

CITY COUNCIL RESOLUTION NO. 10-79

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE CERTIFYING THE PROGRAM ENVIRONMENTAL IMPACT REPORT (SCH# 2007011024, 00497859-PCLE) FOR THE IRVINE BUSINESS COMPLEX VISION PLAN AND RESIDENTIAL MIXED USE OVERLAY ZONING CODE AND RELATED IMPLEMENTING ACTIONS

WHEREAS, the proposed General Plan Amendment 00497846-PGA, Zone Change 00497861-PZC, Master Plan 00497860-PMP, and related implementing actions for the Irvine Business Complex (IBC) Residential Mixed-Use Vision Plan are considered a "project" as defined by the California Environmental Quality Act (CEQA); and

WHEREAS, it was determined pursuant to the City's CEQA Guidelines that the project could have a significant effect on the environment and thus warranted the preparation of an Environmental Impact Report (EIR); and

WHEREAS, a the proposed project was initiated by the City Council on April 12, 2005;

WHEREAS, on July 25, 2006 the City Council directed that an Environmental Impact Report be prepared for the project; and

WHEREAS, EIR scoping sessions were conducted by the Planning Commission on February 1, 2007, the Community Services Commission on February 21, 2007, and the City Council on February 27, 2007; and

WHEREAS, a Draft EIR was prepared for the project and was circulated to the public, responsible agencies and other interested persons for review and comments from March 27, 2009 through May 14, 2009; and

WHEREAS, public comment meetings on the Draft EIR were held by the Community Services Commission on April 15, 2009, the IBC Task Force on April 21, 2009, and the Planning Commission on May 7, 2009; and

WHEREAS, a Recirculated Draft EIR was prepared for the project and was re-circulated to the public, responsible agencies and other interested persons for review and comments from December 23, 2009 to February 5, 2010; and

WHEREAS, a Preliminary Final EIR, including responses to comments and corrections to the RDEIR was prepared and released on March 22, 2010; and

WHEREAS, a Final EIR, including response to additional comments and corrections and has been prepared and distributed to the City Council; and

WHEREAS, the City Council has considered information presented by the applicant, the Community Development Department, and other interested parties at public meetings and hearings held on July 11, 2006, July 25, 2006, February 27, 2007, October 23, 2007, February 26, 2008, April 27, 2010, and July 13, 2010.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. That pursuant to Section 15205 of the State CEQA Guidelines, the City Council reviewed and considered the Final Environmental Impact Report (SCH# 2007011024) (FEIR) in making its recommendation on the Zone Change and the Vision Plan Project.

SECTION 2. Most of the potentially significant environmental impacts of the Vision Plan Project identified in the FEIR have been determined to be less than significant or mitigated to a level that is considered less than significant or changes have been required or incorporated into the Vision Plan Project which avoid or substantially lessen the significant environmental effects.

SECTION 3. Certain impacts of the Vision Plan Project to Air Quality, Noise, Land Use and Traffic have been identified in the FEIR as significant and unavoidable. The specific impacts are summarized in Exhibit A to Resolution No 10-79. Based upon specific economic, social, technical or other considerations, the City Council finds these effects acceptable and adopts the required facts and findings and Statement of Overriding Considerations (attached as Exhibit B to Resolution No. 10-79).

SECTION 4. Although the FEIR identifies certain significant environmental effects that would result if the Vision Plan Project is approved, most environmental effects can feasibly be avoided or mitigated. The applicable mitigation measures, included within the FEIR as Table 1-2 and incorporated herein as Exhibit C to Resolution No. 10-79, have been incorporated into the Vision Plan Project or identified as requirements of the Vision Plan Project.

SECTION 5. In accordance with Section 8 of the City of Irvine CEQA Procedures, the Planning Commission recommends that the City Council find that the FEIR has been completed in compliance with CEQA and the State CEQA Guidelines, and the City's CEQA Procedures. The Planning Commission also recommends that the City Council, having final approval authority over the project, certify as complete and adequate the Final EIR.

SECTION 6. Pursuant to Fish and Game Code Section 7.11.4 (C), all required Fish and Game filing fees will be paid subsequent to certification of the FEIR for the Vision Plan Project.

SECTION 6. The Final EIR shall consist of the following:

- A. The Draft EIR
- B. The Technical Appendices to the Draft EIR
- C. The Recirculated Draft EIR
- D. The Technical Appendices to the Recirculated Draft EIR
- E. Comments and Responses to the Draft EIR and Recirculated Draft EIR (including a list of persons, organizations and agencies who commented on the Draft EIR and Recirculated Draft EIR)
- F. Statement of Facts and Findings
- G. Statement of Overriding Considerations
- H. Mitigation Monitoring Program

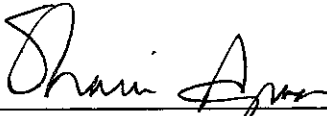
SECTION 7. Based on the above findings, City Council certifies the Final EIR.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 13th day of July, 2010.



MAYOR OF THE CITY OF IRVINE

ATTEST:



CITY CLERK OF THE CITY OF IRVINE

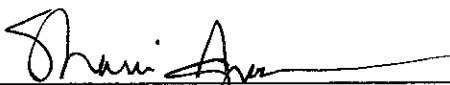
STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF IRVINE)

I, SHARIE APODACA, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 13th day of July, 2010.

AYES: 4 COUNCILMEMBERS: Agran, Choi, Krom and Kang

NOES: 0 COUNCILMEMBERS: None

ABSENT: 1 COUNCILMEMBERS: Shea



CITY CLERK OF THE CITY OF IRVINE

6. *Significant Unavoidable Adverse Impacts*

Chapter 1, *Executive Summary*, contains Table 1-1, which summarizes the impacts; Programs, Plans and Policies (PPP); Project Design Features (PDF); mitigation measures; and levels of significance before and after mitigation. While PPPs, PDFs, and mitigation measures would reduce the level of impact, the following impacts would remain significant, unavoidable, and adverse after mitigation measures are applied:

6.1 **AIR QUALITY**

IMPACT 5.2-1: REGIONAL POPULATION, HOUSING, AND EMPLOYMENT GROWTH PROJECTIONS IN THE IRVINE BUSINESS COMPLEX WERE NOT ACCOUNTED FOR IN THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT'S AIR QUALITY MANAGEMENT PLAN.

The impacts associated with Impact 5.2-1 are lower with the integration of PPPs and PDFs in the proposed project than they would otherwise be, but the PPPs and PDFs are not sufficient to lower the impacts to below a level of significance without the imposition of feasible mitigation measures. However, no additional feasible mitigation measures are available to reduce short-term air pollutant emissions or long-term air pollutant emissions below the SCAQMD regional thresholds so that the project would not significantly contribute to the nonattainment designation of the South Coast Air Basin to ensure AQMP consistency. Consequently, Impact 5.2-1 would remain **significant and unavoidable**.



IMPACT 5.2-2: CONSTRUCTION EMISSIONS ASSOCIATED WITH BUILDOUT OF THE IRVINE BUSINESS COMPLEX WOULD GENERATE SHORT-TERM EMISSIONS THAT EXCEED THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT'S REGIONAL SIGNIFICANCE THRESHOLDS FOR VOC, NOX, CO, PM₁₀, AND PM_{2.5}, AND WOULD SIGNIFICANTLY CONTRIBUTE TO THE NONATTAINMENT DESIGNATIONS OF THE SOUTH COAST AIR BASIN FOR O₃ AND PARTICULATE MATTER (PM₁₀ AND PM_{2.5}).

The impacts associated with Impact 5.2-2 are lower with the integration of PPPs and PDFs into the proposed project than they would otherwise be, but the PPPs and PDFs are not sufficient to lower the impacts to below a level of significance without the imposition of feasible mitigation measures. Due to the potential magnitude of emissions from individual development projects and overlap of different development projects in the IBC, construction emissions would continue to individually or cumulatively exceed the SCAQMD regional thresholds. Consequently, Impact 5.2-2 would remain **significant and unavoidable**.

IMPACT 5.2-3: BUILDOUT OF THE IRVINE BUSINESS COMPLEX WOULD GENERATE LONG-TERM STATIONARY- AND MOBILE-SOURCE EMISSIONS THAT EXCEED THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT'S REGIONAL SIGNIFICANCE THRESHOLD AND SIGNIFICANTLY CONTRIBUTE TO THE NONATTAINMENT DESIGNATIONS OF THE SOUTH COAST AIR BASIN FOR O₃ AND PARTICULATE MATTER (PM₁₀ AND PM_{2.5}).

The impacts associated with Impact 5.2-3 are lower with the integration of PPPs and PDFs identified in Section 5.15, Global Climate Change, into the proposed project than they would otherwise be, but the PPPs

6. Significant Unavoidable Adverse Impacts

and PDFs are not sufficient to lower the impacts to below a level of significance without the imposition of feasible mitigation measures. In particular, PPPs and PDFs in Section 5.15, Global Climate Change, would reduce purchased energy use and water use, and encourage use of alternative transportation to reduce area and mobile sources of air pollution associated with the project. However, operational phase emissions would continue to exceed the SCAQMD regional significance thresholds. Consequently, Impact 5.2-3 would remain **significant and unavoidable**.

IMPACT 5.2-4: PROJECT-RELATED CONSTRUCTION ACTIVITIES COULD EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS OF NO_x, PM₁₀, AND PM_{2.5}.

The impacts associated with Impact 5.2-4 are lower with the integration of PPPs and PDFs – particularly, PPP 2-3 and PDF 2-6 – into the proposed project than they would otherwise be, but the PPPs and PDFs are not sufficient to lower the impacts to below a level of significance without the imposition of feasible mitigation measures. In particular, PDF 2-4 and PDF 2-5 would reduce NO_x from construction equipment exhaust. However, no additional feasible mitigation measures are available to reduce elevated levels of NO_x, PM₁₀, and PM_{2.5} at nearby sensitive receptors. Due to the potential magnitude of emissions from individual development projects, construction activities would potentially exceed the SCAQMD localized significance thresholds. Consequently, Impact 5.2-4 would remain **significant and unavoidable**.

IMPACT 5.2-6: DEVELOPMENT OF RESIDENTIAL USES WITHIN THE IRVINE BUSINESS COMPLEX COULD BE LOCATED WITHIN THE CALIFORNIA AIR RESOURCE BOARD'S RECOMMENDED BUFFER DISTANCES FROM I-405 OR EXISTING DISTRIBUTION CENTERS, CHROME PLATERS, DRY CLEANERS, OR GAS STATIONS.

Freeways

PDF 2-1 and PDF 2-2 would ensure that residents within the IBC would not be exposed to indoor levels of toxic air contaminants that exceed the ambient concentrations in the project vicinity, which are 830 to 1,233 in a million in the IBC area (SCAQMD 2008). PDF 2-3 would ensure that playgrounds, athletic fields, and other public active-use outdoor recreational areas within the IBC would not be located within 500 feet of the freeway. However, development applications for residential structures may include outdoor private-use active areas, such as swimming pools. No mitigation measures are feasible that would reduce exposure of people to elevated concentrations of air pollutants within 500 feet of a freeway in an outdoor environment. Consequently, Impact 5.2-6 would remain **significant and unavoidable**.

6.2 LAND USE AND PLANNING

IMPACT 5.8-2: PROJECT IMPLEMENTATION COULD POTENTIALLY BE IN CONFLICT WITH AN APPLICABLE ADOPTED LAND USE PLAN. [THRESHOLD LU-2]

As described above, the proposed project was reviewed by ALUC and the City and determined to be consistent with AELUP and Caltrans health and safety standards and PDF 6-1 has been incorporated into the project. In addition, the ALUC has determined that the 2851 Alton Parkway and Martin Street Condos projects are consistent with the adopted ALUER. However, the revised project, other pending projects, and potential future projects pursuant to the IBC Vision Plan and Overlay Zoning Code have not yet been before ALUC for a determination of consistency, as ALUC typically does not conduct such reviews until the City of Irvine Planning Commission hearings are scheduled. If ALUC determines that the proposed project as revised, or potential future projects are not found to be consistent with the AELUP, and the Irvine City Council disagrees and overrides this finding by a two-thirds vote, a significant unavoidable adverse impact would result and a Statement of Overriding Considerations would be required.

6. Significant Unavoidable Adverse Impacts

6.3 NOISE

IMPACT 5.9-1: CONSTRUCTION ACTIVITIES COULD RESULT IN TEMPORARY NOISE INCREASES IN THE VICINITY OF THE PROPOSED PROJECT.

PPP 9-1 and PDF 9-2 would minimize noise from construction activities to the extent feasible by requiring that activities be limited to the hours set forth in the City of Irvine Municipal Code and that stationary source equipment be placed as far as feasible from adjacent noise-sensitive land uses. In addition, mitigation measure 9-1 would require preparation of a construction noise mitigation plan prior to issuance of grading permits that identifies ways to mitigate construction noise. However, because new development may occur near noise-sensitive land uses and could generate substantial noise levels for an extended period of time, impacts are considered potentially significant. The magnitude of impact would depend of the location and schedule of the new development and construction equipment. Impact 5.9-1 would remain **significant and unavoidable**.

IMPACT 5.9-2: CONSTRUCTION OF THE PROPOSED PROJECT MAY GENERATE PERCEPTIBLE LEVELS OF VIBRATION AT ADJACENT VIBRATION-SENSITIVE LAND USES.

PPP 9-1 and PDF 9-2 would minimize impacts associated with perceptible levels of vibration annoyance by requiring that activities be limited to the hours set forth in the City of Irvine Municipal Code and that stationary-source equipment be placed as far as feasible from adjacent vibration-sensitive land uses. In addition, PDF 9-1 would ensure that less-vibration-intensive equipment or construction techniques be used. However, because new development may occur near noise-sensitive land uses and could generate substantial vibration levels for an extended period of time, impacts are considered potentially significant. The magnitude of impact would depend of the location of the new development and construction equipment. Impact 5.9-2 would remain **significant and unavoidable**.



IMPACT 5.9-3: PROJECT-RELATED VEHICLE TRIPS WOULD SUBSTANTIALLY INCREASE AMBIENT NOISE AT NOISE-SENSITIVE RECEPTORS IN THE VICINITY OF THE PROJECT SITE ON MCGAW AVENUE BETWEEN JAMBOREE ROAD AND MURPHY AVENUE AND CUMULATIVELY ON VALENCIA AVENUE BETWEEN NEWPORT AVENUE AND RED HILL AVENUE, WARNER AVENUE BETWEEN SR-55 AND RED HILL AVENUE, MCGAW AVENUE BETWEEN JAMBOREE ROAD AND MURPHY AVENUE, BIRCH STREET BETWEEN MESA DRIVE AND BRISTOL STREET. [THRESHOLDS N-1 AND N-3]

No mitigation measures are available to reduce impacts associated with a substantial increase in traffic noise generated by project-related traffic and the project's contribution to cumulative growth in traffic levels. Consequently, Impact 5.9-3 and cumulative impacts would remain **significant and unavoidable**.

IMPACT 5.9-5: NOISE-SENSITIVE LAND USES COULD BE EXPOSED TO NOISE LEVELS THAT EXCEED 65 DBA CNEL FROM TRANSPORTATION OR STATIONARY SOURCES OF NOISE.

PPP 9-2 would require that an acoustic study be prepared to achieve the City of Irvine's interior and exterior noise standards. While interior noise levels are required to achieve 45 dBA CNEL for residential structures and 55 dBA CNEL for commercial structures, exterior noise levels may continue to exceed the 65 dBA CNEL noise compatibility criteria for the City despite exterior noise attenuation (i.e., walls and/or berms). PDF 9-3 would require that occupancy disclosure notices for units with patios and/or balconies that do not meet the 65 dBA CNEL standard are provided to all future tenants for new developments that have outdoor noise-sensitive areas. However, exterior noise compatibility would be significant at noise-sensitive outdoor areas

6. Significant Unavoidable Adverse Impacts

(e.g., residential patios and outdoor areas, such as tot-lots, swimming pools, or athletic fields). No feasible mitigation measures are available to reduce impacts associated with a substantial increase in traffic noise generated by project-related traffic and the project's contribution to cumulative noise impacts associated with increases in traffic levels. Consequently, Impact 5.9-5 would remain **significant and unavoidable**.

6.4 TRAFFIC

IMPACT 5.13-1: BUILDOUT OF THE IBC PURSUANT TO THE PROPOSED PROJECT WOULD GENERATE ADDITIONAL TRAFFIC VOLUMES AND IMPACT LEVELS OF SERVICE FOR THE EXISTING AREA ROADWAY SYSTEM.

Although every effort was made, through site analyses and aerial imagery evaluation to ensure that all recommended improvements are physically feasible, there are intersections where improvements may not be feasible due to cost, right-of-way concerns, or community opposition. For these intersections a Statement of Overriding Considerations will be required.

City of Irvine

- *Intersection #145: Jamboree Road and Michelson Drive*

This intersection has a project related significant impact under the 2015 and Post-2030 Approved Project scenarios, and a cumulative deficiency under the Post-2030 Pending scenarios. Recommended improvements are the same in both 2015 and Post-2030 and include the addition of a third eastbound left and restriping of the southbound approach to get a third southbound left from the southbound through movement. With this improvement, the intersection returns to an acceptable LOS under all scenarios. The recommended triple eastbound and southbound left turn improvements are contrary to City standards due to safety and operational concerns associated with the vehicles turning within appropriate receiving lanes. In addition, as noted previously, the City believes that the triple turn movements would not provide the operational improvements intended due to the proximity of downstream destinations and likely distribution of traffic in the triple left turn lanes. In addition, there are physical constraints associated with the proposed improvements, including Southern California Edison (SCE) 220kV transmission lines along the west side of Jamboree Road and SCE substation located at the southeast corner of this intersection. These physical hinder the ability to implement the improvements necessary to mitigate the identified project impacts.

With completion of the improvements described in Mitigation Measure 13-1, the significant impacts to local roadways associated with the proposed project would be fully mitigated with the exception the Jamboree Road/Michelson Drive intersection.

Cities of Costa Mesa, Newport Beach, Santa Ana, and Tustin Intersections and Arterial Segments

Inasmuch as the primary responsibility for approving and/or completing certain improvements located outside of Irvine lies with agencies other than the City of Irvine (i.e., City of Newport Beach, City of Tustin, City of Santa Ana, City of Costa Mesa, and Caltrans), there is the potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the City of Irvine's control (i.e., the City of Irvine cannot undertake or require improvements outside of Irvine's jurisdiction). Should that occur, impacts relating to traffic generated by the project would remain significant. The impacted facilities that fall within this category include the improvements identified in Tables 5.13-24 through 5.13-26.

6. Significant Unavoidable Adverse Impacts

To provide as much assurance as possible that the necessary resources will be available to allow the adjacent Cities to implement necessary traffic improvements, The City of Irvine has committed to the creation of a development fee program associated with development in the IBC study area. This program will contribute to the improvement of facilities within Irvine and a fair-share to improvements outside the City of Irvine. The City is committed to working with the adjacent Cities to identify the most appropriate improvement strategies for their facilities and acknowledges the fair-share cost of improvements to those facilities. Consistent with that objective, the City recently committed to provide the City of Newport Beach with \$3.65 million toward traffic improvements that will improve circulation within and adjacent to the IBC. However, the adjacent Cities have full jurisdiction toward implementing the identified improvements under their jurisdiction.

Caltrans Main-Line Segments and Ramps

State highway facilities within the study area are not within the jurisdiction of the City of Irvine. Rather, those improvements are planned, funded, and constructed by the State of California through a legislative and political process involving the State Legislature; the California Transportation Commission (CTC); the California Business, Transportation, and Housing Agency; the California Department of Transportation (Caltrans); and OCTA. Recent funding opportunities designated by OCTA's Renewed Measure M provides the vehicle for designated improvements on the freeway facilities within the study area and were analyzed at their recommended buildout in the IBC Vision.

To provide as much assurance as possible that the necessary resources will be available to allow CalTrans to implement necessary traffic improvements, the City of Irvine has committed to the creation of a development fee program associated with development in the IBC study area. This program is specifically in place to contribute to the improvement of facilities within Irvine and a fair-share to improvements outside the City of Irvine. The City is committed to working with Caltrans to identify the most appropriate improvement strategies for their facilities and acknowledges the fair-share cost of improvements to those facilities. However, Caltrans has full jurisdiction toward implementing the identified improvements under their jurisdiction.



While potential impacts to the freeway mainline segments and ramps have been evaluated, implementation of the transportation improvements to Caltrans facilities listed above is the primary responsibility of Caltrans. While Caltrans has recognized that private development has a role to play in funding fair share improvements to impacts on the I-405 and SR-55, neither Caltrans nor the State has adopted a program that can ensure that locally-contributed impact fees will be tied to improvements to freeway mainlines and only Caltrans has jurisdiction over mainline improvements. Because Caltrans has exclusive control over state highway improvements, ensuring that developer fair share contributions to mainline improvements are actually part of a program tied to implementation of mitigation is within the jurisdiction of Caltrans. However, a number of programs are in place in Orange County to improve and upgrade the regional transportation system. These include the Transportation Corridor Agencies (TCA) Corridor program, the State Transportation Improvement Program (STIP), Caltrans Traffic Operations Strategies (TOPS), State Highway Operation and Protection Program (SHOPP), and the Orange County Transportation Authority (OCTA) Measure M program. State and federal fuel taxes generate most of the funds used to pay for these improvements. Funds expected to be available for transportation improvements are identified through a Fund Estimate prepared by Caltrans and adopted by the California Transportation Commission (CTC). These funds, along with other fund sources, are deposited in the State Highway Account to be programmed and allocated to specific project improvements in both the STIP and SHOPP by the CTC. However, if these programs are not implemented by the agencies with the responsibility to do so, the project's freeway/tollway ramp and mainline impacts would remain significant and unmitigated.

Consequently, Impact 5.13-1 would remain **significant and unavoidable**.

6. Significant Unavoidable Adverse Impacts

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FINDINGS OF FACT
AND
STATEMENT OF OVERRIDING CONSIDERATIONS
REGARDING THE FINAL ENVIRONMENTAL IMPACT REPORT
FOR THE IRVINE BUSINESS COMPLEX VISION PLAN AND MIXED USE OVERLAY
ZONING CODE

STATE CLEARINGHOUSE NO. 2007011024

PREPARED BY:

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
ONE CIVIC CENTER PLAZA
IRVINE, CA 92623-9575

March 2010

EXHIBIT B

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I. INTRODUCTION

A. Findings of Fact and Statement of Overriding Considerations

The California Environmental Quality Act (CEQA) (Pub Resc. Code §§ 21000, *et seq.*) and the State CEQA Guidelines (Guidelines) (14 Cal. Code Regs §§ 15000, *et seq.*) promulgated thereunder, require that the environmental impacts of a project be examined before a project is approved. Specifically, regarding findings, Guidelines Section 15091 provides:

(a) No public agency shall approve or carry out a project for which an EIR has been completed which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

1. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant environmental effects on the environment.
2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can or should be, adopted by that other agency.
3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

(b) The findings required by subsection (a) shall be supported by substantial evidence in the record.

(c) The finding in subsection (a)(2) shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives.

(d) When making the findings required in subsection (a)(1), the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.

(e) The public agency shall specify the location and custodian of the documents or other materials which constitute the record of the proceedings upon which its decision is based.

The “changes or alterations” referred to in Section 15091(a)(1) above, that are required in, or incorporated into, the project which mitigate or avoid the significant environmental effects of the project, may include a wide variety of measures or actions as set forth in Guidelines Section 15370, including:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impact by replacing or providing substitute resources or environments.

Regarding a Statement of Overriding Considerations, Guidelines Section 15093 provides:

(a) CEQA requires the decisionmaker to balance the benefits of a Proposed Project against its unavoidable environmental risks in determining whether to approve the project. If the benefits of a proposal project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable".

(b) Where the decision of the public agency allows the occurrence of significant effects which are identified in the final EIR but are not at least substantially mitigated, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. This statement may be necessary if the agency also makes a finding under Section 15091(a)(2) or (a)(3).

(c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination.

Having received, reviewed and considered the Final Environmental Impact Report for the Irvine Business Complex (IBC) Vision Plan and Mixed Use Overlay Zoning Code (Proposed Project), State Clearinghouse No. 2007011024 (FEIR), as well as all other information in the record of proceedings on this matter, the following Findings and Statements of Overriding Considerations (Findings) are hereby adopted by the City of Irvine (City) in its capacity as the CEQA Lead Agency. The Findings and Statements of Overriding Considerations set forth the environmental and other bases for current and subsequent discretionary actions to be undertaken by the City and responsible agencies for the implementation of the Irvine Business Complex (IBC) Vision Plan and Mixed-Use Overlay Zoning Code (Project).

B. Record of Proceedings

For purposes of CEQA and these Findings, the Record of Proceedings for the Proposed Project consists of the following documents and other evidence, at a minimum:

- Both Notices of Preparation (NOPs) and all other public notices issued by the City in conjunction with the Proposed Project;
- The Draft EIR for the Proposed Project;
- The Recirculated Draft EIR for the Proposed Project (RDEIR)
- The Final Environmental Impact Report for the Proposed Project (FEIR);
- All written comments submitted by agencies or members of the public during the public review comment period on the Draft EIR;
- All responses to written comments submitted by agencies or members of the public during the public review comment period on the Draft EIR;
- All written and verbal public testimony presented during a noticed public hearing for the Proposed Project;
- The Mitigation Monitoring and Reporting Program (MMRP);
- The reports and technical memoranda included or referenced in Volumes IIa, IIb, or IIc of the FEIR;
- All documents, studies, EIRs, or other materials incorporated by reference in the Draft EIR and FEIR;

- The Ordinances and Resolutions adopted by the City in connection with the Proposed Project, and all documents incorporated by reference therein;
- Matters of common knowledge to the City, including but not limited to federal, state and local laws and regulations;
- Any documents expressly cited in these Findings; and
- Any other relevant materials required to be in the record of proceedings by Public Resources Code Section 21167.6(e).

C. Custodian and Location of Records

The documents and other materials which constitute the record of proceedings for the City's actions related to the Proposed Project are located at the City of Irvine, 1 Civic Center Plaza, Irvine, California, 92623. The City Community Development Department is the custodian of the record of proceedings for the Proposed Project. Copies of these documents, which constitute the record of proceedings, are and at all relevant times have been and will be available upon request at the offices of the Community Development Department. This information is provided in compliance with Public Resources Code § 21081.6(a)(2) and Guidelines § 15091(e).

II. PROJECT SUMMARY

A. Project Location

The approximately 2,800-acre Irvine Business Complex (IBC) comprises Planning Area 36 in the City of Irvine, in south/central Orange County. More specifically, the IBC is generally bounded by the former Tustin Marine Corps Air Station (MCAS) to the north, the San Diego Creek channel to the east, John Wayne Airport (JWA) and Campus Drive to the south, and State Route 55 (SR-55) to the west. The San Diego Freeway (I-405) traverses the southern portion of the IBC, and the Santa Ana Freeway (I-5) is to the north and east. As shown on Figure 3-1 of the Recirculated Draft EIR (RDEIR), the IBC is bordered by the cities of Newport Beach to the south, Santa Ana and Costa Mesa to the west, and Tustin to the north.

The IBC consists of a range of industrial, office, commercial, and residential uses covering approximately 2,800 acres in the western portion of the City of Irvine. Adjacent to the IBC, on the north, is the City of Tustin and the former MCAS Tustin, currently being redeveloped with residential and commercial uses as part of the Tustin Legacy Specific Plan. A 40-acre parcel of the IBC is detached and to the south of the main IBC boundary area, and bounded by Jamboree Road, Fairchild Road, Macarthur Boulevard, and the San Joaquin Marsh, and adjacent to the City of Newport Beach. The most prominent land use in the IBC is office, with substantial amounts of industrial/warehouse uses and 4,779 medium- and high-density residential units and 232 density bonus units for a total of 5,011 dwelling units existing within the IBC.

B. Project Description

As shown on Table 2-1, the IBC Vision Plan and Mixed Use Overlay Zoning Code (Proposed Project) would allow for an increase in total units in the IBC from 9,015 units to 15,000 units, a difference of 5,985. This increase is a reallocation of existing intensity within current intensity limitations. In addition, a total of 1,598 density bonus units, in addition to 440 existing, approved, or under construction would be allowed in accordance with state law, for a total 17,038 units. The current General Plan allows for 53,125,389 square feet of nonresidential intensity in Planning Area 36. The additional units would be offset by a reduction of 2,399,626 of office square footage and 1,602,526 of industrial square footage (for a total of 4,002,152 square feet, or 2,887,307 square feet of office equivalency). Upon adoption of the IBC Vision Plan, the total nonresidential intensity allowed by the adopted General Plan would be 48,787,662 square feet. The individual components of the Proposed Project are outlined in Table 2-1.

*Table 2-1
IBC Development Summary*

Residential					
	Existing General Plan			Proposed Project	
	Existing	Under Construction	Approved	Pending ¹	Potential ²
Base Units	4,779	1,814	2,422	2,035	3,950
Density Bonus Units ³	232	78	130	215	1,383
Subtotal	5,011	1,892	2,552	2,250	5,333
Total	9,455			7,583	
Total Cap for the IBC				15,000	
Total IBC Units at Buildout including Density Bonus				17,038	
Nonresidential					
	Existing General Plan		Proposed Project		
	Existing Development	Remaining Buildout Potential	Remaining Buildout Potential		
Nonresidential Square Footage	42,771,000	10,354,389	6,016,662		
Total Nonresidential	53,125,389		48,787,662		
Hotel Rooms					
	Existing General Plan		Proposed Project		
	Existing Development	Remaining Buildout Potential	Remaining Buildout Potential		
	2,496	610	372		
Total Hotel Rooms	3,106		3,478		

¹ Pending units are those for which development applications are currently on file with the City.

² Potential units are those remaining to reach the 15,000-unit cap. No development applications have been received for these units.

³ Density bonus units are exempt by state law from local regulatory limitations on development intensity but are included and analyzed in this DEIR.

¹ Pending units are those for which development applications are currently on file with the City.

² Potential units are those remaining to reach the 15,000-unit cap. No development applications have been received for these units.

³ Density bonus units are exempt by state law from local regulatory limitations on development intensity but are included and analyzed in this DEIR.

The Proposed Project consists of the following components:

1) IBC Vision Plan

The IBC Vision Plan outlines the City's policies and objectives for addressing residential and mixed-use development within the IBC, to be incorporated as a new element in the City's General Plan. The framework for the IBC Vision Plan provides the land use and urban design structure by which new residential development would be organized. Figure 3-4 of the RDEIR, IBC Vision Plan Framework, is a summary exhibit of the key elements and attributes of the IBC that would facilitate the development of high-quality, sustainable neighborhoods, and a balanced mix of uses. As shown on Figure 3-5 of the RDEIR, Proposed IBC Infrastructure Improvements, several infrastructure improvements would be proposed throughout the IBC. The locations of the proposed improvements, such as bridge crossings, are generalized in nature, as specific locations have not yet been evaluated in detail. The proposed bridge widenings are intended to improve pedestrian and bicycle access. No additional vehicular travel lanes are proposed.

The existing sidewalk improvement program will continue to be implemented and embellished with enhanced standards for improved walkability and connectivity to create an interconnected system of pedestrian-friendly boulevards, avenues, and streets. The program calls for the installation of sidewalks to fill the gaps in the IBC sidewalk system and provides for the installation of a five- to eight-foot-wide sidewalk behind eight feet of landscaped parkway.

The Proposed Project includes a new per-unit fee program to be assessed against new residential or residential mixed-use development in the IBC to fund these proposed improvements. Existing developments would be exempt from this fee program. This fee program is proposed to be adopted in conjunction with the Vision Plan and its components. A separate fee program is also proposed to be adopted in conjunction with the Vision Plan to augment the current IBC Transportation Mitigation Fee program to reflect current mitigation outlined in the Transportation and Traffic section of the EIR.

2) IBC Districts

The IBC was originally planned as a business complex and at present there is little distinctiveness between its different areas. The IBC Vision Plan attempts to address this by creating two districts, to identify both a proposed mixed-use core and maintain a distinct core for existing businesses, each with its own unique identity and character, within the Mixed Use Overlay Zone.

Urban Neighborhood (UN)

The Urban Neighborhood District would include the mixed-use core IBC (generally between Jamboree Road and Von Karman Avenue) and allows a range of land uses and buildings at varying heights. Generally, these neighborhoods are envisioned to be primarily residential with retail, offices, and restaurants allowed on the first floor.

Business Complex (BC)

The Business Complex District would be applied to portions of the IBC characterized by existing, longstanding industrial and other commercial uses that are expected to remain. This district accommodates new industrial and other commercial uses and an expansion of existing uses.

3) General Plan Amendment

The General Plan Amendment would incorporate Vision Plan policies and objectives into a new General Plan Element and establish a cap of 15,000 dwelling units for the IBC area (excluding density bonus units granted pursuant to state law), with a corresponding reduction of nonresidential office equivalency square footage in Table A-1, Maximum Intensity Standards by

Planning Area, of the City's General Plan, to accommodate future units under the cap that have not yet been approved. As described on Table 2-1, the General Plan/Zoning cap for the IBC is currently set at 9,015 residential units; therefore, a unit cap of 15,000 units would create potential for 5,985 additional dwelling units (of which 2,035 are pending) in the IBC beyond those already existing or approved. The details (location, timing, density, and design) of 3,950 potential units are unknown because there are no currently pending applications. In addition to the 15,000-unit cap, this RDEIR and related traffic study (see Appendix N in the EIR) address the potential for 2,038 additional density bonus units, listed below, which are excluded from local intensity limitations by state law:

- 232 existing (built) density bonus units
- 208 density bonus units approved or under construction
- 215 known density bonus units from pending projects
- A theoretical maximum of 1,383 density bonus units, assuming the remaining 3,950 units are built with a maximum allowable additional density bonus of 35 percent

The current General Plan allows for 53,125,389 square feet of overall nonresidential development in Planning Area 36, which may vary according to the totals of individual land uses over time. The total 5,985 additional new units (either potential or in process) remaining under the 15,000-unit cap would be offset by a reduction of 4,337,727 square feet of nonresidential intensity square feet. With the additional nonresidential land use optimization discussed in this RDEIR, the overall nonresidential intensity in the General Plan would be 48,787,662 square feet, with the reduction resulting primarily from the conversion of higher quantities of older industrial square footage to lower quantities of office square footage. Construction of the 1,892 units in process, along with the pending and approved nonresidential projects, are assumed to be completed by 2015. The remaining 3,950 units, along with the proposed nonresidential land use optimization, would be completed at City buildout, post-2030. Please refer to Section 3.3.2.6 for a detailed discussion of the 2015 Interim Year and Post-2030 Buildout assumptions. The General Plan Amendment would also add new policy language to the current Land Use Element text and add the IBC Vision Plan framework as a new Land Use Element Figure A-3 (IBC) to incorporate the IBC Vision Plan. Previous Table 2-1 provides a summary of the Proposed Project.

As a part of General Plan Amendment, the existing IBC density cap of 52 dwelling units per acre would be removed from the Land Use Element Table A-1 and a minimum of 30 units per acre would be added as a density level. As a result, future residential projects would not have a restriction on maximum density, but would have to comply with a minimum density of 30 units per acre to ensure the benefit of higher-density housing necessary to establish a vibrant mixed-use community.

The General Plan Amendment would also add several new changes to text and figures of the General Plan, including: policies regarding pedestrian-oriented streets to the Circulation Element; IBC trails network to Circulation Element Figure B-4; and policies regarding urban parks to the Parks and Recreation Element (see Appendix C, General Plan Amendment for IBC Residential Mixed-Use Vision Plan).

4) Zoning Ordinance Amendment

The Zoning Ordinance Amendment would add new Chapter 5-8 to adopt the IBC Mixed Use Overlay Zone (Appendix D in the RDEIR, as amended by the City Council on July 13, 2010), which would define regulatory zoning districts for properties within the IBC and outline a process for analysis of compatibility of residential development with adjacent businesses. The proposed overlay zone is shown on Figure 3-6 of the RDEIR, *Overlay Zone Regulating Plan*. The amendment would also revise the statistical analysis outlined in Section 9-36-5, Statistical Analysis, of the City's Zoning Ordinance, to establish a residential cap of 15,000 dwelling units for the IBC area (excluding density bonus units pursuant to state law), with an offsetting reduction of nonresidential square footage, for units under the cap not yet approved, consistent with the proposed General Plan Amendment. Furthermore, the amendment would also update the Chapter 9-36, Planning Area 36 (IBC), provisions regarding the IBC traffic mitigation fee program (see Appendix D in the EIR). This amendment would also include clarifications of code language relating to the Transfer of Development Rights (TDRs). The Zoning Ordinance Amendment would also include other minor amendments to other sections of zoning code to maintain internal consistency.

5) Municipal Code

The Municipal Code Amendment would revise Chapter 10, Dedications, of Division 5, Subdivisions, of the City's Municipal Code, by adding a section to incorporate new urban park standards into the City's park dedication requirements for the IBC. The City's Park Standards Manual would also be updated to address urban open space in the IBC. Section 5-5-1004D(1) will also be revised to remove a 50-unit per acre density cap for determining persons per household.

6) Land Use Assumptions

The Land Use Assumptions for the IBC Vision Plan are summarized as follows, and the methodology for development of these assumptions is detailed in Appendix F of the EIR.

Existing Conditions

The existing conditions are based on the City's IBC database as of July 10, 2009 (included in Appendix F of the RDEIR). Square footage listed as existing in this database represents existing

conditions scenario for the traffic analysis model. Additional unbuilt approved projects and remaining zoning potential listed in this database represents the dataset for the existing General Plan buildout scenario.

Land Use Assumptions for Interim Year 2015

The land use assumptions for 2015 consist of existing conditions plus projects approved but not yet built (Table 2-2) (identified as “Discretionary Approval” in the City’s IBC database as of July 10, 2009, with the exception of certain approved units within the Park Place development not anticipated to be built by 2015) and pending projects currently under review by the City (Tables 2-3 and 2-4 of the RDEIR). The approved and proposed land use changes and TDRs for these projects reflect changes to the existing conditions database for the interim year 2015 with project traffic analysis model for TDR details by project. The 2015 without project scenario consists of approved but not yet built projects only.

*Table 2-2
Summary of Approved IBC Development Projects*

Project Name	Use Type	Description	Units or Square Feet by Use
The Lofts on Von Karman	Residential	116-unit residential	116 units
2801 Kelvin	Residential	248-unit residential	248 units
The Carlyle	Residential	156-unit residential	156-units
Avalon/ Jamboree 1	Residential	280-unit residential	280 units
Central Park	Residential/Office/ Retail	1,380-unit residential	1,380 units, 90,000 sf office, 19,700 sf retail
CUP Childcare - 17575 Cartwright	Child Care	CUP for Child care center w/Admin Relief for Playground Area and Parking	11,580 sf school
CUP Church - 17751 Mitchell North	Church	CUP for La Puerta Abierta Church	82,000 sf church
CUP Hotel – 17061 Fitch	Hotel	CUP for 132-room Hotel	132 rooms (78,365 sf)
CUP Hotel - 2300 Main	Hotel	CUP for 170-room Aloft Extended Stay Hotel	170 rooms
Tentative Parcel Map - 17352 Von Karman	Office Condos	Tent. Parcel Map to divide 97,740 sf building	3,995 sf office; 31,903 sf mfg. 23,104 warehouse
Tentative Parcel Map - Daimler	Office Condos	Tent. Parcel Map to create one-lot for office condominiums	
Park Place	Residential/Office/ Retail	Development Agreement and CUP	2,008 units 308 hotel rooms 3.7 million sf of office 350,000 sf of retail ¹
Hines Master Plan	18582 Teller and 2722 Michelson	Office/Retail	Master Plan for 295,000 sf office (Phase 1), 490,000 sf office (Phase 2), 15,500 sf retail/restaurant

Source: City of Irvine 2009.

¹ Subject to change pursuant to the provisions of the existing Development Agreement.

*Table 2-3
Summary of Pending IBC Nonresidential Development Projects*

Project Name	Address	Use Type	Description
Element Hotel	17662 Armstrong	Hotel	CUP for 122-room hotel
Irvine Crossings Master Plan Modification and TPM	17871 Von Karman	Office/Industrial	Master Plan Modification to reduce office space and increase industrial/warehouse space in an existing building in PA 36 (4,726 sf office, 196,300 sf industrial)
Diamond Jamboree Master Plan Modification	2600–2798 Alton		Master Plan Modification for Shared Parking/reallocation of uses for Diamond Jamboree Center
Master Plan for GIFREHC Center	18691 Jamboree Road	Office/Retail/Hotel	Master Plan for GIFREH Multi-Use Center (250,000 sf office, 39,000 sf retail, 350 room hotel)
Allergan Master Plan Modification	18522 Von Karman	Office	Master Plan Modification for the addition of a 250,000 sf office building
McGaw - Tentative Tract Map	1555 and 1565 McGaw, 17173 Gillette	Office Condos	Tentative Tract Map for seven office condominiums on two lots
Modification to CUP for Park Place	3333 Michelson	Office	Minor modification to CUP 87-CP-0829 (Park Place)
Alton - Tentative Parcel Map for Non-Residential Condos	2152 Alton	Office Condos	Tentative Parcel Map 2008-189 to create 15 non-residential condo units in PA 36
Business Center - Tentative Parcel Map	2062 and 2070 Business Center Dr	Office Condos	Tentative Parcel Map 2008-137 to create 2 parcels for condominium purposes in PA 36

Source: City of Irvine 2009

Land Use Assumptions for Buildout Year (Post-2030) - Land Use Optimization

The Post-2030 land use model scenario has been developed based the City Council direction for a 15,000-unit cap, plus projections on how much development or redevelopment may occur for office, retail, and industrial uses, while respecting the existing trip caps that have been established for each parcel as part of the implementation of the City’s 1992 IBC rezoning. The land use program also takes into account an analysis to estimate which land uses may stay in their current condition at buildout and which may be redeveloped. The process of developing this scenario is referred to as “optimization,” as it projects the most viable set of land use assumptions for a mixed-use environment given the existing regulatory constraints. The program for optimizing land uses in the IBC for remaining unbuilt IBC zoning potential within existing IBC vehicle trip allocations by Traffic Analysis Zone (TAZ), has been used to redistribute potential land uses based on the following considerations:

- Conversion of underutilized office, manufacturing, and/or warehouse uses to retail use to accommodate demand from current and planned residential development.
- Buildout of remaining unutilized nonresidential zoning potential.
- Recycling of underutilized properties to higher-intensity uses.

The current General Plan allows for 53,125,389 square feet of overall nonresidential square footage in Planning Area 36, which may vary according to the totals of individual land uses over time. The total 5,985 additional new units (either potential or in process) remaining under the 15,000-unit cap would be offset by a reduction of 4,337,727 square feet of nonresidential intensity. With the proposed land use optimization discussed in this EIR, the overall nonresidential intensity in the General Plan would be 48,787,662 square feet (an increase of 6,016,662 square feet from existing conditions), with the reduction resulting primarily from the conversion of higher quantities of older industrial square footage to lower quantities of office square footage. The proposed optimization also includes the addition of three neighborhood-serving retail areas and four 2-acre public neighborhood park areas. Three of these parks would be located in the Urban Neighborhood area north of the Interstate 405 (I-405). The fourth park would be located in the Urban Neighborhood area south of the I-405, along Campus Drive. Construction of the 1,892 units in process, along with the pending and approved nonresidential projects, is assumed to be completed by 2015. The remaining 3,950 units, along with the proposed nonresidential land use optimization, would be completed at City buildout, post-2030.

The methodology for the land use optimization process is outlined in Appendix F in the RDEIR. The reallocation of land uses under this program would not change the development intensity assigned to each parcel per the 1992 IBC rezoning program, with the exception of parcels with unutilized zoning potential/approvals. Unutilized zoning potential/approvals for these parcels have been combined within each TAZ to allow a larger amount of zoning potential to accommodate reuse of underutilized land uses to higher-intensity uses. No transfers to other TAZ's have been assumed. It is anticipated that actual specific future development may occur differently than that anticipated in the assumptions used for the Vision Plan land use model, which is why a specific land use plan is not proposed as part of the Vision Plan project. Projects not consistent with the Vision Plan land use model assumptions will be reviewed in accordance with existing city policies and traffic study procedures to determine whether additional conditions of approval or environmental review are necessary.

7) Design Criteria

To ensure a consistent standard of residential design quality throughout the IBC, a set of design criteria from the IBC Vision Plan that would be applicable to residential and residential mixed-use projects in the IBC would be adopted (see Appendix E in the RDEIR). These criteria are intended to guide the physical development of any residential or mixed-use project that contains a component of residential use within the boundaries of the IBC. They are intended to assist in ensuring that the design of each development remains true to the principles established in the IBC Vision Plan. The criteria would also provide standards and criteria for new construction and for remodels or additions. The new design criteria would only be applicable to residential and mixed-use development.

8) Circulation Element Amendment

The City of Irvine General Plan Circulation Element identifies certain roadway configurations that are no longer needed as determined in the IBC Vision Plan; therefore a General Plan Amendment subsequent to the approval of the IBC Vision EIR will downgrade arterial roadways as needed. The City of Irvine intends to downgrade the following arterial segments as a subsequent General Plan Amendment to the Circulation Element:

- Barranca Parkway between Red Hill Avenue and Jamboree Road (downgrade from 8-lane divided roadway to 7-lane divided roadway)
- Jamboree Road between Barranca Parkway and McGaw Avenue (downgrade from a 10-lane divided roadway to a 8-lane divided roadway)
- Main Street between Red Hill and Harvard (downgrade from 6-lane divided arterial with 2 auxiliary lanes to 6-lane divided roadway)
- MacArthur Boulevard between Fitch and Main Street (downgrade from 8-lane divided roadway to 7-lane divided roadway)
- Red Hill Avenue between Barranca Parkway and Main Street (downgrade from an 8-lane divided roadway to a 6-lane roadway)
- Alton Parkway between Red Hill Avenue and Jamboree Road (downgrade from a 6-lane divided roadway to 4-lane divided roadway)
- Von Karman Avenue between Barranca Parkway and Michelson (downgrade from 6-lane roadway to 4-lane roadway)

The arterial segment of Alton Parkway between Red Hill Avenue and Jamboree Road as well as the segment of Von Karman Avenue between Barranca Parkway and Michelson Drive are programmed into both the City of Irvine's General Plan and the Orange County Master Plan of Arterial Highways (MPAH). Both roadways are currently 4-lane roadways and expected to remain as 4-lane roadways in the future. Both the City's General Plan and the Orange County MPAH currently have these two segments programmed as 6-lane divided arterials in the buildout condition. The IBC Vision Plan traffic study has determined that 6 lanes are unnecessary for both of these roadway segments under buildout conditions. Thus, the City of Irvine will initiate an MPAH Amendment by entering into a cooperative study with the Orange County Transportation Authority (OCTA) to determine the feasibility of downgrading both Alton Parkway and Von Karman Avenue. Once this study is complete, both agencies can move forward with amendments to the General Plan and MPAH to downgrade both Alton Parkway between Red Hill Avenue and

Jamboree Road as well as Von Karman Avenue between Barranca Parkway and Michelson Drive.

Additionally, the City of Irvine intends to remove the following interchange improvements:

- Alton Parkway overcrossing at the SR-55 freeway with High Occupancy Vehicle (HOV) drop ramps
- Von Karman Avenue at the I-405 freeway HOV drop ramps

These interchange improvements are programmed in the Orange County MPAH as buildout improvements. However, the IBC Vision Plan traffic study has determined that these interchanges are unnecessary under buildout conditions. The City of Irvine will initiate an MPAH Amendment by entering into a cooperative study with OCTA and the affected local agencies to determine the feasibility of removing these interchange improvements from the MPAH.

9) Additional Changes

The name of the IBC may also be changed as directed by the Irvine City Council. Although not required under CEQA, it is included in this DEIR for informational purposes.

C. Use of Program EIR

The FEIR for the Proposed Project is a Program EIR, prepared pursuant to Section 15168 of the CEQA Guidelines. A Program EIR examines the total scope of environmental effects that would occur as a result of buildout of the entire Proposed Project. By examining the full scope of the Proposed Project and subsequent applications and approvals at this early stage of planning, the Program FEIR will provide a full disclosure of the environmental impacts that may occur throughout the Project Site, together with an analysis of the site specific and cumulative environmental impacts that will occur throughout the buildout of the Project.

The Program FEIR for this Project is intended to provide the environmental clearance for the specific applications currently pending before the City as discussed above, and for subsequent applications that are submitted to obtain City and responsible agency approvals for site-specific development projects within the IBC. If determined necessary, an initial study will be prepared by the agency required to take the discretionary action for each future development application within the IBC to ascertain whether a Subsequent EIR, Supplemental EIR, or other environmental documentation is necessary to comply with the CEQA, as provided by Sections 15162 through 15164, and Section 15168, of the Guidelines. If a Subsequent or Supplemental EIR is required, those documents can incorporate relevant information from the Program FEIR

by reference, and limit their focus to the particular characteristics and effects of the individual project then under consideration.

If, on the other hand, the City or responsible agency finds, pursuant to Section 15162 of the State Guidelines, that no new effects could occur and no new mitigation measures would be required for the subsequent action, it may approve the subsequent action without preparing additional environmental documentation. The City or other responsible agency will, however, in its future discretionary actions, continue to apply the Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), and Mitigation Measures identified in the Program FEIR for the Project and adopted by the City herein.

Future discretionary and non-discretionary actions which may be considered by the City to implement the Proposed Project include, but are not limited to:

- Certification of the Environmental Impact Report (SCH#2007011024);
- Approval of General Plan Amendment 481476-GPA for IBC Residential/Mixed Use Vision Plan and related amendments, including amendments to the Circulation Element;
- Approval of Zone Change 409688-PZC for IBC Residential/Mixed Use Vision Plan and related amendments;
- Approval of Master Plan for IBC Residential Mixed Use Design Criteria;
- Approval of Municipal Code Amendment;
- Approval of amendment to the Park Standards Manual;
- Approval of Infrastructure Improvement Fee Program;
- Approval of Transportation Mitigation Fee Program;
- Approval of Land Use Optimization Program;
- Potential override of ALUC action or AELUP consistency determination
- Issuance of grading, building and other related permits;
- Issue a National Pollution Discharge Elimination System (NPDES) Permit for construction activities and/or Stormwater Pollution Prevention Plan;

- Issue any needed Air Quality Permits for development in the Irvine Business Complex;
- Approval of any necessary sewer or water facilities upgrades necessary to serve future development;
- Activities located within Caltrans right-of-way would require an Encroachment Permit and Caltrans Statewide NPDES Permit from Caltrans;
- Amendment to the Orange County Master Plan of Arterial Highways (MPAH);
- Encroachment permits may be required if any improvements are proposed within OCFCDD right-of-way;
- Other discretionary and non-discretionary permits and approvals as may be required from the City or other responsible agencies for construction and development within the Project Area.

D. Statement of Objectives

A number of Project-specific objectives have been formulated for the Project. These objectives include, but are not limited to, the following:

- (1) Provide for the on going development of the IBC consistent with the City's General Plan Urban and Industrial land use designations and the City's adopted Vision Plan Goals, which are:
 - Protect the existing job base.
 - Develop mixed-use cores.
 - Provide transportation, pedestrian, and visual connectivity.
 - Create usable open space.
 - Develop safe, well-designed neighborhoods.
- (2) Provide additional housing opportunities near existing employment centers, consistent with the City's General Plan Land Use and Housing Elements.
- (3) Provide residential uses near existing employment centers, retail and entertainment uses, and transportation facilities consistent with the goals of the Southern California Association of Governments' Regional Comprehensive Plan and Compass Blueprint.

- (4) Provide residential development in areas of the IBC where adequate supporting uses and public services and facilities are provided, consistent with the City's General Plan Land Use Element.
- (5) Contribute to the development of mixed-use cores by incorporating residential, office, and commercial/retail uses into existing areas of nearby community facilities, retail goods and services, and restaurants to enhance the IBC's overall mixed-use urban character and reduce vehicle miles traveled in the South Coast Air Basin.
- (6) Provide neighborhood level amenities to serve the level of mixed-use development envisioned by the City's General Plan and IBC Vision Plan.
- (7) Incorporate sustainable provisions into implementation of the IBC Vision Plan.
- (8) Identify and pursue opportunities for open space areas that serve the recreational needs of IBC residents and employees.

III. ENVIRONMENTAL REVIEW AND PUBLIC PARTICIPATION

The City of Irvine determined that an EIR would be required for this project. It issued a Notice of Preparation (NOP) and Initial Study on January 8, 2007, to the State Clearinghouse, responsible agencies, and interested parties. The project description was subsequently revised to reduce the number of dwelling units and project details were refined. A new NOP was circulated between September 19, 2008, and October 20, 2008 (see Appendix B).

A total of 38 agencies/interested parties responded to the 2007 NOP. Copies of the written comments received during the public review period are in Appendix A to the FEIR. Copies of the written comments received during the second (2008) public review period, are in Appendix B. The City held three public scoping meeting to provide (i) information regarding the Proposed Project and (ii) an opportunity for public input regarding project issues that should be addressed in the Draft EIR. Comments received during the public involvement process and the IS/NOP scoping period were considered in the preparation of the Draft EIR.

The Draft EIR for the Proposed Project was then prepared and circulated for review and comment by the public, agencies and organizations for a 45-day public review period that began on March 30, 2009 and concluded on May 14, 2009. A Notice of Completion of the Draft EIR was sent to the State Clearinghouse and the Draft EIR was circulated to State agencies for review through the State Clearinghouse, Office of Planning and Research (SCH No. 2007011024). A notice of availability of the Draft EIR for review was mailed to Federal, State, County, City, and Regional Agencies/Organizations, School Districts, and Interested parties. A notice of availability was also placed in the OC Register on March 30, 2009 and Irvine World News on April 2, 2009. During the public review period, 26 comment letters on the Draft EIR were received.

On December 23, 2009, the City released the Recirculated DEIR (RDEIR) for an additional 45-day public review. A Notice of Completion of the RDEIR was sent to the State Clearinghouse and circulated to State agencies for review through the State Clearinghouse, Office of Planning and Research (SCH No. 2007011024). A notice of availability of the RDEIR for review was mailed to Federal, State, County, City, and Regional Agencies/Organizations, School Districts, and Interested parties. The RDEIR contains minor revisions to the Project Description and a new traffic study based on discussions with various stakeholders with an interest in the IBC. Other revisions to the RDEIR have been made based on other comments received on the previously circulated DEIR. Responses to comments have been completed on the previous Draft EIR and included in the RDEIR as Appendix Q.

There have been numerous opportunities for public review and comment concerning the Proposed Project and the environmental documents prepared for it, including the public forums set forth below:

Informational Meetings

December 6, 2004	Public Informational Meeting
January 12, 2005	Public Informational Meeting
February 15, 2005	Public Informational Meeting
January 20, 2005	Planning Commission Informational Meeting
February 17, 2005	Planning Commission Informational Meeting
March 17, 2005	Planning Commission Informational Meeting
April 15, 2005	Council direction to prepare VP
June 15, 2005	Community Services Commission Presentation
June 26, 2005	Charette Kickoff
July 5-9, 2005	Charette
September 7, 2005 & October 19-20, 2005	Joint Planning Commission/Community Services Commission meetings on Draft VP
November 22, 2005	IBC Stakeholder meeting 1
December 13, 2005	IBC Stakeholder meeting 2
January 16, 2006	IBC Stakeholder meeting 3

EIR Scoping

February 1, 2007	Planning Commission
February 21, 2007	Community Services Commission
February 27, 2007	City Council

IBC Task Force

January 9, 2007	Task Force Established
March 21, 2007	Task Force meeting 1- Goals/Objectives, Organization, Schedule, Historical Context
May 9, 2007	Task Force meeting 2- Review and prioritization of public improvements
June 13, 2007	Task Force meeting 3- Park development
July 11, 2007	Task Force meeting 4- Town Centers, Unit Caps, Trip Capture
August 15, 2007	Task Force meeting 5- Preparation of recommendations to City Council

September 10, 2007	Task Force- Resident outreach meeting 1
September 24, 2007	Task Force- Resident outreach meeting 2
October 13, 2007	Council meeting on Task Force Recommendations
December 17, 2007	Task Force- Business outreach meeting
February 26, 2008	City Council acceptance of Task Force recommendations

Draft EIR Comment Meetings

April 15, 2009	Community Services Commission
April 21, 2009	IBC Task Force
May 7, 2009	Planning Commission

Public Hearings for Project Actions

March 17, 2010	Community Services Commission
April 1, 2010	Planning Commission
April 27, 2010	City Council
July 13, 2010	City Council

IV. GENERAL FINDINGS

The City hereby finds as follows:

- The City is the “Lead Agency” for the Proposed Project evaluated in the FEIR;
- The Draft EIR, Recirculated DEIR and the FEIR were prepared in compliance with CEQA and the Guidelines;
- The City has independently reviewed and analyzed the Draft EIR, Recirculated DEIR and the FEIR, and these documents reflect the independent judgment of the City Council;
- An MMRP has been prepared for the changes to the Proposed Project, which the City has adopted or made a condition of approval of the Proposed Project. That MMRP is incorporated herein by reference and is considered part of the record of proceedings for the Proposed Project;
- The MMRP designates responsibility and anticipated timing for the implementation of mitigation; the City will serve as the MMRP Coordinator;
- In determining whether the Proposed Project has a significant impact on the environment, and in adopting these Findings pursuant to Section 21081 of CEQA, the City has complied with CEQA Sections 21081.5 and 21082.2;
- The impacts of the Proposed Project have been analyzed to the extent feasible at the time of certification of the FEIR;
- The City reviewed the comments received on the Recirculated DEIR and the responses thereto and has determined that neither the comments received nor the responses to such comments add significant new information regarding environmental impacts to the Recirculated DEIR. The City has based its actions on full appraisal of all viewpoints, including all comments received up to the date of adoption of these Findings, concerning the environmental impacts identified and analyzed in the FEIR;
- The responses to the comments on the Recirculated DEIR, which are contained in the FEIR, clarify and amplify the analysis in the Recirculated DEIR;
- Having reviewed the information contained in the Draft EIR, Recirculated DEIR, FEIR, and the record of proceedings, as well as the requirements of CEQA and the Guidelines regarding

recirculation of Draft EIRs, and having analyzed the changes in the Recirculated DEIR which have occurred since the close of their respective public review periods, the City finds that there is no new significant information in the FEIR and finds that recirculation is not required.

- Except as otherwise discussed in these Findings and the FEIR, the conclusions regarding Project impacts are the same regardless of whether or not the project is considered an approved project or a pending future project.
- The City has made no decisions that constitute an irretrievable commitment of resources toward the Proposed Project prior to certification of the FEIR, nor has the City previously committed to a definite course of action with respect to the Proposed Project;
- Copies of all the documents incorporated by reference in the FEIR are and have been available upon request at all times at the offices of the City, custodian of record for such documents or other materials;
- Having received, reviewed and considered all information and documents in the record, the City hereby conditions the Proposed Project and finds as stated in these Findings.

V. SUMMARY OF IMPACTS

The FEIR concludes that impacts of the Proposed Project with respect to the following issues either will not be significant or will be mitigated to below a level of significance by Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), and Mitigation Measures that will be made conditions of project approval: Aesthetics, Biological Resources, Cultural Resources, Geology/Soils, Hazards/Hazardous Materials, Hydrology/Water Quality, Population/Housing, Public Services, Recreation, Utilities/Service Systems, and Global Climate Change. Impacts related to Air Quality, Land Use Planning, Noise, and Traffic remain significant despite the adoption of all feasible mitigation measures.

VI. FINDINGS REGARDING IMPACTS

In making each of the findings below, the City has considered the Project Design Features (“PDFs”) and Plans, Programs, and Policies (“PPP”) listed in the Final EIR. The PDFs described in the Final EIR are part of the Project that the City has considered, and are explicitly made conditions of approval. The PPPs discussed in the Final EIR are existing regulatory plans and programs that the Project is subject to, and likewise, are explicitly made conditions of approval.

A. Aesthetics

1. Environmental Impact: Future development pursuant to the IBC Vision Plan would not substantially alter the visual character of the IBC area and its surroundings. While the Proposed Project does not in itself approve specific developments in the IBC, it does propose design standards and criteria in the IBC Vision Plan for new residential and mixed-use developments, allowing for development in the IBC, which would result in intensification of the urban character of the IBC. Although the visual character of the project area would change, this change would be consistent in scale and character with the surrounding development. Therefore, the Project would not substantially degrade the existing visual character of the project area and its surroundings.

Finding: The Project will have no substantial adverse impact on the visual character or quality of the project area or its surroundings. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091

Facts in Support of Finding: Implementation of the IBC Vision Plan would include the establishment of districts and development standards to address the market transition of certain portions of the IBC from exclusively industrial and/or office uses to mixed-use districts that would accommodate office, residential, and support commercial/retail uses, and protect existing businesses. The nonresidential square footage would decrease in the IBC and allow the development of nonindustrial uses, which is generally consistent with the existing and evolving mixed-use nature of the IBC area. Specific development projects in the IBC would be of quality design in conformance with the IBC Vision Plan goals and the standards and criteria outlined in the IBC Vision Plan or other applicable zoning designation. Infrastructure, including bridges, would be of high visual quality and complement their surroundings. Therefore, development of such infrastructure would not degrade the visual character or quality of the IBC area and its surroundings. Therefore, development in accordance with the IBC Vision Plan would not substantially degrade the visual character or quality of the IBC area and its surroundings.

Mitigation Measure: No mitigation is required.

Reference: RDEIR § 5.1.

2. Environmental Impact: Additional light and glare generated by specific development projects in accordance with the IBC Vision Plan would not substantially impact surrounding land uses. Implementation of the Proposed Project would introduce new light sources and potential glare in the IBC and surrounding areas. However, the development would occur in an urbanized area with existing sources of light and glare. The additional light and glare is not anticipated to substantially impact surrounding uses.

Finding: There will be no substantial adverse project impacts from light and glare. PPP 1-1 and PPP 1-2 require applicants for new development adhere to the City lighting standards. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Residential and mixed-use development and development of the proposed bridges would introduce new light sources and potential glare in the IBC and surrounding areas. Surrounding developments and individuals living in adjacent residential areas may experience an increase in nighttime illumination. Individual development projects would be required to comply with the City's existing lighting codes and standards, such as confining direct rays on-site and meeting security code requirements (PPP-1-1 and PPP-2). Additionally, as outlined in the design criteria of the IBC Vision Plan, the use of reflective glass is prohibited. Therefore, additional light and glare generated by specific development projects would not substantially impact surrounding land uses. The impact is less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.1.

3. Environmental Impact: Future development pursuant to the IBC Vision Plan may generate additional light and glare that could impact wildlife in the San Joaquin Freshwater Marsh and the San Diego Creek. Specific development projects in accordance with the IBC Vision Plan could impact wildlife in the San Joaquin Freshwater Marsh and the San Diego Creek. However, PPPs and PDFs address and mitigate this impact. **Finding:** There will be no substantial adverse project impacts from light and glare on wildlife in the San Joaquin Freshwater Marsh and the San Diego Creek. PDF 1-1 requires applicants for new development reduce the reflectivity of building materials within 100 feet of the San Joaquin Freshwater Marsh and the San Diego Creek. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The San Diego Creek channel runs along the eastern boundary of the IBC and the San Joaquin Freshwater Marsh forms a portion of the IBC's southeastern boundary. According to the Conservation and Open Space Element of the City's General Plan, the marsh and the creek are both considered highly sensitive biotic resources.

There is a potential that birds from the marsh and/or creek could fly into the sides of reflective buildings, and evening lighting may disrupt nocturnal wildlife behavior. However, any future development proposals within 100 feet of the marsh or creek would be required to reduce the reflectivity of building surface materials by using angles that are not highly reflective, or through the incorporation of building surface materials that reduce reflectivity (PDF 1-1). Individual development projects would be required to comply with the City's existing lighting codes and standards, such as confining direct rays on-site and meeting security code requirements (PPP-1-1 and PPP-2). Additionally, as outlined in the design criteria of the IBC Vision Plan, the use of reflective glass is prohibited. Therefore, additional light and glare generated by specific development projects would not substantially impact wildlife in the San Joaquin Freshwater Marsh and the San Diego Creek. The impact is less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.2.

4. Environmental Impact: Cumulative Impacts. As discussed in Section 5.1 of the RDEIR, there will be no cumulative impacts for visual effects.

Finding: The Project will have no substantial cumulative impact on visual resources. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Development of the IBC project area in accordance with the IBC Vision Plan would result in an intensification of the urban character of the IBC through demolition or renovation of existing structures and construction of new structures. Specific development projects in the IBC would be of quality design in conformance with the IBC Vision Plan goals and the standards and criteria outlined in the IBC Vision Plan or other applicable zoning designation. As a result, the Proposed Project has a less than significant cumulative impact on the visual character of the IBC.

An increase in development in the IBC would incrementally increase the amount of light and glare in the project area. However, all future projects would be required to comply with the Irvine Uniform Security Code, which limits excessive light and glare through specific requirements, including governing light spillover onto adjacent properties and nighttime illumination. City regulations would mitigate light and glare impacts in the IBC to a less than significant level. The Proposed Project, considered together with existing and future uses, would not result in a cumulatively considerable contribution to light or glare.

Mitigation Measures: No mitigation is required.

Reference: RDEIR, § 5.1.

B. Air Quality

1. Environmental Impact: Regional population, housing, and employment growth projections in the Irvine Business Complex were not accounted for in SCAQMD's Air Quality Management Plan. Implementation of the IBC Vision Plan project would generate short-term and long-term air pollutant emissions that exceed the South Coast Air Quality Management District's (SCAQMD) thresholds (Indicator 1). However, the project would further the goals of SCAG's Regional Comprehensive Plan (Indicator 2). As both criteria must be met, the project is considered significant relative to consistency with the Air Quality Management Plan (AQMP).

Finding: Changes or alterations have been required in, or incorporated into, the Project which will lessen the significant environmental effects of the Project related to air quality. PPPs 2-1 through 2-4, PPP 15-1 through PPP 15-14, PDF 2-6 through PDF 2-9 and PDF 15-1 through PDF 15-17 are feasible and will be implemented by the project. These changes or alterations, however, will not reduce this impact to below a level of significance. The City finds that there are no other feasible mitigation measures that would mitigate the impact to below a level of significance, and that specific economic, social, technological or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the FEIR, as discussed in Section VII of these Findings. (Public Resources Code § 21081(a)(3); Guidelines § 15091(a)(3)). As described in the Statement of Overriding Considerations, the City has determined that this impact is acceptable because of specific overriding considerations.

Facts in Support of Finding: PPP 2-1 through PPP 2-4 and PDF 2-6 through PDF 2-9 would reduce air pollutant emissions generated during construction activities to the extent feasible. In addition, PPP 15-1 through 15-14 and PDF 15-1 through 15-17, would reduce purchased energy use and water use, and encourage use of alternative transportation to reduce area and mobile sources of air pollution associated with the project. The project would not be consistent with the AQMP under the first indicator because short- and long-term emissions associated with the project would exceed the SCAQMD regional and localized significance thresholds, which are the basis for determining if a project would contribute to the regional nonattainment designations of the South Coast Air Basin (SoCAB). The project would be considered consistent with the AQMP under the second indicator because the project would further the goals of SCAG's Regional Comprehensive Plan, but it is necessary for both criteria to be met for the project would be considered consistent with the AQMP. Consequently, because the Proposed Project would fail under Indicator 1, impacts are considered significant relative to project consistency with the AQMP.

Mitigation Measures: No additional mitigation measures are feasible.

Reference: RDEIR, § 5.2, Air Quality Modeling Data (Appendix G).

2. Environmental Impact: Construction emissions associated with buildout of the Irvine Business Complex would generate short-term emissions that exceed the SCAQMD's regional significance thresholds for VOC, NO_x, CO, PM₁₀, and PM_{2.5}, and would significantly contribute to the nonattainment designations of the SOCAB for O₃ and Particulate Matter (PM₁₀ and PM_{2.5}). Construction activities produce combustion emissions from various sources, such as on-site heavy-duty construction vehicles, vehicles hauling materials to and from the site, and motor vehicles transporting the construction crew. Site preparation activities produce fugitive dust emissions (PM₁₀ and PM_{2.5}) from soil-disturbing activities such as grading and excavation and from demolition activities. Construction activities associated with new development occurring in the project area would temporarily increase emissions of PM₁₀, PM_{2.5}, VOC, NO_x, SO_x, and CO.

Finding: Changes or alterations have been required in, or incorporated into, the Project which will lessen the significant environmental effects of the Project related to air quality. PDF 2-3, PDF 2-6 through PDF 2-9 would reduce air pollutant emissions from construction activities. These changes or alterations, however, will not reduce this impact to below a level of significance. The City finds that there are no other feasible mitigation measures that would mitigate the impact to below a level of significance, and that specific economic, social, technological or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the FEIR, as discussed in Section VII of these Findings. (Public Resources Code § 21081(a)(3); Guidelines § 15091(a)(3)). As described in the Statement of Overriding Considerations, the City has determined that this impact is acceptable because of specific overriding considerations.

Facts in Support of Finding: The Project's construction activity air quality impacts are considered significant. Construction activities associated with new development occurring in the project area would exceed SCAQMD's regional significance thresholds for VOC, NO_x, CO, PM₁₀, and PM_{2.5}, and would significantly contribute to the nonattainment designations of the SOCAB for O₃ and Particulate Matter (PM₁₀ and PM_{2.5}). PDF 2-3, PDF through PDF 2-9 would reduce emissions from construction activities to the extent feasible. However, no additional feasible mitigation measures are available to reduce air pollutant emissions generated by short-term activities to below the SCAQMD's regional significance thresholds. Therefore, impacts from air pollutant emissions from construction-related activities would be significant.

Mitigation Measures: No additional mitigation measures are feasible.

Reference: RDEIR, § 5.2, Air Quality Modeling Data (Appendix G).

3. Environmental Impact: Buildout of the Irvine Business Complex would generate long-term stationary- and mobile-source emissions that exceed the SCAQMD's regional significance threshold and significantly contribute to the nonattainment designations of the SOCAB for O₃ and particulate matter (PM₁₀ and PM_{2.5}). Long-term emissions generated by

new development in the IBC Vision Plan area would generate VOC, NO_x, CO, PM₁₀, and PM_{2.5} emissions that would exceed the SCAQMD regional significance thresholds. Emissions of NO_x that exceed the SCAQMD emissions thresholds would contribute to the O₃ and particulate matter (PM₁₀ and PM_{2.5}) nonattainment designations of the SoCAB. In addition, emissions of PM_{2.5} would significantly contribute to the particulate matter (PM₁₀ and PM_{2.5}) nonattainment designations.

Finding: Changes or alterations have been required in, or incorporated into, the Project which will lessen the significant environmental effects of the Project related to air quality. These changes or alterations, however, will not reduce this impact to below a level of significance. The City finds that there are no other feasible mitigation measures that would mitigate the impact to below a level of significance, and that specific economic, social, technological or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the FEIR, as discussed in Section VII of these Findings. (Public Resources Code § 21081(a)(3); Guidelines § 15091(a)(3)). As described in the Statement of Overriding Considerations, the City has determined that this impact is acceptable because of specific overriding considerations.

Facts in Support of Finding: Long-term emissions generated by new development in the IBC Vision Plan area would generate VOC, NO_x, CO, PM₁₀, and PM_{2.5} emissions that would exceed the SCAQMD regional significance thresholds. PPP 15-1 through 15-2 and PDF 15-1 through 15-15 in Section 5.15, Global Climate Change, would reduce purchased energy use and water use, and encourage use of alternative transportation to reduce area and mobile sources of air pollution associated with the project. However, no additional feasible mitigation measures are available to reduce air pollutant emissions generated by long-term activities to below the SCAQMD's regional significance thresholds. Therefore, impacts from air pollutant emissions from mobile and stationary sources would remain significant.

Mitigation Measures: No feasible mitigation measures.

Reference: RDEIR, § 5.2, Air Quality Modeling Data (Appendix G).

4. Environmental Impact: Project-related construction activities could expose sensitive receptors to substantial pollutant concentrations of NO_x, PM₁₀, and PM_{2.5}. Short-term construction emissions generated by the project could expose sensitive receptors to substantial pollutant concentrations and impacts would be considered significant and unavoidable.

Finding: Changes or alterations have been required in, or incorporated into, the Project which will lessen the significant environmental effects of the Project related to air quality. PDF 2-3, PDF 2-6 through PDF 2-8 would reduce air pollutant emissions from construction activities. These changes or alterations, however, will not reduce this impact to below a level of

significance. The City finds that there are no other feasible mitigation measures that would mitigate the impact to below a level of significance, and that specific economic, social, technological or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the FEIR, as discussed in Section VII of these Findings. (Public Resources Code § 21081(a)(3); Guidelines § 15091(a)(3)). As described in the Statement of Overriding Considerations, the City has determined that this impact is acceptable because of specific overriding considerations.

Facts in Support of Finding: Fugitive dust and construction equipment exhaust would generate substantial concentrations of NO_x, PM₁₀, and PM_{2.5} at sensitive land uses near the project site, thereby exposing nearby sensitive receptors to substantial particulate concentrations. PPP 2-3 and PDF 2-8 would reduce particulate matter concentration generated by fugitive dust during construction activities to the extent feasible. In addition, PDF 2-6 and PDF 2-7 would reduce NO_x from construction equipment exhaust. However, no additional feasible mitigation measures are available to reduce elevated levels of NO_x, PM₁₀, and PM_{2.5} at nearby sensitive receptors. Therefore, construction emissions generated by the project could expose sensitive receptors to substantial pollutant concentrations and impacts would be potentially significant.

Mitigation Measures: No feasible mitigation measures.

Reference: RDEIR, § 5.2, Air Quality Modeling Data (Appendix G).

5. Environmental Impact: Operation of the Irvine Business Complex would not expose off-site sensitive receptors to substantial concentrations of NO₂, CO, PM₁₀, or PM_{2.5}. Residential, commercial, and office land uses do not generate substantial quantities of stationary-source air pollutants that would result in a significant impact.

Finding: There will be no substantial adverse project impacts concentrations of air pollutants generated from the operational phase of the project. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Residential, commercial, and office land uses do not generate substantial quantities of stationary-source air pollutants that would result in a significant impact. Based on CO hotspot modeling, at even the most congested intersections, project-related traffic is not anticipated to exceed any of the state one- or eight-hour CO AAQS at the study area intersections. Consequently, sensitive receptors in the area would not be significantly affected by CO emissions generated by operation of the Proposed Project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

Commercial and business uses associated with the Proposed Project would result in daily and weekly truck deliveries. With compliance to existing regulations (California Air Resources Board [CARB] Rule 2485), idling emissions from heavy-duty trucks associated with the commercial and business use materials deliveries would be extremely limited and would not expose sensitive receptors to substantial pollutant concentrations. Truck idling impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR, § 5.2, Air Quality Modeling Data (Appendix G).

6. Environmental Impact: Development of residential uses within the Irvine Business Complex could be located within CARB's recommended buffer distances from I-405 or existing distribution centers, chrome platers, dry cleaners, or gas stations. Placement of sensitive uses near major pollutant sources would result in significant air quality impacts from the exposure of persons to substantial concentrations of toxic air pollutant contaminants. Although mitigation will lessen the impact, placement of private outdoor recreational areas would expose people to elevated levels of toxic air contaminants that exceed the ambient concentrations in the project vicinity and the impact would be significant and unavoidable.

Finding: Changes or alterations have been required in, or incorporated into, the Project which will lessen the significant environmental effects of the Project related to air quality. PDFs 2-1 through 2-5 would require **new** residential land uses to ensure that health risk is minimized to below 10 in a million risk. These changes or alterations, however, will not reduce this impact to below a level of significance. The City finds that there are no other feasible mitigation measures that would mitigate the impact to below a level of significance, and that specific economic, social, technological or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the FEIR, as discussed in Section VII of these Findings. (Public Resources Code § 21081(a)(3); Guidelines § 15091(a)(3)). As described in the Statement of Overriding Considerations, the City has determined that this impact is acceptable because of specific overriding considerations.

Facts in Support of Finding: New residential developments could be located within the recommended buffer distances to the Interstate 405 (I-405) or existing distribution centers, chrome platers, dry cleaners, gas stations, or other industrial facilities that emit toxic air contaminants (TACs) currently operating within the IBC. Placement of sensitive uses near major pollutant sources would result in significant air quality impacts from the exposure of persons to substantial concentrations of toxic air pollutant contaminants.

Implementation of PDF 2-1 through PDF 2-4 would ensure that residents within the IBC would not be exposed to levels of toxic air contaminants that exceed the ambient concentrations

in the project vicinity, which are 830 to 1,233 in a million in the IBC area. PDF 2-1 and 2-2 require that health risk be reduced below SCAQMD's incremental risk threshold of 10 in one million cancer risk through on- or off-site mitigation, or residential development would be prohibited. With implementation of PDF 2-1 and 2-4 impacts to sensitive land uses from industrial sources of air pollution would be less than significant. PDF 2-3 would reduce the potential outdoor health risk for parks within close proximity to the freeway, development projects may include outdoor private recreational areas within the CARB-recommended distance of 500 feet. Therefore, placement of private outdoor recreational areas would expose people to elevated levels of toxic air contaminants that exceed the ambient concentrations in the project vicinity, which are 830 to 1,233 in a million in the IBC area and impacts would be potentially significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR, § 5.2, Air Quality Modeling Data (Appendix G).

7. Environmental Impact: The Irvine Business Complex would not create objectionable odors; however, new residential land uses could be proximate to existing odor generators. Industrial uses within the IBC Vision Plan area may generate odors that are objectionable to some. Consequently, impacts would be potentially significant. PDF 2-5 has been incorporated in the EIR to ensure that new residential land uses are not located in proximity to existing land uses within the IBC that generate substantial odors. Consequently, impacts would be less than significant.

Finding: No significant adverse impacts associated with odors are identified. PDF 2-5 requires that objectionable odors be minimized at residential areas. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Odors generated by land uses within the IBC must comply with SCAQMD Rule 402, which prohibits the generation of odors that cause injury, detriment, nuisance, or annoyance to a considerable number of persons or which endanger the comfort, repose, health, or safety of people. Because proposed office, commercial, hotel, and residential land uses typically do not generate substantial odors, no significant impacts would occur. PDF 2-5 has been incorporated in the EIR to ensure that new residential land uses are not located in proximity to existing land uses within the IBC that generate substantial odors. Consequently, impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR, § 5.2, Air Quality Modeling Data (Appendix G).

8. Environmental Impact: Cumulative Impacts. The Project will exceed SCAQMD Significance Thresholds for certain pollutants as described above. The SCAQMD considers a project cumulatively significant when project-related emissions exceed the SCAQMD regional emissions thresholds; therefore the cumulative air quality impacts from this project would be significant.

Finding: Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant cumulative impact as identified in the Draft EIR. These changes or alterations, however, will not reduce this impact to an insignificant level. The Project is therefore expected to have a significant adverse cumulative impact on air quality. The City finds that there are no other feasible mitigation measures that will mitigate the impact to an insignificant level, and that specific economic, social, technological or other considerations make infeasible the alternatives identified in the Final EIR, as discussed in Section VII of these Findings. As described in the Statement of Overriding Considerations, the City has determined that this impact is acceptable because of specific overriding considerations. Cal. Pub. Res. Code § 21081(a)(1), (3); CEQA Guidelines § 15091(a)(1), (3).

Facts in Support of Finding: As described above and in Section 5.2 of the Draft EIR, emissions due to development and operation of the Project will exceed SCAQMD Significance Thresholds. Even with the implementation of the PPP's and PDF's, project-related construction emissions would still exceed the SCAQMD significance thresholds for VOC, NO_x, PM₁₀, and PM_{2.5}, and cumulative emissions would result in greater exceedances. Operation of the project would also result in emissions in excess of the SCAQMD regional emissions thresholds that contribute to the nonattainment designations of the SoCAB. Therefore, the project's contribution to cumulative air quality impacts would be significant.

Mitigation Measures: No additional measures are feasible.

Reference: RDEIR, § 5.2, Air Quality Modeling Data (Appendix G).

C. Biological Resources

1. Environmental Impact: The project would not have a direct substantial adverse effect on any species identified as a sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. As discussed in Section 5.3 of the RDEIR, the Project will not have a direct impact on any species identified as a sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Finding: Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects to below a level of significance. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: The Proposed Project would not be expected to directly impact the habitat of any sensitive species. However, construction and use of the trail could adversely impact a number of sensitive species that occur in the San Diego Creek and San Joaquin marsh areas. Many sensitive species occur in these areas, including federally listed species such as the least Bell's vireo as well as a number of California Species of Special Concern. Additionally, the construction of new buildings in the developed part of the IBC area that adjoins the San Joaquin Marsh could lead to injury or mortality of birds flying into or away from the marsh.

Implementation of PDF-1 requires further study of the biological issues and the design alternatives for the proposed trail and requires the design analysis of the proposed trail to examine the buffer needs and opportunities of the proposed trail and to consider an alternative that excludes a trail segment along the most sensitive part of San Diego Creek (the northwestern side of the creek between Campus Drive and MacArthur Boulevard). PDF 3-2 ensures that construction activities involving the use of heavy equipment are prohibited during the bird nesting season (March 15 to September 15) and if minor construction activities are carried out during the bird nesting season, then a qualified biologist must conduct a preconstruction survey in the off-site habitat to determine the location of any active bird nests in the area. Additionally, PDF 3-4 will ensure that development landscaping does not include exotic plant species that may be invasive to native habitats. Compliance with PDF-1 through PDF-4 would mitigate the impact to less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.3; Biological Resources Study (Appendix H).

2. Environmental Impact: The project would not Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. The IBC area does not contain any riparian or other sensitive natural habitats. However, these habitats occur in the adjoining areas along San Diego Creek and San Joaquin marsh. Construction in areas that adjoin these riparian habitats could have indirect impacts on riparian habitats as a result of increased erosion. However, compliance with PPP 3-1 would prevent the occurrence of any significant impacts.

Finding: No significant adverse impacts associated with impacts to sensitive species are identified. PPP 3-1 and PDF 3-1 through 3-4 would require existing protocol to minimize impacts are followed. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The project has been conditioned upon compliance with PPP 3-1, stating that prior to approval of the design for the San Diego Creek Trail improvements/extension; the City shall examine alternative locations of the proposed trail and methods that could be used to minimize potential impacts (e.g., fencing and buffers). The design shall consider an alternative that excludes a trail segment along the most sensitive part of San Diego Creek (the northwestern side of the creek between Campus Drive and MacArthur Boulevard). Compliance with PPP 3-1 will ensure that impacts associated with removal of eucalyptus windrows will be less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.3; Biological Resources Study (Appendix H).

3. Environmental Impact: The project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. As discussed in Section 5.3 of the RDEIR, the Proposed Project would not directly impact any wetlands, however, there is the potential for indirect impacts as a result of urban runoff from the developed areas to San Diego Creek. There is also a potential for adverse impacts of erosion and surface runoff during construction and operation of the proposed trail on the wetlands of San Diego Creek and San Joaquin marsh.

Finding: No significant adverse impacts associated with impacts to sensitive species are identified. PPP 3-1 and PDF 3-1 through 3-4 would require existing protocol to minimize impacts are followed. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The IBC area does not contain any wetlands. However, the proposed trail would adjoin San Diego Creek and the San Joaquin Marsh. The open water and riparian habitats of the creek and marsh would be considered jurisdictional wetlands by the Corps and CDFG. In addition, the IBC area contributes urban runoff into the San Diego Creek channel. The Proposed Project would not directly impact any wetlands. However, there is the potential for indirect impacts as a result of urban runoff from the developed areas to San Diego Creek. There is also a potential for adverse impacts of erosion and surface runoff during construction and operation of the proposed trail on the wetlands of San Diego Creek and San Joaquin marsh. However, compliance with PPP 3-1 would prevent the occurrence of any significant impacts.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.3; Biological Resources Study (Appendix H).

4. Environmental Impact: The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. As discussed in Section 5.3 of the RDEIR, the majority of the IBC area is developed with urban land uses and does not function as a wildlife movement corridor. The Proposed Project would intensify urban land uses within already developed areas, which would have no effect on wildlife movement.

Finding: The Project would not interfere substantial with the movement of any native resident or migratory fish or wildlife species and therefore no significant adverse impacts will occur. No mitigation is required. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: The Creek serves as a local movement corridor for wildlife species, and it provides aquatic connectivity between the Santa Ana Mountains and Upper Newport Bay. However, it is not designated by the Orange County NCCP as a corridor or special linkage area. The proposed trail along the San Diego Creek would not include any night-lighting, and limited fencing may be used to prevent unauthorized access into sensitive habitats. A barbed wire fence now marks the boundary of the San Joaquin Marsh area along the existing maintenance road along San Diego Creek. The project would not construct substantial new fencing or convert existing habitat, and therefore would not adversely affect habitat connectivity.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.3; Biological Resources Study (Appendix H).

5. Environmental Impact: The Proposed Project would not Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. As discussed in section 5.3 of the RDEIR, Proposed Project would not conflict with any local policies or ordinances protecting biological resources.

Finding: The Project will not conflict with any local policies or ordinances protecting biological resources, and therefore no significant adverse impacts will occur. PDF 3-2 would require a tree survey and permit for tree removal in accordance with the City's tree preservation ordinance. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The Open Space and Natural Resource element identifies the importance of preserving the biological resources of the San Joaquin Marsh wetlands and the San Diego Creek riparian habitat, and integrating these into local and regional conservation and open space areas. The Proposed Project would not degrade these areas, and would not interfere with their linkage to other open space areas. There are trees in the general area of the proposed trail along San Diego Creek, but the project design is not sufficiently specific to determine whether or how many trees would be impacted. The City of Irvine's Urban Forestry Ordinance requires that a permit be obtained to remove any significant tree on public or private land. Trees on nonresidential properties are subject to replacement criteria at a one-to-one ratio on-site or off-site, as prescribed in the City's Urban Forestry Ordinance, based on the determination of the City Arborist (PPP 3-2).

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.3; Biological Resources Study (Appendix H).

6. Environmental Impact: The Proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. As discussed in Section 5.3 of the Draft EIR, the project is consistent with the NCCP/HCP for the area.

Finding: The Project would not conflict with the adopted NCCP/HCP, nor would it conflict with other approved local, regional, or state habitat conservation plans, and therefore no significant adverse impacts will occur. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The Proposed Project is consistent with the NCCP/HCP based on several criteria. First, only the proposed trail is located near the reserve open space, but would not prevent or interfere with assembly of the Reserve System. Second, Section 5.3.3 of the NCCP Implementation Agreement identifies passive recreation, which includes bicycling (on designated trails), hiking, and nature interpretation as permitted uses within the Reserve System. The NCCP/HCP identifies the areas where public access is prohibited (Figure 26 of the

NCCP/HCP), which does not include any locations within the IBC area. The NCCP/HCP prohibits a number of active recreational uses such as motorized recreation vehicle activities and other facilities that would significantly harm sensitive natural habitat resources and identified species. However, motorized recreation vehicles would not be permitted on the proposed trail, and there would be no significant impact to sensitive habitats and species.

The proposed IBC project is consistent with the findings and recommendations of the SAMP for the San Diego Creek watershed. The SAMP identifies six different types of riparian restoration activities and prospective locations within the San Diego Creek watershed. None of these prospective restoration areas are within the IBC project area.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.3; Biological Resources Study (Appendix H).

7. Environmental Impact: Cumulative Impacts. There are no significant cumulative impacts because of the implementation of the regional NCCP/HCP and the Nature Reserve of Orange County.

Finding: Cumulative biological impacts are mitigated to an insignificant level through the NCCP/HCP and the Nature Reserve of Orange County. Therefore, cumulative impacts to biological resources are not considered significant. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The geographic scope for biological resources includes the NCCP/HCP Planning Area in conjunction with growth projections for Orange County. The NCCP/HCP is intended and designed to address biological resources impacts on a larger, regional basis. The primary cumulative impact on biological resources is the fragmentation of ecosystems resulting from the incremental loss of native habitats. As development continues, the remaining ecosystems will become more isolated and fragmented. The result will be that connectivity between patches of habitat and the wildlife populations they support will be lost. The Proposed Project is within the area designated for development under the NCCP/HCP and is consistent with provisions of the NCCP/HCP. The City of Irvine participates in this and the NCCP program, and requires development to be in accordance with the NCCP. As a result, cumulative biological impacts are mitigated to a level less than significant and would not be cumulatively considerable.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.3; Biological Resources Study (Appendix H).

D. Cultural Resources

1. Environmental Impact: Development of the project could impact prehistoric archaeological sites with burials. As discussed in Section 5.4, there are no known historical resources in the project area. There is the potential, however, for resources to be buried beneath the site.

Finding: Implementation of PPP 4-1 will include retaining a qualified archaeologist to address the monitoring of site grading. In the event that any historical or archaeological resources are discovered, appropriate measures will be taken to protect or recover those resources. Therefore, the City finds that no substantial adverse impact to archeological resources or historic resources will occur. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091(a)(1).

Facts in Support of Finding: Based on the results of the study in Appendix I of the Draft EIR, there are no known historical or archaeological resources within the IBC area. The Project would not cause substantial adverse change to known historical resources outside the project site boundaries. Implementation of PPP 4-1 will include retaining a qualified archaeologist to address the monitoring of site grading for potential archaeological or historical resources. If resources are discovered, no further grading shall occur in the area of the discovery until the Director of Community Development is satisfied that adequate provisions are in place to protect or recover those resources. Therefore, potential impacts to undiscovered historical or archaeological resources, if any, are expected to be less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.4; Paleontological/Archaeological Report (Appendix I).

2. Environmental Impact: The Proposed Project could destroy paleontological resources or a unique geologic feature. As discussed in Section 5.4, the project area is sensitive, at variable depths below six feet, for significant paleontological resources.

Finding: Implementation of PPP 4-1 will include the retention of a qualified paleontologist to address the monitoring of site grading and in the event that any paleontological resources are discovered, appropriate measures will be taken to protect or recover those resources. As such, the Project's potential impacts to paleontological resources, if any, are expected to be less than significant. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091(a)(1).

Facts in Support of Finding: The project area is sensitive, at variable depths below six feet, for significant paleontological resources. Impacts above 30 feet may adversely affect Late Pleistocene fossils and those below 30 feet may adversely affect Middle to Early Pleistocene fossils. Excavation activities associated with development of the Project could encounter deposits and potentially impact sensitive paleontological resources. Implementation of PPP 4-1 will include the retention of a qualified paleontologist to address the monitoring of site grading.

If any paleontological resources are discovered, appropriate measures will be taken to protect or recover those resources. The Project's potential impacts to paleontological resources, if any, are therefore expected to be less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.4; Paleontological/Archaeological Report (Appendix I).

3. Environmental Impact: Grading activities could potentially disturb human remains. As discussed in Section 5.4, the parking lot north of Michelson and west of Harvard may cap intact prehistoric resources, including burials. It is possible, but not likely, that buried human remains are present in the project site boundaries.

Finding: No substantial adverse impacts to human remains are expected. Implementation of PPP 4-2 would provide the measures necessary to appropriately address such a situation by stopping further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Orange County Coroner is contacted. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091(a)(1).

Facts in Support of Finding: Although the parking lot north of Michelson and west of Harvard may cap intact prehistoric resources, including burials. It is possible, but not likely, that buried human remains are present in the project site boundaries. Implementation of PPP 4-2 would provide the measures necessary to appropriately address such a situation by stopping further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Orange County Coroner is contacted. The Orange County Coroner would in turn contact the appropriate persons or groups who have the authority to determine treatment or disposing of the human remains as provided in Public Resources Code Section 5097.98. Therefore, the Proposed Project's potential to impact human remains, if any, would be reduced to a level less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.4; Paleontological/Archaeological Report (Appendix I).

4. Environmental Impact: Cumulative Impacts. As discussed in Section 5.4, potential impacts related to historical, archaeological, and paleontological resources would be reduced to a level that is less than significant through the implementation of existing requirements.

Finding: The Project will have no substantial cumulative adverse impacts to cultural resources. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Future construction projects in the area that increase local population will lead to accelerated degradation of the cultural and paleontological resources. However, each development proposal received by the City undergoes additional discretionary review and is subject to the same resource protection requirements as this Proposed Project. If there is a potential for significant impacts on cultural or paleontological resources, an investigation will be required to determine the nature and extent of the resources and identify appropriate mitigation measures, including existing requirements such as PPP 4-1 and PPP 4-2.

Neither the Proposed Project nor other cumulative development in accordance with the General Plan are expected to result in significant impacts to cultural or paleontological resources provided site-specific surveys and test and evaluation excavations are conducted to determine whether the resources are unique archaeological resources or historical resources, and appropriate mitigation is implemented, including, but not limited to, compliance with existing requirements. Therefore, no significant cumulative impacts to cultural resources are expected to occur from the project.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.4; Paleontological/Archaeological Report (Appendix I).

E. Geology/Soils

1. Environmental Impact: Future residents and employees could be subjected to strong earthquakes. The Project is located in the highly seismic southern California region, due to the proximity of known active faults. Therefore, the Project is subject to potentially significant earthquake-related impacts. **Finding:** No significant impacts related to earthquakes were identified. PPP 5-1 through 5-6 would reduce impacts related to seismic ground-shaking and related hazards. Implementation of PPP 5-6 requires that structures be designed in accordance with the seismic parameters included in the Uniform Building Code/California Building Code which is expected to minimize the effects of ground shaking to the greatest degree feasible and lessen the significant environmental effects to below a level of significance. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: The project area is in Seismic Zone 4 of the Uniform Building Code, which means that the hazard posed by earthquakes is considered high, due to the proximity of known active faults. In southern California, there is no way to avoid earthquake hazards. Appropriate measures to mitigate and minimize the effects of earthquakes are included in the 2007 CBC, with specific provisions for seismic design. The CBC has been accepted as the basic design standard in the City of Irvine and Orange County. The design of structures in accordance with the CBC is expected to minimize the effects of ground shaking to the greatest degree feasible and to less than significant levels except for a catastrophic seismic event. Impacts are less than significant with incorporation of the PPPs and PDFs.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.5.

2. Environmental Impact: Future development could potentially be subjected to seismic-related ground failure, including landslides, lateral spreading, subsidence, liquefaction or collapse resulting in risks to life and property. As discussed in Section 5.5, secondary effects of earthquakes can lead to ground deformation include liquefaction, lateral spreading, seismically induced landslides, and ground lurching and may cause potential impacts within the project area.

Finding: Implementation of PPP 5-1 through PPP 5-5, would ensure that all grading operations and construction will be conducted in conformance with the applicable City of Irvine Grading Code (Municipal Code Title 5, Division 10) and Grading Manual, the most recent version of the California Building Code, and consistent with the recommendations included in the most current geotechnical reports for the project area prepared by the engineer of record. This would reduce any potential impacts from secondary effects of earthquakes within the project site to below a level of significance. No mitigation measures are required. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: The majority of the project area (mostly northeast of Interstate 405 but also near San Diego Creek) is in a Zone of Required Investigation for Liquefaction, as shown on the State of California Seismic Hazard Zones, Tustin Quadrangle map, reissued in January 2001. However, compliance with PPP 5-3 would lessen the impacts to less than significant.

The landslide hazard depends on many factors, including existing slope stability, shaking potential, and presence of existing landslides. The terrain of the project site is relatively flat. Therefore, landslides are not expected to impact the project site.

The potential hazard posed by seismic settlement and/or collapse within the project area is considered to be low in the area underlain by Newport Mesa, but may be moderate for the remainder of the project area, based on the compressibility of the underlying soils and the presence of shallow groundwater. Site-specific mass grading and compaction that would occur as part of future development within the project area would serve to mitigate any potential impacts to seismically induced settlement and/or collapse within the project site.

Seismically induced ground lurching occurs when soil or rock masses move at right angles to a cliff or steep slope in response to seismic waves. Structures built on these masses can experience significant lateral and vertical deformations if ground lurching occurs. The project area is on relatively flat terrain, and the potential for ground lurching is considered low. Therefore, no significant adverse impact related to ground lurching is anticipated.

Excavations extending deeper than about two feet are expected to encounter wet soil conditions and groundwater may be encountered at depths greater than 10 feet during construction. For projects involving subterranean parking garages, it is likely that a dewatering system will have to be designed and constructed. In addition, there is a possibility that some minor settlement and lateral movement of soil in off-site areas adjacent to the site may result from dewatering. Compliance with existing regulations, including the Uniform Building Code and City of Irvine Grading and Excavation Regulation and Grading Manual, would reduce this impact to less than significant.

The water quality impacts of dewatering activities are addressed in detail in Section 5.7, *Hydrology and Water Quality*, of this RDEIR. It should be noted that before water collected by a dewatering system could be discharged into municipal storm drains, the project would be required to obtain a permit pursuant to Order Number 98-67, adopted on July 10, 1998 by the Santa Ana Regional Water Quality Control Board.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.5.

3. Environmental Impact: The project would not result in substantial soil erosion or the loss of topsoil. Soils in the project area have already been disturbed by development in the IBC. Therefore, soil erosion or the loss of topsoil is not a potential impact.

Finding: No significant impacts related to soil erosion or loss of top soil were identified. No mitigation measures are required. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: Soils in the project area have already been disturbed by development in the IBC. Therefore, the loss of topsoil is not a potential impact. Soils in the project area are particularly prone to erosion during the grading phase of development, especially during heavy rains. Reduction of the erosion potential can be accomplished through a Storm Water Pollution Prevention Plan, which specifies best management practices for temporary erosion controls. Such measures typically include temporary catchment basins and/or sandbagging to control runoff and contain sediment transport within the project site. A comprehensive discussion of erosion can be found in Section 5.7, *Hydrology and Water Quality*.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.5.

4. Environmental Impact: The project could have corrosive or expansive soil. As discussed in Section 5.5, the project area is known to have a very high potential for expansive

soils. The presence of expansive soils in areas proposed for construction would be considered a potentially significant impact.

Finding: Compliance with PPP 5-1 through PPP 5-5 would substantially lessen the significant environmental effects to below a level of significance. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: All grading operations and construction will be conducted in conformance with the applicable City of Irvine Grading Code (Municipal Code Title 5, Division 10) and Grading Manual, the most recent version of the California Building Code, and consistent with the recommendations included in the most current geotechnical reports for the project area prepared by the engineer of record (PPP 5-2). Compliance with the City's Grading Ordinance, which requires site-specific geotechnical investigations for new construction, would reduce potential impacts associated with expansive soils to a less than significant level.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.5.

5. Environmental Impact: Cumulative Impacts. As discussed in Section 5.5, no cumulative impacts are expected.**Finding:** Adherence to site-specific geotechnical recommendations and applicable building codes and grading ordinances will reduce potential cumulative geotechnical impacts to a level less than significant. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: The level of seismic activity expected in the project area is similar to the county and other regions of southern California. Most of the soils on the site are well suited for urban development, including construction. On-site impacts related to soils, such as erosion, loss of topsoil, expansive soils, and corrosion, are proposed to be controlled through various Plans, Programs, and Policies identified in PPPs 5-1 through 5-6.

All development at the project site and new development in the region in general will be required to be constructed to withstand probable seismic forces, including seismic-related ground failure like liquefaction. As cumulative projects are constructed, more people and structures will be exposed to seismic hazards. Other geotechnical constraints, such as expansive soils and landslides, may present hazards to cumulative development. Adherence to site-specific geotechnical recommendations and applicable building codes and grading ordinances will reduce potential cumulative geotechnical impacts to a level less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.5.

F. Hazards & Hazardous Materials

1. Environmental Impact: Project construction and/or operations would involve the transport, use, and/or disposal of hazardous materials. As discussed in Section 5.6, according to the Environmental Data Resources report, the routine transport, use, or disposal of hazardous materials for the project associated with redevelopment, demolition activities and future development of facilities may result in a potential significant impact.

Finding: No significant adverse impacts associated transport, use, and/or disposal of hazardous materials are identified. Compliance with existing regulations with respect to hazardous materials abatement, transportation, and management into substantially lessen the significant environmental effects as a result of the Proposed Project to below a level of significance (PPP 6-1 through PPP 6-8). No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Hazardous materials, including but not limited to asbestos containing materials (ACMs), lead-based paint, or petroleum-impacted soil, may be encountered during redevelopment and demolition activities at a project site within the IBC. Other construction activities should involve only minor amounts of hazardous materials or waste, such as oil, grease, and fuels associated with construction equipment. Existing regulations with respect to hazardous materials abatement, transportation, and disposal, including those referenced in PPPs 6-1, 6-2, and 6-4 through 6-8, will be followed during site development and are designed to be protective of human health. According to PDF 6-3, to mitigate any hazardous waste impacts related to the demolition of existing facilities (e.g., transformers or clarifiers), the Director of Community Development, in conjunction with the Orange County Fire Authority, shall include specific project conditions of approval as part of the discretionary review process. Project operations could involve the use of household hazardous materials (e.g., solvents, cleaning agents, paints, pesticides) typical of residential facilities that, when used correctly, would not result in a significant hazard to residents in the Proposed Project area. With adherence to the PPPs and PDFs described previously, no significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous waste/materials is anticipated as a result subsequent development pursuant to the Proposed Project.

Pursuant to the proposed zoning related to residential disclosures, all discretionary applications for residential or residential mixed use shall include a condition of approval for disclosure to residents clearly outlining the issues associated with living in a mixed-use environment (PDF 6-2). Specifically, prior to the issuance of building permits, the applicant shall submit, and the Director of Community Development shall have approved, a completed occupancy disclosure form for the project. The approved disclosure form, along with its attachments, shall be included as part of the rental/lease agreements, part of the sales literature, and part of the CC&Rs for the project. Each resident shall receive a copy of the Safety and Evacuation Plan. The program encourages businesses to provide notification of emergencies and

encourages emergency preparedness as a voluntary supplement to the notification that would be provided by local emergency response services. Taken together, these educational, disclosure, and registration/notification measures will reduce potential impacts of emergency notification and preparation to a less than significant level.

As described in PDF 6-4, the proposed zoning code will require that applicants of new residential and/or residential mixed-use development shall submit data, as determined by the Director of Community Development, for the City to evaluate compatibility with surrounding uses, including hazardous materials handling/storage.

Based on the FIND database query, there are approximately 511 regulated facilities within or in the immediate vicinity of the IBC; of these, 14 are identified as Title V facilities (see Figure 5.6-2 of the RDEIR). There are no public or private K–12 schools in the IBC; therefore, hazardous air emissions are not anticipated to impact schools as a result of project implementation. However, the project would create a mixed residential and industrial environment that may result in compatibility issues when siting residential developments within areas that could be impacted by existing facility emissions. Further evaluation of the toxic and carcinogenic air emissions would be necessary to determine the risk to project occupants. PDF 6-4 would require applicants for new residential and/or residential mixed-use development to submit data to the Director of Community Development to evaluate compatibility with surrounding uses with respect to issues such as air emissions. PDF 6-5 states that for all residential projects located within 1,000 feet of an industrial facility which emits TACs, the Project Applicant shall submit an HRA, prepared in accordance with recognized policies and procedures, to the Community Development Director prior to approval of any tentative tract map.

Although the introduction of residential land use may create a significant impact on future residents from emissions of toxic air pollutants from existing facilities within the IBC, these potential impacts are reduced to a less than significant level through compliance with PPPs 6-1 through 6-7 and PDFs 6-1 and 6-2.

Mitigation Measures: No mitigation is necessary.

Reference: RDEIR § 5.6; Appendix J (Environmental Data Resources Report).

2. Environmental Impact: Various hazardous material sites are located within the Proposed Project area. As discussed in Section 5.6 of the Draft EIR, implementation of the Project may create a significant impact on future residents from hazardous pollutants caused by historic site uses.

Finding: No significant adverse impacts associated hazardous material sites in the IBC Vision Plan area are identified. Compliance with existing regulations with respect to hazardous

materials abatement, transportation, and management into substantially lessen the significant environmental effects as a result of the Proposed Project to below a level of significance (PDF 6-2 through PDF 6-5). No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Based on a review of the Environmental Data Resources database report, the project encompasses an area that includes numerous businesses that have had releases of hazardous substances to the environment and/or are undergoing environmental investigation or remediation. The identified sites include but are not limited to 173 leaking underground storage tank cases, 12 DTSC investigation/remediation cases, and 39 local agency site cleanups.

Future developments within the IBC may be impacted by hazardous substance contamination from historical operations on the project site that may pose a significant health risks. Federal, state, and local regulations referenced in PPPs 6-1, 6-2, and 6-4 through 6-8, establish measures for removing or remediating hazardous materials and wastes that might be encountered during construction. The proposed zoning code requires that applications for new residential and/or residential mixed-use development shall submit data, as determined by the Director of Community Development, for the City to evaluate compatibility with surrounding uses with respect to issues including, but not limited to: noise, odors, truck traffic and deliveries, hazardous materials handling/storage, air emissions, and soil/groundwater contamination. These submittals will include Phase I site assessments, groundwater studies, and other necessary documentation to help determine each project's potential for potentially significant impact from historical releases of hazardous substances to soil and groundwater in the IBC (PDF 6-4).

Individual development sites may have existing facilities, such as transformers or clarifiers, to be demolished as part of a proposed development. To mitigate any hazardous materials-related impacts during the removal of such facilities, the Director of Community Development, in conjunction with OCFA, shall include specific project conditions of approval as part of the discretionary review process for the proposed development (PDF 6-3). Compliance with PPPs 6-1, 6-2, and 6-4 through 6-8, and PDFs 6-2 through 6-4 would reduce these potential impacts a less than significant level.

Mitigation Measures: No mitigation is necessary.

Reference: RDEIR § 5.6; Appendix J (Environmental Data Resources Report).

3. Environmental Impact: The project site is located in the vicinity of John Wayne airport and within the jurisdiction of an Airport Land Use Plan. As discussed in Section 5.6 of the Draft EIR a potentially significant, but mitigable, hazard impact may occur with Project implementation.

Finding: No significant adverse impacts associated aircraft hazards at the John Wayne Airport (JWA) are identified. PDF 6-4 requires applicants for new residential development to assess compatibility of the site with airport-related hazards. In addition, PDF 6-1 and 6-2 require disclosures related to proximity to the JWA. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: As discussed in *California Airport Land Use Planning Handbook*, general aviation aircraft collisions with buildings—and residences in particular—happen infrequently. Given the project’s compliance with the state seismic standards, it is unlikely that the small size of general aviation aircraft would penetrate the structure of any such buildings on-site. As discussed in Section 5.11, *Public Services*, adequate fire protection services are available should an accident occur. In addition, PDF 6-4 was amended in the FEIR to require a compatibility assessment of airport-related hazards. The proposed zoning for the project related to building height limitations, recordation of aviation easements, obstruction lighting and marking, and airport proximity disclosures and signage shall be provided as required by the Orange County Airport Environs Land Use Plan for JWA. Given the requirement for specific review by the Airport Land Use Commission (ALUC) together with the Federal Aviation Administration (FAA) determination and recorded aviation easement, and the proposed zoning for the project related to building height limitations (PDF 6-1), development of the IBC is not expected to result in an inconsistency with the building height limitations set forth under the current civilian airport standards in the Airport Environs Land Use Plan (AELUP).

Pursuant to the proposed zoning related to residential disclosures, all discretionary applications for residential or residential mixed use shall include a condition of approval for disclosure to residents clearly outlining the issues associated with living in a mixed-use environment. The language for this disclosure shall be as specified by the Community Development Director. The disclosure form will contain a Hazardous Substance and Emergency Safety Plan, including a shelter-in-place plan. The approved disclosure form, along with its attachments, shall be included as part of the rental/lease agreements, part of the sales literature, and part of the CC&Rs for the project (PDF 6-2).

Mitigation Measures: No mitigation is necessary.

Reference: RDEIR § 5.6; Appendix J (Environmental Data Resources Report).

4. Environmental Impact: Project development would not affect the implementation of an emergency response or evacuation plan. As discussed in Section 5.6, the Proposed Project is not expected to interfere with the City’s emergency plan and would result in no impact.

Finding: The project will have no substantial adverse impact on any emergency response or evacuation plan. No mitigation is required. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: The City has prepared an Emergency Plan to provide guidance for the City's response to emergency situations such as natural disasters, technological incidents, and national security emergencies. All new development must follow the City's emergency response and evacuation guidelines and be compatible with emergency evacuation routes.

The Proposed Project is not expected to interfere with an adopted emergency response or evacuation plan. Individual project review by both the City's Public Safety Department and OCFA is required (PPP 6-3). The project will incorporate all applicable design and safety requirements as set forth in the Uniform Security Code, Uniform Building Code, Fire Code, and OCFA standards and requirements. Additionally, Knox key switches for emergency vehicles, as required by the Uniform Security Code, will be installed on all gated parking structure entries. Furthermore, all construction activities will be performed per City and OCFA standards and codes, thereby avoiding any interference with emergency response or evacuation plans.

Mitigation Measures: No mitigation is necessary.

Reference: RDEIR § 5.6; Appendix J (Environmental Data Resources Report).

5. Environmental Impact: Cumulative Impacts. No substantial adverse cumulative impacts will result from the Project.

Finding: No substantial adverse cumulative impacts are anticipated from the Project. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Assessment of potential cumulative impacts with regard to hazards and hazardous materials relates to the ability for impacts to occur off-site. The hazardous materials study area considered for cumulative impacts consisted of (1) the area that could be affected by Proposed Project activities, and (2) the areas affected by other projects where activities could directly or indirectly affect the presence or fate of hazardous materials on the Proposed Project site. The contribution of hazardous materials use and hazardous waste disposal with implementation of the project is minimal, and combined hazardous materials effects from past, present, and reasonably foreseeable projects within the City of Irvine will not be significant.

The Proposed Project would not result in an airport-related safety hazard and would not combine with other projects to result in a cumulatively considerable impact with respect to potential airport hazards. As described in PDF 6-1, the proposed zoning for the project related to building height limitations requires recordation of aviation easements, obstruction lighting and

marking, and airport proximity disclosures and signage to be provided, as required by the Orange County ALUP for JWA.

The project is consistent with AELUP and Caltrans standards for health and safety. The proposed buildings are also required to comply with state seismic standards, which are the most restrictive in the country. Furthermore, for the Proposed Project and all other projects in the area to be approved, each project is required to be consistent with the PPPs related to hazards and hazardous materials. Consistency with these plans prevents this and other projects from creating cumulative impacts in terms of hazards and hazardous materials.

Mitigation Measures: No mitigation is necessary.

Reference: RDEIR § 5.6; Appendix J (Environmental Data Resources Report).

G. Hydrology/Water Quality

1. Environmental Impact: Development pursuant to the Proposed Project would not increase the amount of impervious surfaces on the site and would therefore not impact opportunities for groundwater recharge. As discussed in Section 5.7, it is reasonable to assume that the proposed General Plan amendment would not increase the amount of impervious surfaces in IBC, but more likely reduce them, as industrial sites generally have a greater percentage of impervious surfaces in comparison to residential sites. **Finding:** The Project would not increase the amount of impervious surface in a manner which would impact opportunities for groundwater recharge, therefore no significant adverse impacts will occur. PPP 7-1 through PPP 7-4 detail best management practices to reduce water quality and hydrology impacts. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines §15091.

Facts in Support of Finding: The proposed IBC Vision Plan and Overlay Zoning Code plans to incorporate a greater density of Residential – High-Rise Density and Residential – High Density land uses in areas currently zoned for Industrial. It is reasonable to assume that the proposed General Plan amendment will not increase the amount of impervious surfaces in IBC, but more likely reduce them, as industrial sites generally have a greater percentage of impervious surfaces in comparison to residential sites.

As discussed in Section 5.7.1.2 of the RDEIR, groundwater is relatively shallow within portions of the project area, and due to the Types C and D soils, portions of the site may not be conducive to infiltration of runoff. Prior to the issuance of precise grading permits, the applicant shall submit a groundwater survey of the entire site (PPP 7-2). Therefore, redevelopment of the IBC is not anticipated to reduce groundwater recharge opportunities as compared to existing conditions.

Mitigation Measures: No mitigation is needed.

Reference: RDEIR § 5.7; Appendix K (Hydrology and Water Quality Technical Report).

2. Environmental Impact: Development pursuant to the Proposed Project would slightly alter the existing drainage pattern of the site, but would not result in erosion or siltation on- or off-site. As discussed in Section 5.7, the proposed redevelopments would result in minor changes to the existing drainage patterns and peak flows with the minor alterations in impervious surfaces, but in general, the drainage areas, discharge points, and peak flow discharges would be consistent with existing conditions.**Finding:** The Proposed Project would not result in erosion or siltation on or off-site; therefore no significant adverse impacts will occur. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines §15091.

Facts in Support of Finding: Currently, the IBC area is predominantly built out. The majority of the individual projects are the replacement of one structure for another, while recognizing the existing utilities, edge conditions, and drainage facilities. In addition, all runoff from the project site drains into existing MS4 systems and improved channels maintained by the City of Irvine and OCFCD. Lastly, any drainage improvements performed under the individual redevelopment projects will be subject to the design criteria and capacities required by the City of Irvine and OCFCD to control discharges to the existing runoff conditions to reduce any additional impacts. PPP 7-1 would ensure that applicants for new development are subject to the design guidelines and capacities required by the City of Irvine and OCFCD to control discharges to the existing runoff conditions to reduce any additional impacts. Based on the proposed hydrology analysis and flood controls within the project site, erosion and siltation on or off-site are considered less than significant.

Mitigation Measures: No mitigation is needed.

Reference: RDEIR § 5.7; Appendix K (Hydrology and Water Quality Technical Report).

3. Environmental Impact: Development pursuant to the Proposed Project would not increase the amount of impervious surfaces on the site and would therefore not increase surface water flows into drainage systems within the watershed. As discussed in Section 5.7, the proposed General Plan amendment would not appreciably increase the amount of impervious surfaces in IBC, as industrial and commercial sites generally have a greater percentage of impervious surfaces in comparison to residential sites.

Finding: The Project would not increase the amount of impervious surface in a manner which would increase surface water flows on site; therefore no significant adverse impacts will occur. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines §15091.

Facts in Support of Finding: It is reasonable to assume that the Proposed Project will not increase the amount of impervious surfaces in the IBC, as industrial and commercial sites generally have a greater percentage of impervious surfaces in comparison to requirements of the proposed IBC zoning. According to the 1986 Orange County Hydrology Manual, the recommended average values for impervious cover for industrial and commercial land use is 90 percent, and in the IBC, many of the existing commercial and industrial sites appear to have very minimal landscaping and an impervious ratio that actually exceeds 90 percent. The redeveloped IBC zones will have a minimum landscape requirement of 15 percent for residential areas, in addition to landscaping requirements in any new parking lots and park areas. Overall, the Project is not anticipated to increase the amount of imperviousness as compared to existing conditions.

In addition, all individual projects must demonstrate their post-development peak flow runoff rates do not exceed existing condition peak runoff rates pursuant to PPP 7-1. Therefore, the potential impact by the proposed change in impervious surfaces to the IBC is considered less than significant.

Mitigation Measures: No mitigation is needed.

Reference: RDEIR § 5.7; Appendix K (Hydrology and Water Quality Technical Report).

4. Environmental Impact: Portions of the project site proposed for development are located within a 100-year flood hazard area. As discussed in Section 5.7 of the Draft EIR, according to the Flood Insurance Rate Maps (FIRMs) produced for the IBC area, the 100-year floodplain is conveyed within the existing drainage channels and the remainder of the areas are within Zone X, which is defined as areas determined to be outside the 500-year floodplain.

Finding: The Project will have no substantial adverse impact related to flood zones .No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: According to the IBC Master Drainage Study, several portions of the channels were found to be insufficient for containing the 100-year storm flows based on the updated Orange County Hydrology Manual methodologies. The proposed habitable spaces within a SFHA will need to be placed or flood-proofed based on a site-specific analysis for each project. Final elevations will be verified by the City of Irvine. In addition, for areas that are subject to generalized ponding and flooding as indicated in the IBC Master Drainage Study, individual projects must demonstrate that they will not increase the ponding on adjacent properties. This shall be demonstrated by comparing the existing and proposed ponded water volumes stored outside of the building footprints under the water surface (assumed level) in the major facility that the individual project drains to.

As required by PPP 7-1, by designing each project to be elevated or flood-proofed one foot above the anticipated 100-year flood elevation, while maintaining or exceeding the volume of stormwater stored on-site during the 100-year storm event, impacts related to flood zones are considered less than significant.

Mitigation Measures: No mitigation is needed.

Reference: RDEIR § 5.7; Appendix K (Hydrology and Water Quality Technical Report).

5. Environmental Impact: Development pursuant to the Proposed Project would not violate any water quality standards or waste discharge requirements. As discussed in Section 5.7 of the Draft EIR, based on the incorporation of site design/ Low Impact Development (LID) features and BMPs as required under the City LIP and OC DAMP, no significant impact related to water quality and waste discharge is expected to result from the project.

Finding: No substantial adverse impacts to water quality are anticipated. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The IBC Project will not significantly alter hydrologic conditions, and is not anticipated to increase sheet erosion potential. Where individual projects result in an overall decrease in impervious surfaces as compared to existing conditions, the exposed areas would be vegetated and stabilized to reduce erosion potential. Furthermore, Total Suspended Solids (TSS) from impervious areas of the individual projects, such as the paved parking lots and rooftops, would be collected by the local storm drain system and treated by site design/LID, source control and treatment control Best Management Practices (BMPs) for the project per the Orange County Drainage Area Management Plan (OC DAMP) and City Local Implementation Program (LIP) requirements. The majority of LID features and treatment control BMPs available for use, such as storm drain inserts, vegetated swales, and bioretention areas, are considered effective for targeting TSS and other pollutants typically associated with these types of impervious surfaces (see Table 5.7-6 in RDEIR). As a result, it is expected that TSS in runoff would not increase, that water quality standards would not be exceeded, and that beneficial uses would not be adversely affected. Moreover, the applications of these BMPs are designed to reduce TSS in runoff and result in less than significant impacts from TSS in the San Diego Creek and Newport Bay.

The individual projects would implement measures, such as source control measures and treatment BMPs, to minimize the adverse impacts of trash and debris. Source control measures such as periodic sweeping, litter patrol, and storm drain stenciling would be effective in reducing the amount of trash and debris leaving the site. Site design/LID features and treatment control

BMPs also possess moderate to high removal effectiveness for trash and debris. Based on these proposed features, impacts from trash and debris for the IBC are less than significant.

The individual projects as part of the IBC can implement several source control measures to reduce the amount of oil and grease in stormwater from the project sites. Maintenance activities, vehicle and equipment fueling, and waste handling that have the potential to introduce oil- and grease-related compounds will be strictly prohibited in outdoor areas where they could potentially come into contact with rain. In addition, pervious pavements and other LID and treatment control measures are effective at removing oil and grease from stormwater runoff.

Using only native, drought-tolerant species for landscaping purposes minimizes the use of pesticides and uses less irrigation that could potentially run off. Low demand irrigation systems should also be used on-site to ensure minimal runoff from irrigation that has the potential to transport pesticides in runoff. In addition, source control measures—such as provisions against applying pesticides prior to expected rain events and the use of properly certified pesticide workers—are recommended. As a result of these and similar source control measures, it is anticipated that water quality standards for pesticides will not be exceeded, and potential pesticide impacts are less than significant.

The proposed Irvine Business Center Project would not result in increases in metals since the amount of streets and parking would remain similar to existing conditions. In addition, the incorporation of the site design/LID features and treatment control BMPs throughout the individual projects site would provide a means for the settling of metals attached to particulates as well as vegetative uptake of metals. Additional source control measures, such as street and parking lot sweeping, would also reduce the potential for metals to reach the storm drain system. As a result, it is anticipated that water quality standards would not be exceeded, and potential impacts from metals are less than significant.

Based on previous geotechnical investigations performed in the region of the IBC, groundwater may occur at depths ranging from 5 to 10 feet below ground surface (bgs) for portions of the project sites. Since infiltration BMPs, such as pervious pavement and infiltration trenches, require a depth of 10 feet or greater to groundwater to minimize impacts from storm water pollutants, infiltration BMPs are not proposed to serve as primary treatment BMPs for storm water runoff in areas with high groundwater. Any pervious pavement used at these sites will require impermeable linings and underdrain systems to eliminate contact with groundwater and reduce the potential for ponding water on the surface. For sites with greater than 10 feet depth to groundwater, infiltration BMPs may be utilized on-site for water quality treatment. Based on these findings, no pollutants from the IBC are expected to reach groundwater, and groundwater quality impacts are expected to be less than significant.

Dewatering may be required during the construction phase of projects involving subterranean parking to lower the water table at the site of the foundation to make construction

of the foundation possible. Any dewatering would be temporary and would only occur during the construction phase of the project. Before water collected by a dewatering system could be discharged into municipal storm drains, individual projects would be required to obtain a permit pursuant to Order Number 98-67 that the Santa Ana Regional Water Quality Control Board (RWQCB) adopted on July 10, 1998. The requirement to obtain a permit from the RWQCB to allow discharge of water from dewatering operations into storm drains would be incorporated into the Storm Water Pollution Prevention Plan (SWPPP) for the project.

Mitigation Measures: No mitigation is needed.

Reference: RDEIR § 5.7; Appendix K (Hydrology and Water Quality Technical Report).

6. Environmental Impact: During the construction phase of the Proposed Project, there is the potential for short-term unquantifiable increases in pollutant concentrations from the site. After project development, the quality of storm runoff (sediment, nutrients, metals, pesticides, pathogens, and hydrocarbons) may be altered. As discussed in Section 5.7, clearing, grading, excavation, and construction activities associated with the Proposed Projects with the IBC could impact water quality due to sheet erosion of exposed soils and subsequent deposition of particles and pollutants in drainage ways or introduction of construction-related pollutants.

Finding: Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant environmental effect identified in the Draft EIR to below a level of significance. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Under the Statewide General Construction Permit (GCP) (Order 2009-0009-DWQ or subsequent update), the individual project proponents will submit a Notice of Intent (NOI) and associated Permit Registration Documents (PRDs) to the SWRCB prior to commencement of construction activities that disturb 1 acre or greater of soil. In addition, a SWPPP will be prepared and implemented at the project sites, and revised as necessary as administrative or physical conditions change. The SWPPP shall describe construction BMPs meeting the Best Available Technology Economically achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) standards required by the GCP and address pollutant source reduction, and will ensure that water quality standards are not exceeded in downstream receiving waters due to construction activities. These include, but are not limited to erosion controls, sediment controls, tracking controls, non-storm water management, materials & waste management, and good housekeeping practices. The SWPPPs shall be developed in accordance with the construction plans, and shall provide construction BMPs that are to be maintained for the duration of the construction as well as measures that are specific to each phase of construction

Prior to the commencement of any discharges of extracted groundwater waste, the proponents of the individual projects will apply for coverage under Santa Ana RWQCB Order No. R8-2006-0065 for short-term discharges, and Order No. R8-2006-0004 for other dewatering activities, as applicable. Any dewatering activities shall be performed in accordance with the terms and conditions of the applicable Order, and pollutant concentrations in the discharge shall not cause violation of any applicable water quality objectives for the receiving waters, including discharge prohibitions. Implementation of the appropriate BMPs per the GCP will result in less than significant impacts to surface water quality and groundwater quality during the construction phase of the project sites.

Mitigation Measures: No mitigation is needed.

Reference: RDEIR § 5.7; Appendix K (Hydrology and Water Quality Technical Report).

7. Environmental Impact: Cumulative Impacts. As discussed in Section 5.7, the cumulative impacts related to hydrology would be less than significant.

Finding: Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant environmental effect identified in the Draft EIR to below a level of significance. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The proposed redevelopments would result in minor changes to the existing drainage patterns and peak flows with minor alterations in impervious surfaces, but in general, the drainage areas, discharge points, and peak flow discharges will be consistent with existing conditions. Any drainage improvements performed under the individual redevelopment projects would be subject to the design criteria and capacities required by the City of Irvine and Orange County Flood Control District (OCFCD) to correct any deficiencies identified in the existing conditions. Additionally, individual projects would have to submit a Water Quality Management Plan (WQMP) that would identify BMPs that will be used on the site to control predictable pollutant runoff.

Additionally, cumulative flows would be evaluated and addressed in terms of the Flood Control Master Plan, which is specifically intended and designed to define the flood control system necessary to accommodate runoff from future area wide development. As such, the cumulative impacts related to hydrology would be less than significant.

Mitigation Measures: No mitigation is needed.

Reference: RDEIR § 5.7; Appendix K (Hydrology and Water Quality Technical Report).

H. Land Use/Planning

1. Environmental Impact: the Proposed Project would not divide an established community. As discussed in Section 5.8, the Proposed Project would also decrease nonresidential square footage in the IBC and allow the development of nonindustrial uses, which is generally consistent with the existing and evolving mixed-use nature of the IBC area. However, given the original industrial, office, and commercial nature of the IBC area, the transition to residential land uses could potentially divide the existing industrial communities.

Finding: The Proposed Project would not divide an established community. PDF 8-1 through 8-2 would ensure applications for new development are assessed for compatibility with the existing environment. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines §15091.

Facts in Support of Finding: The IBC Mixed Use Overlay Zone would create two distinct districts, the Urban Neighborhood and Business Complex. As outlined in the IBC Vision Plan, residential uses would be limited to the Urban Neighborhood Districts. The Business Complex District would be applied to portions of the IBC characterized by existing longstanding industrial and other commercial uses that are expected to remain nonresidential business cores. This district prohibits residential land uses, accommodates new industrial and other commercial uses, and protects existing commercial and industrial uses that wish to remain and possibly expand.

Additionally, the City has evaluated impacts to the public health, safety, and welfare of sensitive receptors and land uses associated with locating residential uses in the IBC. As discussed in detail in Section 5.6, *Hazards and Hazardous Materials*, several environmental reports were prepared and evaluated, specific to the conditions associated with the project area, including a detailed Environmental Data Resource list and a Facility Information Detail Database search. Section 5.2, *Air Quality*, also evaluates land use compatibility with respect to air quality. As described in PDF 8-2, 2-1, 2-2, 2-4, and 2-5, residential development projects are subject to land use compatibility provisions outlined in the IBC Vision Plan and Overlay Zoning Code.

The pending residential development projects outlined in Chapter 3, *Project Description*, are in the land use parameters of the IBC Vision Plan and Overlay Zoning Code; therefore, such projects would not have any additional impact on land use beyond that discussed in the broader context of the IBC Vision Plan and Overlay Zoning Code.

Mitigation Measures: No mitigation is needed.

Reference: RDEIR § 5.8; City of Irvine General Plan.

2. Environmental Impact: Project implementation could potentially be in conflict with an applicable adopted land use plan.

Finding: Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects to below a level of significance. However, if ALUC determines that the Proposed Project as revised, or potential future projects are not found to be consistent with the AELUP, and the Irvine City Council disagrees and overrides this finding by a two-thirds vote, a significant unavoidable adverse impact would result. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: The current General Plan allows for 53,125,389 square feet of overall nonresidential in Planning Area 36, which may vary according to the totals of individual land uses over time. The total of 5,985 additional new dwelling units (either potential or in process) remaining under the 15,000-unit cap would be offset by a reduction of 4,337,727 square feet of office equivalency. With the additional nonresidential land use optimization discussed in this RDEIR, the overall non-residential intensity in the General Plan would be 48,787,662 square feet, with the reduction resulting primarily from the conversion of higher quantities of older industrial square footage to lower quantities of office square footage. Construction of the 1,892 dwelling units in process, along with the pending and approved nonresidential projects outlined in Table 3-1, is assumed to be completed by 2015. The remaining 3,950 potential units, along with the proposed nonresidential land use optimization, would be completed at City buildout, post-2030.

A detailed analysis of the Proposed Project's consistency with the applicable goals and policies of the various elements of the Irvine General Plan is provided in Table 5.8-1, *General Plan Consistency Analysis*. The analysis in Table 5.8-1 concludes that the Proposed Project would be consistent with the applicable goals and policies of the Irvine General Plan.

Additionally, the pending residential development projects outlined in Chapter 3, *Project Description*, are within the land use parameters of the IBC Vision Plan and Overlay Zoning Code; therefore, such projects would not have a significant impact on land use. The increase in the maximum number of residential units in the IBC, along with the corresponding reduction in nonresidential square footage, would not be detrimental to the public health, safety, or welfare. The introduction of residential uses into the mixed-use master plan area is anticipated to reduce overall peak-hour vehicle trips and would benefit the public by dispersing traffic to alternate hours. In accordance with General Plan Objective A-6(b), a traffic study was prepared (see Appendix N in the RDEIR) and is detailed in Section 5.13, *Transportation and Traffic*.

The IBC currently consists of four zoning designations, which include 5.0 IBC Mixed Use, 5.1 IBC Multi-Use, 5.2 IBC Industrial, and 5.3 (including 5.3 A–D for specific sites) IBC Residential. The Proposed Project includes a Zoning Ordinance Amendment. More specifically, the Zoning Ordinance Amendment would add new Chapter 5-8 to the City's Zoning Ordinance

to adopt the IBC Mixed Use Overlay Zone, which would define regulatory zoning districts for properties in the IBC, and outline criteria for evaluating compatibility of residential development with adjacent businesses. The amendment would also revise the statistical analysis outlined in Section 9-36-5, *Statistical Analysis*, of the City's Zoning Ordinance, to establish a residential cap of 15,000 dwelling units for the IBC area (excluding density bonus units pursuant to state law), with an offsetting reduction of nonresidential office equivalency square footage, for units under the cap not yet approved, consistent with the proposed General Plan Amendment. Furthermore, the amendment would also update the Chapter 9-36, *Planning Area 36 (Irvine Business Complex)*, provisions regarding the IBC traffic mitigation fee program. Adoption of the Zoning Ordinance Amendment would help maintain consistency with and carry out the goals, objectives, and policies of the Irvine General Plan and the City's vision for the future of the IBC.

The University of California – Irvine (UCI) owns and operates a property along the east side of Jamboree Road between Campus Drive and Fairchild Road, adjacent to the IBC. According to the UCI 2007 Long Range Development Plan (LRDP), the site, known as North Campus—which is currently occupied by academic and support facilities, an arboretum, and a child development center—is planned to be redeveloped with up to 950,000 square feet of office/research space and 455 multifamily dwelling units by the year 2036. The land use, circulation, and other development-related assumptions of the LRDP have been included in the IBC Vision Plan analysis, including the importance of the North Campus serving as a gateway between the City of Irvine and the UCI campus. Therefore, the Proposed Project would not significantly impact UCI's ability to implement the LRDP, including the North Campus development plan.

The 2008 Southern California Association of Governments (SCAG) Regional Comprehensive Plan (RCP) is an advisory document to local agencies in the Southern California region for their information and voluntary use while preparing local plans and handling local issues of regional significance. Table 5.8-2 provides an assessment of the Proposed Project's relationship to advisory and voluntary policies contained in various chapters of SCAG's RCP. The analysis contained in Table 5.8-2 concludes that the Proposed Project would be consistent with the advisory and voluntary RCP policies. Therefore, implementation of the Proposed Project would not result in significant land use impacts related to the RCP policies.

Based on this review and Section 5.6 of the RDEIR, the ALUC determined that the Proposed Project was consistent with AELUP and Caltrans' health and safety standards on June 17, 2010.

Mitigation Measures: No mitigation is needed.

Reference: City of Irvine General Plan; Regional Comprehensive Plan and Guide; Airport Environs Land Use Plan.

3. Cumulative Impacts: As stated in Section 5.8, cumulative impacts to land use and planning are not considered significant.

Finding: The Proposed Project would not result in cumulative impacts to land use and planning. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines §15091.

Facts in Support of Finding: The Proposed Project evaluated in this RDEIR would help maintain consistency with and carry out the goals, objectives, and policies of the Irvine General Plan and with the City's vision for the future of the IBC. The Proposed Project would also meet previous City actions by locating high-density urban housing in areas of the IBC that have recently had several parcels converted, or approved for conversion, to residential and mixed uses. After construction of the recently approved developments throughout the various areas of the IBC, the future residential and mixed-use development projects in accordance with the IBC Vision Plan would be some of several throughout the IBC. In addition, a host of existing jobs, restaurants, retail, and other support services and uses would be within walking distance of many of the future residential projects. Therefore, future conversion of nonresidential sites to residential and mixed use would create a cohesive neighborhood of high-density residential uses, thereby contributing to the development of a sustainable urban neighborhood. Furthermore, the General Plan Amendment component of the Proposed Project would establish a cap of 15,000 dwelling units for the IBC area (excluding density bonus units pursuant to state law), with an offsetting reduction of nonresidential office equivalency square footage.

Cumulative intensification of various land uses in the IBC has the potential to result in land use compatibility impacts related to hazards/hazardous materials, air quality, noise, and traffic. In light of the mixed-use nature of the IBC, each residential development application in the IBC is reviewed by the City of Irvine and other agencies, such as OCFA, the Irvine Police Department, and ALUC (when deemed necessary), for compatibility with surrounding land uses. Land use compatibility is determined after a complete evaluation of potential land use conflicts. Cumulatively, placing additional residential projects in the IBC after a land use compatibility analysis, as is the current practice, would provide needed housing in the IBC while still retaining the mature industrial development and its associated job base. As a result, cumulative impacts to land use and planning are not considered significant.

Mitigation Measures: No mitigation is needed.

Reference: RDEIR § 5.8; City of Irvine General Plan.

I. Noise

1. Environmental Impact: Construction activities could result in temporary noise increases in the vicinity of the Proposed Project. Construction of individual developments associated with buildout of the IBC would temporally increase the ambient noise environment. Temporary or short-term noise impacts from project construction will be generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators. Peak noise levels from construction equipment could reach 71-89 dBA at a distance of 50 feet. Noise impacts adjacent to residential uses have the greatest potential for being significant.

Finding: Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant environmental effect identified in the Draft EIR to below a level of significance. PPP 9-1 and PDF 9-2 would reduce construction-related noise to the extent feasible. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091. The Project is therefore expected to have a significant adverse impact because construction activities associated with any individual development may occur near noise-sensitive receptors and noise disturbances may occur for prolonged periods of time. The City finds that there are no other feasible mitigation measures that will mitigate the impact to an insignificant level, and that specific economic, social, technological or other considerations make infeasible the alternatives identified in the Draft EIR, as discussed in Section VII of these Findings. As described in the Statement of Overriding Considerations (Section XI of these Findings), the City has determined that this impact is acceptable because of specific overriding considerations. Cal. Pub. Res. Code § 21081(a)(1), (3); CEQA Guidelines § 15091(a)(1), (3).

Facts in Support of Finding: Short-term construction noise impacts are expected from with demolition, site preparation, grading, and building construction of the proposed land uses. According to a 1971 study by Bolt, Beranek, and Newman, construction noise for development ranges from 71 to 89 dBA L_{eq} when measured at a distance of 50 feet from the construction effort. Construction of individual developments associated with buildout of the IBC would temporally increase the ambient noise environment. However, the City of Irvine restricts the hours of construction activities to the least noise-sensitive portions of the day. Trucks, vehicles, and equipment that are making or involved with deliveries, loading, or transfer of materials, equipment service, or maintenance of any devices or appurtenances for or within any construction project in the City are also subject to these prohibitions. Compliance with PPP 9-1 and PDF 9-2 would reduce impacts associated with construction noise by requiring that activities be limited to the hours set forth in the City of Irvine Municipal Code and that stationary-source equipment be placed as far as feasible from adjacent noise-sensitive land uses. However, construction activities may occur near noise-sensitive receptors and noise disturbances may occur for prolonged periods of time. Therefore, construction noise impacts from buildout of the IBC are considered potentially significant.

Mitigation Measures: No feasible mitigation measures are available.

Reference: RDEIR § 5.9; Noise Modeling Data Sheets prepared by The Planning Center (Appendix L).

2. Environmental Impact: Construction of the Proposed Project may generate perceptible levels of vibration at adjacent vibration-sensitive land uses. Construction operations can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Vibration generated by construction equipment has the potential to be substantial for both vibration annoyance and structural if it occurs proximate to vibration-sensitive uses. Therefore, significant vibration impacts may occur from construction equipment associated with new development within the IBC, especially if vibration-intensive equipment, such as pile drivers, is required. **Finding:** Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant environmental effect identified in the Draft EIR to below a level of significance. PPP 9-1 and PDFs 9-1 and 9-2 would reduce construction related vibration to the extent feasible. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091. The Project is therefore expected to have a significant adverse impact because construction activities associated with any individual development may occur near vibration-sensitive land uses. The City finds that there are no other feasible mitigation measures that will mitigate the impact to an insignificant level, and that specific economic, social, technological or other considerations make infeasible the alternatives identified in the Draft EIR, as discussed in Section VII of these Findings. As described in the Statement of Overriding Considerations (Section XI of these Findings), the City has determined that this impact is acceptable because of specific overriding considerations. Cal. Pub. Res. Code § 21081(a)(1), (3); CEQA Guidelines § 15091(a)(1), (3).

Facts in Support of Finding: Vibration generated by construction equipment has the potential to be substantial for both vibration annoyance and structural if it occurs proximate to vibration-sensitive uses. Compliance with PPP 9-1 and PDF 9-2 would reduce impacts associated with perceptible levels of vibration annoyance by requiring that activities be limited to the hours set forth in the City of Irvine Municipal Code and that stationary-source equipment be placed as far as feasible from adjacent vibration-sensitive land uses. In addition, PDF 9-1 would ensure that less vibration-intensive equipment or construction techniques are used. Because of the potential for construction activities to occur in close proximity to vibration-sensitive uses and structures, vibration generated by the project could result in a significant impact. Significant vibration impacts may occur from construction equipment associated with new development within the IBC, especially if vibration-intensive equipment, such as pile drivers, is required. Impacts are considered potentially significant.

Mitigation Measures: No feasible mitigation measures are available..

Reference: RDEIR § 5.9; Noise Modeling Data Sheets prepared by The Planning Center (Appendix L).

3. Environmental Impact: Project-related vehicle trips would substantially increase ambient noise at noise-sensitive receptors in the vicinity of the project site on McGaw Avenue between Jamboree Road and Murphy Avenue and cumulatively on Valencia Avenue between Newport Avenue and Red Hill Avenue, Warner Avenue between SR-55 and Red Hill Avenue, McGaw Avenue between Jamboree Road and Murphy Avenue, and Birch Street between Mesa Drive and Bristol Street. Long-term operation of the project could substantially increase noise levels in the vicinity of the IBC Vision Plan area from mobile sources.

Finding: The Project is expected to have a significant adverse impact because the traffic growth in the IBC would generate traffic volumes that would noticeably increase ambient noise levels. The City finds that there are no feasible mitigation measures that will mitigate the impact to an insignificant level, and that specific economic, social, technological or other considerations make infeasible the alternatives identified in the Draft EIR, as discussed in Section VII of these Findings. As described in the Statement of Overriding Considerations (Section XI of these Findings), the City has determined that this impact is acceptable because of specific overriding considerations. Cal. Pub. Res. Code § 21081(a)(1), (3); CEQA Guidelines § 15091(a)(1), (3).

Facts in Support of Finding: Traffic noise modeling was conducted for interim year 2015 and post-year 2030 using the FHWA's Highway Traffic Noise Prediction model (FHWA RD-77-108) using a standard vehicle mix for Orange County roadways based on fleet mix for State Route 55 (Caltrans 2009). Under the 2015 scenarios (interim year), maximum noise-level increases on local roadways due to the project would be minimal, 1.3 dBA CNEL or less. Increases in traffic levels solely from traffic volumes generated by the project would not result in a substantial noise increase along roadways in the project vicinity at year 2015. However, at full buildout, post-2030 traffic volumes would generate up to 3.3 dBA CNEL. Because the traffic growth in the IBC would generate traffic volumes on this roadway segment that would noticeably increase ambient noise levels, traffic noise impacts are considered significant for segments adjacent to noise-sensitive land uses.

Mitigation Measures: No feasible mitigation measures are available.

Reference: RDEIR § 5.9; Noise Modeling Data Sheets prepared by The Planning Center (Appendix L).

4. Environmental Impact: Stationary-source noise generated by land uses within the IBC would comply with the City of Irvine Municipal Code and would not substantially elevate the ambient noise environment. Buildout of the IBC would result in an increase in residential and commercial development in the City. The primary noise sources from these land uses include landscaping, maintenance activities, and air conditioning systems. In addition, future commercial uses may include loading docks. However, stationary-source noise is regulated by the City of Irvine through the City's Municipal Code.

Finding: The Project would comply with the City of Irvine Municipal Code; therefore no substantial adverse impacts will occur. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The City of Irvine requires that noise from new stationary sources within the City comply with the City's Noise Ordinance, which limits the acceptable noise at the property line of the impacted use, to reduce nuisances to sensitive land uses. To achieve the noise standards of the Municipal Code, HVAC systems and other equipment would be selected based on their noise rating or would be acoustically engineered with mufflers and barriers to ensure that no exceedance of the City's noise standards would occur. Maintenance activities and use of leaf blowers are restricted to the least noise-sensitive portions of the day.

The parking lots associated with the new high density residential development would generate noise. However, in order to accommodate the growth associated with buildout of the IBC, the majority of parking spaces for the new residential structures would be in subterranean parking garages or in structures surrounded by residential units. The building structure would serve as a barrier and attenuate noise from the majority of parking lot activities. Consequently, impacts noise from the parking area would not be substantial and no significant impacts would occur.

Noise levels from actual unloading and loading activities would be minimal, as the truck interior would be shielded from the exterior environment and unloading and loading activities would occur in the interior of the building after the truck is docked. Commercial deliveries or pickups for commercial properties that share a property line with any residential property are required to limit the hours of delivery/pick-up service to the hours of 7:00 AM and 10:00 PM daily. Moreover, commercial trucks are also prohibited from idling more than five minutes under the CARB's In-Use Idling Airborne Toxic Control Measure. Consequently, impacts from these activities would be less than significant.

Mitigation Measures: No mitigation measures are required.

Reference: RDEIR § 5.9; Noise Modeling Data Sheets prepared by The Planning Center (Appendix L).

5. Environmental Impact: Sensitive land uses could be exposed to noise levels that exceed 65 dBA CNEL from transportation or stationary sources. An impact could be significant if the new residential developments are in areas that exceed the noise compatibility criteria of the City. While interior areas can be mitigated to achieve acceptable interior noise levels, it may not be possible to achieve the noise compatibility criteria for noise-sensitive exterior areas.

Finding: New noise-sensitive outdoors areas may exceed the City's noise compatibility criteria. PPP 9-2 requires an acoustic report, detailing mitigation measures to be implemented for

future noise-sensitive development. PDF 9-3 requires occupancy disclosures for outdoor areas that exceed 65 dBA CNEL. The City finds that there are no additional feasible mitigation measures that will mitigate the impact to an insignificant level, and that specific economic, social, technological or other considerations make infeasible the alternatives identified in the Draft EIR, as discussed in Section VII of these Findings. As described in the Statement of Overriding Considerations (Section XI of these Findings), the City has determined that this impact is acceptable because of specific overriding considerations. Cal. Pub. Res. Code § 21081(a)(1), (3); CEQA Guidelines § 15091(a)(1), (3).

Facts in Support of Finding: The exact locations of residential developments and active recreational areas have not yet been determined and therefore specific impacts cannot be ascertained. However, roadways would generate noise levels above 65 dBA CNEL in the vicinity of the Proposed Project area. In addition, because many of the existing uses in the IBC are commercial and industrial, placement of a noise-sensitive development in the vicinity of existing sources of stationary noise (e.g., warehousing truck distribution centers, emergency generators, and other sources of mechanical or truck idling noise) may be potentially significant. Any siting of new noise-sensitive land uses (e.g., residential or noise-sensitive outdoor areas, such as tot-lots, swimming pools, or athletic fields) within a noise environment that exceeds the normally acceptable land use compatibility criterion creates a potentially significant impact and would require a separate noise study through the development review process to determine the level of impacts and required mitigation.

PPP 9-2 requires that an acoustic study be prepared to achieve the City of Irvine's exterior noise standards. While interior noise levels are required to achieve the interior noise limits of 45 dBA CNEL for residential structures and 55 dBA CNEL for commercial structures, exterior noise levels at noise-sensitive land uses (e.g., residential or noise-sensitive outdoor areas such as tot-lots, swimming pools, or athletic fields) may continue to exceed the 65 dBA CNEL noise compatibility criterion for the City despite exterior noise attenuation (i.e., walls and/or berms). PDF 9-3 requires that occupancy disclosure notices are provided to tenants for units with patios and/or balconies that do not meet the 65 dBA CNEL. Because noise-sensitive land uses could be exposed to noise levels that exceed 65 dBA CNEL, impacts would be potentially significant.

Pursuant to the California Building Code, noise-sensitive habitable rooms would be required to be designed to achieve an interior noise standard of 45 dBA CNEL. PPP 9-2 requires that an acoustic study be prepared to achieve the City of Irvine's interior noise standards to ensure no significant impacts would occur.

Mitigation Measures: No mitigation measures are required.

Reference: RDEIR § 5.9; Noise Modeling Data Sheets prepared by The Planning Center (Appendix L).

6. Environmental Impact: Noise-sensitive habitable rooms in structures within the 60 dBA CNEL noise contour of the John Wayne Airport would be exposed to substantial levels of airport-related noise. Indoor and exterior environments would be exposed to elevated noise levels from aircraft overflights. However, no noise-sensitive residential developments would be located within the 65 dBA CNEL contour of the airport. Consequently, with PDF 9-4 and PPP 9-2, noise generated by aircraft overflights would not generate noise levels that exceed 45 dBA CNEL in habitable rooms and impacts would be less than significant.

Finding: The Proposed Project would expose noise-sensitive land uses to excessive aircraft noise levels. PPP 9-2 and PDF 9-3 through 9-4 would ensure applications for new development are compatibility with the existing noise environment generated by aircraft overflights. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines §15091.

Facts in Support of Finding: Sensitive areas in an airport noise environment that exceeds 65 dBA CNEL would be required to conduct a noise assessment and mitigate, as feasible, to achieve an exterior noise environment of 65 dBA CNEL. Under the Proposed Project, development of residential and noise-sensitive recreational uses would be limited to the Multi Use and Urban Neighborhood Districts. The Multi-Use and Urban Neighborhood Districts would not fall within the 65 dBA CNEL noise contour for the JWA. However, portions of these districts would fall within the 60 dBA CNEL noise contour for the airport. Residents and other noise-sensitive receptors (e.g., parks) located within the 60 dBA CNEL noise contour would not be exposed to excessive exterior noise levels from operations of the JWA because exterior noise levels would not exceed 65 dBA CNEL, which is the City's land use compatibility criteria.

Interior noise levels are required to achieve the interior noise limits of 45 dBA CNEL and 55 dBA $L_{max}(10)$ for residential structures (PDF 9-4 and PPP 9-2) and 55 dBA CNEL (PPP 9-2) for commercial structures. No noise-sensitive residential developments would be located within the 65 dBA CNEL contour of the airport. Consequently, with PDF 9-4 and PPP 9-2, noise generated by aircraft overflights would not generate noise levels that exceed 45 dBA CNEL in habitable rooms and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Reference: RDEIR § 5.9; Noise Modeling Data Sheets prepared by The Planning Center (Appendix L).

7. Cumulative Impacts: The project would not cumulatively contribute to stationary-source noise impacts, however, the project would cumulatively contribute to mobile source noise and construction noise and vibration.

Finding: The Project is expected to have a significant adverse impact because the traffic growth in the IBC would generate traffic volumes that would noticeably increase ambient noise

levels. Additionally, the Project is therefore expected to have a significant adverse impact because construction activities associated with any individual development may occur near noise-sensitive receptors and noise disturbances may occur for prolonged periods of time and may occur near vibration-sensitive land uses. The City finds that there are no feasible mitigation measures that will mitigate the impact to an insignificant level, and that specific economic, social, technological or other considerations make infeasible the alternatives identified in the Draft EIR, as discussed in Section VII of these Findings. As described in the Statement of Overriding Considerations (Section XI of these Findings), the City has determined that this impact is acceptable because of specific overriding considerations. Cal. Pub. Res. Code § 21081(a)(1), (3); CEQA Guidelines § 15091(a)(1), (3).

Facts in Support of Finding: Traffic noise increases on local roadways in the vicinity of the project site were shown in Tables 5.9-10 and 5.9-11. The increase in traffic noise from the existing noise environment for year 2015 and post-2030 scenarios is cumulative noise increases, whereas the increase from the 2015 or 2030 baseline is the project's contribution to cumulative noise increases. Project-related cumulative noise impacts may occur if the project contributes (0.1 dBA or more) to substantial (3 dBA or more) cumulative noise increases. As shown in the tables in the RDEIR, the project would cumulatively contribute to substantial increases on four roadway segments.

Unlike transportation noise, whose effects can extend well beyond the limits of the project site, stationary-source noise generated by the project is limited to impacts to sensitive receptors adjacent to the project site. However, no significant impacts were identified, as stationary-source noise is regulated by the City of Irvine through the City's Municipal Code. Furthermore, stationary sources are not substantial sources of ambient noise because the predominant noise source in the IBC is traffic on major roadways. Consequently, the project would not cumulatively contribute to stationary-source noise impacts.

Like stationary-source noise, cumulative construction noise and vibration impacts are confined to a localized area. Consequently, cumulative impacts would only occur if other projects are being constructed in the vicinity of the project at the same time as the project. Consequently, project-related construction noise and vibration added to construction noise and vibration from nearby development activities would substantially increase the ambient noise environment or generate perceptible levels of vibration. Cumulative impacts are therefore also considered significant.

Mitigation Measures: No mitigation measures are required.

Reference: RDEIR § 5.9; Noise Modeling Data Sheets prepared by The Planning Center (Appendix L).

J. Population/Housing

1. Environmental Impact: The Proposed Project would directly result in population and employment growth in the project area. The Project would have a direct impact on employment, population and housing. The Project would directly induce substantial population growth in the area by proposing a General Plan Amendment to increase the residential intensity cap in the IBC from 9,015 residential units to 15,000 units, excluding density bonus units. The project will potentially add 7,583 residential units, including pending residential units and density bonus units, as detailed in Section 3, Project Description. The remaining nonresidential buildout potential would be 6,016,662 square feet, for a total of 48,787,662 square feet of nonresidential square footage in the IBC at buildout. No housing or population will be displaced, either directly or indirectly, by the Project.

Finding: Compliance with the City's Housing Element policies would avoid or substantially lessen the significant environmental effects related to population and housing to below a level of significance. New residential development would comply with the City's housing requirements (PPP 10-1). No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Currently the General Plan and Zoning Cap will allow for 12,292 residents and the Proposed Project would allow for an additional 9,858 residents in the IBC based on Irvine's population growth standard, totaling 15,635 additional residents over the existing population in the IBC. The project accounts for 11.3 percent of the OCP-2006 projection of the City's population increase from 2003 to 2035 and 1.5 percent of the County's projected increase from 2003 to 2035.

According to Table A-3 in the Land Use Element of the General Plan, it is estimated that 1.9 employees per thousand square feet will be generated for office and industrial and 2.0 employees per thousand square feet for commercial land uses. As shown on Table 5.10-5 in the RDEIR, the project would allow for an additional 6,016,662 square feet of nonresidential development, generating approximately 12,033 additional jobs in the IBC compared to existing conditions.

Orange County Projections (OCP) OCP-2006 projects that the County's jobs/housing balance will diminish from 1.59 jobs per household in 2005 to 1.72 in 2035. However, the Proposed Project would increase housing in the county by 7,583 units and reduce jobs by 8,675 employees compared to OCP-2006. As a result, the Proposed Project will improve the County's jobs/housing balance from 1.72 to 1.70 in 2035. As a result, the Proposed Project would lessen the degree to which the County is jobs-rich.

The project is consistent with the overall Compass 2% Strategy in that it directs additional housing and mixed-use opportunities to the jobs-rich Orange County Subregion. The

Proposed Project would increase livability by allowing for more infill development in the existing commercial district and higher density housing opportunities in the City's major commercial/industrial area and near major City corridors. In addition, the Proposed Project would focus future development in one of the City's commercial districts away from environmentally sensitive open space. The Proposed Project is consistent with SCAG's proposed implementation of the Compass 2% Strategy in that it promotes mobility by allowing new housing within easy walking or bicycling distance to jobs in one of the City's commercial districts.

The Proposed Project responds to City policies that encourage a balance of housing and job opportunities and local and regional plans and policies in a manner that responds to the most prominent need, which is to develop more housing opportunities at higher densities in close proximity to existing employment.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.10.

2. Environmental Impacts: Cumulative Impacts. As discussed in Section 5.10 of the Draft EIR, the Project has no significant cumulative impacts on population and housing.

Finding: The Project will result in no substantial cumulative adverse impact related to population and housing. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: At buildout, a total of 17,038 residential units are projected for the IBC, generating a total of 22,149 residents. The Proposed Project will allow for an additional 6,016,662 square feet of nonresidential square footage resulting in an additional 12,033 jobs above what already exists in the IBC. OCP-2006 projects that the City of Irvine in 2035 will have a population of 269,802; 97,390 housing units; and 341,977 jobs. The project improves the County's jobs/housing balance from 1.72 to 1.70, and provides jobs near existing and planned employment concentrations.

The Proposed Project increases the cumulative total of housing units and associated population approved in the City. In doing so, the project's cumulative housing and population impact provides benefits for the jobs/housing ratio, regional housing goals that promote housing production in jobs-rich areas, regional growth policies that encourage housing production in the Irvine Business Center, City Housing Element goals regarding workforce housing, and state-mandated fair share housing programs. Therefore, the cumulative housing impact with the Proposed Project is not a significant cumulative impact.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.10.

K. Public Services

1. Environmental Impact: The Proposed Project would introduce new structures, residents, and workers into the orange county fire authority service boundaries, thereby increasing the requirement for fire protection facilities and personnel. As discussed in Section 5.12 of the Draft EIR, the proposed development is fully covered by the Secured Fire Protection Services Agreement (“SFPSA”) and the future facilities and resources provided for in the SFPSA would adequately meet the increase in the demand associated with the proposed development. The Project’s impact on fire protection services would be less than significant.

Finding: Under the Secured Fire Protection Services Agreement, the Project will have no substantial adverse impacts to fire services. PPP 11-1 through 11-4 and PDF 11-1 would reduce impacts to fire services. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Orange County Fire Authority (OCFA) has indicated the area in the western region of the project area is outside the response time projection; therefore, a new station is required to service the area west of Jamboree road by Fairfield Road and north of Campus. However, all projects within the IBC must enter into a Secured Fire Protection Agreement as fair-share mitigation to offset the cost of a new station and the equipment to serve the area. This agreement specifies the developer’s pro-rata fair-share funding of capital improvements that is necessary to establish adequate fire protection facilities, equipment, and personnel. During entitlement, the developer must enter into the agreement, typically on a project-specific basis. The Secured Fire Protection Services Agreement is not related to the provision of an adequate tax base directed to the Structural Fire Fund to offset short and long range costs, but rather to mitigating the impact of a project on OCFA as it impacts capital and infrastructure needs.

Funds have been and will be collected and saved in a Capital Improvement Plan until OCFA constructs a new station. OCFA estimates construction of the IBC station in the 2012–2013 fiscal year. Therefore, the future fire station will be provided for in the Secured Fire Protection Services Agreement and would adequately meet the increase in the demand associated with the Proposed Project.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.11; Appendix M.

2. Environmental Impacts: Cumulative Impacts (Fire Services). As discussed in Section 5.11 of the Draft EIR, the project is fully covered by the Secured Fire Protection

Services Agreement (“SFPSA”) and the future facilities and resources provided for in the SFPSA would adequately meet the increase in the demand associated with the proposed development. No significant impacts related to Fire Protection Services are expected to result from the Project.

Finding: The Project will have no substantial adverse cumulative impacts on fire services. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: As described in Section 5.11 of the Draft EIR, the Secured Fire Protection Services Agreement (SFPSA) addresses fire service needs for new development within the City. Compliance with the agreement, including the construction of a new fire station for the IBC, will ensure that performance objectives for fire protection are met and provide funding for any capital improvements necessary to maintain adequate fire protection facilities, equipment, and/or personnel. In addition, compliance with the PPPs and PDFs would ensure adequate access within the project area, which further ensures the adequate provision of fire protection and emergency services to residents in the project area. Therefore, the project’s increased demand for fire protection services would not result in significant cumulative impacts.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.11; Appendix M.

3. Environmental Impact: The Proposed Project would introduce new structures, residents, and workers into the Irvine police department service boundaries, thereby increasing the requirement for police protection facilities and personnel. As discussed in Section 5.11, additional residential units and retail uses within the project area will increase the demand for police officers and nonsworn support personnel and would potentially create a significant impact.

Finding: With implementation of existing PPP 11-5 requiring compliance with the Uniform Security Code, PPPs 11-1 through 11-4, PDF 11-1, and PDF 11-2 pertaining to provisions of security features, the impacts of the Proposed Project related to law enforcement would be less than significant.

Facts in Support of Finding: Based on the potential for 7,583 dwelling units (including pending units, potential new units, and potential density bonus units) beyond what currently exists in the IBC, an additional 13 police officers and 5 nonsworn support personnel would be required. This demand for additional personnel and associated equipment would be provided through the continued implementation of the City’s Strategic Business Plan and Budgeting process. Through this process, police department needs are assessed and budget allocations are revised accordingly to ensure that adequate levels of services are maintained throughout the City. Compliance with the Uniform Security Code required by PPP 11-5 would contribute to reducing calls for police services. Provision of the Opticom traffic light control (PDF 11-1) and

Click2enter remote control access through pedestrian and vehicle security gates (PPP 11-4) would improve response times within the project area. Therefore, the impact is not significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.11; Appendix M.

4. Environmental Impact: Cumulative Impacts (Police Services). As discussed in Section 5.11 of the Draft EIR, no significant cumulative impacts related to police services are anticipated.

Finding: The Project will have no substantial adverse impacts on police services. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.58

Facts in Support of Finding: As described in Section 5.11 of the Draft EIR, a total of 17,038 residential units are projected for the IBC at buildout, which is expected to increase demand for police services and would contribute to the need to expand facilities. The long-term plans and provisions for police services, based on General Plan land use designations, would not be adversely affected by the project.. As described above, existing and planned provisions for adequate levels of police services and corresponding budget allocations will serve to avoid significant impacts due to Project demands. No significant cumulative impacts related to police services are anticipated to occur; hence, the impact would not be cumulatively considerable.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.11; Appendix M.

5. Environmental Impacts: The Proposed Project would generate a total of 5,480 new students which would impact the school enrollment capacities of the local school districts. As discussed in Section 5.11, the project area is located in three school districts; Irvine, Santa Ana, and Tustin. IUSD, SAUSD, and TUSD are all currently short of elementary, middle, and high school classrooms to serve the cumulative proposed development in the IBC and would potentially create a significant impact.

Finding: Compliance with existing regulations would avoid or substantially lessen the significant environmental effects to below a level of significance. PPP 11-6 would require payment of developer fees to reduce impacts to school services. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: Irvine Unified School District (IUSD). The Proposed Project would generate an additional 1,195 students according to the districtwide student generation rates. IUSD will need to place relocatable classrooms at each of the schools in this

project's assigned attendance area and may need to study boundary changes and the need for new facilities to accommodate this development. The need for additional services is addressed through compliance with the school impact fee assessment. Senate Bill 50 (SB 50) (Chapter 407 of Statutes of 1998) sets forth a state school facilities construction program that includes restrictions on a local jurisdiction's ability to condition a project on mitigation of impacts on school facilities in excess of fees set forth in Education Code Section 17620. These fees are collected by school districts at the time of issuance of building permits for commercial, industrial, and residential projects. As of March 2009, IUSD charges Level 2 Developer Fees at \$5.32 per square foot for residential development and \$0.47 per commercial/industrial square foot.

Santa Ana Unified School District (SAUSD). There is a potential for 1,972 new units, including pending units, and 312 density bonus units, for a total of 2,284 residential units in the SAUSD portion of the IBC. The Proposed Project would generate 1,604 additional students, according to the districtwide student generation rates. The current SAUSD development fees, as of July 14, 2008, are \$2.97 per square foot for residential development and \$0.47 per commercial and senior housing square foot. Additionally, compliance with Senate Bill 50 would lessen the impact.

Tustin Unified School District (TUSD). There is a potential for 1,673 new units, including pending units, and 505 density bonus units, for a total of 2,178 residential units in the TUSD portion of the IBC. The Proposed Project would generate 399 additional students, according to the districtwide student generation rates. TUSD currently charges Level II school fees, as authorized by Education Code Section 65995.5, at the rate of \$6.76 per square foot for new residential construction, and \$0.47 per square foot for new commercial and industrial construction. Again, compliance with Senate Bill 50 would lessen the impact.

The pending IBC residential projects would generate approximately 142 students for IUSD, 760 students for SAUSD, and 176 students for TUSD. The pending projects project would be required to pay school impact fees in accordance with Senate Bill 50 (SB 50). SB 50 (Chapter 407 of Statutes of 1998) sets forth a state school facilities construction program that includes restrictions on a local jurisdiction's ability to condition a project on mitigation of a project's impacts on school facilities in excess of fees set forth in Education Code Section 17620. Since all of the pending projects in the IBC must pay their appropriate impact fees, each project will mitigate the impacts associated with its activities. No significant impact upon local school districts is anticipated as a result of the implementation of the IBC Vision Plan and Mixed Use Overlay Zoning Code and other area-wide development activities.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.11; Appendix M.

6. Environmental Impacts. Cumulative Impacts (Schools). As described in Section 5.11 of the Draft EIR, all nonexempt projects must pay their appropriate impact fees, as authorized under Education Code Section 17620(a) and Government Code Section 65995(b). As a result, no cumulative impact upon local school districts is anticipated as a result of the implementation of the project.

Finding: The Project will have no substantial adverse cumulative impacts to schools. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: IUSD, SAUSD, and TUSD are all currently short of elementary, middle, and high school classrooms to serve the cumulative proposed development in the IBC. Cumulative development in the IBC may generate too many students to be accommodated by the districts facilities. School fees, as authorized under Education Code Section 17620(a) and Government Code Section 65995(b), are collected by municipalities at the time building permits are issued and conveyed to the affected school district in accordance with a defined fee structure. Although those fees are seldom adequate to accommodate the true costs incurred by affected districts to construct new facilities the Legislature has declared that the payment of those fees constitutes full mitigation for the impacts generated by new development, per Government Code Section 65995. Since all projects in the IBC must pay their appropriate impact fees, each project will mitigate the impacts associated with its activities. No cumulative impact upon local school districts is anticipated as a result of the implementation of the IBC Vision Plan and Mixed Use Overlay Zoning Code and other areawide development activities.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.11; Appendix M.

7. Environmental Impacts. The Proposed Project would generate approximately 8,769 residents, increasing the service needs for the local libraries. As discussed in Section 5.11 of the Draft EIR, while the Project would exceed the level of service for library square footage, it will not in and of itself trigger the construction of new or expanded library facilities, and the library impact is less than significant.

Finding: The project will not create a substantial adverse impact on library services. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: As described in Section 5.12 of the Draft EIR, the Project is projected to generate 8,769 new residents, depending on the number of residential units established within the Urban Neighborhood District. Per the Orange County Public Library standard of service, this equates to a need for 1,754 total square feet and 13,154 total volumes. Per the City of Irvine standard of service, this would require an additional 4,385 square feet of library square footage and 21,923 additional volumes, beyond the existing shortage, to serve the

project. As required by PDF 11-4, if a library impact fee on development is established and in force at the time of development, the project applicant would pay all applicable fees and thereby contribute to future development of a new library facility. While the Project would exceed the level of service for library square footage, it will not in and of itself trigger the construction of new or expanded library facilities, and the library impact is less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.11; Appendix M.

8. Environmental Impacts. Cumulative Impacts (Library Services). The library service needs generated by the Project contribute to a cumulative impact in the form of a shortage in library facilities. However, this impact is not considered to be significant, and the Project will be required to pay any citywide library impact fee in force at the time of project development. Therefore, the Project does not create cumulative impacts on library services.

Finding: The Project will have no substantial adverse cumulative impact on library services. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: As detailed in Section 5.12 of the Draft EIR, the Project would not itself result in the need for a new library facility, but it would contribute to a shortage in library facilities and have a cumulative impact. However, contribution to the need for new library square footage to address a projected shortfall in public library service standards, based on the projected buildout population of the City, is not considered to be cumulatively significant. Per Appendix G of the CEQA Guidelines, a project would only have a significant adverse environmental impact on library services if such impacts are caused by the actual construction of a library. While this project may contribute to the need to construct a library in the future, without knowing the size, location, and scope of that future library construction, it is not possible to define the potential impacts of that construction. Therefore, the impacts that would result from the construction and operation of a new library facility are too speculative to be determined at this time. The Project will be subject to any citywide library impact fee in force at the time of project development. Therefore, the Project does not create cumulative impacts on library services.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.11; Appendix M.

L. Recreation

1. Environmental Impact: The Proposed Project would generate approximately 8,769 additional residents, which would increase the use of existing park and recreational

facilities. As discussed in Section 5.12 of the Draft EIR, with adherence to existing PPPs, no significant impact related to recreation is expected to result from the Project.

Finding: Adherence to PPP 12-1 and 12-2 would avoid or substantially lessen the significant environmental effects to recreation below a level of significance. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: Development of additional residential units in the IBC would increase the demand for parks and recreational facilities of various types. Based on the Park Code, the project would generate a need for a total of 43.8 acres of parkland at buildout, with 17.5 acres of community parkland and 26.3 acres of neighborhood parkland. Future residential development pursuant to the IBC Vision Plan and Zoning Code would be required to submit a Park Plan application to establish park dedication requirements, to be provided, the amount of in-lieu fees, if any, and the allocation of those fees. The City is currently seeking an adequate site within the IBC for construction of a public neighborhood park. Funds from the general IBC neighborhood park account will be used for purchase of the site and construction of the park.

The San Diego Creek and the San Joaquin Freshwater Marsh, which lie adjacent to the IBC, are part of the wider open space system within the IBC. In addition to the required fees, part of the Proposed Project is to create an interconnected system of streets, bikeways, and trails connecting the new streets, parks, and urban plazas within the IBC to the wider system of City open space. According to the IBC Mixed Use Vision, the project would introduce several varieties of grass native to southern California along the Creek's edge and develop a network of trails along the creek incorporating urban elements such as children's play areas, pathways, benches, and public artwork. This would provide new and expand existing parks and recreational facilities. The Proposed Project would provide new recreational facilities in compliance with City park dedication standards and therefore not have a significant impact on existing neighborhood and regional parks or other recreational facilities that would result in, or accelerate, substantial physical deterioration of the facilities.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.12.

2. Environmental Impacts: Cumulative Impacts. As discussed in Section 5.12 of the Draft EIR, the Project will meet parkland dedication requirements established by the City, thereby reducing the level of use of off-site local and regional recreation facilities. Therefore, the Project's cumulative contribution to the physical impact on local and regional recreation facilities will not be significant.

Finding: The Project will have no substantial adverse cumulative impacts on parks and recreational facilities. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Recreational needs of future residents of the IBC, in conjunction with cumulative development in accordance with the adopted General Plan, would add to citywide and regional demand for parks and recreational facilities. However, each project within the City of Irvine is required to comply with the City's parkland dedication requirements as contained in the Subdivision Ordinance. As a result, new parklands and trails are developed as residential development occurs. Park in-lieu fees are paid to the City prior to the issuance of the first residential building permit. Park in-lieu fees for projects within the IBC would be allocated to the general IBC neighborhood and community park accounts and would be used to provide and/or improve neighborhood and community parks that will be available to IBC residents. Therefore, no significant impacts related to recreational opportunities are anticipated.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5.12.

M. Transportation/Traffic

Environmental Impact : Buildout of the IBC pursuant to the Proposed Project would generate additional traffic volumes and impact levels of service for the existing area roadway system. The City of Irvine's traffic model, the Irvine Traffic Analysis Model (ITAM) 8.4, was used to forecast the traffic data for the various horizon years and scenarios evaluated within the study area.

Finding: Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects to below a level of significance. In addition, PPP 13-1 and PDF 13-2 would reduce impacts to the extent feasible. However, operational and physical constraints may make proposed mitigation impossible at one intersection in the City of Irvine, Jamboree Road and Michelson Drive. In addition, implementation of mitigation measures in the cities of Costa Mesa, Newport Beach, Santa Ana, and Tustin is under the control of those cities and not of the City of Irvine. Implementation of mitigation measures on freeways and freeway ramps would be under the control of Caltrans rather than the City of Irvine. Because the City does not have the ability to control when and if these other agencies implement the necessary changes and alterations which would mitigate the impacts of the Project to below a level of significance, the City further finds that there are no other feasible mitigation measures that would mitigate the impacts to below a level of significance, and that specific economic, social, technological or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the FEIR, as discussed in Section VII of these Findings.

(Public Resources Code § 21081(a)(3); Guidelines § 15091(a)(3)). As described in the Statement of Overriding Considerations, the City has determined that these impacts are acceptable because of specific overriding considerations. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Mitigation Measures: Mitigation Measures 5.13-1, 5.13-2, 5.13-3, and 5.13-4 set forth in the FEIR and in the MMRP are incorporated herein by reference as though fully set forth and shall be conditions of Project approval.

MM 13-1 Prior to the issuance of the first building permit pursuant to the Proposed Project, the City of Irvine shall prepare a "nexus" study that will serve as the basis for requiring development impact fees under AB 1600 legislation, as codified by California Code Government Section 66000 et seq, for the Irvine Business Complex to support General Plan and Zoning changes under consideration for the Irvine Business Complex Vision Plan. The established procedures under AB 1600 require that a "reasonable relationship" or nexus exist between the traffic improvements and facilities required to mitigate the traffic impacts of new development pursuant to the Proposed Project. The following traffic improvements and facilities are necessary to mitigate project impacts and shall be included, among other improvements, in the AB 1600 nexus study:

Costa Mesa

Intersection #12: SR-55 Southbound Frontage Road at Baker Street

Improve the southbound approach to one left turn lane, one shared through left, one through lane, and one right turn lane. Restripe the eastbound approach to two through lanes and a shared through right turn lane.

Intersection #13: SR-55 Northbound Frontage Road at Baker Street

Restripe the eastbound approach to include a single left turn lane, three through lanes, and no right turn lane, plus the addition of a northbound defacto right turn lane.

Irvine

Intersection #141: Jamboree Road and Main Street

Improve the northbound and southbound approaches to 2 left turn lanes, 5 through lanes, and 1 right turn lane. Additionally, as part of this improvement, convert the westbound free right turn lane to a single right turn lane.

Intersection #188: Harvard Avenue and Michelson Drive

Add a second southbound left turn lane.

Intersection #232: Culver Drive and I-405 Northbound Ramps

Restripe the westbound approach of this intersection to one left turn lane and two right-turn lanes.

Intersection #136: Jamboree Road and Barranca Parkway

Convert the existing free northbound right-turn lane to a standard right turn lane and add a fifth northbound through lane.

Newport Beach

Intersection #62: Campus Drive at Bristol Street NB

In 2015, the required improvement is the implementation of the already planned addition of a fifth westbound through lane, consistent with the City of Newport Beach's General Plan buildout. For the buildout scenario, an additional improvement of a third southbound right turn lane is required. Implementation of the identified improvements results in acceptable operations under both scenarios and the mitigation appears to be physically feasible although potentially cost prohibitive due to potential impacts to a structure adjacent to the intersection. The addition of a 5th westbound through lane was identified by the City of Newport Beach as part of the Newport Beach General Plan Update Traffic Study (Urban Crossroads, 2006). The addition of a 3rd southbound right turn lane was identified in the John Wayne Airport (JWA) Improvement Program as an ancillary improvement to support the growth of the Airport.

Intersection #85: MacArthur Boulevard and Birch Street

Improve the eastbound approach to two eastbound left-turn lanes and two eastbound through lanes.

Santa Ana

Intersection #543 Bristol Street and Segerstrom Avenue

Two alternative improvements are proposed and outlined below. The City of Irvine shall coordinate with the City of Santa Ana to determine the most appropriate future improvement at this location.

Alternative 1: Add 3rd eastbound through and westbound through lanes on Segerstrom Avenue.

Alternative 2: Add 4th northbound through and southbound through lanes on Bristol Street.

Intersection #723 Main Street and Dyer Road (Segerstrom)

Add a third northbound through lane and a defacto northbound right-turn lane.

Intersection #730 Grand Avenue and Warner Avenue

Add a third westbound through lane.

Arterial #1884 MacArthur Blvd. from Main Street to SR-55

Widen from 6 to 8 Lanes

Tustin

Intersection #24: Newport Avenue and Walnut Avenue

Add a defacto westbound right turn lane and defacto northbound right turn lane.

Intersection #93: Tustin Ranch Road and El Camino Real

Add a fourth southbound through lane and restripe the eastbound approach to one left turn lane, a shared through right turn lane and a right turn lane.

Intersection #134: Loop Road/Park Avenue at Warner Avenue

Add a third eastbound through lane.

Intersection #754: Red Hill Avenue at Carnegie Avenue/A Street

This intersection has a project impact under the Post-2030 scenario. The project impact is largely due to heavy traffic on the northbound through movement. Widening the northbound approach to provide a fourth northbound through lane on Red Hill. This intersection is expected to be substantially expanded as a result of development of the Tustin Legacy project and shall be monitored to observe if any additional improvements are warranted when that project nears buildout.

- MM 13-2 Prior to the issuance of the first building permit pursuant to the Proposed Project, the City of Irvine shall update the IBC Development Fee program pursuant to the AB 1600 Nexus Study identified in Mitigation Measure 5.13-1. The IBC Development Fee program was established to fund area-wide circulation improvements within the IBC and adjoining areas. The improvements are required due to potential circulation impacts associated with buildout of the IBC. Fees are assessed when there is new construction or when there is an increase in square footage within an existing building or the conversion of existing square footage to a more intensive use. The development fees collected are applied toward circulation improvements and right-of-way acquisition in the IBC and adjoining areas. Fees are calculated by multiplying the proposed square footage, dwelling unit or hotel room by the appropriate rate. The IBC Fees are included with any other applicable fees payable at the time the building permit is issued. The City will use the IBC development fees to, among other things, fund construction (or to recoup fees advanced to fund construction) of the transportation improvements identified in Mitigation Measure 5.13-1.
- MM 13-3 Prior to issuance of the first building permit pursuant to the Proposed Project, the City shall update the Irvine Business Complex Land Use and Trip Monitoring Data base (IBC Database) to reflect the land use changes associated with the Proposed Project. The City maintains this database for tracking development intensity within the IBC. This data base is an important tool to help

ensure the circulation system serving the IBC area is adequate and to ensure roadway improvements are provided at the appropriate time. The data base tracks the amount of square footage built (Existing), the available square footage (Additional Zoning Potential and/or Remaining Approval) and the maximum amount of square footage allocated (Total Development Potential and/or Buildout + Existing) to each parcel within the IBC.

- MM 13-4 Prior to adoption of the AB 1600 nexus study identified in MM 13-1, the City and Caltrans shall jointly identify feasible operational and physical improvements and the associated fair-share funding contribution necessary to mitigate project-related impacts to state transportation facilities. The City shall fund said improvements on pro-rata “fair-share” basis in accordance with the terms and conditions of an Agreement to be prepared and agreed to by both agencies. These fair-share contributions for feasible improvements shall be included in the AB 1600 nexus study

Facts in Support of Finding:

2015 Cumulative With Project Daily Arterial Segment Analysis: The 2015 Cumulative With Project traffic patterns generally remain consistent with existing conditions and the 2015 Cumulative Baseline No Project scenario traffic patterns. For some segments, there is a net increase in ADT and for some a decrease as a result of the project. Figures 5.13-29 and 5.13-30 graphically display the ADT and arterial segment LOS deficiencies for the 2015 Cumulative With Project scenario. As noted above, LOS E indicates a deficient segment for all arterial segments outside Planning Area (PA) 36 within the City of Irvine. PA 36 segments are considered deficient at LOS F. When compared to the 2015 Cumulative Baseline No Project, there are no additional deficient segments.

2015 Cumulative With Project Peak Hour Link Analysis: Peak hour directional traffic volumes were directly obtained from peak hour forecast turning movement volumes for intersections upstream and downstream for each deficient arterial segment. The results of peak hour link analysis indicate that all arterial segments within the City of Irvine that are deficient under daily conditions operate at an acceptable LOS in both peak hours, performing at LOS D or better, and hence no mitigation measures are recommended at this time for these facilities.

2015 Cumulative With Project Intersection Analysis: Figures 5.13-31 and 5.13-32 graphically present the AM and PM Peak Hour Intersection ICU for deficient intersections. Seven intersections are deficient in the 2015 Cumulative With Project

scenario, including one location in Irvine, one in Newport Beach, four in Tustin, and one shared location between Tustin and Irvine. Of the seven intersections, only two are significantly impacted by the Project: #93 – Tustin Ranch Road at El Camino Real (ICU increase of 0.01) in Tustin and #62 – Campus Drive at Bristol Street (ICU increase of 0.02 and ICU reduction from LOS D to LOS E) in Newport Beach). When compared to the No Project scenario, there is one additional deficiency, intersection #62: Campus Drive at Bristol Street in the City of Newport Beach. All locations operating at a deficient LOS with an increase in the ICU value exceeding the significance threshold are identified as project impacts and discussed in Section 5.13.6, Mitigation Measures of the RDEIR.

2015 Cumulative With Project Freeway Mainline Analysis: Future freeway mainline volumes are based on forecast traffic using the ITAM model. The With Project scenario does not include any freeway mainline capacity improvements, consequently, the capacities are consistent with the No Project scenario. Figures 5.13-33 and 5.13-34 graphically depict the 2015 Cumulative With Project freeway and ramp deficiencies. When compared to the No Project conditions, there are two additional segments that are deficient under the 2015 With Project conditions, I-405 Southbound between Culver Drive and Jamboree Road and I-405 Northbound between MacArthur Boulevard and SR-55 both in the AM peak hour.

2015 Cumulative With Project Freeway Ramp Analysis: The ramp analysis methodology for 2015 Cumulative With Project is consistent with that applied for 2015 Cumulative Baseline No Project. When compared to the 2015 No Project scenario, there are no additional deficient locations; however, there are some ramps that deteriorate further as project trips are added. Project related impacts on freeway ramps are addressed in Section 5.13.6, Mitigation Measures, of the RDEIR.

Post-2030 Cumulative With Project Daily Arterial Segment Analysis: The analysis indicates that several segments are deficient under the Post-2030 Cumulative With Project daily conditions including two segments located within Costa Mesa, 15 of the segments in Irvine, one segment each in Newport Beach and Santa Ana, and two segments in Tustin. Compared to the No Project scenario, there are three additional segments that are deficient under daily conditions within the City of Irvine. As noted above, LOS E indicates a deficient segment for arterial segments outside Planning Area (PA) 36 within the City of Irvine. PA 36 (IBC area) segments are considered deficient at LOS F. Deficient segments in the City of Irvine are evaluated under peak hour conditions to determine significant impacts in the following section. For arterial segments in Costa Mesa, Newport Beach, and Tustin, arterial daily LOS impacts are addressed at the adjacent intersections. Santa Ana identifies significant project impacts based on the arterial daily LOS. Arterial segment #1884 (MacArthur Boulevard from Main Street to SR-55) is deficient in the Post-2030 Cumulative With Project scenario and because there

is a greater than 0.01 increase in the daily LOS between No Project and With Project conditions, a project related impact exists at this location. The Project impacts and mitigations are discussed in Chapter 5.13, *Mitigation Measures*.

Post-2030 Cumulative With Project Peak Hour Link Analysis: All arterial segments that are deficient under daily conditions operate at an acceptable LOS in both peak hours, performing at LOS D or better. Since all segments operate at an acceptable peak hour LOS there are no significant project impacts, hence no mitigation measures are recommended for these facilities.

Post-2030 Cumulative With Project Intersection Analysis: Figures 5.13-46 and 5.13-47 graphically present the AM and PM Peak Hour Intersection ICU for deficient intersections for the Post-2030 Cumulative With Project scenario. When comparing the No Project and With Project scenarios, there are two additional intersections that are deficient, #141: Jamboree Road at Main Street, and #723: Main Street at Dyer Road (Segerstrom Avenue), both in the PM peak hour. Further discussion of specific impacts, mitigation, and fair-share cost analysis is addressed in Section 5.13.6, *Mitigation Measures*.

Post-2030 Cumulative With Project Freeway Mainline Analysis: The freeway mainline volumes (forecast using the ITAM 8.4 model), densities, and levels of service reflect the future potential deficiencies of each freeway segment. Figures 5.13-48 and 5.13-49 graphically depict the Post-2030 Cumulative With Project freeway and ramp deficiencies. According to the analysis, the following segments are forecast to operate at LOS E or F. When compared to the No Project scenario, there is one additional deficiency under AM peak hour conditions, and one additional deficiency under PM peak hour conditions. The methodology for determining the deficiencies on freeway ramps is consistent with that used for previously studied scenarios. When compared to the Post-2030 No Project scenario, there are two additional deficiencies under the With Project conditions: I-405 Northbound Off-Ramp to Culver Drive and the SR-55 Southbound Loop On-Ramp from MacArthur Boulevard. Impacted locations and mitigation strategies are discussed in Chapter 5.13, *Mitigation Measures*.

Reference: RDEIR § 5.13; Appendix N (Traffic Study).

1. Environmental Impact: The Proposed Project would not increase hazards due to a design feature or incompatible uses. The City of Irvine Transportation Design Procedures (TDP) establish uniform policies and procedures for reviewing traffic plans in the City. These procedures are used to evaluate the roadway design features that may be impacted by future projects pursuant to the proposed IBC Vision Plan and Mixed-Use Overlay Zoning Code. For those criteria that are traffic-volume dependent, (i.e., evaluation of the project driveway) evaluation is based in the existing plus project condition. Since the City has adopted roadway

design standards that would preclude the construction of any unsafe features, no increased hazards are anticipated.

Finding: The project would not create significant traffic hazard impacts, and no mitigation measures are required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: With implementation of the existing City Transportation Design Procedures, developments considered for approval under the proposed IBC Vision Plan, and improvements to roadways made pursuant to the IBC Vision Plan, would not create significant traffic hazard impacts.

Mitigation Measures: Traffic hazard impacts would be less than significant, and no mitigation measures are required.

Reference: RDEIR § 5.13

2. Environmental Impact: Adequate parking would be provided for the Proposed Project. Future development pursuant to the IBC Vision Plan and Mixed-Use Overlay Zoning Code will be required to provide adequate parking, on-site, in accordance with the City of Irvine Zoning Ordinance standards.

Finding: The project would not result in significant parking impacts, and no mitigation measures are required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Compliance with the City of Irvine's Zoning Ordinance parking standards would avoid substantial adverse parking impacts.

Mitigation Measures: Parking impacts would be less than significant, and no mitigation measures are required.

Reference: RDEIR § 5.13.

3. Environmental Impact: The Proposed Project would comply with adopted policies, plans, and programs for alternative transportation.

Public Transit The City of Irvine began operating the *i* Shuttle in June 2008, with two routes connecting the Tustin Metrolink Station to various parts of the IBC; the *i* Shuttle is intended to provide transportation both within and to and from the IBC.

Bicycle Facilities The IBC Vision Plan would provide linkages to the City regional bicycle trail system. Bicycle lanes are proposed along parts of several roadways in the IBC. Furthermore, the sidewalk system would be shared with pedestrians and bicycles.

Pedestrian Facilities the IBC Vision Plan creates funding mechanisms to provide for the implementation of community-orientated pedestrian infrastructure improvements to increase walkability in the IBC. Improvements would include new streets to reduce the size of City blocks to a pedestrian scale; pedestrian paseos to connect to the arterials at key locations; new sidewalks in places now lacking sidewalks; and several pedestrian bridges. A Creekwalk system is also envisioned adjacent to the San Diego Creek to provide a trail to connect the Great Park from the IBC and the Civic Center.

Finding: The Proposed Project would not have substantial adverse impacts to policies, plans, and programs for alternative transportation, and no mitigation measures are required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The project would develop high-density housing within an area being served by at least two modes of transit. On June 9, 2008, **The i Shuttle**, which is operated by the City of Irvine and designed for the IBC community, began operating. The shuttle allows residents and employees to have an alternative way to commute to jobs and locations throughout the IBC. The shuttle offers two routes to accommodate residents and employees traveling within the area and to and from the IBC (see Figure 4-2, **The i Shuttle** Route). Route A connects the Tustin Metrolink Station to the JWA via Von Karman Avenue. Route B connects the Tustin Metrolink Station to the heart of the IBC via Jamboree Road and Michelson Drive. Therefore, the project would facilitate walking and non-vehicular travel to a greater extent than would be the case for similar development in outlying areas without extensive transit availability. In addition, the high-density development would include a greater number of potential residents that could potentially utilize or engage in alternative modes of travel than in a lower density development on the project site.

The IBC Vision Plan creates funding mechanisms to provide for the implementation of community-orientated pedestrian infrastructure improvements to increase walkability in the IBC. New streets incorporated into the IBC would reduce the size of the City blocks to a pedestrian scale and pedestrian paseos would connect to the arterials at key locations. In addition, many of the streets in the IBC currently do not have sidewalks. The sidewalk improvement program will be expanded to provide connectivity, incorporate several new pedestrian bridges, and many existing sidewalks would be moved away from the curb into the setback area. Creekwalk system is also envisioned adjacent to the San Diego Creek to provide a trail to connect the Great Park from the IBC and the Civic Center.

The IBC Vision Plan would provide linkages to the City regional bicycle trail system. Currently continuous on-street bicycle lanes exist only along Main Street. Bicycle lanes are proposed along parts of Jamboree Road, Red Hill Avenue, Von Karman Avenue, Michelson Avenue, Carlson Avenue, Barranca Parkway, and Alton Parkway. Furthermore, the sidewalk system would be shared with pedestrians and bicycles. As part of the Vision Plan, bicycle

connections to the San Marco Park, adjacent to the San Diego Creek, would be improved with a new pedestrian bridge.

Mitigation Measures: Project impacts to alternative transportation would be less than significant, and no mitigation measures are required.

Reference: RDEIR § 5.13.

4. Environmental Impact: Cumulative Impacts (Traffic)

The analysis of traffic impacts above under Impact M.1 included analysis of cumulative as well as project-related impacts. Therefore, the findings, mitigation measures, and facts in support of findings under M.1 above apply to cumulative impacts.

N. Utilities/Service Systems

1. Environmental Impact: There are adequate water supply and delivery systems to meet project requirements. As discussed in Section 5.14, a Water Supply Assessment (WSA) was prepared by IRWD for the Project and found that there is a sufficient supply capacity for both potable and nonpotable water to accommodate full buildout through 2028, upon completion of under development supplies. Additionally, through implementation of the Sub-Area Master Plan (SAMP) recommendations for the IBC, the water systems and facilities would adequately serve the Project.

Finding: The Proposed Project would not have substantial adverse impacts to water supplies or infrastructure. PPP 14-1 requires new development to use recycled water to reduce demand on potable water supplies. PPP 14-2 and 14-3 also reduce impacts to water supply. No mitigation measures are required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: As described in Section 5.14 of the Draft EIR, the buildout of the IBC would result in an increase in water demand of approximately 3,176.3 acre-feet per year. A WSA has been prepared for the Project by IRWD, in accordance with the requirements of CEQA and California Water Code section 10910 et. seq. The Water Supply Assessment (WSA) is included as Appendix P in the RDEIR.

According to the WSA, there is sufficient supply capacity for both potable and nonpotable water to accommodate full buildout through 2028, upon completion of under development supplies. IRWD's estimates are very conservative because the WSA assumes a 20,000 residential unit cap in the IBC. The Proposed Project has a maximum dwelling unit cap of 15,000, and a total of 1,191 density bonus units allowable in accordance with state law, for a total of 16,191 units.

In accordance with IRWD requirements, each redevelopment project must provide a fire flow analysis. If the fire flow analysis identifies any deficiencies, the developer would be responsible for any water system improvements associated with the redevelopment project required to rectify the deficiencies and meet IRWD fire flow requirements (PPP 14-3).

As part of the SAMP, a hydraulic model was constructed to perform hydraulic analysis of the existing and future potable systems. The SAMP analyzed a total of 19,552 dwelling units in the IBC, consisting of 14,552 redevelopment projects and the additional 5,000 units. The nonpotable water system improvements are only for new nonpotable water lines that are to be installed as the IBC develops. Through its SAMP, IRWD has identified areas in need of improvement and has determined the cost of domestic and nonpotable water system improvements. IRWD will fund 100 percent of potable water system improvements and approximately 97 percent of nonpotable water system improvements, with developer contributions totaling a little over \$100,000 for site specific, nonregional transmission line improvements,. Through the use of its WRMP and SAMP, the IRWD will determine the each project's fair share costs and connection fees associated with servicing their project site (PPP 14-2). Through the use of its WRMP and SAMP, and water connection districts, the IRWD will determine each project's improvements and connection fees associated with servicing their individual project site. Upon implementation of PPP 14-1 through 14-3, impacts will be less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5-14; Water Supply Assessment (Appendix P in the RDEIR).

2. Environmental Impact: Cumulative Impacts (Project Water Demands). As discussed in Section 5.14 of the Draft EIR, presuming future development is generally consistent with existing general plans; IRWD does not anticipate any problems supplying water to any current or future development in the City.

Finding: The Project will have no substantial adverse impacts to water supply and the delivery systems. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The total water supplies available to IRWD during the MWD Allocation condition, Normal-, Single Dry-, and Multiple Dry-Year conditions within a 20-year projection will meet the projected water demand of the project and of existing and other planned future uses, including, but not limited to, residential, industrial, and commercial uses. IRWD supply and facilities planning is consistent with the general plans of the land use jurisdictions overlying IRWD. Consequently, presuming future development is generally consistent with existing general plans; IRWD does not anticipate any problems supplying water

to any current or future development in the City of Irvine. Therefore, the Proposed Project's demand for water services would not be cumulatively considerable.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5-14; Water Supply Assessment (Appendix P in the RDEIR).

3. Environmental Impacts: Project-generated wastewater could be adequately treated by the wastewater service provider for the project. As discussed in Section 5.14 of the Draft EIR, through implementation of the SAMP recommendations and existing regulations, the project-generated wastewater could be adequately treated and impacts would be less than significant.

Finding: The Project will have no substantial adverse impact on wastewater treatment requirements of the applicable Regional Water Quality Control Board. PDF 14-2 would require payment of developer fees to expansion. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Wastewater generation factors, stated in the SAMP, were used to estimate wastewater flow for IBC properties, based on land use. In order to evaluate the conformance of the existing wastewater collection system by land use under current and future (redeveloped) wastewater flows, a hydraulic model was developed. The hydraulic model was developed using H20MAP Software for extended-period simulation of wastewater flows over a 24-hour period. The boundary of the IBC system was examined to identify any inflow/outflow and thereby define the model boundary conditions. The only flow into the IBC taken into account was the Main Street Interceptor flow into the eastern boundary of the IBC at the intersection of Main Street and the San Diego Creek Channel.

The hydraulic analysis for future redeveloped conditions (14,552 units in the IBC) identified the wastewater system deficiencies during of maximum-day conditions include pipe segments that did not meet capacity and maximum velocity criteria (minimum slope deficiencies are the same as existing conditions). The wastewater collection system deficiencies are based on the capacity criteria, which are based on the peak flow conditions during maximum day of the year. Although these deficiencies were considered worst-case scenarios, the SAMP recommends improvements to four pipes outside of the Proposed Project area. Upon implementation of PPP 14-2, impacts will be less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5-14.

4. Environmental Impacts: Cumulative Impacts (Wastewater). As discussed in Section 5.14 of the Draft EIR, cumulative impacts to the wastewater system would be less than significant.

Finding: No significant cumulative adverse impacts to wastewater are anticipated. (Public Resources Code § 21081(a)(1), Guidelines § 15091(a)(1)).

Facts in Support of Finding: Implementation of the Proposed Project may require expanded water facilities, including upsizing of some wastewater and nonpotable water pipe segments. However, the project would not result in a significant impact related to the construction of expanded water facilities. While development in the IBC will increase sewer demand and impact capacity and flow, IRWD has sufficient planned sewer capacity to accommodate the increase in demand. Through the SAMP, IRWD has identified areas in need of improvement and has determined the cost of wastewater improvements. IRWD will fund approximately 97 percent of the wastewater system, with developer contributions totaling a little over \$100,000 for site specific, nonregional transmission line improvements, if necessary. Through the SAMP process, it has been demonstrated that the sewer collection and treatment system would meet project demand for wastewater service. Additionally, the long-range planning efforts of IRWD take into account current and Proposed Projects to eliminate the potential for cumulative impacts. Therefore, the Proposed Project's demand for potable, nonpotable, and wastewater collection and treatment services would not be cumulatively considerable.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5-14.

5. Environmental Impacts: Existing facilities would be able to accommodate project-generated solid waste and comply with related solid waste regulations. As discussed in Section 5.14, anticipated increases in solid waste generation resulting from the implementation of the Project are not anticipated to exceed the current capacity. Therefore, the Project's impacts on solid waste disposal capacity are less than significant.

Finding: The Project is not anticipated to have any substantial adverse impacts on landfill capacity. PPP 14-4 would require applicants for new development project to indicate the location of receptacles for solid waste and recycling on site plans. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: Development of the Proposed Project would increase the service demand for solid waste disposal beyond existing conditions and would provide more solid waste to the Bowerman Landfill in Irvine. The additional 6,745 residential units planned for the IBC, would generate approximately 8,249 pounds per day (ppd) or 4 tons per day (tpd). The

remaining nonresidential buildout potential would be 6,380,955 square feet, which would generate an additional 79,329 ppd or 40 tpd (431,089 square feet of retail and 5,949,866 square feet of office and industrial). The project would generate a total of 44 tpd. The rate of disposal for the landfill serving the project area is 8,500 tpd. Therefore, the Orange County Integrated Waste Management District can accommodate the project and impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5-14.

6. Environmental Impacts: Cumulative Impacts (Solid Waste). As discussed in Section 5.14 of the Draft EIR, there is adequate capacity in Orange County landfills to accommodate the Project and other cumulative projects in the area.

Finding: The Project will have no substantial cumulative adverse impacts on solid waste disposal. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The Proposed Project, in combination with other projects in the county, would increase demand for landfills and solid waste services for the County of Orange. Total waste generation from the IBC at buildout is estimated to be approximately 766,370 ppd or 383 tpd (1,648,932 square feet retail, 49,250,486 square feet office/industrial, and 16,191 residential units). However, the Orange County Landfill system is required to have available disposal capacity for a projected period of 15 years. The Orange County Landfill System has demonstrated this capacity and regularly imports solid waste from Los Angeles County. The Orange County Integrated Waste Management District can accommodate the project specifically and cumulatively. Therefore, the project-related demand would not be cumulatively considerable.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5-14.

7. Environmental Impacts: Existing and/or proposed facilities would be able to accommodate project-generated utility demands. As discussed in Section 5.14, there would be an increase in demand for services as a result of buildout of the project, however, implementation of regulatory requirements and standard conditions of approval would lessen the impact to less than significant.

Finding: The Project will have no substantial cumulative adverse impacts on solid waste disposal. New development project to comply with the most recent Title 24 requirements (PPP 14-5). No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The primary demand for electricity, gas, and communications within the project area will be the additional 6,475 residential units and 6,863,621 square feet of nonresidential square development. At buildout the IBC would generate a demand for 1,241,351 Gwh/year of electricity. Demand for energy and natural gas service would be accommodated by the service providers. New facilities to support the demand for electric service in the IBC would be constructed by SCE in accordance with the demand for new service. In addition, new structures within the IBC would be built in accordance with all State Energy Insulation Standards and City of Irvine codes in effect at the time of application for building permits (PPP 14-5). Consequently, SCE would be able to supply electricity to meet the demand for electricity the IBC.

Additional residential units would increase the demand for television and cable services. Additional facilities would be necessary to accommodate the additional residential units, such as new cabling, node locations, and power supplies. To provide service future residential development, enhancement and/or extensions of existing facilities near project sites would be required. Construction of the necessary improvements and/or extensions creates the potential for additional impacts such as dust, noise, and air emissions. The potential impacts associated with the construction of communication facilities are accounted for in other sections of the RDEIR (Sections 5.1 through 5.15). Any applicable mitigation measures identified in those sections will address potential significant impacts associated with construction of public utilities (in particular see Sections 5.2 Air Quality, 5.9 Noise, and 5.13 Traffic). Therefore, through consistent implementation of a variety of mitigation measures related to construction impacts, no additional impacts related to construction and operation of the facilities would occur. Therefore, no substantial physical impacts are anticipated.

there is already telephone service in the project area and telephone facilities can be upgraded without any significant impact on the environment.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5-14; Appendix M (Public Service Correspondence).

8. Environmental Impacts: Cumulative Impacts. As discussed in Section 5.14, Cumulative development in the project area as projected from buildout of the project would not have an adverse affect and would not be cumulatively considerable.

Finding: The Project will have no substantial adverse cumulative impact on the ability to service the area. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: According to the California Energy Commission (CEC) energy use in the state is growth at 1.25 percent per year and peak demand is growing at 1.35

percent per year (CEC 2008). Around 2010, the majority of consumers in the state will have meters that can measure electricity use, and in some cases natural gas use, every 15 minutes or at least every hour. In addition, many utility companies offer incentives for recycling older inefficient air conditioners. In addition, the CEC is working to develop dynamic pricing tariffs to reduce demand for electricity at peak periods (CEC 2008). According to SCE, the electrical loads of the project are within parameters of projected load growth which SCE is planning to meet in this area.

Cumulative development in the project area as projected from buildout of the project would increase natural gas consumption. Based on present conditions of gas supply and regulatory policies, there are no significant impacts to gas services anticipated at this time; therefore the project-related demand for natural gas would not be cumulatively considerable.

Cox, AT&T, and Verizon would be able to accommodate the needs for telephone, internet, wireless, and cable service for this project and other projects in the area. No adverse impacts on the ability to service the area would result.

Mitigation Measures: No mitigation is required.

Reference: RDEIR § 5-14.

O. Global Climate Change

1. Environmental Impacts: Project-related greenhouse gas emissions could significantly contribute to global climate change impacts or conflict with the CARB-Adopted Scoping Plan. The development contemplated by the Proposed Project would contribute to global climate change through direct emissions of GHG from on-site area sources, off-site energy production required for on-site activities, and vehicle trips generated by the project. However, the project will not conflict with the CARB-Adopted Scoping Plan and implementation of the PPPs and PDFs would lessen the impact to less than significant. Because the project's GHG emissions were considered less than significant with incorporation of the PPPs and PDFs, the project's GHG emissions and contribution to global climate change impacts are considered less than cumulatively considerable and therefore also less than significant.

Finding: Project-related GHG emissions would not be cumulatively considerable. PPP 15-1 through 15-16 and PDF 15-1 through PDF 15-15 would reduce impacts related to GHG emissions. No mitigation is required. Cal. Pub. Res. Code § 21081; CEQA Guidelines § 15091.

Facts in Support of Finding: The City's greenhouse gas (GHG) reduction target for the IBC Vision Plan is a zero net increase in GHG emissions from existing conditions for transportation and nontransportation sources. In accordance with CEQA Guidelines, a net zero increase in GHG emissions would clearly indicate that no significant impacts would occur as

Section 15064.4(b)(1) is not intended to imply a zero net emissions threshold of significance. Federal and State strategies would result in GHG emissions at Post-2030 buildout that would achieve the zero net increase GHG target. However, nontransportation sources would exceed the City's zero net increase target for nontransportation sources by 40,157 metric tons (MTons). However, Citywide PPPs and PDFs listed in Table 5.15-6 of the RDEIR (PDF 15-10, PPP 15-9, PPP 15-11, PDF 15-7, PPP 15-10, PPP 15-16, PDF 15-14, PDF 15-15, PPP 15-1, and PPP 15-13) would reduce GHG emissions by 131,182 MTons. Consequently, nontransportation emissions would be offset by the Citywide GHG strategies for the IBC Vision Plan. As a result of Federal, State, and Citywide GHG reduction strategies, the IBC Vision Plan would generate approximately 17 percent less GHG emissions than existing conditions.

With incorporation of the PPP 15-1 through 15-16 and PDFs 15-1 through 15-15 identified above, the impact would be less than significant.

Mitigation Measure: No mitigation is required.

Reference: RDEIR § 5-15. Appendix P (Global Climate Change Technical Report).

2. Environmental Impacts: Cumulative Impacts.

As described under Impact 5.15-1, project-related GHG emissions are not confined to a particular air basin but are dispersed worldwide. Therefore, impacts identified under Impact 5.15-1 are not project-specific impacts to global warming but the project's contribution to this cumulative impact. Because the project's GHG emissions were considered less than significant with incorporation of the PPPs and PDFs, the project's GHG emissions and contribution to global climate change impacts are considered less than cumulatively considerable and therefore also less than significant.

Mitigation Measure: No mitigation is required.

Reference: RDEIR § 5-15.

VII.

FINDINGS REGARDING ALTERNATIVES

Because the Proposed Project will cause unavoidable significant environmental effects related to air quality, noise, and traffic, the City must consider the feasibility of any environmentally superior alternative to the Proposed Project, evaluating whether these alternatives could avoid or substantially lessen the unavoidable significant environmental effects while achieving most of the objectives of the Proposed Project. The FEIR evaluated four alternatives to the Project and evaluated the feasibility of each of the alternatives in light of the Project objectives and other considerations. As described in Section 2.2 of the FEIR, the specific objectives of the Proposed Project are as follows:

- (1) Provide for the on going development of the IBC consistent with the City's General Plan Urban and Industrial land use designations and the City's adopted Vision Plan Goals, which are:
 - Protect the existing job base.
 - Develop mixed-use cores.
 - Provide transportation, pedestrian, and visual connectivity.
 - Create usable open space.
 - Develop safe, well-designed neighborhoods.
- (2) Provide additional housing opportunities near existing employment centers, consistent with the City's General Plan Land Use and Housing Elements.
- (3) Provide residential uses near existing employment centers, retail and entertainment uses, and transportation facilities consistent with the goals of the Southern California Association of Governments' Regional Comprehensive Plan and Compass Blueprint.
- (4) Provide residential development in areas of the IBC where adequate supporting uses and public services and facilities are provided, consistent with the City's General Plan Land Use Element.
- (5) Contribute to the development of mixed-use cores by incorporating residential, office, and commercial/retail uses into existing areas of nearby community facilities, retail goods and services, and restaurants to enhance the IBC's overall mixed-use urban character and reduce vehicle miles traveled in the South Coast Air Basin.

- (6) Provide neighborhood level amenities to serve the level of mixed-use development envisioned by the City's General Plan and IBC Vision Plan.
- (7) Incorporate sustainable provisions into implementation of the IBC Vision Plan.
- (8) Identify and pursue opportunities for open space areas that serve the recreational needs of IBC residents and employees.

The alternatives presented in the FEIR constitute a reasonable range of alternatives necessary to permit a reasoned choice among the options available to the City and/or the Project proponent. Based upon the administrative record for the Project, the City makes the following findings concerning the alternatives to the Proposed Project.

A. Alternatives Considered and Rejected During the Scoping/Project Planning Process

Four alternatives were considered and rejected during the scoping/project planning process: Alternative project sites; No Project/No Development alternative; Limited Residential Development alternative; and Reduced Urban Neighborhood alternative.

1. Alternative Project Sites

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location, which are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR. (CEQA Guidelines Section 15126.6(f)(2)(A)). In general, any development of the size and type proposed by the Project would have substantially the same short-term impacts on air quality and noise. The Proposed Project did not result in any significant unavoidable impacts related to aesthetics, agricultural resources, biological resources, cultural resources, geology/soils, hazards and hazardous materials, hydrology/water quality, land use and planning, mineral resources, population and housing, public services, recreation, utilities and service systems, or global climate change. Given the sites' central location near major employment centers and surrounded by existing infrastructure, it is unlikely that any alternative site would have lesser impacts on air quality, population and housing, land use/planning, traffic, and utilities service systems, and global climate change.

Where a previous document has sufficiently analyzed a range of reasonable alternative locations and environmental impacts for projects with the same basic purpose, the lead agency should review the previous document. The EIR may rely on the previous document to help it assess the feasibility of potential project alternatives to the extent the circumstances remain

substantially the same as they relate to the alternative. (CEQA Guidelines Section 15126.6(f)(2)(C)).

The Open Space Initiative and subsequent GPA 16 preserve important conservation and open space resources through a program that consolidates large, contiguous open space areas under public ownership by permitting development to occur in other areas of the City deemed to be of lesser open space value. As a result, the only remaining alternative sites within the jurisdiction of the City are already planned for development, such as Planning Areas 1, 18, and 39 which are entitled for residential uses, or consist of existing or future open space preservation areas (i.e., Implementation Districts), which GPA 16 determined were most appropriate for preservation. Overall, development of these preservation areas would result in significantly greater environmental impacts than the Proposed Project and would therefore not meet the CEQA criteria for an alternatives analysis. In addition, most of the land within the Implementation Districts are also subject to the Natural Communities Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) for the Central-Coastal Subregion and are not otherwise available for development.

As the California Supreme Court indicated in *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal. 3d 553 (1990):

The general plan has been aptly described as the "constitution for all future developments" within the city or county..." [T]he propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements..." "To be sure, the general plan is not immutable, far from it. But it may not be trifled with lightly, as the limitation on the number of amendments to the general plan in any calendar year attests." (Goleta, at 570-571)

... Moreover, in some circumstances, an EIR may consider alternatives requiring a site-specific amendment of the general plan. However, an EIR is not ordinarily an occasion for the reconsideration or overhaul of fundamental land use policy. (Goleta, at 573)

Consistent with the Supreme Court's interpretation of the role of the General Plan in framing CEQA alternatives analysis, and in consideration of the Open Space Initiative and subsequent GPA 16, and the NCCP/HCP for the Central-Coastal Subregion, no alternative sites within the jurisdiction of the City are considered to be feasible alternatives to the Proposed Project, since they would not reduce the environmental impacts associated with the project. In addition, the mixed-use opportunities within the IBC are directly related to its location adjacent to major transportation facilities, including the I-405, SR-55, and JWA. In addition, the IBC is currently home to approximately 90,000 jobs, making it one of the largest employment centers in southern California. As a result, the development of high-density residential units in another

location would not offer the same reductions in vehicle miles travelled, and the associated environmental benefits of reduced air quality, noise, and global climate change impacts. Therefore, there are no available alternative sites which could accommodate the Proposed Project.

2. No Project/No Development Alternative

The No Project/No Development Alternative would prohibit all new development, restricting urban growth to its current extent. This alternative assumes that no additional development and growth within the Planning Area would occur beyond what is already approved. Buildout of the IBC under this alternative would consist of 9,446 dwelling units and 42,771,000 square feet of non-residential intensity. Total population in the IBC at buildout would be approximately 12,280 residents and employment would remain at existing levels, which is approximately 90,000 jobs. Some minor population and employment growth could occur within the IBC, to the extent that existing residential units or buildings and projects that have already been approved could accommodate additional growth. None of the impacts of the Proposed Project would result. Future conditions within the IBC, except for the impacts of regional growth, would generally be the same as existing conditions, which were described in the environmental setting section for each environmental topic.

Development under this alternative would not expand mixed use development in the IBC and improve the jobs/housing balance of the region potentially reducing the number of vehicle miles travelled in the South Coast Air Basin. Further, this alternative would not result in the construction of transportation improvements identified in the Proposed Project. However, regional traffic growth would still occur, resulting in the potential for traffic impacts that would otherwise be mitigated by the Proposed Project. It should also be noted that this Alternative would not achieve any of the objectives established for the project. In addition, this Alternative eliminates the existing entitlements and allowable development intensity for the IBC and is therefore, not considered feasible. As a result, this Alternative has been rejected from further consideration.

3. Limited Residential Development Alternative

As described in Section 5.2, the Proposed Project would result in significant long-term air quality impacts based on exceedance of SCAQMD's threshold criteria. The purpose of the Limited Residential Development Alternative is to avoid potential long-term operational air quality impacts. Using the URBEMIS 2007 Air Quality Computer Model, it was determined that up to 650 condominium/apartment units could be developed in the IBC without exceeding SCAQMD's threshold criteria. No additional nonresidential development could occur under this scenario.

Development under this alternative would not expand mixed-use development in the IBC and would improve the jobs/housing balance of the region, potentially reducing the number of vehicle miles travelled in the South Coast Air Basin. Further, this alternative would not result in the construction of transportation improvements identified in the Proposed Project. However, regional traffic growth would still occur, resulting in the potential for traffic impacts that would otherwise be mitigated by the Proposed Project. It should also be noted that this Alternative would not achieve any of the objectives established for the project. In particular, this Alternative would likely preclude the City from achieving their Regional Housing Needs Assessment (RHNA) allocation of 35,660 units for the 2006 to 2014 planning period. The City's proposed Housing Element has identified the IBC as an area for potential very-low, low, and moderate income units, which would be precluded by this Alternative. In addition, this Alternative eliminates the existing entitlements and allowable development intensity for the IBC and is therefore, not considered feasible. As a result, this Alternative has been rejected from further consideration.

4. Reduced Urban Neighborhood Alternative

The previously released Draft EIR included a Reduced Urban Neighborhood Alternative. Under this alternative, the overall intensity as measured under the current zoning code would remain the same as the Proposed Project; however, the potential 4,158 residential units would only be located north of I-405. Additionally, all of the 2,587 pending units—except for Martin Street Condominiums project and Irvine Technology Center project, which total 1,082 units—would be located north of I-405. The objective of this Alternative is to reduce potential hazards and hazardous materials impacts and land use and planning impacts. Since release of the previous Draft EIR, the City of Irvine has revised the Proposed Project so that the previous Reduced Urban Neighborhood Alternative is now the Proposed Project as analyzed in this RDEIR. As a result, this alternative has been removed from the alternatives analysis.

B. Alternatives Selected for Further Analysis

As discussed in Section 6.6 of the FEIR, the following four alternatives were determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic Project objectives and which may avoid or substantially lessen any of the significant impacts of the Proposed Project: (1) No Project/Existing General Plan Alternative, (2) Reduced Intensity Alternative, (3) Increased Residential (20,000 du) Alternative, and (4) Increased Residential (25,000 du) Alternative. Each of the six alternatives is discussed below, including a comparison of the merits of each alternative in relation to the Project objectives and the impacts of each alternative in relation to the Proposed Project. In addition, as required by CEQA, where an alternative has been identified as an “environmentally superior alternative” this has been noted.

1. No Project/Existing General Plan Alternative

Description: In this alternative the existing General Plan would continue to guide development of the IBC into the future. The current City of Irvine General Plan and Zoning Ordinance designate the area as Urban and Industrial and 5.1 IBC Multi-Use, respectively. Under the No-Project/Existing General Plan Alternative, buildout of the IBC would include a total of 9,455 residential units, 53,125,389 square feet of non-residential uses, and 3,106 hotel rooms. Under the No-Project/General Plan Alternative, only 2,552 additional dwelling units, which have already been approved, would be developed. A buildout potential of 10,354,389 square feet of non-residential uses would remain. This alternative would only include the traffic improvements identified in the current IBC Fee Program since the proposed update to the IBC Fee Program to include neighborhood level amenities would not occur. Under this alternative, the IBC would have a jobs/housing ratio of 11.63 at buildout.

Finding: The City finds that specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make the No Project/Existing General Plan Alternative infeasible. (Public Resources Code § 21081(a)(3), Guidelines § 15091(a)(3)).

Facts in Support of Finding:

a. The No-Project/Existing General Plan Alternative would reduce impacts associated with biological resources, hazards and hazardous materials, land use/planning, public services, recreation, and utilities and services. However, this alternative would have greater air quality, population and housing and global climate change impacts. All other impact categories would generally be the same as the Proposed Project. Although some impacts would be reduced, this alternative would still result in significant air quality, noise, and traffic impacts. Unlike the Proposed Project, the need for a general plan amendment and zone change would not be necessary.

b. Under the No Project/Existing General Plan Alternative, total trips generated by development within the IBC would decrease slightly from 697,308 per day to 672,309, resulting in similar local air quality impacts. However, the No Project/Existing General Plan Alternative is estimated to increase VMT within the City from 16,704,433 VMT per day to 16,797,545 VMT per day, for an increase of 93,112 VMT. According to the GHG emissions analysis conducted by CTG Energetics, buildout of the No Project/Existing General Plan would generate a total of 845,577 MTons of GHG emissions at buildout with PPPs and PDFs; however, buildout of the proposed General Plan would generate 668,671 MTons at buildout with PPPs and PDFs.

c. Buildout under the existing General Plan would result in 9,857 fewer residents and 7,583 fewer dwelling units than buildout conditions under the Proposed Project. Under this Alternative, the jobs/housing balance in the City at buildout would worsen from 5.98 to 11.63

and fewer housing units would be provided near existing employment centers in the IBC. By comparison, the Proposed Project allows for the development of a wide range of housing opportunities in close proximity to regional employment and activity centers in the IBC.

d. Although environmentally superior for some environmental impact categories, this alternative would not meet any of the objectives of the Proposed Project. It would not provide additional housing opportunities in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities and would not promote the objectives of the City's long-range goals for the IBC which include development of a dynamic mixed-use environment, additional housing opportunities in proximity to existing employment centers consistent with SCAG's RCP and Compass Blueprint policies, reducing vehicle miles travelled within the South Coast Air Basin (SoCAB), and the provision of neighborhood level amenities to serve the level of mixed-use development envisioned by the City's General Plan and IBC Vision Plan.

Reference: RDEIR §§ 7.4, 7.4.16

2. Reduced Intensity Alternative

Description: This alternative would reduce overall intensity within the project area by limiting future residential growth to approved and pending projects and limiting non-residential square footage to 48,787,662 square feet, the same as the Proposed Project. As a result, the Reduced Intensity Alternative includes a total of 11,705 dwelling units, 48,787,662 square feet of non-residential uses and 3,478 hotel rooms. Under the Reduced Intensity Alternative there would be a remaining buildout potential of 2,250 dwelling units (in addition to the 9,455 units that are existing, under construction, or approved) and 6,016,662 square feet of non-residential uses. This alternative would result in overall reductions in development intensity within the IBC as compared to the existing General Plan. This Alternative was developed to reduce the air quality, noise, and traffic impacts of the project. All other components of the project would remain the same. Under this alternative, the IBC would have a jobs/housing ratio of 8.70 at buildout.

Finding: The City finds that specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make the Reduced Intensity Alternative infeasible. (Public Resources Code § 21081(a)(3), Guidelines § 15091(a)(3)).

Facts in Support of Finding:

a. The Reduced Intensity Alternative would reduce impacts associated with air quality, hazards and hazardous materials, land use and planning, noise, public services, recreation, local traffic and utilities and services. However, this alternative would have greater population and

housing and global climate change impacts and increase regional VMT. All other impacts would be similar.

b. Although this alternative would lessen some environmental impacts, it would not avoid the significant environmental impacts to air quality, noise, or transportation/traffic. It would provide less housing opportunities in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities and would not promote the objectives of the City's long-range goals for the IBC to the same extent as the Proposed Project. Most of the project objectives would be met, but not to the degree of the project. In addition, this alternative reduces overall allowable development intensity within the IBC below what is currently allowed and would impact existing entitlements.

Reference: RDEIR §§ 7.5, 7.5.16

3. Increased Residential (20,000) Alternative

Description: This alternative would increase residential intensity and reduce non-residential intensity within the project area. As a result, the Increased Residential (20,000 du) Alternative includes a total of 20,000 dwelling units (which would include the maximum allowable density bonus units under state law), 46,675,906 square feet of non-residential uses, and 3,478 hotel rooms. Under the Increased Residential (20,000 du) Alternative there would be a remaining buildout potential of 10,545 dwelling units (including bonus density units) and 3,904,906 square feet of non-residential uses. This alternative would maintain the current maximum buildout intensity within the IBC as measured under the current zoning code, although non-residential intensity would be reduced. The objective of this Alternative is to reduce regional VMT and associated air quality impacts by improving jobs/housing balance within the IBC and Orange County Subregion. All other components of the project would remain the same. Under this alternative, the IBC would have a jobs/housing ratio of 4.60 at buildout.

Finding: The City finds that specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make the Increased Residential (20,000) Alternative infeasible. (Public Resources Code § 21081(a)(3), Guidelines § 15091(a)(3)).

Facts in Support of Finding:

a. The Increased Residential (20,000 du) Alternative would reduce impacts associated with air quality, population and housing, and global climate change. However, this alternative would have greater impacts to hazards and hazardous materials, land use and planning, public services, recreation, transportation/traffic, and utilities and service systems. In addition, this alternative does not avoid any significant environmental impacts.

b. The increased residential development in this alternative could result in more conflicts with existing and future commercial land uses. Impacts to fire protection, law enforcement, and library services would also be greater under this alternative, since there would be more residential development at full buildout. Residential land uses result in more calls for fire and police service as compared to commercial/office development. In addition, the increase in residential units would result in increased water demand and waste-water treatment requirements since residential uses typically use more water and generate more wastewater,

c. This alternative would provide greater housing opportunities in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities and would promote the objectives of the City's long-range goals for the IBC. Most of the project objectives would be met under this alternative. However, this Alternative would not protect the existing job base of the IBC to the same extent as the Proposed Project.

Reference: RDEIR §§ 7.6, 7.6.16.

4. Increased Residential (25,000) Alternative

Description: This alternative would convert nearly all of the remaining development intensity in the IBC to residential uses. Some non-residential intensity would remain to accommodate approved and pending non-residential projects. As a result, the Increased Residential (25,000 du) Alternative includes a total of 25,000 dwelling units (which would include the maximum allowable density bonus units under state law), 43,897,662 square feet of non-residential uses, and 3,478 hotel rooms. Under the Increased Residential (25,000 du) Alternative there would be a remaining buildout potential of 15,545 dwelling units (including density bonus units) and 1,126,662 square feet of non-residential uses. This alternative would maintain the current maximum buildout intensity within the IBC as measured by the current zoning code, although non-residential intensity would be reduced. The objective of this Alternative is to reduce regional VMT and associated air quality impacts. All other components of the project would remain the same. Under this alternative, the IBC would have a jobs/housing ratio of 3.50 at buildout.

Finding: The City finds that specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for

highly trained workers, make the No Project Alternative infeasible. (Public Resources Code § 21081(a)(3), Guidelines § 15091(a)(3)).

Facts in Support of Finding:

a. The Increased Residential (25,000 du) Alternative would reduce impacts associated with air quality, population and housing, and global climate change. However, this alternative would have greater impacts to hazards and hazardous materials, land use and planning, public services, recreation, and utilities and service systems. In addition, this alternative does not avoid any significant environmental impacts.

b. The increase in housing units, and decrease in non-residential uses, in this alternative would result in increased demands for fire protection, law enforcement, and library services; increased demand for park facilities; and increased demand for water and need for wastewater treatment.

c. This alternative would provide greater housing opportunities in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities and would promote the objectives of the City's long-range goals for the IBC. Most of the project objectives would be met under this alternative. However, this Alternative would not protect the existing job base of the IBC to the same extent as the Proposed Project.

Reference: RDEIR §§ 7.7, 7.7.16.

VIII.
ENVIRONMENTAL ISSUES DETERMINED
NOT TO BE POTENTIALLY AFFECTED BY THE PROJECT

Based on the Project's Initial Study and responses to the Project's NOP, two environmental issues, Agricultural Resources and Mineral Resources, were determined by the City to be either inapplicable to the Project based upon the nature of the Project and/or the absence of any potential impact related to that issue or because the issue was potentially impacted to a degree that could clearly be seen to be less than significant and, therefore, not warranting further consideration in the FEIR. No substantial evidence has been presented to or identified by the City which would modify or otherwise alter the City's less-than-significant determinations for those environmental issues. Accordingly, the FEIR does not analyze potential impacts of the Project as to Agricultural Resources and Mineral Resources.

IX. FINDINGS REGARDING GROWTH INDUCING IMPACTS

Guidelines Section 15126.2(d) requires that an EIR: “Discuss the ways in which the Proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.”

The Proposed Project would allow for an increase in total residential units within the IBC (Planning Area 36) from 9,455 units to 15,000 units. In addition, a total of 2,038 density bonus units would be allowed in accordance with State Law for a total 17,038 units. The increase in total allowed units would be 7,583, including 2,250 pending units and 5,333 units of potential future development. The current General Plan allows for 53,461,052 square feet of office equivalency in Planning Area 36. The total 7,538 additional new units (either potential or in process) remaining under the 15,000 unit cap would be offset by a reduction of 2,399,626 square feet of office square footage and 1,602,526 of industrial square footage (for a total of 4,002,152 square feet, or 2,887,307 square feet of office equivalency). Upon adoption of the IBC Vision Plan, the total nonresidential intensity allowed by the adopted General Plan would be 48,787,662 square feet. The Proposed Project would also increase the maximum number of hotel rooms allowed in the IBC by 372, from the existing limit of 3,106 to 3,478.

Although public service agencies would need to expand their services because of the Project in order to maintain desired levels of service, existing infrastructure is located within and near the Project site within either already developed projects or projects that are approved or planned for development. Therefore, the proposed expansion of public services to serve the Project Area would not encourage development in other areas beyond the Project boundary.

During Project construction, construction-related jobs would be created. This would be a direct, although temporary, growth inducing effect. In addition, as new homes are built and occupied, these new residents in the Project Area will create increased demand for goods and services which could encourage the creation of new businesses and/or the expansion of existing businesses to respond to this demand. Thus, the Project will have a growth inducing effect by encouraging or facilitating economic activity, although such indirect growth-inducing effects will be minimized due to the balanced nature of the land use plan.

The Project would not involve a precedent setting action that could be applied to other properties and thereby encourage or facilitate growth. The Project shifts intensities from other portions of the Planning Areas or other areas of the City, and does not increase the total number of residential units allowed under the General Plan. In addition, the Project is consistent with standard conditions of approval and/or mitigation measures adopted for the Project will ensure that subsequent development projects comply with all applicable City plans, policies, ordinances,

etc. Moreover, pressures to develop other land in the surrounding area would derive from regional economic conditions and market demands that are not directly influenced by zoning actions in a particular Planning Area.

X.
**FINDINGS REGARDING SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL
CHANGES**

Guidelines Section 15126.2(c) indicates that “uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely.” The Guidelines also indicate that “irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.” The Project would allow construction activities that would use non-renewable or slowly renewable resources including lumber and other forest products, sand and gravel, asphalt, steel, copper, lead and other metals, and water. There would also be a commitment of social services and public maintenance services, such as police, fire, schools, libraries, water and sewer services. The City finds that the commitment of such resources would represent an incremental effect on the regional consumption of these commodities and that such consumption is justified.

XI. STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to Public Resources Code Section 21081(b) and the Guidelines Section 15093, the City has balanced the benefits of the Proposed Project against the following unavoidable adverse impacts associated with the Proposed Project and has adopted all feasible mitigation measures with respect to these impacts: (1) Air Quality, (2) Noise, and (3) Transportation/Traffic. The City also has examined alternatives to the Proposed Project, none of which both meet the Project objectives and is environmentally preferable to the Proposed Project.

The City, after balancing the specific economic, legal, social, technological, and other benefits of the Proposed Project, has determined that the unavoidable adverse environmental impacts identified above may be considered “acceptable” due to the following specific considerations which, separately and in combination, outweigh the unavoidable, adverse environmental impacts of the Proposed Project. Each of the separate benefits of the Proposed Project, as stated herein, is determined to be, unto itself and independent of the other Project benefits, a basis for overriding all unavoidable adverse environmental impacts identified in these Findings. Project benefits include:

5. Provision of needed housing.

Housing growth within the State and the Southern California region has trailed population and employment growth rates for an extended period of time. In an effort to redress this mismatch between population and housing growth, State law now mandates that jurisdictions throughout California must plan to provide their fair share of regional housing needs. State law requires that each City must adopt a Housing Element to be included in the City’s General Plan to provide for the anticipated housing needs of the jurisdiction, and a Land Use Element which zones sufficient land for residential uses at an appropriate density to allow for the construction of the number of housing units which are specified in the plans contained in the Housing Element. In developing the number of housing units that are specified as the City’s planning goal in the City’s Housing Element of its General Plan, State law further provides that the City must consider the regional housing needs developed by the State of California and the allocation of these units to various jurisdictions by regional planning organizations. To this end, California’s Department of Housing and Community Development issues Regional Housing Need Allocation (RHNA) targets for each jurisdiction based on state and regional growth projections. Each jurisdiction must demonstrate in its Housing Element that it has made provisions in its General Plan for production of its fair share of regional housing needs for the 2006-2014 period. The City of Irvine’s 2006-2014 RHNA target is 35,660 units. The City of Irvine estimates that approximately 7,387 of its RHNA target units were built during 2006-2008, with the remaining 28,273 plus units to be completed by 2014.

The State's fair share housing program will issue updated RHNA targets every five years. Local jurisdictions must update their Housing Elements to demonstrate that they will produce enough housing to meet their RHNA targets for 2015-2025 and each successive 5-year period. The RHNA targets assigned by HCD will reflect state and regional growth forecasts and not necessarily local forecasts or general plans.

In order to meet the current RHNA targets the City will have to provide for an average of 5,655 housing units per year between 2010 and 2014. OCP-2006 projects that the City's housing stock will grow by 35,107 units between 2003 and 2035, or only 1,064 units per year, based on current General Plan designations. OCP-2006's projected average annual housing growth is only 19% of the current average annual RHNA goal. Given the City and Orange County's continued strong share of regional employment, the actual demand for housing will be likely to far exceed the OCP-2006 projection of the amount of housing "most likely" to be built during the 33-year period.

Given the likely demand and the fact that the post-2014 RHNA targets for the City are very likely to greatly exceed the number of units currently available under the City's existing General Plan, the City needs to designate more land for residential units within the City and its sphere. The City could accomplish this in several ways including through the recycling of existing employment- and revenue-generating uses to residential uses within the existing City boundaries; or through redevelopment of existing housing areas at higher densities within the existing City boundaries. Given the relatively recent vintage of Irvine's existing development, the first of these alternatives is the more feasible means of providing the projected fair share housing opportunities.

The Proposed Project contributes to the City's ability to meet its projected fair share housing production obligations in the 2006-2025 period, and helps insure a better long-term balance between jobs and housing within the City. In order to provide the amount of land necessary to produce the housing units that the City has established as its goal in the Housing Element and that the City expects will be required under the RHNA process, the City must develop adequate housing in each planning area to support growing employment opportunities and to meet the City's RHNA goal.

Reference: Irvine General Plan Housing Element Objective C-1 Policy (e); Land Use Element Objective A-4 Policy (c).

6. Improvement of the City's jobs/housing balance.

The Proposed Project contributes to a more balanced jobs/housing ratio consistent with both regional and City General Plan policies. The Proposed Project is located near existing transportation and transit facilities and within a major regional job concentrations and is

organized in a manner conducive to walking, biking and transit alternatives to automobile travel in accordance with Southern California Association of Governments (SCAG) policies. The location of the Proposed Project in an area already developed with employment opportunities, roads, transit access, and utilities further contributes to providing more affordable housing opportunities for workers within the City, rather than trying to satisfy the City's housing needs in more isolated locations without transportation and transit access or proximity to jobs, or on more difficult terrain that requires expensive construction techniques. These siting advantages will provide fiscal balance between employment, retail and residential uses; lower housing costs; reduced traffic congestion; and lower emissions due to congestion.

Reference: Irvine General Plan Land Use Element Objective A-4; SCAG Regional Growth Management Policies.

7. Consistency with AQMP Land Use Strategies

Although the proposed General Plan Amendment and Zone Change will result in significant air quality impacts, the project is consistent with Regional Comprehensive Plan and Guide (RCPG) and AQMP land use strategies to reduce the number of trips (i.e., through more balanced land uses within the IBC) and the length of trips (i.e., by reducing regional VMT by reducing home-to-work commute distances through jobs/housing balance policies). The assumptions regarding land use-based air quality measures is that trips and mode choices are not only a function of the transportation system, but also relate to housing density, relative locations of residential and commercial land uses, and the proximity to regional transportation systems.

The Proposed Project improves the jobs/housing balance of the Orange County Subregion, which is presently identified by SCAG as "jobs-rich." Providing a wide-range of housing opportunities within a concentrated employment center such as the IBC will provide people with the opportunity to live closer to their work, resulting in fewer VMT and less traffic congestion. Under, the "no-project" scenario, housing demand generated by Orange County employment increases would have to be met by areas farther from regional employment centers in Orange County, such as Riverside and San Bernardino Counties, which would result in an increase in regional VMT, increased congestion, and corresponding increases in CO, ROG, NO_x and PM₁₀ emissions from mobile sources. Therefore, as discussed previously, the Proposed Project promotes regional RCPG and AQMP attainment policies relating to jobs/housing balance and the promotion of HOV/transit use.

8. Implements THE OBJECTIVES ESTABLISHED FOR THE PROJECT

The City has established various objectives for the IBC Vision Plan and Mixed-Use Overlay Zoning Code. These objectives are summarized as follows:

- (1) Provide for the on going development of the IBC consistent with the City's General Plan Urban and Industrial land use designations and the City's adopted Vision Plan Goals, which are:
 - Protect the existing job base.
 - Develop mixed-use cores.
 - Provide transportation, pedestrian, and visual connectivity.
 - Create usable open space.
 - Develop safe, well-designed neighborhoods.
- (2) Provide additional housing opportunities near existing employment centers, consistent with the City's General Plan Land Use and Housing Elements.
- (3) Provide residential uses near existing employment centers, retail and entertainment uses, and transportation facilities consistent with the goals of the Southern California Association of Governments' Regional Comprehensive Plan and Compass Blueprint.
- (4) Provide residential development in areas of the IBC where adequate supporting uses and public services and facilities are provided, consistent with the City's General Plan Land Use Element.
- (5) Contribute to the development of mixed-use cores by incorporating residential, office, and commercial/retail uses into existing areas of nearby community facilities, retail goods and services, and restaurants to enhance the IBC's overall mixed-use urban character and reduce vehicle miles traveled in the South Coast Air Basin.
- (6) Provide neighborhood level amenities to serve the level of mixed-use development envisioned by the City's General Plan and IBC Vision Plan.
- (7) Incorporate sustainable provisions into implementation of the IBC Vision Plan.
- (8) Identify and pursue opportunities for open space areas that serve the recreational needs of IBC residents and employees.

The objectives identified above are achieved through implementation of the proposed project. The IBC Vision Plan outlines the City's policies and objectives for addressing residential and mixed-use development within the IBC, to be incorporated as a new element in the City's General Plan. The framework for the IBC Vision Plan provides the land use and urban design structure by which new residential development would be organized. Figure 3-4 of the RDEIR,

IBC Vision Plan Framework, is a summary exhibit of the key elements and attributes of the IBC that would facilitate the development of high-quality, sustainable neighborhoods, and a balanced mix of uses. As shown on Figure 3-5 of the RDEIR, Proposed IBC Infrastructure Improvements, several infrastructure improvements would be proposed throughout the IBC. The locations of the proposed improvements, such as bridge crossings, are generalized in nature, as specific locations have not yet been evaluated in detail. The proposed bridge widenings are intended to improve pedestrian and bicycle access. No additional vehicular travel lanes are proposed.

The existing sidewalk improvement program will continue to be implemented and embellished with enhanced standards for improved walkability and connectivity to create an interconnected system of pedestrian-friendly boulevards, avenues, and streets. The program calls for the installation of sidewalks to fill the gaps in the IBC sidewalk system and provides for the installation of a five- to eight-foot-wide sidewalk behind eight feet of landscaped parkway.

The proposed project includes a new per-unit fee program to be assessed against new residential or residential mixed-use development in the IBC to fund these proposed improvements. Existing developments would be exempt from this fee program. This fee program is proposed to be adopted in conjunction with the Vision Plan and its components. A separate fee program is also proposed to be adopted in conjunction with the Vision Plan to augment the current IBC Transportation Mitigation Fee program to reflect current mitigation outlined in the Transportation and Traffic section of this DEIR.

5. Transportation/Traffic Considerations

Although substantial traffic increases are associated with the Proposed Project, traffic improvements are proposed to mitigate the traffic impacts. Continuation of existing General Plan policies, instead of project implementation, would result in increased VMT. The Proposed Project includes mitigation measures requiring specific circulation improvements and an update to the IBC Development Fee Program for funding circulation improvements in the IBC and adjoining areas. Without the Proposed Project and the project-funded circulation improvements specified as mitigation measures within this EIR, future cumulative intersection levels of service may worsen through a combination of local and regional traffic, or required improvements would become the responsibility of the appropriate public agencies or developers of other cumulative projects in the region.

6. Conclusion

For the foregoing reasons, the City of Irvine concludes that the IBC Vision Plan and Mixed-Use Overlay Zoning Code will result in a beneficial mix of residential, multi-use, commercial, industrial, institutional, recreation and open space uses providing significant housing open space, and transportation benefits of local and regional significance, as well as various public infrastructure improvements, which outweigh the unavoidable environmental impacts. Therefore, the City of Irvine has adopted this Statement of Overriding Considerations.

*MITIGATION
MONITORING
PROGRAM*

IRVINE BUSINESS

COMPLEX VISION PLAN

AND MIXED USE

OVERLAY ZONING CODE

ENVIRONMENTAL

IMPACT REPORT

SCH #2007011024



prepared for:

CITY OF IRVINE

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Vice President,
Environmental Services*

JULY 2010

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1. Introduction

1.1 PURPOSE OF MITIGATION MONITORING PROGRAM

This Mitigation Monitoring Program has been developed to provide a vehicle by which to monitor mitigation measures and conditions of approval outlined in the Recirculated Draft Environmental Impact Report (RDEIR) State Clearinghouse No. 2007011024. The Mitigation Monitoring Program has been prepared in conformance with Section 21081.6 of the Public Resources Code and City of Irvine Monitoring Requirements. Section 21081.6 states:

(a) When making the findings required by paragraph (1) of subdivision subsection (a) of Section 21081 or when adopting a mitigated negative declaration pursuant to paragraph (2) of subdivision (c) of Section 21080, the following requirements shall apply:

(1) The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.

(2) The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.

(b) A public agency shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other public project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.

(c) Prior to the close of the public review period for a draft environmental impact report or mitigated negative declaration, a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the lead agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources which are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a responsible agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit the authority of the responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

The Mitigation Monitoring Program will serve to document compliance with adopted/certified mitigation measures which are formulated to minimize impacts associated with the construction of the proposed project.

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1.2 PROJECT LOCATION

The approximately 2,800-acre Irvine Business Complex (IBC) comprises Planning Area 36 in the City of Irvine, in south/central Orange County. More specifically, the IBC is generally bounded by the former Tustin Marine Corps Air Station (MCAS) to the north, the San Diego Creek channel to the east, John Wayne Airport and Campus Drive to the south and State Route 55 (SR-55) to the west. The San Diego Freeway (I-405) traverses the southern portion of the IBC, and the Santa Ana Freeway (I-5) is to the north and east. The IBC is bordered by the cities of Newport Beach to the south, Santa Ana and Costa Mesa to the west, and Tustin to the north. The IBC consists of a range of industrial, office, commercial, and residential uses covering approximately 2,800 acres in the western portion of the City of Irvine. Adjacent to the IBC, on the north, is the City of Tustin and the former MCAS Tustin, currently being redeveloped with residential and commercial uses as part of the Tustin Legacy Specific Plan. A 40-acre parcel of the IBC is detached and to the south of the main IBC boundary area, and bounded by Jamboree Road, Fairchild Road, Macarthur Boulevard, and the San Joaquin Marsh, and adjacent to the City of Newport Beach. The most prominent land use in the IBC is office, with substantial amounts of industrial/warehouse uses and 4,779 medium- and high density residential units and 232 density bonus units for a total of 5,011 dwelling units existing within the IBC.

1.3 PROJECT SUMMARY

As shown on Table 1-1, the IBC Vision Plan and Mixed Use Overlay Zoning Code (proposed project) would allow for an increase in total units in the IBC from 9,015 units to 15,000 units, a difference of 5,985. This increase is a reallocation of existing intensity within current intensity limitations. In addition, a total of 1,598 density bonus units, in addition to 440 existing, approved, or under construction would be allowed in accordance with state law, for a total 17,038 units. The current General Plan allows for 53,125,389 square feet of nonresidential intensity in Planning Area 36. The additional units would be offset by a reduction of 2,399,626 of office square footage and 1,602,526 of industrial square footage (for a total of 4,002,152 square feet, or 2,887,307 square feet of office equivalency). Upon adoption of the IBC Vision Plan, the total nonresidential intensity allowed by the adopted General Plan would be 48,787,662 square feet. The individual components of the proposed project are outlined in Table 1-1.

1. Introduction

Table 1-1
IBC Development Summary

Residential					
	Existing General Plan			Proposed Project	
	Existing	Under Construction	Approved	Pending ¹	Potential ²
Base Units	4,779	1,814	2,422	2,035	3,950
Density Bonus Units ³	232	78	130	215	1,383
Subtotal	5,011	1,892	2,552	2,250	5,333
Total	9,455			7,583	
Total Cap for the IBC				15,000	
Total IBC Units at Buildout including Density Bonus				17,038	
Nonresidential					
	Existing General Plan		Proposed Project		
	Existing Development	Remaining Buildout Potential	Remaining Buildout Potential		
Nonresidential Square Footage	42,771,000	10,354,389	6,016,662		
Total Nonresidential	53,125,389		48,787,662		
Hotel Rooms					
	Existing General Plan		Proposed Project		
	Existing Development	Remaining Buildout Potential	Remaining Buildout Potential		
	2,496	610	372		
Total Hotel Rooms	3,106		3,478		

¹ Pending units are those for which development applications are currently on file with the City.

² Potential units are those remaining to reach the 15,000-unit cap. No development applications have been received for these units.

³ Density bonus units are exempt by state law from local regulatory limitations on development intensity but are included and analyzed in this DEIR.

The proposed project consists of the following components:

1.3.1 IBC Vision Plan

The IBC Vision Plan outlines the City's policies and objectives for addressing residential and mixed-use development within the IBC, to be incorporated as a new element in the City's General Plan. The framework for the IBC Vision Plan provides the land use and urban design structure by which new residential development would be organized. The IBC Vision Plan Framework would facilitate the development of high-quality, sustainable neighborhoods, and a balanced mix of uses. Several infrastructure improvements would be proposed throughout the IBC Vision Plan area. The locations of the proposed improvements, such as bridge crossings, are generalized in nature, as specific locations have not yet been evaluated in detail. The proposed bridge widenings are intended to improve pedestrian and bicycle access. No additional vehicular travel lanes are proposed.

The existing sidewalk improvement program will continue to be implemented and embellished with enhanced standards for improved walkability and connectivity to create an interconnected system of pedestrian-friendly boulevards, avenues, and streets. The program calls for the installation of sidewalks to fill the gaps in the IBC sidewalk system and provides for the installation of a five- to eight-foot-wide sidewalk behind eight feet of landscaped parkway.

The proposed project includes a new per-unit fee program to be assessed against new residential or residential mixed-use development in the IBC to fund these proposed improvements. Existing developments would be exempt from this fee program. This fee program is proposed to be adopted in conjunction with the Vision Plan and its components. A separate



1. Introduction

fee program is also proposed to be adopted in conjunction with the Vision Plan to augment the current IBC Transportation Mitigation Fee program to reflect current mitigation.

1.3.2 IBC Districts

The IBC was originally planned as a business complex and at present there is little distinctiveness between its different areas. The IBC Vision Plan attempts to address this by creating two districts, to identify both a proposed mixed-use core and maintain a distinct core for existing businesses, each with its own unique identity and character, within the Mixed Use Overlay Zone.

Urban Neighborhood (UN)

The Urban Neighborhood District would include the mixed-use core IBC (generally between Jamboree Road and Von Karman Avenue) and allows a range of land uses and buildings at varying heights. Generally, these neighborhoods are envisioned to be primarily residential with retail, offices, and restaurants allowed on the first floor.

Business Complex (BC)

The Business Complex District would be applied to portions of the IBC characterized by existing, longstanding industrial and other commercial uses that are expected to remain. This district accommodates new industrial and other commercial uses and an expansion of existing uses.

1.3.3 Subsequent Development Pursuant to the Proposed Project

The 2,250 pending units identified in Table 1-1 include the proposed projects summarized in Table 1-2, for which applications are currently on file with the City. It is anticipated that following the certification of this RDEIR, the City will proceed with the processing of the discretionary applications associated with each of these projects, without further need for a General Plan Amendment, Zone Change, or EIR so long as the project substantially conforms to the description in this RDEIR.

*Table 1-2
Summary of Pending IBC Residential Development Projects*

Project Name	Location	Base Units	Density Bonus Units	Total Units
Martin Street Condos	2301 Martin Street	82	—	82
2851 Alton	Northwest corner of Alton and Murphy	170	—	170
Avalon Jamboree II	16901 Jamboree	144	35	179
Irvine Technology Center	Northwest corner of Jamboree and Campus	1,000	—	1,000
Kilroy	17150 Von Karman	347	122	469
Alton/Millikan Apartments	16952 Millikan	126	30	156
2852 Kelvin	2852 Kelvin	166	28	194
Total		2,035	215	2,250

1.3.4 General Plan Amendment

The General Plan Amendment would incorporate Vision Plan policies and objectives into a new General Plan Element and establish a cap of 15,000 dwelling units for the IBC area (excluding density bonus units granted pursuant to state law), with a corresponding reduction of nonresidential office equivalency square footage in Table A-1, Maximum Intensity Standards by Planning Area, of the City's General Plan, to accommodate future units under the cap that have not yet been approved. As described on Table 1-1, the General Plan/Zoning cap for the IBC is currently set at 9,015

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residential units; therefore, a unit cap of 15,000 units would create potential for 5,985 additional dwelling units (of which 2,035 are pending) in the IBC beyond those already existing or approved. The details (location, timing, density, and design) of 3,950 potential units are unknown because there are no currently pending applications. In addition to the 15,000-unit cap, this RDEIR and related traffic study address the potential for 2,038 additional density bonus units, listed below, which are excluded from local intensity limitations by state law:

- 232 existing (built) density bonus units
- 208 density bonus units approved or under construction
- 215 known density bonus units from pending projects
- A theoretical maximum of 1,383 density bonus units, assuming the remaining 3,950 units are built with a maximum allowable additional density bonus of 35 percent

The current General Plan allows for 53,125,389 square feet of overall nonresidential development in Planning Area 36, which may vary according to the totals of individual land uses over time. The total 5,985 additional new units (either potential or in process) remaining under the 15,000-unit cap would be offset by a reduction of 4,337,727 square feet of nonresidential intensity square feet. With the additional nonresidential land use optimization discussed in this DEIR, the overall nonresidential intensity in the General Plan would be 48,787,662 square feet, with the reduction resulting primarily from the conversion of higher quantities of older industrial square footage to lower quantities of office square footage. Construction of the 1,892 units in process, along with the pending and approved nonresidential projects, are assumed to be completed by 2015. The remaining 3,950 units, along with the proposed nonresidential land use optimization, would be completed at City buildout, post-2030. The General Plan Amendment would also add new policy language to the current Land Use Element text and add the IBC Vision Plan framework as a new Land Use Element Figure A-3 (IBC) to incorporate the IBC Vision Plan.

As a part of General Plan Amendment, the existing IBC density cap of 52 dwelling units per acre would be removed from the Land Use Element Table A-1 and a minimum of 30 units per acre would be added as a density level. As a result, future residential projects would not have a restriction on maximum density, but would have to comply with a minimum density of 30 units per acre to ensure the benefit of higher-density housing necessary to establish a vibrant mixed-use community.

1.3.5 Zoning Ordinance Amendment

The Zoning Ordinance Amendment would add new Chapter 5-8 to adopt the IBC Mixed Use Overlay Zone, which would define regulatory zoning districts for properties within the IBC and outline a process for analysis of compatibility of residential development with adjacent businesses. The amendment would also revise the statistical analysis outlined in Section 9-36-5, Statistical Analysis, of the City's Zoning Ordinance, to establish a residential cap of 15,000 dwelling units for the IBC area (excluding density bonus units pursuant to state law), with an offsetting reduction of nonresidential square footage, for units under the cap not yet approved, consistent with the proposed General Plan Amendment. Furthermore, the amendment would also update the Chapter 9-36, Planning Area 36 (Irvine Business Complex), provisions regarding the IBC traffic mitigation fee program. This amendment would also include clarifications of code language relating to Transfer of Development Rights (TDR). The Zoning Ordinance Amendment would also include other minor amendments to other sections of zoning code to maintain internal consistency.

1.3.6 Municipal Code Amendment

The Municipal Code Amendment would revise Chapter 10, Dedications, of Division 5, Subdivisions, of the City's Municipal Code, by adding a section to incorporate new urban park standards into the City's park dedication requirements for the IBC. The City's Park Standards Manual would also be updated to address urban open space in the



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IBC. Section 5-5-1004D(1) will also be revised to remove a 50-unit per acre density cap for determining persons per household..

1.3.6.1 Design Criteria

To ensure a consistent standard of residential design quality throughout the IBC, a set of design criteria from the IBC Vision Plan that would be applicable to residential and residential mixed-use projects in the IBC would be adopted. These criteria are intended to guide the physical development of any residential or mixed-use project that contains a component of residential use within the boundaries of the IBC. They are intended to assist in ensuring that the design of each development remains true to the principles established in the IBC Vision Plan. The criteria would also provide standards and criteria for new construction and for remodels or additions. The new design criteria would only be applicable to residential and mixed-use development.

1.3.6.2 Amendments to the City's Circulation Element

The City of Irvine General Plan Circulation Element identifies certain roadway configurations that are no longer needed as determined in the IBC Vision Plan; therefore a General Plan Amendment subsequent to the approval of the IBC Vision EIR will downgrade arterial roadways as needed. The City of Irvine intends to downgrade the following arterial segments as a subsequent General Plan Amendment to the Circulation Element:

- Barranca Parkway between Red Hill Avenue and Jamboree Road (downgrade from 8-lane divided roadway to 7-lane divided roadway)
- Jamboree Road between Barranca Parkway and McGaw Avenue (downgrade from a 10-lane divided roadway to a 8-lane divided roadway)
- Main Street between Red Hill and Harvard (downgrade from 6-lane divided arterial with 2 auxiliary lanes to 6-lane divided roadway)
- MacArthur Boulevard between Fitch and Main Street (downgrade from 8-lane divided roadway to 7-lane divided roadway)
- Red Hill Avenue between Barranca Parkway and Main Street (downgrade from an 8-lane divided roadway to a 6-lane roadway)
- Alton Parkway between Red Hill Avenue and Jamboree Road (downgrade from a 6-lane divided roadway to 4-lane divided roadway)
- Von Karman Avenue between Barranca Parkway and Michelson (downgrade from 6-lane roadway to 4-lane roadway)

The arterial segment of Alton Parkway between Red Hill Avenue and Jamboree Road as well as the segment of Von Karman Avenue between Barranca Parkway and Michelson Drive are programmed into both the City of Irvine's General Plan and the Orange County Master Plan of Arterial Highways (MPAH). Both roadways are currently 4-lane roadways and expected to remain as 4-lane roadways in the future. Both the City's General Plan and the Orange County MPAH currently have these two segments programmed as 6-lane divided arterials in the buildout condition. The IBC Vision Plan traffic study has determined that 6 lanes are unnecessary for both of these roadway segments under buildout conditions. Thus, the City of Irvine will initiate an MPAH Amendment by entering into a cooperative study with the Orange County Transportation Authority (OCTA) to determine the feasibility of downgrading both Alton Parkway and Von Karman Avenue. In order for the City of Irvine to maintain eligibility for Measure M funding, prior to amending the City's General Plan to downgrade both Alton Parkway between Red Hill Avenue and Jamboree Road and Von Karman

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Avenue between Barranca Parkway and Michelson Drive, the City and OCTA will work to prepare amendments to the County MPAH to be approved by the OCTA Board of Directors. If the MPAH is approved by the OCTA Board, the City can move forward with downgrading the arterial segments.

Additionally, the City of Irvine intends to remove the following interchange improvements:

- Alton Parkway overcrossing at the SR-55 freeway with High Occupancy Vehicle (HOV) drop ramps
- Von Karman Avenue at the I-405 freeway HOV drop ramps

These interchange improvements are programmed in the Orange County MPAH as buildout improvements. However, the IBC Vision Plan traffic study has determined that these interchanges are unnecessary under buildout conditions. The City of Irvine will initiate an MPAH Amendment by entering into a cooperative study with OCTA and the affected local agencies to determine the feasibility of removing these interchange improvements from the MPAH.

1.3.7 Additional Changes

The name of the IBC may also be changed as directed by the Irvine City Council. Although not required under CEQA, it is included for informational purposes.

1.4 ENVIRONMENTAL IMPACTS

The City of Irvine determined that an EIR would be required for this project and issued a Notice of Preparation (NOP) and Initial Study on January 8, 2007, to the State Clearinghouse, responsible agencies, and interested parties. Comments received during the January 8, 2007, through February 22, 2007, NOP review period are also contained in Appendix A. The project description was subsequently revised to reduce the number of dwelling units and project details were refined. A new NOP was circulated between September 19, 2008, and October 20, 2008.



1.4.1 Impacts Considered Less Than Significant

The following environmental topical sections were found to be less in the Initial Study.

- Agricultural Resources
- Mineral Resources

1.4.2 Potentially Significant Adverse Impacts That Can Be Mitigated, Avoided, or Substantially Lessened

The following have been identified as potentially resulting in significant adverse impacts that can be mitigated, avoided, or substantially lessened:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services

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- Recreation
- Transportation/Traffic
- Utilities and Service Systems
- Global Climate Change

1.4.3 Unavoidable Significant Adverse Impacts

The DEIR identifies three significant and unavoidable adverse impacts, as defined by CEQA that would result from implementation of the proposed project:

- Air Quality
- Noise
- Transportation and Traffic

2. Mitigation Monitoring Process

2.1 MITIGATION MONITORING AGREEMENT

The Mitigation Monitoring Agreement will be provided through the City conditions of approval process, and reference compliance with this monitoring program.

Provisions are included in the Agreement specifying monitoring and reporting requirements, scheduling, qualifications of mitigation monitors and specialists, agency fees, right of site access, dispute resolution, and penalties. The Agreement will include enforcement provisions and sanctions for more severe infractions, such as stop work orders, loss of further entitlement or restoration. The landowner would agree that the agency has the right to impose these sanctions pursuant to the contract and hold the agency harmless in enforcement of its provisions.

The lead agency may also require that Mitigation Monitoring Agreements be executed between the landowner and appropriate responsible or trustee agencies.

The use of Mitigation Monitoring Agreements will clarify the assignment of responsibility, and have the added benefit of improving the citizenry's confidence that agencies are committed to take actions to protect their environment.

2.2 MITIGATION MONITORING PROGRAM ORGANIZATION

Overall mitigation monitoring program management is the responsibility of the City of Irvine Community Development Department. The Mitigation Monitoring Committee—composed of the landowner, construction manager, and the environmental monitor—is responsible for program implementation and reporting requirements. The technical consultants (EIR consultant, geologist/environmental assessor, project engineer, noise consultant, and traffic consultant) will perform related monitoring tasks under the direction of the environmental monitor (if contracted by the City).

In the event of disputes regarding matters for which the City is the final authority, The Director of Community Development will be final arbiter in the event of a dispute.

2.3 CITY OF IRVINE COMMUNITY DEVELOPMENT DEPARTMENT

The City of Irvine Community Development Department will serve as the program administrator, responsible for overall program management, mitigation monitoring clearances and coordination of the arbitration committee/responsible agencies, and the mitigation monitoring committee. The Department is responsible for review of all monitoring reports, enforcement actions, and document disposition.

2.4 MITIGATION MONITORING COMMITTEE

The mitigation monitoring committee is responsible for the day-to-day monitoring activities and reporting, and includes a representative from the landowner, construction manager, and the mitigation monitor. The monitoring committee holds regularly scheduled meetings to coordinate mitigation measure implementation, review compliance reports, and resolve in-field disputes. Unresolved disputes are forwarded to the arbitration committee.

2.5 MITIGATION MONITORING TEAM

The mitigation monitoring team, consisting of the environmental monitor manager and technical subconsultants (EIR consultant, geologist/environmental assessor, project engineer, biologist, noise consultant, traffic consultant, and archaeologist), is responsible for monitoring the implementation/ compliance with all adopted mitigation measures and conditions of approval. A major portion of the team's work is in-field monitoring and compliance report preparation. Implementation disputes are brought to the committee for resolution by the monitor, and if required, to the arbitration committee.

2. Mitigation Monitoring Process

The following summarizes key positions in the monitoring program and their respective functions:

Monitoring Team

- **Technical Advisors:** Responsible for monitoring in respective areas of expertise (EIR consultant, geologist/environmental assessor, project engineer, noise consultant, and traffic consultant). Directly reports to the environmental monitor.
- **Monitoring Committee:** Responsible for report review, and first phase of dispute resolution.
- **Irvine Community Development Department:** Principal manager of the monitoring program. Responsible for coordination of mitigation monitoring committee, technical consultants, report preparation, and dispute resolution. Responsible for overall program administration, participation on arbitration committee and document/report clearinghouse.
- **Irvine Department of Public Works:** Responsible for review of final engineering plans in conformance with the Tentative maps, technical support, and compliance report preparation.
- **City Council:** Responsible for implementation of corrective action, stop work orders and final arbitrator of disputes.

2.6 *RECOGNIZED EXPERTS*

The use of recognized experts, as a component of the monitoring team and arbitration committee, is required to ensure compliance with scientific and engineering based mitigation measures. While the mitigation monitoring teams recognized experts assess compliance with required mitigation measures, responsible agency recognized experts consult with the arbitration committee regarding disputes.

2.7 *ARBITRATION/DISPUTE RESOLUTION*

If the mitigation monitor identifies a mitigation measure which, in the opinion of the monitor, has not been implemented, or has not been implemented correctly, the problem will be brought for resolution before the mitigation monitoring committee for resolution. If the problem cannot be satisfactorily resolved by the committee, it will be brought before the Director of Community Development for resolution. The decision of the Director of Community Development is final, unless appealed to the Director or Planning Commission. The Director of Community Development, acting through a final vote of the City Council, will have the authority to issue stop work orders until the dispute is resolved. In the case of situations involving potential risk of safety or other emergency conditions, the Director of Community Development is empowered to issue temporary stop work orders until such time as Planning Commission or City Council review of the particular stop work matter becomes final.

2.8 *ENFORCEMENT*

Public agencies may enforce conditions of approval through their existing police power, using stop work orders, fines, infraction citations, loss of entitlement, refusal to issue building permits or certificates of use and occupancy, or, in some cases, notice of violation for tax purposes. Criminal misdemeanor sanctions could be available where the agency has adopted an ordinance requiring compliance with the monitoring program, similar to the provision in many zoning ordinances which state the enforcement power to bring suit against violators of the ordinance's provisions.

Additional enforcement provisions could include required posting of a bond or other acceptable security in the amount of the required mitigation measures. In the event of non-compliance, the City could call the bond and complete the required mitigation measures.

2. Mitigation Monitoring Process

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3. Mitigation Monitoring Requirements

3.1 PRE-MITIGATION MEETING

A pre-monitoring meeting will be scheduled to review mitigation measures, implementation requirements, schedule conformance, and mitigation monitoring committee responsibilities. Committee rules are established, and the entire mitigation monitoring program is presented and any misunderstandings resolved.

3.2 CATEGORIZED MITIGATION MEASURES/MATRIX

Project-specific design features, existing plans, policies, and procedures, and mitigation measures have been categorized in matrix format, as shown in Table 3-1. As shown, the matrix identifies the environmental factor, specific mitigation measures, project design features, and existing plans, policies, and procedures, schedule, and monitor. The mitigation matrix will serve as the basis for scheduling the implementation of, and compliance with, all mitigation measures, project design features, and existing plans, policies, and procedures.

3.3 DATA BASE MANAGEMENT

All mitigation monitoring reports, letters, memos, shall be prepared utilizing Microsoft Word software on IBM compatible PC (currently in use by the Irvine Community Development Department).

3.4 COORDINATION WITH CONTRACTORS

The construction manager is responsible for coordination of contractors, and is responsible for contractor completion of required mitigation measures.

3.5 LONG-TERM MONITORING

Long-term monitoring relating to several mitigation measures may be required.

3. Mitigation Monitoring Requirements

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4. Mitigation Monitoring Reports

Mitigation monitoring reports are required to document compliance with the Mitigation Monitoring Program, and dispute arbitration enforcement resolution. Specific reports include:

- Field Check Report
- Plan Check Conformance Reports
- Implementation Compliance Report
- Arbitration/Enforcement Report

4.1 FIELD REPORTS

Field reports are required to record in-field compliance and conditions.

4.2 PLAN CHECK CONFORMANCE REPORTS

Plan check conformance reports are completed by the Community Development Department, the Department of Public Works and the mitigation monitor to evaluate final engineering compliance with mitigation measures outlined in the Final EIR.

4.3 IMPLEMENTATION COMPLIANCE REPORT (ICR)

The ICR is prepared to document the implementation of mitigation measures on a phased basis and is shown in Table 3-1. The report summarizes implementation compliance including mitigation measures and date completed.

4. Mitigation Monitoring Reports

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3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
5.1 AESTHETICS			
Existing Plans, Programs and Policies			
Prior to the issuance of building permits	PPP 1-1 City of Irvine Zoning Ordinance Chapter 3-16- Lighting: As required by Chapter 3-16, Lighting, of the City's Zoning Ordinance, outdoor lighting shall be designed and installed so that all direct rays are confined to the site and adjacent properties are protected from glare. The level of lighting on the site shall comply with the requirements of the City's Uniform Security Code.	Community Development Department	
Prior to the issuance of building permits	PPP 1-2 City of Irvine Standard Condition 3.6: Prior to the issuance of building permits, the applicant shall demonstrate, through the submittal of an electrical engineer's photometric survey, prepared to the satisfaction of the Director of Community Development, that lighting requirements as set forth in the Irvine Uniform Security Code (Irvine Municipal Code, Title 5, Division 9, Chapter 5) are met.	Community Development Department	
Project Design Features			
Prior to the issuance of building permits	PDF 1-1 City of Irvine Zoning Ordinance Chapter 5-8-4.A.1: For specific development projects that are proposing high-rise office or residential uses within 100 feet of the San Joaquin Freshwater Marsh or the San Diego Creek, in order to minimize the frequency of birds flying into the building surface, the project applicant shall reduce the reflectivity of building surface materials by using angles that are not highly reflective, or through the incorporation of building surface materials that reduce reflectivity.	Community Development Department	
5.2 AIR QUALITY			
Existing Plans, Programs and Policies			
Prior to the issuance of grading permits	PPP 2-1 SCAQMD Rule 201 – Permit to Construct: The SCAQMD requires developers who build, install, or replace any equipment or agricultural permit unit, which may cause new emissions of or reduce, eliminate, or control emissions of air contaminants to obtain a permit to construct from the Executive Officer.	South Coast Air Quality Management District	
Prior to the issuance of grading permits	PPP 2-2 SCAQMD Rule 402 – Nuisance Odors: The SCAQMD prohibits the discharge of any quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property to be emitted within the South Coast Air Basin (SoCAB).	South Coast Air Quality Management District	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Prior to the issuance of grading permits and during construction activities	PPP 2-3 SCAQMD Rule 403 – Fugitive Dust (PM₁₀ and PM_{2.5}): The SCAQMD prohibits any person to cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that: (a) the dust remains visible in the atmosphere beyond the property line of the emission source; or (b) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook) if the dust emission is the result of movement of a motorized vehicle.	South Coast Air Quality Management District consultation with the Construction Contractor	
Prior to the issuance of grading permits and during construction activities	PPP 2-4 SCAQMD Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities: This rule specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.	South Coast Air Quality Management District consultation with the Construction Contractor	
Project Design Features			
Prior to the issuance of building permits	PDF 2-1 City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.f: As described in the proposed zoning for the project and based on the recommended buffer distances of the California Air Resources Board, for all residential or residential mixed-use projects within the distances to industrial uses outlined below, the Project Applicant shall submit a health risk assessment (HRA) prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD) to the Community Development Director prior to approval of any future discretionary residential or residential mixed use project. If the HRA shows that the incremental cancer risk exceeds one in one hundred thousand (1.0E-05), or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value (MERV) filters rated at 14 or better at all residential units: • 1,000 feet from the truck bays of an existing distribution center that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units, or where transport refrigeration unit operations exceed 300 hours per week. • 1,000 feet from an existing chrome plating facility or facility that uses hexavalent chromium. • 300 feet from a dry cleaning facility using perchloroethylene using one machine and 500 feet from a dry cleaning facility using perchloroethylene using two machines. • 50 feet from gas pumps within a gas-dispensing facility and 300 feet from gas pumps within a	Community Development Department	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Prior to the issuance of building permits	gasoline-dispensing facility with a throughput of 3.6 million gallons per year or greater. City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.e: As described in the proposed zoning for the project, applicants for new residential developments in the Irvine Business Complex within 500 feet of Interstate 405 shall be required to install high efficiency Minimum Efficiency Reporting Value (MERV) filters of MERV 10 or better in the intake of residential ventilation systems. A MERV 10 filter creates more resistance to airflow because the filter media becomes denser as efficiency increases. Heating, air conditioning and ventilation (HVAC) systems shall be installed with a fan unit power designed to force air through the MERV 10 filter. To ensure long-term maintenance and replacement of the MERV 10 filters in the individual units, the following shall occur: a) Developer, sale, and/or rental representative shall provide notification to all affected tenants/residents of the potential health risk from I-405 for all affected units. b) For rental units within 500 feet of the I-405, the owner/property manager shall maintain and replace MERV 10 filters in accordance with the manufacturer's recommendations. The property owner shall inform renters of increased risk of exposure to diesel particulates from I-405 or SR-55 when windows are open. c) For residential owned units within 500 feet of I-405, the Homeowner's Association (HOA) shall incorporate requirements for long-term maintenance in the Covenant Conditions and Restrictions and inform homeowners of their responsibility to maintain the MERV 10 filter in accordance with the manufacturer's recommendations. The HOA shall inform homeowner's of increased risk of exposure to diesel particulates from I-405 when windows are open.	Community Development Department	
Prior to the issuance of building permits	City of Irvine IBC Design Criteria Section 2.0.B As described in the proposed design criteria for the project, all outdoor active-use public recreational areas associated with development projects shall be located more than 500 feet from the nearest lane of traffic on the Interstate 405.	Community Development Department	
Prior to the issuance of grading permits and during construction activities	City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.g: For all residential projects located within 1,000 feet of an industrial facility which emits toxic air contaminants, the Project Applicant shall submit a health risk assessment prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment and the South Coast Air Quality Management District to the Community Development Director prior to approval of any future discretionary residential or mixed-use project. If the HRA shows that the incremental cancer risk exceeds one in one hundred thousand (1.0E-05), or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACIs may include, but are not limited to,	Community Development Department	

3. Mitigation Monitoring Requirements

<i>Table 3-1</i> <i>Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs),</i> <i>Mitigation Measures (MMs) and Level of Significance after Mitigation</i>			
Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Prior to the issuance of grading permits and during construction activities	scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value filters rated at 10 or better at all residential units. City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.h.: For all residential projects located within 1,000 feet of an industrial facility that emits substantial odors, which includes but is not limited to: - wastewater treatment plants - composting, greenwaste, or recycling facilities - fiberglass manufacturing facilities - painting/coating operations - coffee roasters - food processing facilities, The Project Applicant shall submit an odor assessment to the Community Development Director prior to approval of any future discretionary action that verifies that the South Coast Air Quality Management District (SCAQMD) has not received three or more verified odor complaints. If the Odor Assessment identifies that the facility has received three such complaints, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential odors to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value (MERV) filters rated at 10 or better at all residential units.	Community Development Department	
Prior to the issuance of grading permits and during construction activities	Exhaust PDF 2-6 City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.a and 9-38-20.3: Applicants for new developments in the Irvine Business Complex shall require that the construction contractor utilize off-road construction equipment that conforms to Tier 3 of the United States Environmental Protection Agency, or higher emissions standards for construction equipment over 50 horsepower that are commercially available. The construction contractor shall be made aware of this requirement prior to the start of construction activities. Use of commercially available Tier 3 or higher off-road equipment, or: year 2006 or newer construction equipment for engines rated equal to 175 horsepower (hp) and greater;	Community Development Department in consultation with the Construction Contractor	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	• year 2007 and newer construction equipment for engines rated equal to 100 hp but less than 175 hp; and • 2008 and newer construction equipment for engines rated equal to or greater than 50 hp The use of such equipment shall be stated on all grading plans. The construction contractor shall maintain a list of all operating equipment in use on the project site. The construction equipment list shall state the makes, models, and numbers of construction equipment on-site.		
Prior to the issuance of grading permits and during construction activities	PDF 2-7 City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.b: Applicants for new developments in the Irvine Business Complex shall require that the construction contractor to properly service and maintain construction equipment in accordance with the manufacturer's recommendations. Nonessential idling of construction equipment shall be restricted to five minutes or less in compliance with California Air Resources Board's Rule 2449.	Community Development Department in consultation with the Construction Contractor	

3. Mitigation Monitoring Requirements

<i>Table 3-1</i> <i>Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs),</i> <i>Mitigation Measures (MMs) and Level of Significance after Mitigation</i>			
Timing	Fugitive Dust PDF 2-8	PPPs, PDFs, and MMs	Responsible for Monitoring Date Completed
Prior to the issuance of grading permits and during construction activities	SCAQMD Rule 403 – Fugitive Dust (PM₁₀ and PM_{2.5}), City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.c: Applicants for new developments in the Irvine Business Complex shall require that the construction contractor prepare a dust control plan and implement the following measures during ground-disturbing activities in addition to the existing requirements for fugitive dust control under South Coast Air Quality Management District Rule 403 to further reduce PM₁₀ and PM_{2.5} emissions. To assure compliance, the City shall verify compliance that these measures have been implemented during normal construction site inspections: • During all grading activities, the construction contractor shall reestablish ground cover on the construction site through seeding and watering. This would achieve a minimum control efficiency for PM₁₀ of 5 percent. • During all construction activities, the construction contractor shall sweep streets with Rule 1186 compliant PM₁₀-efficient vacuum units on a daily basis if silt is carried over to adjacent public thoroughfares or occurs as a result of hauling. • During all construction activities, the construction contractor shall maintain a minimum 24-inch freeboard on trucks hauling dirt, sand, soil, or other loose materials and tarp materials with a fabric cover or other suitable means. This would achieve a control efficiency for PM₁₀ of 91 percent. • During all construction activities, the construction contractor shall water exposed ground surfaces and disturbed areas a minimum of every three hours on the construction site and a minimum of three times per day. This would achieve an emissions reduction control efficiency for PM₁₀ of 61 percent. • During all construction activities, the construction contractor shall limit on-site vehicle speeds on unpaved roads to no more than 15 miles per hour. This would achieve a control efficiency for PM₁₀ of 57 percent. • The construction contractor shall apply chemical soil stabilizers to reduce wind erosion. This would achieve a control efficiency of up to 80 percent.	Community Development Department in consultation with the Construction Contractor	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Prior to the issuance of grading permits and during construction activities	Architectural Coatings City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.d: Applicants for new developments in the Irvine Business Complex shall require that the construction contractor use coatings and solvents with a volatile organic compound (VOC) content lower than required under Rule 1113 (i.e., Super Compliant Paints). All architectural coatings shall be applied either by (1) using a high-volume, low-pressure spray method operated at an air pressure between 0.1 and 10 pounds per square inch gauge to achieve a 65 percent application efficiency; or (2) manual application using a paintbrush, hand-roller, trowel, spatula, dauber, rag, or sponge, to achieve a 100 percent applicant efficiency. The construction contractor shall also use precolored natural colored building, where feasible. Use of low-VOC paints and spray method shall be included as a note on architectural building plans.	Community Development Department in consultation with the Construction Contractor	
5.3 BIOLOGICAL RESOURCES			
Existing Plans, Programs and Policies			
Prior to the issuance of grading permits	PPP 3-1 U.S. Clean Water Act, Section 404: Prior to any installation of any new storm drain connections to and/or discharges into the San Diego Creek or San Joaquin Marsh, the City or other project applicants shall 1) obtain a permit or other authorization from the US Army Corps of Engineers pursuant to Section 404 of the Clean Water Act; 2) obtain a Section 401 Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region, pursuant to Section 401 of the federal Clean Water Act, which requires any applicant for a federal permit, such as a Clean Water Act Section 404 permit, to provide the licensing agency a certification from the California Regional Water Quality Control Board that the project will comply with adopted water quality standards; and 3) provide notification to the California Department of Fish and Game (CDFG) of the project pursuant to Section 16-2 of the Fish and Game Code and comply with any further actions required by CDFG.	US Army Corps of Engineers (Section 404 Permit), Santa Ana Regional Water Quality Control Board (Section 401 Permit), California Department of Fish and Game (Section 16-2)	
Prior to issuance of grading permits	PPP 3-2 City of Irvine Municipal Code Section 5-7-410(c): If any trees are removed, the Applicant shall carry out a tree survey and obtain a permit for their removal in accordance with the City's tree preservation ordinance (including 1:1 replacement).	Community Development Department	

3. Mitigation Monitoring Requirements

<i>Table 3-1</i> <i>Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs),</i> <i>Mitigation Measures (MMs) and Level of Significance after Mitigation</i>			
Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Project Design Features			
Prior to approval of the design for the San Diego Creek Trail improvements/extension	PDF 3-1 City of Irvine Zoning Ordinance Chapter 5-8-4.D.2.a: Prior to approval of the design for the San Diego Creek Trail improvements/extension, the City shall examine alternative locations of the proposed trail and methods that could be used to minimize potential impacts (e.g., fencing and buffers). The design shall consider an alternative that excludes a trail segment along the most sensitive part of San Diego Creek (the northwestern side of the creek between Campus Drive and MacArthur Boulevard).	Community Development Department	
Prior to issuance of grading permits	PDF 3-2 City of Irvine Zoning Ordinance Chapter 5-8-4.D.2.b: Prior to issuance of grading permits for the San Diego Creek Trail, a note shall be placed on all grading plans that construction activities involving the use of heavy equipment are prohibited during the bird nesting season (March 15 to September 15). If minor construction activities are carried out during the bird nesting season, a qualified biologist shall conduct a preconstruction survey in the off-site habitat to determine the location of any active bird nests in the area, including but not limited to raptors and least Bell's vireo. The survey should begin not more than three days prior to the beginning of construction activities. The wildlife agencies shall be notified if any nesting least Bell's vireo are found. During construction, active nesting sites shall be monitored to ensure that construction levels do not exceed 60 dBA Leq. Should these noise levels be exceeded, the City shall implement noise attenuation measures, potentially including the erection of temporary noise curtains sufficient to reduce noise levels at occupied nesting sites to acceptable levels. Nest monitoring should continue until fledglings have dispersed or the nest has been determined to be a failure, as approved by the wildlife agencies.	Community Development Department	
Prior to issuance of building permits	PDF 3-3 City of Irvine Zoning Ordinance Chapter 5-8-4.A.1.a: Prior to issuance of building permits for high-rise buildings within 100 feet of the San Joaquin Marsh or San Diego Creek, the project applicant shall demonstrate that architectural plans prohibit the use of highly reflective glass windows, and utilize angles that are not highly reflective in order to reduce light and glare impacts on the marsh and creek environment and to reduce the incidence of bird collisions, to the satisfaction of the Community Development Director.	Community Development Department	
Prior to approval of final landscape plans for areas located within 100 feet of the San Joaquin Marsh or San Diego Creek	PDF 3-4 City of Irvine Zoning Ordinance Chapter 5-8-4.A.1.b: Prior to approval of final landscape plans for areas located within 100 feet of the San Joaquin Marsh or San Diego Creek, the project applicant shall ensure that development landscaping does not include exotic plant species that may be invasive to native habitats. Exotic plant species not to be used include those species listed on Lists A and B of the California Invasive Plant Council's (Cal-IPC) list of "Exotic Pest Plants of Greatest Ecological Concern in California as of October 1999." A copy of the complete list can be obtained from Cal-IPC's web site at http://www.cal-ipc.org .	Community Development Department	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
5.4 CULTURAL RESOURCES			
Existing Plans, Programs and Policies			
Prior to the issuance of the first preliminary or precise grading permits	PPP 4-1 City of Irvine Modified Standard Condition 2.5: Prior to the issuance of the first preliminary or precise grading permits for each planning area, and for any subsequent permit involving excavation to increased depth, the applicant shall provide letters documenting retention of an archaeologist and a paleontologist for the project. The letters shall state that the applicant has retained these individuals, and that the consultants will be on call during all grading and other significant ground-disturbing activities. These consultants shall be selected from the roll of qualified archaeologists and paleontologists maintained by the County of Orange. The archaeologist and/or paleontologist shall meet with Community Development staff, and shall submit written recommendations specifying procedures for cultural/scientific resource surveillance. These recommendations shall be reviewed and approved by the Director of Community Development prior to issuance of the grading permit and prior to any surface disturbance on the project site. Should any cultural/scientific resources be discovered, no further grading shall occur in the area of the discovery until the Director of Community Development is satisfied that adequate provisions are in place to protect these resources. Unanticipated discoveries shall be evaluated for significance by an Orange County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers. Persons performing this work shall be Orange County Certified Professional Archaeologists/Paleontologists.	Community Development Department, Archaeologist/Paleontologist, and Construction Contractor	
Prior to issuance of grading permits	PPP 4-2 City of Irvine Modified Standard Condition 2.5: In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, one of the following steps shall be taken: There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Orange County Coroner is contacted to determine if the remains are prehistoric and that no investigation of the cause of death is required. If the coroner determines the remains to be Native American, then the coroner shall contact the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of,	Public Works Department and Archaeologist/Paleontologist	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. b. Where the following conditions occur, the land owner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance: - The Native American Heritage Commission is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 24 hours after being notified by the commission. - The identified descendant fails to make a recommendation; or - The landowner or his/her authorized representative rejects the recommendation of the descendant, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner. (CEQA Guidelines Section 15064.5[e])		

5.5 GEOLOGY AND SOILS

Existing Plans, Programs and Policies

On-going during grading	PPP 5-1	City of Irvine Municipal Code Title 5, Division 10 and City Grading Manual: Revegetation of cut and fill slopes shall be required in accordance with the City of Irvine Grading Code and Grading Manual.	Public Works Department and Construction Contractor
On-going during grading	PPP 5-2	City of Irvine Municipal Code Title 5, Division 10 and City Grading Manual: All grading operations and construction will be conducted in conformance with the applicable City of Irvine Grading Code and Grading Manual, the most recent version of the California Building Code, and consistent with the recommendations included in the most current geotechnical reports for the project area prepared by the engineer of record.	Public Works Department and Construction Contractor
Prior to issuance of grading permits	PPP 5-3	City of Irvine Municipal Code Title 5, Division 10 and City Grading Manual: In accordance with the City of Irvine Grading Code and Grading Manual, detailed geotechnical investigation reports for each Rough Grading Plan shall be submitted to further evaluate faults, subsidence, slope stability, settlement, foundations, grading constraints, liquefaction potential, issues related to shallow groundwater, and other soil engineering design conditions and provide site-specific recommendations to mitigate these issues/hazards. The geotechnical reports shall be prepared and signed/stamped by a Registered Civil Engineer specializing in geotechnical engineering and a Certified Engineering Geologist. The City of Irvine Geotechnical Engineer/Engineering Geologist	Public Works Department, Construction Contractor, and Geotechnical Consultant

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
On-going during grading	shall review the rough grading plan to ensure conformance with recommendations contained in the reports. PPP 5-4 City of Irvine Municipal Code Title 5, Division 10 and City Grading Manual: In accordance with the City of Irvine Grading Code and Grading Manual, grading and earthwork shall be performed under the observation of a Registered Civil Engineer specializing in Geotechnical Engineering in order to achieve proper subgrade preparation, selection of satisfactory fill materials, placement and compaction of structural fill, stability of finished slopes, design of buttress fills, subdrain installation, and incorporation of data supplied by the engineering geologist.	Public Works Department, Construction Contractor, and Civil Engineer	
On-going during grading	PPP 5-5 City of Irvine Municipal Code Title 5, Division 10 and City Grading Manual: In accordance with the City of Irvine Grading Code and Grading Manual, grading and earthwork shall also be performed under the observation of a Certified Engineering Geologist to provide professional review and written approval of the adequacy of natural ground for receiving fills, the stability of cut slopes with respect to geological matters, and the need for subdrains or other groundwater drainage devices. The geologist shall geologically map the exposed earth units during grading to verify the anticipated conditions, and if necessary, provide findings to the geotechnical engineer for possible design modifications.	Public Works Department, Construction Contractor, and Engineering Geologist	
Prior to issuance of building permits	PPP 5-6 City of Irvine Building Code and the most recent Uniform Building Code and/or California Building Code: Future buildings and structures (e.g., houses, retaining walls) shall be designed in accordance with the City of Irvine Building Code and the most recent Uniform Building Code and/or California Building Code. The concrete utilized shall take into account the corrosion and soluble sulfate soil conditions at the site. The structures shall be designed in accordance with the seismic parameters included in the UBC/CBC.	Public Works Department	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
5.6 HAZARDS AND HAZARDOUS MATERIALS			
Existing Plans, Programs and Policies			
Prior to issuance of grading permits	PPP 6-1 California Health and Safety Code, Sections 25280 through 25299: If any underground storage tanks (USTs) are encountered during site grading and excavation activities, they shall be removed in accordance with the existing standards and regulations of, and oversight by, the Orange County Health Care Agency (OCHCA), based on compliance authority granted through the California Code of Regulations, Title 23, Division 3, Chapter 16, Underground Tank Regulations. The process for UST removal is detailed in the OCHCA's "Underground Storage Tanks: The Basics." Soil samples from areas where storage tanks have been removed or where soil contamination is suspected shall be analyzed for hydrocarbons including gasoline and diesel in accordance with procedures set forth by OCHCA. If hydrocarbons are identified in the soil, the appropriate response/remedial measures will be implemented as directed by OCHCA with support review from the RWQCB until all specified requirements are satisfied and a Tank Closure Letter is issued. Any aboveground storage tank (AST) in existence at the commencement of site development shall be removed in accordance with all applicable regulations under the oversight of Orange County Fire Authority. Compliance requirements relative to the removal/closure of storage tanks are set forth through the California Health and Safety Code, Sections 25280 through 25299.	Orange County Health Care Agency (OCHCA)	
During demolition, grading, and excavation	PPP 6-2 California Code of Regulations Section 1532.1, California Health and Safety Code: During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations Section 1532.1, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead. Lead-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code.	Public Works Department and Construction Contractor	
Prior to approval of a conditional use permit	PPP 6-3 OCFA Guideline B-09 (Fire Master Plans for Commercial and Residential Development): Prior to approval of a conditional use permit, project applicants shall prepare a Fire Master Plan for submittal to the Orange County Fire Authority (OCFA) consistent with OCFA Guideline B-09 (Fire Master Plans for Commercial and Residential Development).	Community Development Department and Orange County Fire Authority	
Prior to issuance of demolition permits and during demolition activities	PPP 6-4 Rule 29, Code of Federal Regulations (CFR) Part 1926, California Code of Regulations, Title 17, Division 1, Chapter 8: Federal law requires compliance with Rule 29 of the Code of Federal Regulations (CFR) Part 1926. Prior to site demolition activities, building materials shall be carefully assessed for the presence of lead-based paint, and its removal, where necessary, must comply with state and federal regulations, including Occupational Safety and Health Administration (OSHA) 29	Public Works Department and Construction Contractor	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	CFR Part 1926. The OSHA rule establishes standards for occupational health and environmental controls for lead exposure. The standard also includes requirements addressing exposure assessment, methods of compliance, respiratory protection, protective clothing and equipment, hygiene facilities and practices, medical surveillance, medical removal protection, employee information and training, signs, recordkeeping, and observation of monitoring. Furthermore, the requirements of California Code of Regulations, Title 17, Division 1, Chapter 8, identify procedures that must be followed for accreditation, certification, and work practices for lead-based paint and lead hazards. Section 36100 thereof specifically sets forth requirements for lead-based paint abatement in public and residential buildings.		
Prior to issuance of demolition permits and during demolition activities	PPP 6-5 SCAQMD Rule 1403 – Prior to site demolition activities, building materials must be carefully assessed for the presence of asbestos-containing materials (ACM), and removal of this material, where necessary, must comply with state and federal regulations, including SCAQMD Rule 1403, which specifies work practices with the goal of minimizing asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of ACMs. The requirements for demolition and renovation activities include asbestos surveying; notification; ACM removal procedures and time schedules; ACM handling and cleanup procedures; and storage, disposal, and landfill disposal requirements for asbestos-containing waste materials.	Public Works Department and Construction Contractor	
During site decommissioning and demolition activities	PPP 6-6 Title 22, Division 4.5 of the California Code of Regulations: During site decommissioning and demolition activities, hazardous wastes must be managed in accordance with the requirements of Title 22, Division 4.5 of the California Code of Regulations. Title 22 sets forth the requirements with which hazardous-waste generators, transporters, and owners or operators of treatment, storage, or disposal facilities must comply. These regulations include the requirements for packaging, storage, labeling, reporting, and general management of hazardous waste prior to shipment. In addition, the regulations identify standards applicable to transporters of hazardous waste such as the requirements for transporting shipments of hazardous waste, manifesting, vehicle registration, and emergency accidental discharges during transportation.	Public Works Department	
During demolition, grading, and excavation	PPP 6-7 California Code of Regulations, Section 1529: During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1529, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos. Asbestos-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code.	Public Works Department	

3. Mitigation Monitoring Requirements

Table 3-1 Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation				
Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Project Design Features				
Prior to issuance of building permits	PDF 6-1	City of Irvine Zoning Ordinance Chapter 5-8-4.C.1 As described in the proposed zoning for the project, building height limitations, recordation of aviation easements, obstruction lighting and marking, and airport proximity disclosures and signage shall be provided per Airport Environs Land Use Plan for John Wayne Airport.	Community Development Department	
Prior to issuance of building permits	PDF 6-2	City of Irvine Zoning Ordinance Chapter 5-8-4.A.3: As described in the proposed zoning related to residential disclosures, all discretionary applications for residential or residential mixed use shall include a condition of approval for disclosure to residents clearly outlining the issues associated with living in a mixed-use environment. The language for this disclosure shall be as specified by the Community Development Director. Copies of each signed disclosure shall be made available for review upon written request by the City.	Community Development Department	
During site decommissioning and demolition activities	PDF 6-3	City of Irvine Zoning Ordinance Chapter 5-8-4.A.6 As described in the proposed zoning code related to hazardous material standards, individual development sites may have existing facilities, such as transformers or clarifiers, that would be demolished as part of a proposed development. To mitigate any hazardous-materials-related impacts during the removal of such facilities, the Director of Community Development, in conjunction with the Orange County Fire Authority, shall include specific project conditions of approval as part of the discretionary review process for the proposed development.	Community Development Department and Orange County Fire Authority	
In conjunction with submittal of a development application (e.g., Conditional Use Permit)	PDF 6-4	City of Irvine Zoning Ordinance Chapter 5-8-4.A.2: As required by the proposed zoning code, applications for new residential and/or residential mixed-use development shall submit data to the Director of Community Development, to evaluate compatibility with surrounding uses with respect to issues including but not limited to: noise, odors, truck traffic and deliveries, hazardous materials handling/storage, air emissions, soil/groundwater contamination, heliports/heliports and John Wayne Airport compatibility. Structures that penetrate the 100:1 Notification Surface shall file a Form 7460-1 Notice of Proposed Construction or Alternation with Federal Aviation Administration. Residential land uses shall be prohibited in Safety Zone 3.	Community Development Department	
In conjunction with submittal of a development application (e.g., Conditional Use Permit)	PDF 6-5	City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.g: For all residential projects located within 1,000 feet of an industrial facility which emits toxic air contaminants, the Project Applicant shall submit a health risk assessment prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment and the South Coast Air Quality Management District to the Community Development Director prior to approval of any future discretionary residential or mixed-use project. If the HRA shows that the incremental cancer risk exceeds one in	Community Development Department	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Included in adopted zone change	one hundred thousand (1.0E-05), or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value filters rated at 10 or better at all residential units. PDF 6-6 Residential development shall not be permitted within a one-parcel buffer surrounding the property at 17451 Von Karman, based on existing parcelization as of the date of the certification of the Environmental Impact Report. The area within the one parcel buffer is depicted in Figure 1 in the City of Irvine Zoning Code Chapter 5-8.		
5.7 HYDROLOGY AND WATER QUALITY			
Existing Plans, Programs and Policies			
Prior to the issuance of precise grading permit	PPP 7-1 City Standard Condition A.6: Prior to the issuance of precise grading permits, the applicant shall submit a hydrology and hydraulic analysis of the entire site. The analysis shall be prepared by a professional civil engineer versed in flood control analysis and shall include the following information and analysis: a. Hydrology/hydraulic analysis of 100-year surface water elevation at the project site to determine building elevation or flood proofing elevation. b. Analysis of existing and postdevelopment peak 100-year storm flow rates, including mitigation measures to reduce peak flows to existing conditions. c. An analysis demonstrating that the volume of water ponded on the site and stored underground in the drainage system outside of the building envelope in the proposed condition is greater than or equal to the corresponding volume in the existing condition. The water surface used to determine the ponded volume shall be based on the water surface in the major flood control facility that the site is tributary to.	Public Works Department	
Prior to the issuance of precise grading permit	PPP 7-2 City Standard Condition 2.2: Prior to the issuance of precise grading permits, the applicant shall submit a groundwater survey of the entire site. The analysis shall be prepared by a geotechnical engineer versed in groundwater analysis and shall include the following information and analysis:	Public Works Department	

3. Mitigation Monitoring Requirements

Table 3-1 Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation				
Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed	
	a. Potential for perched groundwater intrusion into the shallow groundwater zone upon build-out. b. Analysis for relief of groundwater buildup and properties of soil materials on-site. c. Impact of groundwater potential on building and structural foundations. d. Proposed mitigation to avoid potential for groundwater intrusion within five feet of the bottom of the footings.			
Prior to the issuance of preliminary or precise grading permits	PPP 7-3 City Standard Condition 2.12: This project will result in soil disturbance of one or more acres of land that has not been addressed by an underlying subdivision map. Prior to the issuance of preliminary or precise grading permits, the applicant shall provide the City Engineer with evidence that a Notice of Intent (NOI) has been filed with the State Water Resources Control Board. Such evidence shall consist of a copy of the NOI stamped by the State Water Resources Control Board or the Regional Water Quality Control Board, or a letter from either agency stating that the NOI has been filed.	Public Works Department		
Prior to the issuance of preliminary or precise grading permits	PPP 7-4 City Standard Condition 2.13: Prior to the issuance of precise grading permits, the applicant shall submit, and the Director of Community Development shall have approved, a project water quality management plan (WQMP). The WQMP shall identify the best management practices that will be used on the site to control predictable pollutant runoff.	Community Development Department		
5.9 LAND USE AND PLANNING				
Project Design Features				
In conjunction with submittal of a development application (e.g., Conditional Use Permit)	PDF 8-1 IBC Design Criteria: To ensure a consistent standard of residential mixed-use design quality throughout the IBC, the City of Irvine has established a set of Residential Mixed-Use Design Criteria. These Design Criteria are intended to guide the physical development of any residential or mixed-use project that contains a component of residential use located within the boundaries of the IBC. This document establishes the framework through which design continuity can be achieved while accommodating varying tastes, materials, and building methods. It provides standards and criteria for new construction and for remodels or additions.	Community Development Department		
In conjunction with submittal of a development application (e.g., Conditional Use Permit)	PDF 8-2 City of Irvine Zoning Ordinance Chapter 5-8-4.A.2: As described in the proposed zoning code relating to compatibility with surrounding uses, the IBC mixed-use environment is an urbanized area, and land use compatibility issues are expected to occur. Therefore, applications for new residential and/or residential mixed-use development shall submit data, as determined by the Director of	Community Development Department		

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Permit	Community Development, for the City to evaluate compatibility with surrounding uses with respect to issues including, but not limited to: noise, odors, truck traffic and deliveries, hazardous materials handling/storage, air emissions, and soil/groundwater contamination.		
5.9 NOISE			
Existing Plans, Programs and Policies			
On-going during construction	PPP 9-1 City of Irvine Municipal Code Section 6-8-205(a), Control of Construction Hours: Construction activities occurring as part of the project shall be subject to the limitations and requirements of Section 6-8-205(a) of the Irvine Municipal Code which states that construction activities may occur between 7:00 AM and 7:00 PM Mondays through Fridays, and 9:00 AM and 6:00 PM on Saturdays. No construction activities shall be permitted outside of these hours or on Sundays and federal holidays unless a temporary waiver is granted by the Chief Building Official or his or her authorized representative. Trucks, vehicles, and equipment that are making, or are involved with, material deliveries, loading, or transfer of materials, equipment service, maintenance of any devices or appurtenances for or within any construction project in the City shall not be operated or driven on City streets outside of these hours or on Sundays and federal holidays unless a temporary waiver is granted by the City. Any waiver granted shall take impact upon the community into consideration. No construction activity will be permitted outside of these hours except in emergencies including maintenance work on the City rights-of-way that might be required.	Public Works Department	
Prior to issuance of building permits	PPP 9-2 City Standard Condition 3.5: Prior to the issuance of building permits for each structure or tenant improvement other than a parking structure, the applicant shall submit a final acoustical report prepared to the satisfaction of the Director of Community Development. The report shall show that the development will be sound attenuated against present and projected noise levels, including roadway, aircraft, helicopter and railroad, to meet City interior and exterior noise standards. The final acoustical report shall include all information required by the City's Acoustical Report Information Sheet (Form 42-48). In order to demonstrate that all mitigation measures have been incorporated into the project, the report shall be accompanied by a list identifying the sheet(s) of the building plans that include the approved mitigation measures	Director of Community Development	
Project Design Features			
Prior to issuance of grading permits and on-going through construction activities	Construction PDF 9-1 City of Irvine Zoning Ordinance Chapter 5-8-4.A.5.b: As described in the proposed zoning for the project, applicants for individual projects that involve vibration-intensive construction activities, such	Community Development Department and Construction Contractor	

3. Mitigation Monitoring Requirements

<i>Table 3-1</i> <i>Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation</i>			
Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	as pile drivers, jack hammers, and vibratory rollers, occurring near sensitive receptors shall submit a noise vibration analysis prior to their application being deemed complete by the City. If construction-related vibration is determined to exceed the Federal Transit Administration vibration-annoyance criteria of 78 VdB during the daytime, additional requirements, such as use of less vibration intensive equipment or construction techniques shall be implemented during construction (e.g., drilled piles to eliminate use of vibration-intensive pile driver).		
Prior to issuance of grading permits and on-going through construction activities	PDF 9-2 City of Irvine Zoning Ordinance Chapter 5-8-4.A.5.a: Prior to issuance of grading permits, the project applicant shall incorporate the following measures as a note on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved. • Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturer's standards. • Construction staging areas shall be located away from off-site sensitive uses during the later phases of project development. • The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site, whenever feasible. • Construction of sound walls that have been incorporated into the project design prior to construction of the building foundation; or installation of temporary sound blankets (fences typically composed of poly-vinyl-chloride-coated outer shells with adsorbent inner insulation) placed along the boundary of the project site during construction activities.	Community Development Department and Construction Contractor	
Prior to issuance of certificate of occupancy	Noise Compatibility PDF 9-3 City of Irvine Zoning Ordinance Chapter 5-8-4.A.5.c: As described in the proposed zoning for the project, prior to issuance of certificate of occupancy, the project applicant shall submit evidence to the satisfaction of the Director of Community Development that occupancy disclosure notices for units with patios and/or balconies that do not meet the 65 dBA CNEL are provided to all future tenants pursuant to the City's Noise Ordinance.	Community Development Department	
Prior to issuance of building permits	PDF 9-4 City of Irvine Zoning Ordinance Chapter 5-8-4.C: As described in the proposed zoning for the project, residential and active recreational areas shall be prohibited in the 65 dBA CNEL noise contour of the John Wayne Airport. In addition, as described in the proposed zoning for the project, prior to issuance of building permits, the project applicant for any project within the 60 dBA CNEL contour of the John Wayne Airport shall retain an acoustical engineer to prepare an acoustic analysis that identifies required building acoustical improvements (e.g., sound transmission class	Director of Community Development	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	rated windows, doors, and attic baffling) to achieve the 45 dBA CNEL interior noise standard of Title 21 and Title 24 of the California Building Code. In addition to the 24-hour interior noise standard, the acoustic report shall detail compliance with the City's interior noise standard of 55 dBA L _{max} (10) for single-event noise generated by the loudest 10 percent of aircraft overflights at the John Wayne Airport. Parks within the 60 dBA CNEL noise contour shall include signage indicating their proximity to John Wayne Airport and related airport noise. The acoustic analysis shall be submitted to the Director of Community Development to ensure compliance.		
5.10 POPULATION AND HOUSING			
Existing Plans, Programs and Policies			
On-going	PPP 10-1 City of Irvine Housing Element: Compliance with the City's Housing Element policies, which provide a strategic blueprint to ensure the siting of new very low, low, and moderate income housing units in future development projects to help the City continue to meet its state fair share housing requirements.	Community Development Department	
5.11 PUBLIC SERVICES			
Fire Protection and Emergency Services			
Existing Plans, Programs and Policies			
On-going	PPP 11-1 Orange County Fire Authority Rules and Regulations: Every project applicant shall comply with all applicable Orange County Fire Authority codes, ordinances, and standard conditions regarding fire prevention and suppression measures relating to water improvement plans, fire hydrants, automatic fire extinguishing systems, fire access, access gates, combustible construction, water availability, and fire sprinkler systems.	Community Development Department	
Prior to the issuance of the preliminary grading permits	PPP 11-2 Orange County Fire Authority Rules and Regulations: Prior to the issuance of the first grading permit for the individual development within the IBC, the applicant shall have executed a Secured Fire Protection Agreement with the Orange County Fire Authority	Community Development Department	
Prior to issuance of building permits	PPP-11-3 Orange County Fire Authority Rules and Regulations: Prior to the issuance of the first building permit, all fire protection access easements shall be approved by the Orange County Fire Authority and irrevocably dedicated in perpetuity to the City	Community Development Department	

3. Mitigation Monitoring Requirements

Table 3-1 Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation				
Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Project Design Features				
Prior to issuance of building permits	PDF 11-1	IBC Infrastructure Improvement Program: Installation of an Opticom traffic light control system at signalized intersections through the proposed IBC Infrastructure Improvement Program.	Public Works Department	
Prior to issuance of building permits	PDF 11-2	City of Irvine Zoning Ordinance Chapter 5-8-4.B.2.c: A Click2Enter radio frequency access system shall be installed at any vehicle and pedestrian access point controlled by privacy gates within the project area.	Community Development Department	
Police Protection				
Existing Plans, Programs and Policies				
In conjunction with submittal of a development application (e.g., Conditional Use Permit)	PPP 11-5	City of Irvine Municipal Code Title 5, Division 9, Chapter 5: The project applicant shall comply with all applicable requirements of the City of Irvine Uniform Security Code	Community Development Department	
Project Design Features				
In conjunction with submittal of a development application (e.g., CUP)	PDF 11-2	City of Irvine Zoning Ordinance Chapter 5-8-4.B.1.b: Utilize the concepts of Crime Prevention Through Environmental Design in the design and layout of any project to reduce criminal opportunity and calls for service, as specified in the proposed zoning code.	Community Development Department	
School Services				
Existing Plans, Programs and Policies				
Prior to certificate of occupancy to the issuance of building permits	PPP 11-6	California Government Code Section 65995: Pursuant to Government Code Section 65995, the individual applicants shall pay developer fees to the appropriate school districts at the time building permits are issued; payment of the adopted fees would provide full and complete mitigation of school impacts. Alternatively, the applicant may enter into a school finance agreement with the school district(s) to address mitigation to school impacts in lieu of payment of developer fees. The	Community Development Department and School District	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	agreement shall establish financing mechanisms for funding facilities to serve the students from the project. If the applicant and the affected school district(s) do not reach a mutually satisfying agreement, then project impacts would be subject to developer fees.		
Library Services			
Project Design Features			
Prior to the issuance of building permits	PDF 11-3 City of Irvine Zoning Ordinance Chapter 5-8-4.D.1: In the event that a Citywide library impact fee is adopted and in force, each developer shall pay this fee prior to issuance of building permits for new development.	Community Development Department	
5.12 RECREATION			
Existing Plans, Programs and Policies			
Prior to the issuance of building permits	PPP 12-1 City of Irvine Municipal Code Section 5-5-1004.E.2: All park fees shall be paid directly to the City cashier prior to issuance of any residential building permits for the building site or sites from which fees are to be derived. These fees are to be used only for the purpose of developing new or rehabilitating existing park or recreational facilities to serve the subdivision.	Community Development Department	
Prior to the issuance of preliminary or precise grading permits	PPP 12-2 City Standard Conditions 2.1, 2.16: This development includes public trails as identified in the City's General Plan. Prior to the issuance of the first preliminary or precise grading permit, an irrevocable offer of dedication for the nonexclusive easements for public use of any public trails shall be recorded. Improvements and dedication of public trails shall be subject to the approval of the Director of Community Services	Community Development Department	
5.13 TRAFFIC AND CIRCULATION			
Existing Plans, Programs and Policies			
Prior to the issuance of building permits	PPP 13-1 IBC Development Fee Program: A Development Fee program was established to fund area-wide circulation improvements within the IBC area. The improvements are required due to potential circulation impacts associated with buildout of the IBC area. Fees are assessed when there is new construction or when there is an increase in square footage within an existing building or the conversion of existing square footage to a more intensive use. The development fees collected are used strictly for circulation improvements right-of-way acquisition and transportation monitoring measures in the IBC area. Fees are calculated by multiplying the proposed square footage, dwelling unit or hotel room by the appropriate rate. The IBC Fees are included with any other applicable fees	Community Development Department	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	payable at the time the building permit is issued.		
Project Design Features			
Ongoing	PDF 13-1 City of Irvine Zoning Code Chapter 9-36-21, Transportation Management Association: The City shall pursue formation of a Transportation Management Association (TMA) for the Irvine Business Complex. The goals and objectives of the TMA are as follows: • Monitor travel demand at employment sites and provide reports on trip generation to the City of Irvine. • Offer employers and property owners assistance with transportation services on a voluntary basis. • Deliver transportation services to commuters. Services include: a. Provide ridesharing, transit and Metrolink information b. Inform commuters of incentives that may be available from public agencies c. Formation of vanpools • Represent the IBC in local transportation matters • Oversee and fund the implementation and expansion of The i Shuttle, a clean fuel rubber tire shuttle system.	Public Works Department	
Mitigation Measures			
Prior to the issuance of the first building permit	MM 13-1 Prior to the issuance of the first building permit pursuant to the proposed project, the City of Irvine shall prepare a "nexus" study that will serve as the basis for requiring development impact fees under AB 1600 legislation, as codified by California Code Government Section 66000 et seq, for the Irvine Business Complex to support General Plan and Zoning changes under consideration for the Irvine Business Complex Vision Plan. The established procedures under AB 1600 require that a "reasonable relationship" or nexus exist between the traffic improvements and facilities required to mitigate the traffic impacts of new development pursuant to the proposed project. The following traffic improvements and facilities are necessary to mitigate project impacts and shall be included, among other improvements, in the AB 1600 nexus study: Costa Mesa Intersection #12: SR-55 Southbound Frontage Road at Baker Street: Improve the southbound approach to one left turn lane, one shared through left, one through lane, and one right turn lane.	Public Works Department	

3. Mitigation Monitoring Requirements

<i>Table 3-1</i> <i>Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation</i>			
<i>Timing</i>	<i>PPPs, PDFs, and MMs</i>	<i>Responsible for Monitoring</i>	<i>Date Completed</i>
	Restripe the eastbound approach to two through lanes and a shared through right turn lane. Intersection #13: SR-55 Northbound Frontage Road at Baker Street: Restripe the eastbound approach to include a single left turn lane, three through lanes, and no right turn lane, plus the addition of a northbound defacto right turn lane. Addition of second southbound left-turn lanes. Irvine Intersection #141: Jamboree Road and Main Street: Improve the northbound and southbound approaches to 2 left turn lanes, 5 through lanes, and 1 right turn lane. Additionally, as part of this improvement, convert the westbound free right turn lane to a single right turn lane. Intersection #188: Harvard Avenue and Michelson Drive: Add a second southbound left turn lane. Intersection #232: Culver Drive and I-405 Northbound Ramps: Restripe the westbound approach of this intersection to one left turn lane and two right-turn lanes. Intersection #136: Jamboree Road and Barranca Parkway: Convert the existing free northbound right-turn lane to a standard right turn lane and add a fifth northbound through lane. Newport Beach Intersection #62: Campus Drive at Bristol Street NB: In 2015, the required improvement is the implementation of the already planned addition of a fifth westbound through lane, consistent with the City of Newport Beach's General Plan buildout. For the buildout scenario, an additional improvement of a third southbound right turn lane is required. Implementation of the identified improvements results in acceptable operations under both scenarios and the mitigation appears to be physically feasible although potentially cost prohibitive due to potential impacts to a structure adjacent to the intersection. The addition of a 5th westbound through lane was identified by the City of Newport Beach as part of the Newport Beach General Plan Update Traffic Study (Urban		

3. Mitigation Monitoring Requirements

<i>Table 3-1</i> <i>Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs),</i> <i>Mitigation Measures (MMs) and Level of Significance after Mitigation</i>			
<i>Timing</i>	<i>PPPs, PDFs, and MMs</i>	<i>Responsible for Monitoring</i>	<i>Date Completed</i>
	Crossroads, 2006). The addition of a 3rd southbound right turn lane was identified in the John Wayne Airport (JWA) Improvement Program as an ancillary improvement to support the growth of the Airport. Intersection #85: MacArthur Boulevard and Birch Street: Improve the eastbound approach to two eastbound left-turn lanes and two eastbound through lanes. Santa Ana Intersection #543 Bristol Street and Segersstrom Avenue: Two alternative improvements are proposed and outlined below. The City of Irvine shall coordinate with the City of Santa Ana to determine the most appropriate future improvement at this location. - Alternative 1: Add 3rd eastbound through and westbound through lanes on Segersstrom Avenue - Alternative 2: Add 4th northbound through and southbound through lanes on Bristol Street Intersection #723 Main Street and Dyer Road (Segersstrom): Add a third northbound through lane and a defacto northbound right-turn lane. Intersection #730 Grand Avenue and Warner Avenue: Add a third westbound through lane. Arterial #1884 MacArthur Blvd. from Main Street to SR-55 Widen from 6 to 8 Lanes Tustin Intersection #24: Newport Avenue and Walnut Avenue: Add a defacto westbound right turn lane and defacto northbound right turn lane.		

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	Intersection #93: Tustin Ranch Road and El Camino Real: Add a fourth southbound through lane and restripe the eastbound approach to one left turn lane, a shared through right turn lane and a right turn lane. Intersection #134: Loop Road/Park Avenue at Warner Avenue: Add a third eastbound through lane. Intersection #754: Red Hill Avenue at Carnegie Avenue/A Street: This intersection has a project impact under the Post-2030 scenario. The project impact is largely due to heavy traffic on the northbound through movement. Widening the northbound approach to provide a fourth northbound through lane on Red Hill. This intersection is expected to be substantially expanded as a result of development of the Tustin Legacy project and shall be monitored to observe if any additional improvements are warranted when that project nears buildout.		
Prior to the issuance of the first building permit	MM 13-2 Prior to the issuance of the first building permit pursuant to the proposed project, the City of Irvine shall update the IBC Development Fee program pursuant to the AB 1600 Nexus Study identified in Mitigation Measure 5.13-1. The IBC Development Fee program was established to fund area-wide circulation improvements within the IBC and adjoining areas. The improvements are required due to potential circulation impacts associated with buildout of the IBC. Fees are assessed when there is new construction or when there is an increase in square footage within an existing building or the conversion of existing square footage to a more intensive use. The development fees collected are applied toward circulation improvements and right-of-way acquisition in the IBC and adjoining areas. Fees are calculated by multiplying the proposed square footage, dwelling unit or hotel room by the appropriate rate. The IBC Fees are included with any other applicable fees payable at the time the building permit is issued. The City will use the IBC development fees to, among other things, fund construction (or to recoup fees advanced to fund construction) of the transportation improvements identified in Mitigation Measure 5.13-1.	Public Works Department	
Prior to the issuance of the first building permit	MM 13-3 Prior to issuance of the first building permit pursuant to the proposed project, the City shall update the Irvine Business Complex Land Use and Trip Monitoring Data base (IBC Database) to reflect the land use changes associated with the proposed project. The City maintains this database for tracking development intensity within the IBC. This data base is an important tool to help ensure the circulation system serving the IBC area is adequate and to ensure roadway improvements are provided at the appropriate time. The data base tracks the amount of square footage built (Existing),	Public Works Department	

3. Mitigation Monitoring Requirements

<i>Table 3-1</i> <i>Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs),</i> <i>Mitigation Measures (MMs) and Level of Significance after Mitigation</i>			
<i>Timing</i>	<i>PPPs, PDFs, and MMs</i>	<i>Responsible for Monitoring</i>	<i>Date Completed</i>
Prior to adoption of the AB 1600 nexus study identified in MM 13-1	the available square footage (Additional Zoning Potential and/or Remaining Approval) and the maximum amount of square footage allocated (Total Development Potential and/or Buildout + Existing) to each parcel within the IBC. MM 13-4 Prior to adoption of the AB 1600 nexus study identified in MM 13-1, the City and Caltrans shall jointly identify feasible operational and physical improvements and the associated fair-share funding contribution necessary to mitigate project-related impacts to state transportation facilities. The City shall fund said improvements on pro-rata "fair-share" basis in accordance with the terms and conditions of an Agreement to be prepared and agreed to by both agencies. These fair-share contributions for feasible improvements shall be included in the AB 1600 nexus study	Public Works Department	
5.14 UTILITIES AND SERVICE SYSTEMS			
Water Service			
<i>Existing Plans, Programs and Policies</i>			
Prior to the issuance of grading permits	PPP 14-1 IRWD Rules and Regulations, Requirement to Use Recycled Water: Irvine Ranch Water District (IRWD) will identify customers in a zone identified in the Plan ("the Plan" collectively refers to the Water Resources Master Plan, Sewer Master Plan, Natural Treatment System Master Plan, and addenda thereto) as an area capable of receiving service from the IRWD's recycled water system, and will determine the feasibility of providing recycled water service to these customers. IRWD will also review applications for new permits to determine the feasibility of providing recycled water service to these applicants. If recycled water service is determined by IRWD to be feasible, applicants for new water service shall be required to install on-site facilities to accommodate both potable water and recycled water service in accordance with these Rules and Regulations. IRWD may also require existing customers to retrofit existing on-site water service facilities to accommodate recycled water service. If IRWD does not require the use of recycled water service, the customer may obtain recycled water service upon request but only if IRWD has determined that recycled water service to the customer is feasible and authorizes such use.	Irvine Ranch Water District	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Prior to the issuance of grading permits	PPP 14-2 IRWD Rules and Regulations, Connection Fees: Future project applicants in the IBC shall enter into agreement or agreements as necessary with IRWD to establish the appropriate financial fair share costs to be borne by the project proponent. Fair share costs may include, but are not limited to, those associated with the preparation of studies and infrastructure expansion necessary to analyze and serve the project.	Irvine Ranch Water District	
Prior to the issuance of grading permits	PPP 14-3 IRWD Rules and Regulations, Fire Flow Analysis: In accordance with IRWD requirements, each redevelopment project in the IBC must provide a fire flow analysis. If the analysis identifies any deficiencies, the developer will be responsible for any water system improvements associated with the development project required to rectify the deficiencies and meet IRWD fire flow requirements.	Public Works Department	
Sewer Services			
Existing Plans, Programs and Policies			
	Refer to PPP 14-2 above.		
Solid Waste			
Existing Plans, Programs and Policies			
Prior to the issuance of precise grading permits	PPP 14-4 City of Irvine Standard Condition 3.7: This project will result in new construction that will generate solid waste. Prior to the issuance of precise grading permits, the applicant shall show on the site plans the location of receptacle(s) to accumulate on-site-generated solid waste for recycling purposes. At the discretion of the Director of Community Development the developer of a nonresidential project may be permitted to contract with a waste recycler for off-site materials recovery. In this case the applicant must provide a letter verifying that recycling will be conducted off site in an acceptable manner	Community Development Department	
Utility Demands			
Existing Plans, Programs and Policies			
Prior to the issuance of building permits	PPP 14-5 2008 Building and Energy Efficiency Standards (CCR Title 24): The proposed project shall comply with all State Energy Insulation Standards and City of Irvine codes in effect at the time of application for building permits. (Commonly referred to as Title 24, these standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Title 24 covers the use of energy efficient building standards, including ventilation, insulation and construction and the use of energy saving appliances, conditioning systems, water	Public Works Department	

3. Mitigation Monitoring Requirements

<i>Table 3-1</i> <i>Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs),</i> <i>Mitigation Measures (MMs) and Level of Significance after Mitigation</i>			
<i>Timing</i>	<i>PPPs, PDFs, and MMs</i>	<i>Responsible for Monitoring</i>	<i>Date Completed</i>
5.15 GLOBAL CLIMATE CHANGE			
Existing Plans, Programs and Policies			
During construction and demolition	City of Irvine Municipal Code Title 6 Division 7, Construction and Demolition (C&D) Debris Recycling and Reuse: The Construction and Demolition (C&D) ordinance requires that 1) all residential projects of more than one unit, 2) nonresidential developments on 5,000 square feet or larger, and 3) nonresidential demolition/renovations with more than 10,000 square feet of building recycle or reuse a minimum of 75 percent of concrete and asphalt and 50 percent of nonhazardous debris generated.	Community Development Department	
Prior to the issuance of building permits for residential, commercial, or office structures	2008 Building and Energy Efficiency Standards (CCR Title 24): Prior to the issuance of a building permit for residential, commercial, or office structures in the Irvine Business Complex, development plans for these structures shall be required to demonstrate that the project meets the 2008 Building and Energy Efficiency Standards. Commonly known as Title 24, these standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2008 standards are approximately 15 percent more energy efficient than the 2005 Building and Energy Efficiency Standards. Plans submitted for building permits shall include written notes demonstrating compliance with the 2008 energy standards and shall be reviewed and approved by the Public Utilities Department prior to issuance of building permits. Design strategies to meet this standard may include maximizing solar orientation for daylighting and passive heating/cooling, installing appropriate shading devices and landscaping, utilizing natural ventilation, and installing cool roofs. Other techniques include installing insulation (high R value) and radiant heat barriers, low-e window glazing, or double-paned windows.	Community Development Department	
During design and construction of projects approved for development in the IBC	Title 24 Code Cycles: Net-Zero Buildings (Residential & Non-Residential): The California Public Utilities Commission adopted its Long-Term Energy Efficiency Strategic Plan on September 18, 2008, presenting a roadmap for all new residential and commercial construction to achieve a zero-net energy standard. This Plan outlines the goal of reaching zero net energy in residential construction by 2020 and in commercial construction by 2030. Achieving this goal will require increased stringency in each code cycle of California's Energy Code (Title 24).	Community Development Department	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Ongoing	PPP 15-4 California SB 107 Renewable Portfolio Standard (RPS) is a foundational element of the State's emissions reduction plan. In 2002, Senate Bill 1078 established the California RPS program, requiring 20 percent renewable energy by 2017. In 2006, Senate Bill 107 advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II. On September 15, 2009, Governor Arnold Schwarzenegger signed Executive Order S-21-09 directing CARB to adopt regulations increasing RPS to 33 percent by 2020. These mandates apply directly to investor-owned utilities, in this case Southern California Edison (SCE).	Community Development Department	
Ongoing	California Exec Order S-1-07 Low Carbon Fuel Standard: On January 18, 2007, Governor Arnold Schwarzenegger issued Executive Order S-1-07 requiring the establishment of a Low Carbon Fuel Standard (LCFS) for transportation fuels. This statewide goal requires that California's transportation fuels reduce their carbon intensity by at least 10 percent by 2020. Regulatory proceedings and implementation of the LCFS have been directed to CARB. The LCFS has been identified by CARB as a discrete early action item in the Scoping Plan. CARB expects the LCFS to achieve the minimum 10 percent reduction goal; however, many of the early action items outlined in the Scoping Plan work in tandem with one another. To avoid the potential for double-counting emission reductions associated with AB 1493 (Pavley), the Scoping Plan has modified the aggregate reduction expected from the LCFS to 9.1 percent.	Community Development Department	
Ongoing	PPP 15-6 Federal Corporate Average Fuel Economy (CAFE) Standards: The 2007 Energy Bill creates new federal requirements for increases in fleetwide fuel economy for passenger vehicles and light trucks. The federal legislation requires a fleetwide average of 35 miles per gallon (mpg) to be achieved by 2020. The National Highway Traffic Safety Administration is directed to phase in requirements to achieve this goal. Analysis by CARB suggests that this will require an annual improvement of approximately 3.4 percent between 2008 and 2020.	Community Development Department	
Ongoing	PPP 15-7 California Assembly Bill 1493 – Pavley Standards: On July 22, 2002, Governor Gray Davis signed Assembly Bill 1493 requiring CARB to develop and adopt regulations designed to reduce greenhouse gases emitted by passenger vehicles and light-duty trucks beginning with the 2009 model year. The standards set within the Pavley regulations are expected to reduce GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016. California had petitioned the USEPA in December 2005 to allow these more stringent standards and California executive agencies have repeated their commitment to higher mileage standards. On July 1, 2009, the USEPA granted California a waiver that will enable the state to enforce stricter tailpipe	Community Development Department	

3. Mitigation Monitoring Requirements

<i>Table 3-1</i> <i>Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs),</i> <i>Mitigation Measures (MMs) and Level of Significance after Mitigation</i>			
<i>Timing</i>	<i>PPPs, PDFs, and MMs</i>	<i>Responsible for Monitoring</i>	<i>Date Completed</i>
Ongoing	emissions on new motor vehicles. California SB 375: SB 375 requires the reduction of GHG emissions from light trucks and automobiles through land use and transportation efforts that will reduce vehicle miles traveled (VMT). In essence, SB 375's goal is to control GHGs by curbing urban sprawl and through better land use planning. SB 375 essentially becomes the land use contribution to the GHG reduction requirements of AB 32, California's global warming bill enacted in 2006. The proposed project is consistent with SB 375 strategies to reduce VMT and associated GHG emissions in that it represents a compact, mixed-use development, improves jobs/housing balance in the City and Orange County Council of Governments Subregion, and provides access to mass transit. According to the 2008 Regional Comprehensive Plan, SCAG's Land Use and Housing Action Plan can be expected to result in a 10 percent reduction in VMT in 2035 when compared to current trends.	Community Development Department	
Ongoing	Transit Service to LAX: Although the City of Irvine is serviced by John Wayne Airport, Los Angeles International Airport (LAX) is the regional air transportation hub. Providing direct transit service from the City to LAX can reduce single passenger trips to this destination. The Los Angeles World Airports operates three Flyaway shuttles that provide nonstop airport service to and from Westwood, Van Nuys, and Downtown Los Angeles via the Flyaway program. Since November 16, 2009, a Flyaway shuttle from the Irvine Metrolink Station to LAX provides nonstop service. Based on the ITAM model, a 0.25 percent reduction in VMT is achieved through implementation of this program.	Community Development Department	
Ongoing	Comprehensive Signal Retiming and Coordination Program: Emissions are highest at the lowest travel speeds. The City is currently retiming and coordinating signals throughout Irvine under its ITEMS (Irvine Traffic Engineering System) program. The City plans to enhance signal coordination in the IBC area by the end of 2011. A program to retime and coordinate traffic signals would produce more even traffic flows, so that vehicles are not starting and stopping constantly. These types of programs can improve vehicular level of service (LOS), thereby decreasing emissions for the same volume of vehicles. Based on the ITAM model, a 1 percent citywide reduction in VMT is achieved through implementation of this program.	Public Works Department	
Ongoing	Additional Fixed Route Shuttle System to Complement The i Shuttle: In March 2008, the City introduced The i Shuttle service, which complements regional bus service and provides direct express transportation to and from the nearby Tustin Metrolink Station, John Wayne Airport, and throughout the IBC. The i Shuttle currently operates 12 fully accessible, compressed natural gas (CNG) buses and is funded by the City of Irvine and the Orange County Transportation Authority. The City's shuttle system has the potential to further decrease VMT in the City by encouraging	Public Works Department	

3. Mitigation Monitoring Requirements

Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Ongoing	employees not living in the IBC to commute to work using mass transit. Fehr & Peers is currently preparing a comprehensive study of additional local shuttles designed to complement the existing fixed route bus service operated by OCTA and the existing The i Shuttle. This report (Irvine Transit Vision, June 2009) identified six new shuttle routes for within the City of Irvine that would connect from either the Irvine Metrolink Station or the Tustin Metrolink Station to various destinations in Irvine. The City will provide additional shuttle service using the Irvine Transit Vision as a guide. Energy Efficient Traffic Lights: New traffic signals installed within the Irvine Business Complex will have light emitting diodes. The City is implementing a program to convert all traffic lights in the City to traffic light emitting diodes.	Public Works Department	
Ongoing	California AB 939 Waste Reduction: The City adopted a Zero Waste program in 2007 to approach waste management. The City recovers approximately 66 percent of its waste for recycling and composting, which exceeds the state's AB 939 waste diversion goals. Furthermore, waste haulers establish rate schedules according to bin size and frequency of collection. Commercial customers that subscribe to smaller bins (e.g., 2 cubic-yard bins) are routinely charged less by haulers. This pricing structure encourages waste reduction and recycling, and tends to minimize hauler pickups.	Public Works Department	
Ongoing	City of Irvine Renewable Energy and Existing Buildings Retrofit Program: Pursuant to City Council Resolution 09-52, the City has received federal funding from the U.S. Department of Energy to establish a Renewable Energy and Existing Retrofit Program. Retrofitting is designed to improve a building's energy consumption by using cost-effective measures that do not require extensive remodeling work. The City of Irvine is proposing to use the "whole building approach" meaning that the City will look at the following: • Thermal envelope (i.e. the shell insulation and air leakage) • Mechanical systems (i.e. HVAC and domestic hot water) • Appliances and lighting that may need replacing The approach will evaluate these areas and their interaction given usage rates, building site, and climate to assess the building's overall energy efficiency and performance and to make targeted recommendations for improvement and ultimately reduce residential demand. The City of Irvine will create a financing district to help property owners finance energy efficiency improvements and renewable energy installations. The City of Irvine is forming a Property Assessed Clean Energy (PACE) District under the Mello-Roos Community Facilities Act of 1982 and its powers as a charter city. Eligible improvements may include energy efficiency, water conservation, and renewable	Community Development Department	

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Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Ongoing	energy improvements to privately owned buildings or property. Potential funding for initial improvements may come from various sources including American Recovery and Reinvestment Act grants, taxable bonded indebtedness, other external financing arrangements, or City funds. Safe Route to Schools: The Safe Routes to School program is a federal and state grant program intended to increase the percentage of students walking or cycling to school. Funding is awarded to cities to construct engineering improvements and to start educational, encouragement, and enforcement programs. The City of Irvine has been successful in obtaining grant funding to implement a citywide program that includes walking school buses—groups of students who meet at a designated location and walk to school together, with a parent at the front and back of the group. This encourages students to walk to school and assuages parents' fears of traffic and crime safety risks that are impediments to walking alone. Based on the ITAM model, a 0.2 percent reduction in VMT is achieved through implementation of this program.	Public Works Department	
Ongoing	Circulation Phasing Analysis: The amount of emissions increase exponentially as arterial travel speeds decrease. As is the case with many cities in Southern California, there are often defined congestion locations (such as the major intersections along Jamboree Road) where a majority of congestion and delay occurs. The City currently has a Circulation Phasing Analysis program in place. They collect traffic counts at congested locations on a bi-annual basis and monitor locations every three years. The results of the analysis are used to determine future Capital Improvement Projects.	Public Works Department	
Project Design Features			
During preparation of construction bids for, and construction of, new developments	City of Irvine Zoning Code Chapter 9-36-20.1, Alternate Transportation Incentives: As described in the proposed zoning for the project, applicants for new developments in the Irvine Business Complex shall require that the construction contractor provide alternative transportation mode incentives such as bus passes and/or carpooling for workers to and from the worksite on days that construction activities require 200 or more workers. These requirements shall be noted on the grading plan cover sheet.	Community Development Department	
During design of new developments	City of Irvine Zoning Code Chapter 9-36-20.2, Recycled Materials: As described in the proposed zoning for the project, applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development or the Director of Public Works that the project uses recycled materials for at least 20 percent of construction materials. Recycled materials may include salvaged, reused, and recycled content materials. Recycled and/or salvaged building materials shall be shown on building plans and product cut sheets submitted to the	Community Development Department	

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Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	City.		
Ongoing	PDF 15-3 City General Plan Element N, Compact/Mixed-Use Development: The California Energy Commission (CEC) considers compact development forms beneficial for minimizing energy consumption that leads to greenhouse gas emissions. In fact, the CEC's report on the connections between land use and climate change identifies density as the project feature most predictive of the number of vehicle trips and VMT by project occupants. The project locates additional housing opportunities near major employment and transportation centers. On a regional basis, this Land Use PDF will reduce regional VMT.	Community Development Department	
Ongoing	PDF 15-4 City General Plan Element N, High Rate of Internal Trip Capture: With the inclusion of a mix of land uses including office, commercial, industrial, and residential in the project area, the proposed project significantly reduces trips outside the project area. This reduces trip length and congestion on the local circulation system outside the project area.	Community Development Department	
Ongoing	PDF 15-5 City of Irvine Zoning Code Chapter 9-36-20.7, Office/Commercial Development Heat Island Standards: New parking lots serving retail and office developments shall include tree plantings designed to result in 50 percent shading of parking lot surface areas within 15 years. These shading requirements shall apply to all impervious surfaces on which a vehicle can drive, including parking stalls, driveways, and maneuvering areas within parking areas. Commercial developments shall provide landscapes with drought-resistant species and groundcovers, rather than pavement, to reduce heat reflection. Additionally: 1) Buildings are encouraged to be oriented to the south or southwest, where feasible; 2) deciduous trees are encouraged to be planted on the west and south sides of structures.	Community Development Department	
Ongoing	PDF 15-6 City General Plan Element N, Urban Infill Near Multiple Transit Modes: The project would develop high-density housing in an area being served by at least two modes of transit. On March 31, 2008, <i>The i Shuttle</i>, which is operated by the City of Irvine and designed for the IBC community, began operating. The shuttle allows residents and employees to have an alternative way to commute to jobs and locations throughout the IBC. The shuttle offers three routes to accommodate residents and employees traveling within the area and to and from the IBC (see Figure 4-2, <i>The i Shuttle Route</i>). Route A connects the Tustin Metrolink Station to the John Wayne Airport via Von Karman Avenue. Route B connects the Tustin Metrolink Station to the heart of the IBC via Jamboree Road and Michelson Drive. Route C is a midday service in the busiest section of the IBC. Therefore, the project would facilitate walking and nonmotor travel to a greater extent than would be the case for similar development in outlying areas without extensive transit availability. In addition, the high-	Community Development Department	

3. Mitigation Monitoring Requirements

<i>Table 3-1</i> <i>Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs),</i> <i>Mitigation Measures (MMs) and Level of Significance after Mitigation</i>				
<i>Timing</i>	<i>PPPs, PDFs, and MMs</i>	<i>Responsible for Monitoring</i>	<i>Date Completed</i>	
During design and operation of new commercial, office, and retail developments	density development would include a greater number of potential residents that could use or engage in alternative modes of travel than in a lower density development on the project site. PDF 15-7 City of Irvine Zoning Code Chapter 9-36-21, Transportation Management Association (TMA): The City anticipates establishment of a TMA for the IBC by Spring 2010. Based on the ITAM model, establishment of the TMA for the IBC Vision Plan area would result in a reduction of 8 percent of projected VMT.	Community Development Department		
Ongoing	PDF 15-8 Pedestrian Improvements: The IBC Vision Plan creates funding mechanisms to provide for the implementation of community-orientated pedestrian infrastructure improvements to increase walkability. New streets incorporated into the IBC would reduce the size of the city blocks to a pedestrian scale and pedestrian paseos would connect to the arterials at key locations. In addition, many of the streets in the IBC currently do not have sidewalks. The sidewalk improvement program would be expanded to provide connectivity, and incorporate several new pedestrian bridges, and many existing sidewalks would be moved away from the curb into the setback area. The Creekwalk system is also envisioned adjacent to the San Diego Creek to provide a trail to connect the Great Park from the IBC and the Civic Center.	Public Works Department		
Ongoing	PDF 15-9 City General Plan Element N, Bicycle Improvements: The IBC would provide linkages to the City regional bicycle trail system. Currently continuous on-street bicycle lanes exist only along Main Street. Bicycle lanes are proposed along parts of Jamboree Road, Red Hill Avenue, Von Karman Avenue, Michelson Avenue, Carlson Avenue, Barranca Parkway, and Alton Parkway. Furthermore, the sidewalk system would be shared between pedestrians and bicycles. As part of the Vision Plan, bicycle connections to the San Marco Park, adjacent to the San Diego Creek, would be improved with a new pedestrian bridge. Also refer to PDF 13-1 and PDF 15-7, which allow for creation of a Transportation Management Association (TMA) for the IBC area.	Public Works Department		
Prior to issuance of building permits	PDF 15-10 City of Irvine Zoning Code Chapter 9-36-20.4, Ultra-Low-Flow Fixtures: Applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that toilets, urinals, sinks, showers, and other water fixtures installed on-site are ultra-low-flow water fixtures that exceed the Uniform Plumbing Code. Examples are: 1.28 average gallons per flush high efficiency toilets, 2 gallon per minute (gpm) efficient bathroom faucets, 2.2 gpm efficient kitchen faucets, and 2.2 gpm efficient shower heads.	Community Development Department		

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Table 3-1

Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PDFs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Prior to issuance of building permits	City of Irvine Zoning Code Chapter 9-36-20.5: Landscaping and Irrigation Systems: Applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that landscaping irrigation systems installed in the project are automated, high-efficient irrigation systems that reduce water use, such as an evapotranspiration "smart" weather-based irrigation controller, dual piping for recycled water, and bubbler irrigation; low-angle, low-flow spray heads; moisture sensors; and use of a California-friendly landscape palette. These features will make the project consistent with the intent of the California Water Conservation in Landscaping Act of 2006 (AB 1881), including provisions to reduce the wasteful, uneconomic, inefficient, and unnecessary consumption of water.	Community Development Department	
Ongoing	City of Irvine Zoning Code Chapter 9-36-20.6: Use of Reclaimed Water on All Master Landscaped Areas: If recycled water service is determined by IRWD to be feasible (see PPP 14-1), applicants for new developments in the Irvine Business Complex shall use reclaimed water in all master landscaped areas. This will include master landscaped commercial, multifamily, common, roadways, and park areas. Master landscapes will also incorporate weather-based controllers and efficient irrigation system designs to reduce overwatering, combined with the application of a California-friendly landscape palette.	Irvine Ranch Water District	
Ongoing	City of Irvine Zoning Code Chapter 9-36-20.8: Material Recovery: To reduce waste generated in the IBC and encourage recycling of solid wastes, the Orange County Integrated Waste Management Department operates material recovery facilities to recycle glass, plastic, cans, junk mail, paper, cardboard, greenwaste (e.g., grass, weeds, leaves, branches, yard trimmings, and scrap wood), and scrap metal. Future employees, residents, and customers would participate in these programs. On-site recycling facilities will be required for all commercial, retail, industrial, and multifamily residential developments.	Community Development Department	
Prior to issuance of building permits	City of Irvine Zoning Code Chapter 5-8-4.A.7: GreenPoint Rated Residential Buildings: Applicants for new residential developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that proposed buildings are designed and constructed to be GreenPoint Rated. GreenPoint Rated developments must achieve a minimum of 50 total points and meet the category-specific point thresholds as specified in the current GreenPoint Rated Builder Handbook. Developments that exceed this minimum are rewarded by a higher grade on their projects. The GreenPoint Rated program is updated every three years to coincide with changes to the California Building Energy Efficiency Standards.	Community Development Department	

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<i>Table 3-1</i> <i>Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs),</i> <i>Mitigation Measures (MMs) and Level of Significance after Mitigation</i>			
<i>Timing</i>		<i>PPPs, PDFs, and MMs</i>	<i>Responsible for Monitoring</i> <i>Date Completed</i>
Prior to issuance of building permits	PDF 15-15	City of Irvine Zoning Code Chapter 9-36-20.9: Designed to Earn the Energy Star Non-Residential Buildings: Applicants for new non-residential developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that proposed buildings are designed and constructed to achieve the 'Designed to Earn the Energy Star' rating. In order achieve the 'Designed to Earn the Energy Star' rating, the architect/design firm must demonstrate that the final estimate of the building's energy use corresponds to a rating of 75 or better using the US EPA's Energy Performance Rating from the Internet-based tool, Target Finder.	Community Development Department Date Completed