensure that GHGs would not increase to an extent greater than buildout under the General Plan analyzed in the 2012 EIR. In addition, new development under the FBC would be subject to Chapter 9.64 of the RMC, which prohibits the use of natural gas in new buildings, which would reduce natural gas and associated GHG emissions in future development. Finally, consistent with the analysis in the 2012 EIR, projects proposed under the proposed FBC would be required to comply with General Plan policies and Implementing Actions that serve to reduce impacts related to GHGs to a less than significant level.

### **Conclusion**

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to GHG emissions than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new or revised mitigation measures are necessary. Mitigation Measures 3.6-1a to 3.6-1o and 3.6-2 from the 2012 EIR would continue to apply to future development under the proposed project, and no new mitigation measures are necessary.

## **5.9 Hazards and Hazardous Materials**

### **Impacts Identified in the 2012 EIR**

As discussed under Section 3.8, *Hazardous Materials*, of the 2012 EIR (pages 3.8-1 through 3.8-25), implementation of the General Plan would not result in significant impacts regarding exposing hazardous materials to the public or the environment or be located on a hazardous material site. Projects must comply with General Plan policies, Implementing Actions and BMPs as well as state

and local regulatory framework which would ensure less than significant impacts related to hazards and hazardous materials.

### **Impacts of the Proposed Project**

As with buildout under the General Plan, implementation of the proposed FBC would involve the routine use, storage, transportation, and disposal of hazardous materials in existing and proposed land uses. In addition, development allowed under the proposed FBC may also be in locations where hazardous materials-related environmental contamination may be present but not yet listed. However, development under the proposed FBC would occur in the same areas as those analyzed in the General Plan and would not increase areas of development or disturbance compared to what is allowed under the 2030 General Plan and analyzed in the 2012 EIR. Future development projects under the FBC would be subject to applicable local, State, and federal regulations regarding the transportation, use, and disposal of hazardous materials as well as regulations regarding sites with contaminated soil or groundwater. Adherence to applicable regulations would minimize risks and protect the public and environment from hazard exposure. Development under the proposed FBC may include demolition or renovation of existing structures that could contain asbestos-containing materials, lead-based paint, polychlorinated biphenyls (PCBs), or other building materials containing hazardous substances. However, as stated in the 2012 EIR, BMPs would prevent the release of hazardous materials during demolition and construction. Finally, consistent with the analysis in the 2012 EIR, development under the proposed FBC would be required to comply with General Plan policies and Implementing Actions that serve to reduce impacts related to hazards and hazardous materials to a less than significant level.

### **Conclusion**

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to hazards and hazardous materials than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## **5.10 Hydrology and Water Quality**

### **Impacts Identified in the 2012 EIR**

As discussed under Section 3.9, *Hydrology and Water Quality*, of the 2012 EIR (pages 3.9-1 through 3.9-40), implementation of the General Plan would result in less than significant impacts related to potable water, wastewater, groundwater supplies, runoff water and drainage, and flooding. Although areas within the City are located within Federal Emergency Management Agency (FEMA) designated flood hazard zones and the implementation of the General Plan could result in dam failure inundation and sea level rise flood hazards, projects would be required to comply with General Plan policies, Implementing Actions as well as regional and local policies, practices and regulations such as NPDES Permits and floodplain development regulations, which would ensure less than significant impacts to hydrology and water quality.

### **Impacts of the Proposed Project**

Construction and operation of future development under the proposed FBC would involve development on currently developed commercial corridors and likely would not substantially alter

drainage pattern and lead to substantial erosion or siltation as well as increased runoff and flooding, and also contribute to groundwater quality degradation. However, development under the proposed FBC would occur in the same areas as those analyzed in the General Plan and would not increase areas of development or disturbance compared to what is allowed under the 2030 General Plan and analyzed in the 2012 EIR. As with buildout under the General Plan, all future development would be subject to State and local regulations regarding stormwater discharge, sedimentation, drainage alteration, construction practices, and water quality. Therefore, development under the proposed FBC would not violate water quality standards or NPDES Permits and would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

As shown on Figure 3.9-1 (Flood Hazard Zones) in the 2012 EIR, the project area is not within special flood zone A, AE, Ah, AO, D, or VE. Further, the project area is not in an area subject to inundation in the event of dam failure or in an area subject to sea level rise. Therefore, flooding impacts would not occur.

Development under the FBC would be required to comply with applicable state and local requirements, General Plan policies, Implementing Actions and BMPs related to protecting water quality, reducing impacts on potable water, wastewater, groundwater supplies, runoff water and drainage, and flooding. Given required compliance with applicable requirements and policies, impacts related to hydrology and water quality would remain less than significant.

## Conclusion

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to hydrology and water quality than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 5.11 Land Use and Planning

### Impacts Identified in the 2012 EIR

As discussed under Section 3.1, *Land Use Consistency and Comparison*, of the 2012 EIR (pages 3.1-1 through 3.1-10), implementation of the General Plan would not physically divide an existing established community as the General Plan was designed as a cohesive plan to improve accessibility for all residents in existing and future neighborhoods. Furthermore, implementation of the General Plan would not conflict with other existing plans, policies, or regulations such as the RMC, the Civic Center Master Plan, the Point Molate Reuse Plan or the San Francisco Bay Plan. Moreover, the 2012 EIR concluded that implementation of the General Plan would not result in substantial land use incompatibilities due to the development strategy used to integrate uses within core areas in the City. The 2012 EIR concludes that no mitigation measures are required as there would be no impacts.

### Impacts of the Proposed Project

Buildout under the proposed FBC would not allow increased building area or height beyond what is currently allowed under the General Plan and was studied in the 2012 EIR. The proposed FBC would apply along existing transit corridors and would neither physically divide an existing established community nor conflict with existing land use plans, policies, or regulations. In addition,

implementation of the FBC would not result in substantial land use incompatibilities as it would generally involve residential and commercial uses in areas with existing commercial and residential development and the project would not increase building area or height beyond what is currently allowed under the General Plan. As a result, there would be no impacts to land use and planning.

## **Conclusion**

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to land use and planning than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 5.12 Mineral Resources

### **Impacts Identified in the 2012 EIR**

As discussed in Section 3.7, *Geology, Soils, and Minerals*, of the 2012 EIR, impacts related to mineral resources would be less than significant. The Office of Surface Mining, under the direction of the State Mining and Geology Board, has classified some lands within the City as Mineral Resource Zone-2 (MRZ-2), which indicates the existence of a deposit. However, buildout under the General Plan would not involve mineral extraction or changes in existing extractive mineral resource operations within the City, including the change areas. In addition, General Plan Policy CN2.8, which calls for preservation of mineral resources, would minimize the potential for future development to threaten the availability of mineral resources.

### **Impacts of the Proposed Project**

The proposed project would involve adoption of a FBC for several commercial corridors and surrounding areas to implement the goals and policies in the City's 2030 General Plan. Consistent with buildout under the General Plan, the proposed FBC would not facilitate mineral extraction or changes in existing extractive mineral resource operations. Impacts related to mineral resources would be consistent with impacts identified in the 2012 EIR and less than significant.

## **Conclusion**

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to mineral resources than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 5.13 Noise

### **Impacts Identified in the 2012 EIR**

As discussed under Impact 3.10-1 in Section 3.10, *Noise*, of the 2012 EIR (pages 3.10-1 through 3.10-37), implementation of the General Plan could generate noise levels that temporarily exceed acceptable noise levels in the construction phase and result in impacts that would be significant and

unavoidable. The 2012 EIR required the following mitigation measure to reduce impacts of construction noise to the extent feasible.

*Mitigation Measure 3.10-1*

Future projects shall incorporate project-specific mitigation measures to reduce the impact of construction noise.

As discussed under Impact 3.10-2 in Section 3.10 of the 2012 EIR, implementation of the General Plan could generate or expose persons or structures to temporary groundborne vibration during the construction phase and result in impacts that would be significant and unavoidable. The 2012 EIR required the following mitigation measure to reduce impacts of groundborne vibrations on sensitive uses to the extent feasible.

*Mitigation Measure 3.10-2*

Future projects shall incorporate project-specific mitigation measures to reduce the impact of construction-related groundborne vibration.

As discussed under Impact 3.10-3 in Section 3.10 of the 2012 EIR, implementation of the General Plan could expose sensitive receptors to noise levels in excess of the existing noise standards established by the City, especially noise levels from nearby rail operations, and result in impacts that would be significant and unavoidable. The 2012 EIR required the following mitigation measure to reduce impacts of noise levels from nearby rail operations on sensitive receptors to the extent feasible.

*Mitigation Measure 3.10-3*

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

As discussed under Impact 3.10-4 in Section 3.10 of the 2012 EIR, implementation of the General Plan would not generate and expose sensitive receptors on or off-site to excessive groundborne vibration or groundborne noise levels during the operation phase. The General Plan contains policies that would protect nearby sensitive receptors from excessive groundborne vibration or noise. The 2012 EIR concludes that no mitigation measures are required as impacts would be less than significant.

As discussed under Impact 3.10-5 in Section 3.10 of the 2012 EIR, implementation of the General Plan would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in the project vicinity during the operation phase, and result in impacts that would be significant and unavoidable. While General Plan policies and project-specific measures could reduce noise effects from transportation at new development, it may be unfeasible to include noise reduction strategies to target existing residences located next to roadways or other noise generating sources. The 2012 EIR required the following mitigation measure to reduce impacts of noise effects from transportation to the extent feasible.

*Mitigation Measure 3.10-5*

Future projects shall incorporate project-specific mitigation measures to promote nonmotorized transportation to reduce the impact of traffic noise.

## Impacts of the Proposed Project

The proposed FBC would not allow increased building area or height beyond what is currently allowed under the General Plan and was studied in the 2012 EIR. Buildout under the FBC would also be within the overall buildout allowed under the General Plan and analyzed in the 2012 EIR. Consistent with buildout under the General Plan, construction of future development under the proposed FBC could generate noise levels that temporarily exceed acceptable noise levels and generate or expose persons or structures to temporary groundborne vibration, resulting in significant and unavoidable impacts. Mitigation Measure 3.10-1 and 3.10-2 would apply to future development under the FBC and serve to reduce impacts to the extent feasible.

Operation of future development under the proposed FBC would generate noise consistent with residential and commercial uses as assumed under the General Plan and would not generate or expose sensitive receptors to excessive operational noise. However, as with development under the General Plan, development under the proposed FBC would generate local traffic that could cause a permanent increase in ambient noise levels, resulting in significant and unavoidable impacts. Mitigation Measure 3.10-5 would apply to future development under the FBC and would reduce impacts to the extent feasible.

Rail tracks bisect a portion of the project area. Future development in portions of the project area near rail tracks under the FBC could also expose sensitive receptors to noise levels from nearby rail operations which would exceed the City's noise standards, resulting in a significant and unavoidable impact. However, Mitigation Measure 3.10-3 would apply and would reduce impacts from railway noise on sensitive receptors to the extent feasible.

## Conclusion

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to noise than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. Mitigation Measures 3.10-1, 3.10-2, 3.10-3 and 3.10-5 from the 2012 EIR would continue to apply to the proposed project, and no new mitigation measures are necessary.

## 5.14 Population and Housing

### Impacts Identified in the 2012 EIR

As discussed under Sections 4.0, *CEQA Considerations* (pages 4-1 through 4-10), and 3.2, *Demographics*, of the 2012 EIR (pages 3.2-1 through 3.2-9), housing and population impacts from implementation of the General Plan would be less than significant. While buildout under the General Plan would cause population, housing and employment growth, such growth would be consistent with City and regional goals. Since growth under the General Plan would be primarily in relatively high-density mixed-use and in-fill developments, the 2012 EIR concludes that implementation of the General Plan would not result in substantial unplanned population growth in Richmond or surrounding communities. In addition, the 2012 EIR concluded that while some housing could be removed as part of the General Plan, it is not anticipated that there would be substantial removal of housing, and replacement housing would be constructed.

## Impacts of the Proposed Project

The proposed FBC would not allow increased building area or different or more intense land uses than are currently allowed under the General Plan. Moreover, as described in Chapter 3, *Proposed Richmond Livable Corridors Form -Based Code*, buildout under the FBC would be consistent with buildout allowed under the General Plan and analyzed in the 2012 EIR. Therefore, the proposed project would not induce development that would be denser or otherwise generate more population growth than development under the General Plan. Impacts related to population growth would therefore be consistent with impacts anticipated under the General Plan. Moreover, consistent with development under the General Plan, buildout under the FBC would be in relatively high-density mixed-use and in-fill developments and would not result in substantial unplanned population growth in Richmond or surrounding communities. While some housing could be removed under the FBC, it is not anticipated that there would be substantial removal of housing, and replacement housing would be constructed, similar to the General Plan analysis. Impacts related to population and housing would remain less than significant.

## Conclusion

No substantial changes have occurred that require major revisions to the 2020 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to population and housing than were identified in the 2020 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 5.15 Public Services

### Impacts Identified in the 2012 EIR

As discussed under Impact 3.12-1 and Impact 3.12-2 in Section 3.12, *Public Services*, of the 2012 EIR (pages 3.12-1 through 3.12-21), implementation of the General Plan would increase the demand for fire protection, emergency services, police protection services and department personnel and/or equipment but would not reduce the level of protection resulting in a less than significant impact. Any significant new development of facilities would be subject to the General Plan policies as well as the City's environmental review process which includes project-specific assessment of fire and police services.

As discussed under Impact 3.12-3, implementation of the General Plan would also generate additional students, but impacts related to schools would be less than significant with the payment of State-mandated school impact fees.

As discussed under Impact 3.12-4, implementation of the General Plan would create an additional demand for library services, but impacts related to libraries would be less than significant since General Plan policies ensure library needs would be addressed and plans to improve existing facilities would be undertaken.

### Impacts of the Proposed Project

The proposed FBC would not allow increased building area or height than is currently allowed under the General Plan. Moreover, buildout under the FBC would be within buildout allowed under the General Plan and analyzed in the 2012 EIR. The project area is located in central portions of the city along existing commercial corridors that are well served by existing services. As a result, the

proposed FBC would not generate demand for public services beyond the demand evaluated in the 2012 EIR and would have less than significant impacts on fire services, police services, schools, and libraries.

## **Conclusion**

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to public services than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 5.16 Recreation

### **Impacts Identified in the 2012 EIR**

As discussed in Section 3.11, *Parks and Recreation*, of the 2012 EIR (pages 3.11-1 through 3.11-14), implementation of the 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. General Plan policies as well as the dedication of land or payment of an in-lieu fee for future residential subdivisions would reduce the impacts of an increased demand and use of parks and recreation facilities. The 2012 EIR concludes that no mitigation measures are required as impacts related to park and recreational facilities would be less than significant.

### **Impacts of the Proposed Project**

The proposed FBC would not allow increased building area than is currently allowed under the General Plan. Moreover, buildout under the FBC would be consistent with buildout allowed under the General Plan and analyzed in the 2012 EIR. Therefore, the proposed project would not generate population growth beyond what could occur under the General Plan. Consistent with buildout under the General Plan, implementation of the proposed FBC would result in a regional population growth of 13 percent, with a projected population increase of 30,147 people (Richmond 2011). As a result, the implementation of FBC would not increase the use of parks and recreational facilities beyond the increase analyzed in the 2012 EIR and would therefore not result in substantial physical deterioration of facilities. The proposed FBC would not create demand for construction or expansion of park facilities beyond that anticipated in the General Plan since population growth would be projected to stay the same, resulting in less than significant impacts.

## **Conclusion**

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to recreation than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 5.17 Transportation

### Impacts Identified in the 2012 EIR

As discussed under Impact 3.14-1 in Section 3.14, *Transportation and Circulation*, of the 2012 EIR (pages 3.14-1 through 3.14-52), implementation of the General Plan may result in traffic congestion that would exceed City of Richmond and regional Level of Service (LOS) standards, and impacts would therefore be significant and unavoidable. General Plan policies and Implementing Actions would reduce the impact by promoting alternative modes and optimizing roadway and intersection capacity within constraints of the “Place Based” street classification and evaluation policy, but not to a less than significant level. The 2012 EIR required the following mitigation measure to reduce impacts of traffic congestion to the extent feasible.

#### *Mitigation Measure 3.14-1*

Future projects shall incorporate project-specific mitigation measures to reduce traffic impacts.

As discussed under Impact 3.14-3 in Section 3.14 of the 2012 EIR, implementation of the General Plan would produce higher demand for transit service, potentially exceeding the capacity of transit service providers, and result in impacts that would be significant and unavoidable. General Plan policies and Implementing Actions would help with the service increase needed to satisfy an increased demand, but impacts would still be significant since provision of sufficient transit service cannot be guaranteed. The 2012 EIR concludes that no mitigation measures are available as impacts would be significant and unavoidable.

As discussed under Impact 3.14-6 in Section 3.14 of the 2012, implementation of the 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), and result in impacts that would be significant and unavoidable. The limited new roadway capacity proposed in the General Plan in conjunction with an increase in new vehicle traffic generated would make this impact potentially significant. General Plan policies and Implementing Actions would reduce this impact, but not necessarily to a less than significant level. The 2012 EIR concludes that no mitigation measures are feasible to reduce this impact.

As discussed under Impacts 3.14-2, 3.14-4 and 3.14-5 in Section 3.14 of the 2012 EIR, implementation of the General Plan would improve mobility and safety for all modes, and provide enhanced facilities to serve pedestrians and bicyclists, increasing connectivity and safety for these modes. Furthermore, implementation of the General Plan would also reduce potential for conflicts at rail/roadway crossings. The 2012 EIR concludes that no mitigation measures are required as there are no impacts.

Consistent with state law and the CEQA Guidelines (as discussed further under Regulatory Setting below), this addendum uses an analysis of vehicle miles traveled (VMT), rather than LOS, to assess the significance of transportation impacts. The project’s impacts related to VMT are analyzed in a memorandum prepared by Fehr & Peers in May 2022, included as Appendix A to this addendum.

Because the requirement for analysis of VMT was only recently added to the CEQA Guidelines, the 2012 EIR does not provide a framework for considering the proposed project’s impacts to VMT. However, VMT does not constitute new information requiring a revision to previous CEQA analysis or a subsequent or supplemental EIR, because analysis based on VMT metrics was available prior to the certification of the 2012 EIR (for example, VMT is routinely used to calculate impacts related to

air quality and greenhouse gas emissions). Moreover, an analysis of VMT impacts of development under the General Plan is provided in order to determine if the project would result in new significant impacts or substantial increase in the severity of impacts compared to buildout under the General Plan. The VMT analysis includes both a comparison to baseline (existing 2020) conditions as well as a comparison to buildout under the proposed project.

## **Regulatory Setting**

### *Senate Bill 743 and Vehicle Miles Traveled*

Senate Bill (SB) 743 was signed into law by Governor Brown in 2013 and tasked the State Office of Planning and Research (OPR) with establishing new criteria for determining the significance of transportation impacts under the California Environmental Quality Act (CEQA). SB 743 requires the new criteria to “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” It also states that alternative measures of transportation impacts may include “vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated.”

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started a process that changes transportation impact analysis as part of CEQA compliance. SB 743 requires the Governor’s OPR to identify new metrics for identifying and mitigating transportation impacts within CEQA. In January 2018, OPR transmitted its proposed CEQA Guidelines implementing SB 743 to the California Natural Resources Agency for adoption, and in January 2019 the Natural Resources Agency finalized updates to the CEQA Guidelines, which incorporated SB 743 modifications, and are now in effect. SB 743 changed the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (Public Resource Code, § 21099 (b)(2)). In addition to new exemptions for projects consistent with specific plans, the CEQA Guidelines replaced congestion-based metrics, such as auto delay and level of service (LOS), with VMT as the basis for determining significant impacts, unless the Guidelines provide specific exceptions.

## **Impacts of the Proposed Project**

Moreover, buildout under the FBC would be consistent with buildout allowed under the General Plan and analyzed in the 2012 EIR. As with buildout under the General Plan, implementation of the proposed FBC 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, and result in impacts that would be significant and unavoidable. However, future projects would be required to implement Mitigation Measure 3.14-1 which would reduce impacts of traffic congestion to the extent feasible. Nonetheless, as with development under the General Plan, this impact would be significant and unavoidable for the proposed project.

In addition, development under the proposed FBC would increase demand for transit service and potentially exceed the capacity of transit service providers, as well as increase congestion and reduce travel speeds on roadways throughout the City including some that are on primary emergency response routes, resulting in significant and unavoidable impacts. Although implementation of General Plan policies and Implementing Actions for future development under the proposed FBC would help reduce the impacts, it might not do so to a less than significant level. This impact would be significant and unavoidable for the proposed project, the same as for development under the General Plan.

The intent of the proposed FBC is to create walkable mixed-use neighborhoods, consistent with the intent of the City's General Plan. Development under the proposed FBC would increase connectivity and safety by providing enhanced facilities for pedestrians and bicyclists and reduce potential for conflicts at rail/roadway crossings, resulting in no impacts.

As described in the VMT analysis memorandum, VMT impacts were analyzed using the Contra Costa Transportation Authority (CCTA) model and based on the City of Richmond's adopted VMT thresholds. VMT is typically an output from travel demand models. Its calculation is based on the estimated number of vehicles multiplied by the distance traveled by each vehicle. This analysis uses the following VMT metrics:

- Household VMT per capita, which measures all the VMT by motor vehicle on a typical weekday associated with a residential use, such as trips to work, school, or shop, and divides that VMT by the number of residents in the project area. Household VMT is also referred to as home-based VMT.
- Commute VMT per worker, which measures all of the worker commute VMT by a motor vehicle on a typical weekday between homes and workplaces and divides that VMT by the number of workers in the project area. Commute VMT is also referred to as home-work or home-based work VMT.
- Total VMT per service population, which measures all of the VMT of all vehicle trips, vehicle types, and trip purposes for all of the project area, and divides that total VMT by the service population (i.e., sum of residents and workers) in the project area.

Table 5 summarizes the VMT efficiency metrics listed above for the Baseline (2020) conditions in the project area and Project Buildout (2040) Conditions as estimated by the CCTA Model. The table also compares the VMT efficiency metrics for the project area with the appropriate baseline averages and a VMT 85 percent of the baseline averages (Countywide average for household VMT per capita and total VMT per service population, and regionwide average for commute VMT per worker), which are the threshold used to determine the significance of the VMT impact.

**Table 5 Project Vehicle Miles Traveled Metrics**

<b>Geography</b>	<b>Average Household VMT per Capita</b>	<b>Average Commute VMT per Worker</b>	<b>Average Total VMT per Service Population</b>
Project Area			
Baseline (2020)	8.9	14.1	18.9
Project Buildout (2040) <sup>1</sup>	7.3	13.9	16.6
Baseline Average <sup>2</sup>	17.3	15.6	30.0
85% of Baseline Average (Threshold of Significance)	14.7	13.2	25.5
Above the Threshold of Significance?	No	No <sup>3</sup>	No

<sup>1</sup> Buildout of the project, which represents an additional 5,151 residential units (16,483 residents) and 5,294 jobs (2,212,543 square feet of space).

<sup>2</sup> Countywide average for household VMT per capita and total VMT per service population, and regionwide average for commute VMT per worker.

<sup>3</sup> Based on the results of the CCTA Model, the average commute VMT per worker is estimated to be 13.8 under Project Buildout (2040) conditions. However, the CCTA Model does not account for transportation demand management (TDM) strategies that future developments are required to implement. It is estimated that TDM strategies would reduce the average commute VMT per worker by at least five percent to below the threshold of significance.

Source: Fehr & Peers based on the results of the CCTA Travel Demand Model, 2022.

As shown in Table 5, based on the results of the CCTA model, implementation of the proposed project would reduce the household VMT per capita in the project area from 8.9 under Baseline (2020) conditions to 7.3 under Project Buildout (2040) conditions, which would be below the threshold of significance of 14.7 (85 percent of the baseline countywide average), indicating a less-than-significant impact. The project would reduce the household VMT per capita in the project area because it would locate additional housing and increase the mix of uses in a transit-rich and pedestrian friendly area, which would encourage walking, biking, and transit trips and result in fewer and shorter automobile trips.

Based on the results of the CCTA model, implementation of the proposed project would reduce the commute VMT per worker in the project area from 14.1 under Baseline (2020) conditions to 13.9 under Project Buildout (2040) conditions. Although the project would reduce the commute VMT per worker in the project area, it would remain above the threshold of significance of 13.2 (85 percent of the baseline Bay Area regional average) by approximately 5 percent. As described above, the VMT estimated by the CCTA Model only accounts for build-environment variables and does not account for transportation demand management (TDM) measures that future developments are required to implement.

The City has a TDM Ordinance (RMC Section 15.04.612) which requires multi-unit residential developments of ten or more units and nonresidential developments of 10,000 or more square feet to develop and implement a TDM plan to the extent feasible reduce the development’s vehicle trip generation to 15 percent below the standard rates as published in the latest edition of the Institute of Transportation Engineers’ Trip Generation Manual and/or to ensure that the VMT per resident or worker for the development is below the citywide average. Most of the future developments under the FBC would be subject to the requirements of the City’s TDM ordinance. However, the specific TDM measures that future developments would implement are not known at this time. Table 6 summarizes the potential VMT reducing strategies that future developments can implement to reduce the commute VMT per worker. Table 6 also presents the effectiveness range of each

strategy based on research compiled in the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, Designed for Local Governments, Communities, and Project Developers (California Air Pollution Control Officers Association [CAPCOA], December 2021). The CAPCOA report is a resource for local agencies to quantify the benefit, in terms of reduced travel demand and VMT, of implementing various TDM strategies.

Furthermore, individual developments that are above the VMT threshold could potentially contribute to future VMT mitigation fee programs, banks, or exchanges. No regional VMT mitigation programs currently exist; however, the CCTA is evaluating different mitigation program frameworks which may lead to a Countywide or regional VMT mitigation program. Should such a program be implemented, development projects could potentially pay into a fee program or purchase mitigation credits to achieve needed VMT mitigation instead of, or in addition to, onsite TDM measures.

**Table 6 Summary of VMT Reduction Strategies**

Strategy	Description	Range of Potential VMT Reduction <sup>1</sup>
Implement ride-sharing program	This strategy focuses on encouraging carpooling and vanpooling by project site/building tenants, which depends on the ultimate building tenants.	Up to 8%
Subsidize or discount transit passes	This strategy reduces the need to use a vehicle by incentivizing individuals to use transit for their daily commute. This strategy depends on the ultimate building tenants.	Up to 5%
Price and manage parking	Parking management strategies focus on the management of parking to influence vehicle travel. Free and ubiquitous parking supply tends to increase vehicle use while reducing parking supply and pricing spaces can help reduce vehicle travel. A reduction in parking supply, as required by the FBC, can incentivize infill development and higher density development by reducing the cost of building parking spaces.	Up to 20%
Mandatory commute trip reduction program	Implementing a mandatory Commute Trip Reduction (CTR) program with rigorous monitoring requirements can disincentive single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions.	Up to 26%
End-of-trip bicycle facilities	This measure will install and maintain end-of-trip facilities for employee use. End-of-trip facilities include bike parking, bike lockers, showers, and personal lockers. The provision and maintenance of secure bike parking and related facilities encourages commuting by bicycle.	Up to 4%
Employer-sponsored vanpool	Vanpooling is a flexible form of public transportation that provides groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting.	Up to 20%

<sup>1</sup> Based on *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, Designed for Local Governments, Communities, and Project Developers* (CAPCOA, December 2021).

Source: Fehr & Peers, 2022.

The effectiveness of TDM programs in reducing vehicle trips and VMT would depend on characteristics of individual developments and the specific TDM strategies implemented at each site. Although these details not known at this time, future development projects are expected to implement a suite of TDM measures that would reduce each project's VMT to comply with the City's TDM Ordinance.

Considering the effectiveness range of the TDM strategies described above and the City's requirement for future developments to implement TDM plans, it is assumed that the implementation of the selected measures at future developments combined can reduce the average commute VMT per worker for the project area by at least five percent to below the threshold of significance (85 percent of the baseline Bay Area regional average). Thus, the impact of the proposed project on commute VMT per worker is less than significant.

For total VMT per service population, implementation of the proposed project would reduce the total VMT per service population from 18.9 under Baseline (2020) conditions to 16.6 under Project Buildout (2040) conditions, which would be below the threshold of significance of 25.5 (85 percent of the baseline countywide average), indicating a less-than-significant impact. The project would reduce the total VMT per service population in the project area because it would locate a variety of uses in a mixed-use, transit-rich, and pedestrian friendly area, which would encourage walking, biking, and transit trips and result in fewer and shorter automobile trips

## **Conclusion**

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more significant impacts with respect to transportation and traffic than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. Mitigation 3.14-1 from the 2012 EIR would continue to apply to the proposed project, and no new mitigation measures are necessary.

## 5.18 Tribal Cultural Resources

### **Impacts Identified in the 2020 EIR**

Tribal Cultural Resources was added to the 2016 *CEQA Guidelines* as a separate environmental issue area. Thus, the 2012 EIR does not include a chapter or section dedicated to analysis of impacts to tribal cultural resources. However, it does analyze general impacts to cultural resources (including archeological resources that may originate from Native American tribes) in Section 3.5, *Cultural Resources* and concludes that impacts would be less than significant. Development under the General Plan could adversely affect cultural resources, including through construction activities that could result in the disturbance of undiscovered archaeological or tribal cultural resources during grading or other on-site excavation activities. However, the EIR concludes that the implementation of existing regulations and General Plan policies, including Policy HR1.1, which seeks to preserve historic, cultural, and archaeological sites and resources in the City, would reduce potential impacts to a less than significant level.

### **Impacts of the Proposed Project**

The proposed project may result in new buildings and uses on certain parcels within the City where requested by applicants and approved by the City. However, development, including ground disturbance would occur in the same areas as analyzed in the General Plan; there would be no changes to the land use or zoning maps and no change to the General Plan boundaries. The General Plan and 2012 EIR do not discuss compliance with Assembly Bill 52 (AB 52), which was approved in 2014 and requires lead agencies to complete consultation with California Native American Tribes regarding proposed projects, because it was approved after adoption of the General Plan. However, individual new projects subject to the proposed FBC would likely be subject to project-level CEQA

review and would thus be required to meet the requirements of AB 52; the City of Richmond would be required to notify tribes of pending projects and complete consultation when requested. Future projects under the proposed FBC would also be required to implement Mitigation Measures 3.5-2a and 3.5-2b which prohibit actions that would cause a substantial change and reduce to cultural resources. Therefore, impacts to tribal cultural resources would be less than significant.

## Conclusion

No substantial changes have occurred that require major revisions to the 2020 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to tribal cultural resources than were identified in the 2020 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 5.19 Utilities and Service Systems

### Impacts Identified in the 2012 EIR

As discussed under Section 3.13, *Public Utilities*, of the 2012 EIR (pages 3.13-1 through 3.13-38), the East Bay Municipal Utility District (EBMUD) provides water to the project site while the City of Richmond, West County Wastewater District (WCWD) and Stege Sanitary District (SSD) manages wastewater and stormwater services to the project site. The City of Richmond also provides solid waste removal services for the project site. Implementation of the General Plan would result in less than significant impacts to water supply, wastewater treatment requirements, and solid waste treatment as facilities would have adequate capacity to meet the needs of the project. However, the General Plan could require the construction or expansion of wastewater treatment facilities or collection systems that could cause significant environmental impacts, absent project-specific mitigation measures, and result in a significant and unavoidable impact. The 2012 EIR required the following mitigation measure to reduce impacts on wastewater to the extent feasible.

#### *Mitigation Measure 3.13-3*

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

### Impacts of the Proposed Project

The proposed project would not increase the intensity of development beyond what was analyzed in the 2012 EIR. Therefore, the project would not create additional demand for utilities and service systems beyond the demand evaluated in the 2012 EIR. Consistent with buildout under the General Plan, buildout under the proposed FBC would not increase water demand more than what was previously analyzed. Under EMBUD's Water Supply Management Program 2040, consumer consumption is projected to be reduced by 35 percent through conservation measures to ensure adequate water supply for EBMUD's service area (EBMUD 2012). Like development under the General Plan, development under the proposed FBC would also result in less than significant impacts to wastewater treatment requirements as wastewater districts serving the City of Richmond would be required to comply with NPDES permit requirements to ensure discharges would not exceed the Regional Water Quality Control Board wastewater treatment requirements. Although development under the General Plan and proposed project could require the construction or expansion of wastewater treatment facilities or collection systems that could cause significant and

unavoidable environmental impacts, Mitigation Measure 3.14-3 would reduce impacts to the extent feasible. As was identified in the 2012 EIR, this impact would be significant and unavoidable even with mitigation. Lastly, consistent with analysis in the 2012 EIR, implementation of the proposed FBC would have a less than significant impact on solid waste disposal as there would be sufficient landfill capacity to accommodate an increased demand.

## **Conclusion**

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to utilities and service systems than were identified in the 2012 EIR. None of the conditions listed in CEQA Guidelines Section 15162 requiring preparation of a subsequent EIR would occur. Mitigation 3.13-3 from the 2012 EIR would continue to apply to future development under the proposed project, and no new mitigation measures are necessary.

## 5.20 Wildfire

### **Impacts Identified in the 2012 EIR**

Since Wildfire was added to the *CEQA Guidelines* as a separate environmental issue area after certification of the 2012 EIR, it does not include a chapter or section dedicated to analysis of impacts to wildfire. However, impacts associated with wildland fire were discussed in Section 3.12, *Public Services*, of the 2012 EIR. As discussed in that section, implementation of the General Plan would involve construction and operation of land uses in areas that are surrounded by urban land uses that are not mixed with or adjacent to wildlands and would not be exposed to an increased risk of wildfires. Therefore, impacts would be less than significant.

### **Impacts of the Proposed Project**

Recent changes to the *CEQA Guidelines* have added additional checklist questions related to wildfire hazards to Appendix G of the *CEQA Guidelines*. Therefore, additional discussion related to wildfire hazards is provided herein to supplement the 2012 EIR. Wildfires are of particular concern in areas designated as a Very High Fire Hazard Severity Zone (VHFHSZ). The areas where the FBC would apply are not located within or adjacent to land classified as a VHFHSZ (CAL FIRE 2009 and 2020).

In addition, the project may have a significant impact if, due to slope, prevailing winds, and other factors, the project would exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire. The areas where the FBC would apply are not near wildlands. Although the areas are in an urbanized area and surrounded by development, heavy duty equipment used during project construction may produce sparks that could ignite local site-specific vegetation. Development under the FBC would be required to comply with requirements related to construction equipment and fire suppressant (such as California Public Resources Code Section 4442). Therefore, with compliance with applicable State requirements, the project would not exacerbate wildfire risk and impacts would be less than significant.

The project may have a significant impact if it would require the installation of associated infrastructure that may exacerbate fire risk or may result in temporary or ongoing impacts to the environment. Development under the FBC would be infill development, and current buildings in the

area are currently served by existing roads, emergency water sources, power lines, and utilities. Although utility trenching may occur to assure adequate service to new buildings, no extensions beyond the project site into areas of wildfire concern would occur. Therefore, the project would not result in the installation of associated infrastructure that could otherwise exacerbate fire risk or result in temporary or ongoing impacts to the environment, and the project would have no impact.

Finally, the proposed project may have a significant impact if it would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The areas where the FBC would apply are not immediately downslope from naturally vegetated hillsides and are not located in a designated flood zone. The proposed project's urban location and compliance with applicable regulatory requirements would not expose people or structures to significant downslope or downstream flooding or landslide risks resulting from runoff, post-fire slope instability, or drainage changes. Therefore, impacts would be less than significant.

## **Conclusion**

No substantial changes have occurred that require major revisions to the 2012 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect wildfire than were identified in the 2012 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR would occur. No new mitigation measures are necessary.

## 6 Conclusion

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The City of Richmond, acting as the lead agency, determined that an addendum is the appropriate environmental document under CEQA because the proposed project would not require revisions to the adopted General Plan's EIR due to the involvement of new significant environmental effects or substantial increases in the severity of significant effects previously identified in the General Plan Update EIR.

There are no changed circumstances or new information that meets the standards for requiring further environmental review under CEQA Guidelines Section 15162. Thus, these circumstances and information would not result in new or more severe impacts beyond what were addressed in the General Plan Final EIR and would not meet any other standards under CEQA Guidelines Section 15162(a)(3). No additional analysis is required based on the following findings.

First, as addressed in the analysis, for any given parcel within the project area, the proposed FBC would not allow increased building area or height compared to what is currently allowed under the General Plan for that parcel. The proposed project would not result in new or more severe impacts beyond what was addressed in the 2012 EIR.

Second, the City is not aware of any substantial changes in the circumstances that would cause a new significant impact or substantially increase the severity of a previously identified significant impact requiring major revisions to the General Plan EIR (State CEQA Guidelines Section 15162[a][2]). There have been no changes in the environmental conditions in the City of Richmond not contemplated and analyzed in the General Plan EIR that would result in new or substantially more severe environmental impacts.

Third, as documented in Section 3, there is no new information of substantial importance (which was not known or could not have been known at the time of the General Plan adoption in October 2003) that identifies: a new significant impact (condition "A" under State CEQA Guidelines Section 15162[a][3]); a substantial increase in the severity of a previously identified significant impact (condition "B" State CEQA Guidelines Section 15162[a][3]); mitigation measures or alternatives previously found infeasible that would now be feasible and would substantially reduce one or more significant effects of the General Plan; or mitigation measures or alternatives that are considerably different from those analyzed in the General Plan EIR which would substantially reduce one or more significant effects on the environment (conditions "C" and "D" State CEQA Guidelines Section 15162[a][3]). In sum, none of the "new information" conditions listed in the State CEQA Guidelines Section 15162[a][3] are present here to trigger the need for a subsequent or supplemental EIR.

State CEQA Guidelines Section 15164 states that "The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." An addendum is therefore appropriate because, as explained above, none of the conditions calling for preparation of a subsequent EIR have occurred.

## 7 References

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### 7.2 List of Preparers

Rincon Consultants, Inc. prepared this addendum under contract to the City of Richmond. Persons and firms involved in data gathering, analysis, project management, and quality control include the following:

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# Appendix A

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Vehicle Miles Traveled Analysis

# Memorandum

Date: May 24, 2022

To: Drew Finke, Opticos Design  
Karly Kaufman, Rincon Consultants, Inc.

From: Sam Tabibnia, Fehr & Peers

**Subject: Richmond Livable Corridors Form-Based Code Addendum – VMT Analysis**

OK20-0385

This memorandum presents the vehicle miles traveled (VMT) analysis completed for the proposed Richmond Livable Corridors Form-Based Code (FBC) project in support of the addendum under preparation for the project. The memorandum starts by discussing the need for a VMT assessment in relation to the City's General Plan EIR, and then presents the existing VMT metrics in the project area, followed by regulatory background for VMT assessment, and concludes by presenting an analysis of the project impact on VMT including methodology and assumptions.

## Tiering from the City's General Plan EIR

VMT has long been used as a metric for measuring air quality and greenhouse gas (GHG) impacts in California. The *City of Richmond General Plan 2030 EIR*, certified in 2012, evaluated the air quality and GHG impacts associated with potential VMT changes resulting from the General Plan Project. The adoption of VMT as a new metric for the measurement of transportation impacts under CEQA does not constitute new significant information, because VMT associated with the project was already disclosed and evaluated in the General Plan EIR.

Furthermore, an addendum is not required to consider new impact areas added to CEQA after the underlying EIR was certified. See *Concerned Dublin Citizens v. City of Dublin* (2013) 214 Cal.App.4th 1301, 1320 (adoption of new guidelines for GHG evaluation was not significant new information requiring further CEQA review because GHG emissions were known information and could have been addressed in the original EIR); *Fort Mojave Indian Tribe v. Dept. of Health Servs.*



(1995) 38 Cal.App.4th 1574, 1605 (new critical habitat regulation was not significant new information because impacts to the species had already been addressed in original EIR.).

The General Plan EIR's discussion of VMT makes clear that VMT was a clearly understood metric for measuring air quality and GHG impacts at the time the EIR was certified. Thus, no new analysis of VMT to address the project's impacts on transportation and traffic is required. However, to present a conservative analysis, the remainder of this memorandum presents the impacts of the project on VMT consistent with the State, County, and City requirements.

## Existing Conditions

One performance measure used to quantify automobile travel is VMT, which refers to the amount of automobile travel attributable to a project as well as the distance traveled. In 2013, Governor Brown signed Senate Bill (SB) 743, which added Public Resources Code Section 21099 to the California Environmental Quality Act (CEQA). Public Resources Code Section 21099 changes the way transportation impacts are analyzed in CEQA documents, and aligns local environmental review methodologies with statewide objectives to reduce greenhouse gas (GHG) emissions, encourage infill mixed-use development in designated priority development areas, reduce regional sprawl, and reduce VMT in California.

Increased VMT leads to various direct and indirect impacts on the environment and human health. Among other effects, increased VMT on the roadway network leads to increased emissions of air pollutants, including GHGs, and increased energy consumption. The transportation sector is associated with more GHG emissions than any other sector in California. As documented in the City's Climate Action Plan (Richmond, 2016), about 39 percent of Richmond's GHG emissions were produced by motor vehicles in 2012. Reducing VMT is one of the most effective means for reducing the City's GHG emissions.

VMT is typically an output from travel demand models. Its calculation is based on the estimated number of vehicles multiplied by the distance traveled by each vehicle. This analysis uses the following VMT metrics:

- **Household VMT per capita**, which measures all the VMT by motor vehicle on a typical weekday associated with a residential use, such as trips to work, school, or shop, and divides that VMT by the number of residents in the project area. Household VMT is also referred to as home-based VMT.
- **Commute VMT per worker**, which measures all of the worker commute VMT by a motor vehicle on a typical weekday between homes and workplaces and divides that VMT by the



number of workers in the project area. Commute VMT is also referred to as home-work or home-based work VMT.

- **Total VMT per service population**, which measures all of the VMT of all vehicle trips, vehicle types, and trip purposes for all of the project area, and divides that total VMT by the service population (i.e., sum of residents and workers) in the project area.

This analysis uses the Contra Costa Transportation Authority (CCTA) Countywide Travel Demand Model (CCTA Model) to estimate VMT. The CCTA Model includes data from 2020, which represents pre-pandemic conditions; therefore, the model approximates existing conditions. The VMT estimate accounts for all the VMT generated by the project area within the Nine County Bay Area region. **Table 1** presents the existing VMT efficiency metrics (i.e., per capita, per worker, or per service population) for the project area and compares them to the citywide, countywide, and regionwide averages based on the CCTA Model results for the year 2020. The existing (2020) VMT efficiency metrics for the project area are lower than the citywide, countywide, and regionwide averages.

**Table 1: Existing (2020) VMT Summary**

Geography	Average Household VMT per Capita	Average Commute VMT per Worker	Average Total VMT per Service Population
Project Area	8.9	14.1	18.9
City of Richmond	10.4	15.5	23.0
Contra Costa County	17.3	14.9	30.0
Bay Area Region	13.3	15.6	26.2

Source: Fehr & Peers based on the results of the CCTA Travel Demand Model for the year 2020, 2022.

## Regulatory Setting

The State, County, and City requirements regarding analysis of land use projects impact on VMT are discussed below.

### *Senate Bill 743*

Passed in 2013, SB 743 started a process that changed the way transportation impact analysis is conducted as part of CEQA compliance. With these changes, automobile delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion are no longer the basis for determining significant impacts under CEQA. According to SB 743, these changes are intended to “more appropriately balance the needs of congestion management with statewide



goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.”

In December 2018, the Natural Resources Agency finalized updates to Section 15064.3 of the CEQA Guidelines, including the incorporation of SB 743 modifications. The Guidelines’ changes were approved by the Office of Administrative Law and as of July 1, 2020 are now in effect statewide.

To help aid lead agencies with SB 743 implementation, the Governor’s Office of Planning and Research (OPR) produced the *Technical Advisory on Evaluating Transportation Impacts in CEQA* that provides guidance about the variety of implementation questions they face with respect to shifting to a VMT metric.

#### *Contra Costa Transportation Authority*

Consistent with SB 743 requirements and OPR guidelines, in July 2020 CCTA published the *VMT Analysis Methodology for Land Use Projects in Contra Costa GMTF Review Draft*, to describe CCTA’s recommended methodology for evaluating VMT for land use projects in CEQA documents. The document provides thresholds of significance for projects of different types and a methodology for estimating VMT that jurisdictions in Contra Costa County are required to follow in order to be consistent with CCTA’s Growth Management Program (GMP).

#### *City of Richmond*

On February 4, 2021, the Richmond City Council adopted the VMT screening criteria, thresholds of significance, and VMT estimation methodologies as published by CCTA in July 2020 (described above), and consistent with SB 743 requirements and OPR guidelines.

On February 4, 2021, the Richmond City Council also adopted changes to the City’s Transportation Demand Management (TDM) Ordinance (Article 15.04.612 of the City of Richmond Municipal Code), which requires multi-unit residential developments of ten or more units and nonresidential developments of 10,000 or more square feet to develop and implement a TDM Plan to the extent feasible reduce the development’s vehicle trip generation to 15 percent below the standard rates as published in the latest edition of the Institute of Transportation Engineers’ *Trip Generation Manual*, and/or to ensure that the VMT per resident or worker for the development is below the citywide average.



## Impact Analysis

The methodology and assumptions used for evaluating the VMT impacts of the project as well as the VMT results are presented below.

### VMT Estimation

This analysis uses the CCTA Model to estimate VMT efficiency metrics. Travel demand models represent neighborhoods in transportation analysis zones (TAZs). TAZs are used in transportation planning models for transportation analysis and other planning purposes. The CCTA Model includes approximately 138 TAZs in Richmond, which vary in size from a few blocks in the areas around the main corridors such as Cutting Boulevard and San Pablo Avenue and surrounding the Richmond BART Station to larger geographic areas farther away. The project area, which is defined as the TAZs where the proposed FBC would change land uses, fully or partially encompasses 48 TAZs.

The CCTA Model uses various socio-economic variables, such as number of households and residents by household type, number of jobs by employment category at a TAZ level and transportation system assumptions such as type of roadway, number of lanes, major bicycle and pedestrian facilities, transit service capacity and frequency to forecast various travel characteristics, such as daily and peak-hour travel volumes and VMT.

The CCTA Model uses a four-step modeling process that looks at trip generation, trip distribution, mode split, and trip assignment. This process accounts for changes in travel patterns due to future growth and expected changes in the transportation network. The CCTA Model assigns all predicted trips within, across, to, or from the nine-county San Francisco Bay Area region to the roadway network and transit system by mode (i.e., single-occupant or carpool vehicle, biking, walking, or transit) and transit carrier (i.e., bus, rail) for a given scenario. The VMT generated by each TAZ can be estimated by tracking the number of trips and the length of each trip generated by the TAZ.

The CCTA Model version released in April 2019, which incorporates land use data and transportation network improvements consistent with *Plan Bay Area 2040* (i.e., the Sustainable Communities Strategy)<sup>1</sup>, was used to develop VMT estimates because it is currently the best

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<sup>1</sup> Although MTC adopted *Plan Bay Area 2050* in October 2021, this analysis relies on *Plan Bay Area 2040* because CCTA Model, which is used to estimate the VMT metrics for this project, is based on *Plan Bay Area 2040* and updated to reflect *Plan Bay Area 2050* are not expected for several years.



available tool for estimating VMT metrics in Contra Costa County. VMT metrics are developed for the following scenarios:

- **Baseline (2020) Conditions** – This scenario represents the land uses and transportation network within and outside of the project area under existing (2020) conditions.
- **2040 Plus Project Buildout Conditions** – This scenario assumes the buildout of the proposed project within the project area, and the *Plan Bay Area 2040* assumptions outside of the project area. Regional planned transportation improvements include funded and approved transportation improvements as documented in the Plan Bay Area 2040 and included in the CCTA Travel Demand Model.

As a regional planning tool, the CCTA Model was developed through an extensive model validation process. The model is intended to replicate existing vehicular travel behavior, and can provide a reasonable estimate of VMT generated in various geographic areas on a typical weekday. It can also estimate future VMT that reflects planned local and regional land use and transportation system changes. As a result, the CCTA Model was used to estimate the VMT and the VMT efficiency metrics under 2020 and 2040 conditions.

The VMT and VMT efficiency metrics estimated by the CCTA Model are somewhat conservative because the CCTA Model is a regional travel demand model and only accounts for the built environment variables to which the model is sensitive. As such, the FBC policies supporting variables the model is not sensitive to (such as presence of bicycle and pedestrian facilities, limited parking supply, and TDM measures) may not be reflected in these VMT estimates.

### Thresholds of Significance

Per City of Richmond's adopted thresholds of significance for evaluating VMT impacts and consistent with OPR and CCTA guidelines, this analysis uses the following thresholds of significance to determine if the proposed project would cause a significant impact on VMT:

- For residential uses, the implementation of the proposed project would result in a significant impact if it would result in the average household VMT per capita to be higher than 85% of the existing average household VMT per capita in Richmond or Contra Costa County, whichever is less stringent.
- For employment generating uses, the implementation of the proposed project would result in a significant impact if it would result in the average commute VMT per worker to be higher than 85% of the existing average commute VMT per worker in Richmond or Bay Area Region, whichever is less stringent.
- For retail and other uses, the implementation of the proposed project would result in a significant impact if it would result in the average total VMT per service population to be



higher than 85% of the existing average total VMT per service population in Richmond or Contra Costa County, whichever is less stringent.

As previously shown in Table 1, the average household VMT per capita and the average total VMT per service population for Contra Costa County, and the average commute VMT per worker for the Bay Area region are the less stringent metrics and per the CCTA guidelines, are used as the thresholds of significance in this analysis.

### Project VMT Metrics

**Table 2** summarizes the VMT efficiency metrics listed above for the Baseline (2020) conditions in the project area and Project Buildout (2040) Conditions as estimated by the CCTA Model. The table also compares the VMT efficiency metrics for the project area with the appropriate baseline averages and a VMT 85 percent of the baseline averages (Countywide average for household VMT per capita and total VMT per service population, and regionwide average for commute VMT per worker), which are the threshold used to determine the significance of the VMT impact.

**Table 2: Project VMT Metrics**

Geography	Average Household VMT per Capita	Average Commute VMT per Worker	Average Total VMT per Service Population
Project Area			
Baseline (2020)	8.9	14.1	18.9
Project Buildout (2040) <sup>1</sup>	7.3	13.9	16.6
Baseline Average <sup>2</sup>	17.3	15.6	30.0
85% of Baseline Average (Threshold of Significance)	14.7	13.2	25.5
Above the threshold of significance?	No	No <sup>3</sup>	No

Notes:

1. Buildout of the project, which represents an additional 5,151 residential units (16,483 residents) and 5,294 jobs (2,212,543 square feet of space).
2. Countywide average for household VMT per capita and total VMT per service population, and regionwide average for commute VMT per worker.
3. Based on the results of the CCTA Model, the average commute VMT per worker is estimated to be 13.8 under Project Buildout (2040) conditions. However, the CCTA Model does not account for TDM strategies that future developments are required to implement. It is estimated that TDM strategies would reduce the average commute VMT per worker by at least five percent to below the threshold of significance.

Source: Fehr & Peers based on the results of the CCTA Travel Demand Model, 2022.



The effects of the project on the three VMT metrics is described below:

#### *Household VMT per Capita*

As shown in Table 2, the implementation of the proposed project would reduce the household VMT per capita in the project area from 8.9 under Baseline (2020) conditions to 7.3 under Project Buildout (2040) conditions, which would be below the threshold of significance of 14.7 (85 percent of the baseline countywide average), indicating a less-than-significant impact. The project would reduce the household VMT per capita in the project area because it would locate additional housing and increase the mix of uses in a transit-rich and pedestrian friendly area, which would encourage walking, biking, and transit trips and result in fewer and shorter automobile trips.

#### *Commute VMT per Worker*

The implementation of the proposed project would reduce the commute VMT per worker in the project area from 14.1 under Baseline (2020) conditions to 13.9 under Project Buildout (2040) conditions. Although the project would reduce the commute VMT per worker in the project area, it would remain above the threshold of significance of 13.2 (85 percent of the baseline Bay Area regional average) by about five percent, according to the CCTA Model. As described above, the VMT estimated by the CCTA Model only accounts for build-environment variables, and does not account for TDM measures that future developments are required to implement.

As stated above, the City has a TDM ordinance which requires multi-unit residential developments of ten or more units and nonresidential developments of 10,000 or more square feet to develop and implement a TDM Plan to reduce automobile trips and VMT to the extent feasible. Most future developments in the project area would be subject to this TDM ordinance. However, the specific TDM measures that future developments would implement are not known at this time.

**Table 3** summarizes the potential VMT reducing strategies that future developments can implement to reduce the commute VMT per worker. Table 3 also presents the effectiveness range of each strategy based on research compiled in the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, Designed for Local Governments, Communities, and Project Developers* (California Air Pollution Control Officers Association [CAPCOA], December 2021). The CAPCOA report is a resource for local agencies to quantify the benefit, in terms of reduced travel demand and VMT, of implementing various TDM strategies.



Furthermore, individual developments that are above the VMT threshold could potentially contribute to future VMT mitigation fee programs, banks, or exchanges. No regional VMT mitigation programs currently exist; however, the CCTA is currently evaluating different mitigation program frameworks which may lead to a Countywide or regional VMT mitigation program. Should such a program be implemented, development projects could potentially pay into a fee program or purchase mitigation credits to achieve needed VMT mitigation instead of, or in addition to, onsite TDM measures.

**Table 3: Summary of VMT Reduction Strategies**

Strategy	Description	Range of Potential VMT Reduction <sup>1</sup>
Implement ride-sharing program	This strategy focuses on encouraging carpooling and vanpooling by project site/building tenants, which depends on the ultimate building tenants.	Up to 8%
Subsidize or discount transit passes	This strategy reduces the need to use a vehicle by incentivizing individuals to use transit for their daily commute. This strategy depends on the ultimate building tenants.	Up to 5%
Price and manage parking	Parking management strategies focus on the management of parking to influence vehicle travel. Free and ubiquitous parking supply tends to increase vehicle use while reducing parking supply and pricing spaces can help reduce vehicle travel. A reduction in parking supply, as required by the FBC, can incentivize infill development and higher density development by reducing the cost of building parking spaces.	Up to 20%
Mandatory Commute trip reduction program	Implementing a mandatory Commute Trip Reduction (CTR) program with rigorous monitoring requirements can disincentive single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions.	Up to 26%
End-of-trip bicycle facilities	This measure will install and maintain end-of-trip facilities for employee use. End-of-trip facilities include bike parking, bike lockers, showers, and personal lockers. The provision and maintenance of secure bike parking and related facilities encourages commuting by bicycle.	Up to 4%
Employer-sponsored vanpool	Vanpooling is a flexible form of public transportation that provides groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting.	Up to 20%

Notes:

1. Based on *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, Designed for Local Governments, Communities, and Project Developers* (CAPCOA, December 2021).

Source: Fehr & Peers, 2022.



The effectiveness of TDM programs in reducing vehicle trips and VMT would depend on characteristics of individual developments and the specific TDM strategies implemented at each site. Although these details not known at this time, future development projects are expected to implement a suite of TDM measures that would reduce each project's VMT to comply with the City's TDM Ordinance.

Considering the effectiveness range of the TDM strategies described above and the City's requirement for future developments to implement TDM plans, it is assumed that the implementation of the selected measures at future developments combined can reduce the average commute VMT per worker for the project area by at least five percent to below the threshold of significance (85 percent of the baseline Bay Area regional average). Thus, the impact of the proposed project on commute VMT per worker is less-than-significant.

#### *Total VMT per Service Population*

For total VMT per service population, the implementation of the proposed project would reduce the total VMT per service population from 18.9 under Baseline (2020) conditions to 16.6 under Project Buildout (2040) conditions, which would be below the threshold of significance of 25.5 (85 percent of the baseline countywide average), indicating a less-than-significant impact. The project would reduce the total VMT per service population in the project area because it would locate a variety of uses in a mixed-use, transit-rich, and pedestrian friendly area, which would encourage walking, biking, and transit trips and result in fewer and shorter automobile trips.

#### **Cumulative VMT Analysis**

According to the CCTA Guidance, a cumulative analysis is only required if the project-level impact is found to be significant. Since the project-level impact is less-than-significant, as described above, no cumulative analysis is prepared for the project.