

1. Executive Summary

1.1 INTRODUCTION

This Draft Supplemental Environmental Impact Report ("DSEIR") addresses the environmental effects associated with the implementation of the Great Park Neighborhoods Revision to the Heritage Fields Project at the former Marine Corps Air Station ("MCAS"), El Toro Site (the "Modified Project"). The California Environmental Quality Act ("CEQA") requires that local government agencies, prior to taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. An Environmental Impact Report ("EIR") is a public document designed to provide the public and local and State governmental agency decision makers with an analysis of potential environmental consequences to support informed decision-making. This document focuses on those impacts determined to be potentially significant as disclosed in the Initial Study completed for the Modified Project (see Appendix A to this DSEIR).

As discussed in Section 3.3.1, *Previous Environmental Documentation*, of this DSEIR, in 2003, the City certified the Final Environmental Impact Report for the Orange County Great Park, SCH No. 2002101020, dated May 27, 2003 ("2003 EIR"), which analyzed the environmental effects of the development of 3,625 residential units and 6,585,594 square feet of non-residential uses on the former MCAS El Toro site ("Proposed Project Site"). Subsequently, the City prepared, and the City Council approved, seven addenda to the 2003 EIR ("Addenda"), which analyzed subsequent revisions to the project that had been analyzed in 2003 EIR. The 2003 EIR and the seven Addenda are referred to together as the "Certified EIR." The Certified EIR and the 1,269 density bonus units granted by the City in 2008 pursuant to state law, are referred to in this DSEIR as the "Approved Project." Therefore, the "Approved Project" consists of 4,894 residential units and 6,585,594 square feet of non-residential development. The Certified EIR is incorporated by reference in this DSEIR. A summary of the Certified EIR is provided in Section 3.3.1 of this DSEIR.

This DSEIR has been prepared pursuant to the requirements of CEQA (California Public Resources Code, Division 13, Sections 21000, et seq.), the State CEQA Guidelines (Title 14 of the California Code of Regulations, Division 6, Chapter 3, Sections 15000, et seq.), and the City of Irvine's CEQA Procedures. The overall purpose of this DSEIR is to inform the City's decision makers and the general public whether, as compared to the Approved Project, the Modified Project would result in any new significant impacts or an increase in the severity of significant impacts of the Approved Project. The Approved Project is the "baseline" for the analysis in this DSEIR, and was used in preparing the Initial Study for the Modified Project, to evaluate the potential impacts of the Modified Project. The City of Irvine, as the Lead Agency, has reviewed and revised as necessary all submitted drafts, technical studies, and reports to reflect its own independent judgment, including, without limitation, by relying on applicable City technical personnel and reviewing all technical subconsultant reports.

Data and other information for this DSEIR was obtained from previous environmental documentation; onsite field observations; discussions with affected agencies; analysis of adopted plans and policies; review of available studies, reports, data and similar literature; and specialized environmental assessments (e.g., air quality analysis, geology and soils update, greenhouse gas emissions analysis, hydrology and water quality updates, noise analysis, traffic impact analysis and a water supply assessment).

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1.2 ENVIRONMENTAL PROCEDURES

This DSEIR has been prepared pursuant to CEQA to assess the environmental effects associated with implementation of the Modified Project, as well as associated anticipated future discretionary actions and approvals. The six main objectives of this document as established by CEQA are listed below:

- 1) To disclose to decision makers and the public the significant environmental effects of proposed activities.
- 2) To identify ways to avoid or reduce environmental damage.
- 3) To prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.
- 4) To disclose to the public reasons for agency approval of projects with significant environmental effects.
- 5) To foster interagency coordination in the review of projects.
- 6) To enhance public participation in the planning process.

An EIR is the most comprehensive form of environmental documentation identified in CEQA and the CEQA Guidelines and provides the information needed to assess the environmental consequences of a proposed project, to the extent feasible. EIRs are intended to provide an objective, factually supported, full-disclosure analysis of the environmental consequences associated with a proposed project that has the potential to result in significant, adverse environmental impacts.

An EIR is also one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Prior to approving a proposed project, the lead agency must consider the information contained in the EIR; determine whether the EIR was properly prepared in accordance with CEQA and the CEQA Guidelines; determine that it reflects the independent judgment of the lead agency; adopt findings concerning the project's significant environmental impacts and alternatives; and adopt a Statement of Overriding Considerations if the proposed project would result in significant impacts that cannot be avoided.

1.2.1 EIR Format

This DSEIR has been formatted as described below.

Section 1. Executive Summary: Summarizes the background and description of the Modified Project, the format of this DSEIR, project alternatives, and the potential environmental impacts and mitigation measures identified for the Modified Project. It also includes a discussion of any critical issues remaining to be resolved and areas of controversy.

Section 2. Introduction: Describes the purpose of this DSEIR, background on the Modified Project, the Notice of Preparation/Initial Study, the use of incorporation by reference, Final EIR certification, and mitigation monitoring requirements.

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Section 3. Project Description: Includes a detailed description of the Modified Project, the objectives of the Modified Project, the Proposed Project Site and location, approvals anticipated to be included as part of the Modified Project, the necessary environmental clearances for the Modified Project, and the intended uses of this DSEIR.

Section 4. Environmental Setting: Includes a description of the physical environmental conditions in the vicinity of the Proposed Project Site as they existed at the time the Notice of Preparation was published, from both a local and regional perspective. Ordinarily, the environmental setting provides baseline physical conditions from which the lead agency determines the significance of environmental impacts resulting from a development project. However, because this is a Supplemental EIR that supplements the Certified EIR, the baseline used for the analyses in this DSEIR is the Approved Project.

Section 5. Environmental Analysis: For each environmental topic analyzed, the DSEIR provides a description of the affected environment, presenting an analysis for each of the environmental resource areas evaluated, a detailed analysis of the environmental impacts, and discussion of mitigation measures to reduce or eliminate any significant environmental impacts associated with the Modified Project. Included for each environmental topic (i.e., Aesthetics, Air Quality, Transportation and Traffic, etc.) addressed in Section 5.0 is the identification and description of specific measures or requirements incorporated into the Modified Project that serve to avoid or lessen potential significant impacts. Those measures and requirements fall in to the following three categories:

- **Existing Plans, Programs, and Policies (“PPPs”).** These measures include existing regulatory requirements or plans and programs that are applicable to the Modified Project. For example, existing standard conditions imposed by the City of Irvine, such as the requirement that new structures meet seismic safety requirements (i.e., Uniform Building Code requirements), serve to reduce the potential for new development within the Proposed Project Site to be significantly affected by possible seismic events.
- **Project Design Features (“PDFs”).** The analysis of each topic includes a description of any project design features proposed by Heritage Fields El Toro, LLC (“Applicant” or “Heritage Fields”), which are specifically intended and designed to reduce or avoid impacts.
- **Mitigation Measures (“MMs”).** For those issue areas where the impact analysis determines that implementation of the Modified Project would result in significant impacts, mitigation measures are recommended in accordance with the requirements of CEQA.

It should be noted that the existing PPPs and the PDFs were assumed and accounted for in the analysis of impacts for each topical issue area. The MMs were formulated only for those topical issue areas where the results of the impact analysis identified significant impacts even with the inclusion of PPPs and PDFs. All three types of measures described above will be required to be implemented as part of the Modified Project, and will be included in the Mitigation Monitoring and Reporting Program for the Modified Project. In instances where these types of measures are not feasible, or cannot reduce the impact to a less than significant level, the impact is identified as “Significant and Unavoidable.”

Section 6. Significant Unavoidable Adverse Impacts: Describes the significant unavoidable adverse impacts of the Modified Project.

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Section 7. Alternatives to the Proposed Project: Describes the impacts of the alternatives to the Modified Project, including the No Project/Density Bonus Units Not Located Alternative, No Project/Density Bonus Units Located Alternative, Relocated Residential Units Alternative, Conversion Alternative and the School Mitigation Alternative, and compares the alternatives to the Modified Project.

Section 8. Impacts Found Not to Be Significant: Briefly describes the potential impacts of the Modified Project that the City determined in its Initial Study (Appendix A to this DSEIR) would not be significant and therefore have not been discussed in detail in this DSEIR.

Section 9. Significant Irreversible Changes Due to the Modified Project: Describes the significant irreversible environmental changes associated with the Modified Project.

Section 10. Growth-Inducing Impacts of the Modified Project: Describes the growth-inducing impacts of the Modified Project.

Section 11. Organizations and Persons Consulted: Lists the people and organizations that were contacted during the preparation of this DSEIR for the Modified Project.

Section 12. Qualifications of Persons Preparing EIR: Lists the people who prepared this DSEIR for the Modified Project.

Section 13. Bibliography: A bibliography of the technical reports and other documentation used in the preparation of this DSEIR for the Modified Project.

Appendices. The appendices to this DSEIR (presented in PDF format on a CD attached to the front cover) contain the following supporting documents:

- Appendix A: Notice of Preparation (“NOP”) and Initial Study
- Appendix B: NOP Responses
- Appendix C: Draft General Plan Amendments
- Appendix D: Draft Amendments to Zoning and Municipal Codes
- Appendix E: Tentative Tract Maps
- Appendix F: Master Plans
- Appendix G: Air Quality Technical Report
- Appendix H: Greenhouse Gas (“GHG”) Technical Report
- Appendix I: Hydrology Technical Reports
- Appendix J: Water Quality Technical Reports
- Appendix K: Noise Technical Report
- Appendix L: Public Services Correspondence
- Appendix M: Traffic Impact Analysis
- Appendix N: Water Supply Assessment and Water Supply Verification
- Appendix O: Fire Safety Risk Analysis
- Appendix P: Additional Technical Information Related to Alternatives
- Appendix Q: Geology and Seismicity Update

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1.2.2 Type and Purpose of This DSEIR

According to Section 15121(a) of the CEQA Guidelines, the purpose of an EIR is to:

Inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This DSEIR analyzes the changes to the Approved Project that are being proposed by the Modified Project. CEQA dictates when a supplemental or subsequent EIR is required when changes are made to a project previously analyzed under CEQA, and the CEQA document is beyond the statute of limitations. Once a project has been approved based on a CEQA analysis contained in an EIR, or even in a negative declaration, and the EIR or negative declaration is no longer subject to challenge, CEQA section 21166 provides that "no subsequent or supplemental environmental impact report shall be required by the lead agency or any responsible agency" unless one of three circumstances apply: (1) substantial changes to the approved project will require major revisions to the certified EIR, (2) substantial changes occur with respect to the circumstances under which the approved project is being undertaken will require major revisions to the certified EIR, or (3) new information, that was not known and could not have been known at the time the EIR for the approved project was certified becomes available. (CEQA § 21166.)

In this case, in-depth review has already occurred and the time for challenging the sufficiency of the Certified EIR has long since expired (CEQA § 21167, subd. (c)). Moreover, as discussed below, no circumstances have changed enough to justify repeating a substantial portion of the process. The factors used to evaluate whether a subsequent or a supplemental EIR should be prepared are set forth in CEQA Guidelines 15162 and 15163, and relate to whether "major changes" to the EIR are required. CEQA Guidelines section 15162 clarifies what constitute major changes to the EIR. According to that Section, major changes to the EIR are those that are required either:

- "Due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;" (CEQA Guidelines § 15162, subd. (a)(1), (a)(2); see also, id., subd. (a)(3)(A), (a)(3)(B));
- Where "[m]itigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or" (id., subd. (a)(3)(C));
- Where "[m]itigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative." (Id., subd. (a)(3)(D).)

This Draft SEIR does not disclose any new significant environmental effects or any substantial increase in the severity of previously identified significant effect. Moreover, the Applicant has not refused to adopt any new or newly feasible mitigation measures or alternatives.

This DSEIR is a project-level document that supplements the analyses in the Certified EIR. Section 15163 of the CEQA Guidelines provides that:

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- (a) The lead or responsible agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:
 - 1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and
 - 2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.
- (b) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.
- (c) A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.
- (d) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.
- (e) When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised.

In accordance with Section 15163 of the CEQA Guidelines, this document:

- Incorporates the Certified EIR by reference.
- Contains information necessary to make the Certified EIR adequate for the Modified Project.
- Evaluates the potential environmental impacts of the changes to the Approved Project that are proposed by the Modified Project.
- Focuses on the land uses of the Modified Project and analyzes the potentially significant impacts of these proposed land uses.
- Updates where necessary information relating to the resources in the vicinity of the Proposed Project Site that will be affected by the Modified Project.
- Updates where necessary the discussion of cumulative impacts, project alternatives, growth inducing impacts and other required sections of this DSEIR.

The changes to the Approved Project proposed include no new residential units or non-residential square footage on the Proposed Project Site. Moreover, the Applicant is not requesting that any land uses be permitted in the Proposed Project Site that were not included in the Approved Project. As a result, the analysis contained in this DSEIR confirms that the Certified EIR is adequate for the Modified Project, with the updated information contained herein. The Modified Project is described below and in Chapter 3 of this DSEIR.

1.3 PROJECT LOCATION

The "Proposed Project Site" refers to and encompasses the areas designated as "Planning Areas 30" and "Planning Area 51" in the City of Irvine General Plan, which are northeast of the freeway junction of

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Interstate 5 (I-5) and Interstate 405 (I-405), within the City of Irvine. Because the location of and boundaries for the "Approved Project" and the "Modified Project"¹ developments are the same, all references to the "Proposed Project Site" used throughout this DSEIR refer to the project site for both the Approved Project and the Modified Project.

Planning Area 51 is generally bounded by the Eastern Transportation Corridor to the west, the Foothill Transportation Corridor to the north, the Southern California Regional Rail Authority ("SCRRA") rail lines to the south, and Irvine Boulevard and the storm water channel near Alton Parkway to the east. Planning Area 51 abuts Planning Area 6 to the north, Planning Areas 30 and 32 to the south, Planning Area 35 (Irvine Spectrum 2) and the City of Lake Forest to the east, and Planning Areas 9 and 40 to the west. Planning Area 30 is generally bounded by Interstate 5 to the south, the SCRRA rail lines to the north, and the Irvine Spectrum to the east and west (Irvine Spectrum 2 - Planning Area 35 and Irvine Spectrum 3 - Planning Area 32).

The major roadways bordering the areas covered by the Vesting Tentative Tract Maps that are included among the proposed entitlements associated with the Modified Project are Sand Canyon Avenue and the SR-133 to the west, Portola Parkway to the north, and Bake Parkway to the east. Irvine Boulevard separates District 7 and District 8 on its north side from District 1-North, District 1-South and District 4 on its south side. The Irvine Station is adjacent to the Metrolink tracks that traverse the Proposed Project Site and that separate Planning Areas 30 and 51. Surrounding the Proposed Project Site are residential and nonresidential uses to the north and west, open space to the northeast, and nonresidential and mixed land uses to the east and southeast within the Cities of Lake Forest and Irvine.

1.4 PROJECT SUMMARY

Between 2003 and 2009, the City approved the Approved Project, which includes residential and non-residential development on the portions of the Proposed Project Site that are owned by Heritage Fields and that are referred to as the Great Park Neighborhoods. As approved by the City, the Approved Project includes 3,625 residential units (15 percent of which are affordable units) generally located in various areas within Planning Area 51; 1,269 density bonus units granted by the City in 2008 pursuant to State law (California Government Code sections 65915 et seq.), the general location of which has not previously been identified; and approximately 6,585,594 square feet of non-residential uses generally located throughout Planning Areas 51 and 30.² With the exception of the 1,269 density bonus units (the grant of which was mandated by State law and therefore not subject to CEQA analysis), the Approved Project was analyzed in the Certified EIR, and includes the mitigation measures recommended in the Certified EIR and adopted by the City in the Mitigation and Monitoring Program.

The Applicant, Heritage Fields El Toro LLC, is now proposing the Modified Project, which would modify the Approved Project by: locating 1,100 low density residential units, previously located on a programmatic basis within Districts 5 and 7, in the locations depicted on the proposed Vesting Tentative Tract Maps ("VTTMs") described below, and changing the General Plan land use designation and the associated zoning of these units from Low Density (0-5 du/ac) to Multi-Use (0-40 du/ac); locating 1,500 residential units, previously located on a programmatic basis in the portion of the Transit Oriented District ("TOD") located within Planning Areas 30 and 51, to the locations depicted on the proposed VTTMs; locating the 1,269 density bonus units, which have not previously been located on a programmatic basis, in the locations depicted on the proposed VTTMs;

¹ The "Approved Project" and the "Modified Project" are defined and described below.

² The adopted zoning for the Proposed Project Site allows up to 6,545,594 square feet of non-residential uses, which excludes 40,000 square feet allocated to an elementary school within the Proposed Project Site.

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locating the remaining 1,025 residential units on the proposed VTTMs; transferring development intensities between certain zones as detailed below and other minor text/graphic modifications to the General Plan and Zoning Code; and realigning Ridge Valley and “O” Street at Irvine Boulevard. These changes will be achieved and implemented through the proposed General Plan Amendment, Zone Change, VTTMs, Vesting Tentative Tract Map amendments and Master Plans pursuant to Zoning Code 2-17, Comprehensive Parks Plans, Master Trails Plan and Master Walls and Fences Plan, all as more specifically described below. Consistent with the Approved Project, the Modified Project includes a total of 4,894 dwelling units and 6,585,594 square feet of non-residential uses.

The Modified Project incorporates all of the mitigation measures recommended in the Certified EIR and adopted by the City in the Mitigation Monitoring and Reporting Program. The Modified Project also includes Project Design Features not included in the Approved Project as discussed below.

This DSEIR analyzes the environmental impacts of the Modified Project as compared to those of the Approved Project. Since the 1,269 density bonus units have not previously been analyzed under CEQA, this DSEIR analyzes the impacts of locating them on the proposed VTTMs, even though they have already been granted by the City and are a vested component of the Approved Project for the purpose of identifying and imposing feasible mitigation measures, where required.

General Plan Amendments

The General Plan Amendment application requests the following in Planning Area (“PA”) 51: (1) amendment of the General Plan maps to reflect the planned roadway realignment of Ridge Valley and “O” Street at Irvine Boulevard and within District 1-North; (2) amendment of the General Plan maps to reflect a zone change from 1.9 Orange County Great Park (“1.9 OCGP”) to 8.1 Trails and Transit Oriented Development (“8.1 TTOD”) and visa versa; (3) amendment of the General Plan Land Use Table A-1 footnotes to allow up to 75,000 square feet of any public facilities permitted by the General Plan and to delete references currently in the footnotes that limit such square footage to 25,000 square feet of golf course clubhouse and 50,000 square feet of public facility uses; (4) the previously approved amendment of General Plan Land Use Table A-1 to allow 4,894 dwelling units in PA 51 (reflecting the inclusion of the previously approved 1,269 density bonus units); (5) addition of a new footnote in General Plan Land Use Table A-1 allowing the 1,269 density bonus units granted pursuant to State law to be placed in Planning Area 51, or in PA 30 upon subsequent environmental review; and (6) revision to General Plan footnote 16 as described below.

The proposed text and table modifications for the General Plan consist of the following:

- Revise General Plan Table A-1 to modify the distribution of residential units.
- Revise General Plan Table A-1 to allow 4,894 Multi-Use (0-40 du/ac) dwelling units in PA 51 instead of only 2,525 Multi-Use (0-40 du/ac) dwelling units in PA 51.
- Revise General Plan Table A-1 to allow zero Low Density (0-5 du/ac) dwelling units in PA 51 instead of 1,100 Low Density (0-5 du/ac) dwelling units in PA 51.
- Revise General Plan Table A-1 footnote 16 to read: "16. The Multi-Use category intensity will be used for Transit Oriented Development in Planning Areas 30 and 51 and for the Trucks and Transit Oriented District in PA 51, even though the intensity is only shown within PA 51 on this table. The

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units and square footage will be divided between Planning Areas 30 and 51 through the implementation of a Master Plan for Transit Oriented Development."

- Revise General Plan Table A-1 footnote 17 to read: "17. The 1,254,500 square feet in Institutional/Public Facilities in Planning Area 51 includes 122,500 square feet for Orange County Transit Authority facilities; 300,000 square feet for County of Orange facilities; 263,000 square feet for warehousing for homeless providers; 468,000 square feet of institutional uses; 26,000 square feet of sports park; and 75,000 square feet of any public facilities that are permitted by the General Plan and as defined in the Zoning Ordinance. "
- Add a new General Plan Table A-1 footnote that states: "The Density Bonus Agreement by and between the City of Irvine and property owner recorded on September 9, 2009 vests property owner's right to develop 1,269 density bonus units, for a total of 4,894 units in PAs 30 and 51. Up to 1,269 of the density bonus units included in PA 51 can be transferred to PA 30, upon the completion of further environmental review."
- For Planning Area 30, delete references to Footnotes 15 and 17 in General Plan Table A-1 and add references to Footnotes 16, 18, and 25.
- Revise General Plan Table A-2, PA 51, to allow zero acres of Low Density Residential instead of 635 acres of Low Density Residential. Revise to allow 1,678 acres of Multi-Use instead of 1,043 acres of Multi-Use.
- Revise General Plan Table A-2 to be consistent with General Plan Table A-1 (i.e. remove 211 acres from Recreation, add 211 acres to Multi-Use, for a total of 1,889 acres Multi-Use in PA 51).
- Amend General Plan Land Use Maps A-3, K-1 and L-2 to reflect the 1.9 OCGP to 8.1 TTOD and 8.1 TTOD to 1.9 OCGP.
- Amend General Plan Circulation Element Figures B-1 and B-2 to reflect the planned roadway realignment of Ridge Valley and "O" Street at Irvine Boulevard, and any other General Plan exhibits that depict the old alignment of Ridge Valley and "O" Street. Ridge Valley is a secondary highway. (see Figure 3-4)
- Revise the General Plan Maximum Intensity Matrix to include the 1,269 density bonus units, for a total of 4,894 units.
- Amend General Plan Figure G-1 to add two locations for K-8 schools, and remove the existing location of an elementary school.
- Amend General Plan Figure K-1 to remove Golf Course hatching, remove Major Private Commercial Recreation Facility, and revise Regional Park western boundary.
- Amend General Plan Figure L-2 to remove Recreation hatching, Golf Course Overlay hatching, and revise western boundaries of Recreation.
- Revise the "General Plan/Zoning Correlation" (Page A-18, Land Use Element) to include the 'OCGP' General Plan Category, and '1.9 OCGP', '3.2 TOD', '8.1 TTOD' Zoning Districts.

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- Revise Figure J-1 to show a proposed Police Station in the Orange County Great Park.
- Other minor modifications as necessary to implement the Modified Project.

Zoning Code Amendments

The Zone Change component of the application requests modification to the current 8.1 Lifelong Learning District zoning classification to create a zoning category that reflects the unique nature of the Great Park Neighborhoods. The existing zoning designations for the Proposed Project Site are shown on Figure 3-5, *Existing Zoning*. The proposed zone changes are shown on Figure 3-6, *Proposed Zone Changes*. The new 8.1 Trails and Transit Oriented District (“TTOD”) zoning classification would allow most of the uses that are currently permitted in PA 51 in zones 1.8 Golf Course Overlay (“Golf”), 2.2 Low Density Residential (“LDR”), and 8.1A Lifelong Learning District, but would not allow any new uses or any increase in intensity beyond the 1,269 density bonus residential units that have been granted by State law, for a total of 4,894 residential units. The Zone Change also requests modification to the 3.2 Transit Oriented Development (“TOD”) zoning category to allow research and development uses as permitted uses in the 3.2 TOD zone. The 3.2 TOD zone and the new 8.1 TTOD zone will be modified to: 1) transfer 666,600 square feet of Institutional uses from the 8.1 TTOD zone to the 3.2 TOD zone; 2) transfer 951,300 square feet of Medical and Science uses from the 8.1 TTOD zone to the 3.2 TOD zone; 3) transfer 75,000 square feet of Community Commercial uses from the 3.2 TOD zone to the 8.1 TTOD zone; 4) transfer 75,000 square feet of Office uses from the 3.2 TOD zone to the 8.1 TTOD zone; and 5) transfer 1,500 residential units from the 3.2 TOD zone to the 8.1 TTOD zone. These uses being transferred to the 3.2 TOD zone are consistent with the already permitted uses in the 3.2 TOD zoning and will be consistent with the other permitted uses in the TTOD zone. The Zone Change also proposes zone changes from (1) 8.1A LLD to 8.1 TTOD; (2) 2.2 LDR to 8.1 TTOD; (3) 2.2LDR/1.8 Golf to 8.1 TTOD; (4) 1.9 OCGP to 8.1 TTOD; (5) 8.1 TTOD to 1.9 OCGP; and (6) 8.1 TTOD to 1.1 Exclusive Agriculture. The proposed zoning is shown on Figure 3-7, *Proposed Zoning*.

The text modifications for the Zone Change are included in this DSEIR as Appendix D. While no changes are requested to the types of uses or the overall intensities permitted in PAs 30 and 51, changes to some of the local intensities within individual Districts are being proposed. Some of the text amendments include:

Lifelong Learning District zone (and affiliated sections of the Zoning Code):

- 8.1 Trails and Transit Oriented Development district (and affiliated sections of the Zoning Code)
 - Modify the nomenclature of the 8.1 Lifelong Learning District to be 8.1 Trails and Transit Oriented Development district (TTOD).
 - Modify section 9-51-6(F) to be consistent with the ARDA.
 - Clarify maximum site coverage for residential and non-residential development to allow a range of uses proposed by the five VTTMs.
 - Add golf course/driving range and large family child care as conditional uses since these are uses allowed in the 2.2/1.8 zone that should now be allowed in the 8.1 zone.
 - Reduce setbacks for primary highways (45 feet to 42 feet), building to building (10 feet to 6 feet), and addition of setbacks for private drives (8 feet) in 3-37-39 (Development Standards) to allow the range of development proposed by the five VTTMs.
- Transfer of development intensity between the 8.1 LLD to 3.2 TOD
 - Transfer 666,600 square feet of institutional from 8.1 LLD to 3.2 TOD to facilitate the development of the five VTTMs.

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- Transfer 951,300 square feet of medical and science from 8.1 LLD to 3.2 TOD to facilitate the development of the five VTTMs.
- Revise Section 3-3-1 of the Zoning Code to change from conditional to permitted land use for residential (attached) and residential (single family detached) since conditional use permits for residential development is impractical.
- 3.2 Transit Oriented Development (TOD) zone (and affiliated sections of the Zoning Code)
 - Transfer of development intensity between 3.2 TOD to 8.1 TTOD to facilitate development of the five VTTMs.
 - Transfer 75,000 square feet of Community Commercial uses from 3.2 TOD to 8.1 TTOD to facilitate the development of the five VTTMs.
 - Transfer 75,000 square feet of Office from 3.2 TOD to 8.1 TTOD to facilitate the development of the five VTTMs.
 - Transfer 1,500 residential units from 3.2 TOD to 8.1 TTOD to facilitate the development of the five VTTMs.
 - Add Research and Development as a permitted land use to facilitate the development being transferred from the TOD.
 - Delete Section 9-30-6(D) to provide for a range of options for pedestrian crossings at Alton, Barranca and Marine Way.
- Allow 1,269 density bonus units to be placed either in PA 51, or PA 30 upon subsequent environmental review, for a total of 4,894 dwelling units, to accommodate the intent of the grant of the density bonus units.
- Revise Section 3-37-39 of the Zoning Code to change the dwelling unit intensities for the new 8.1 TTOD to allow for a range of densities in the five VTTMs.
- Delete the senior restriction on the 800 residential units to accommodate the development of the five VTTMs, which will include senior units.
- Delete references to the base zone since the parties have entered into the ARDA.
- Clarification of the maximum average daily trips (“ADT”) in relation to 1,269 units for PAs 30 and 51 to comply with state housing and CEQA law.
- Update the statistical matrices for PAs 30 and 51 to reflect the existing grant of the density bonus units.
- Update the land use map for PA 51 to reflect the proposed Zone Change.
- Revise Section 2-17-2 to change the nomenclature from 8.1 LLD to 8.1 TTOD.
- Deletion of the references to the Orange County Great Park Streetscape Plan requirements since it is inconsistent with the ARDA.
- Delete obsolete references to the base zone
- Minor Text Changes

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Tentative Tract Maps, Master Plans and Comprehensive Park Plans

In addition to the above-described General Plan Amendment and Zone Change, the Applicant proposes five VTTMs (VTTMs 17283A, 17368, 17364, 17366, and 17202) that define the size, shape, location and orientation of lots proposed for residential and commercial development, landscape parcels and roadways. The proposed development in each of the five proposed VTTMs is set forth in more detail in Table 1-1. The Applicant also proposes a Master Plan of Intensity Allocation and Master Plans that establish design relative to residential design, trails, landscaping, parks and fencing. Subsequent master plans or development applications will be required to establish the design for the non-residential development.

In addition, the Applicant is proposing five Comprehensive Park Plans to cover required neighborhood park facilities, as described in Table 1-2. Finally, the Applicant is proposing modifications to Amended Tentative Tract Map 17008 (AVTTM 17008) and Amended Vesting Parcel Map 2006-271 (AVTPM 2006-271) to implement the Modified Project.

The proposed amendments to TPM 2006-271 consist of an update to the Proposed Project Site boundary as shown on Record of Survey recorded on February 4, 2008 (Instrument No. 2008000051629- Book 225, Pages 29-42 of Record of Surveys), as well as adjustments to parcel lines and incorporation of additional parcels to make AVTPM 2006-271 consistent with the most current plan of development, and to reflect corrections to previously prepared legal descriptions for several parcel lines and identify boundary adjustments to the parcels to be exchanged between the City of Irvine and the Applicant.

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*Table 1-1
Proposed Vesting Tentative Tract Maps*

| <i>District</i> | <i>VTTM</i> | <i>Acres</i> | <i>Lots</i> | <i>Residential Uses</i> | | <i>Non-Residential Uses</i> | | <i>Parks</i> |
|-----------------|--------------|-----------------|------------------------------------|-----------------------------------|--------------------------|------------------------------|--------------------|--------------|
| | | | | <i>Unit Type</i> | <i>Units</i> | <i>Land Use</i> | <i>Square Feet</i> | |
| 1 North | 17283 A | 413.7 | 540 Numbered 98 Lettered | Single-Family Detached | 203 | Institutional | 775,000 | 2 |
| | | | | Single-Family Detached | 608 | R & D | 48,700 | |
| | | | | Single-Family Attached | 52 | | | |
| | | | | Single-Family Attached | 390 | Office | 75,000 | |
| | | | | Apartments- Senior- Affordable | 182 | Retail | 150,000 | |
| | | | | Apartments- Family- Affordable | 196 | Public Facility | 10,000 | |
| | | | | | | Child Care | 5,000 | |
| | | | | | | Public Facility ¹ | 15,000 | |
| | | | | Child Care ¹ | 6,000 | | | |
| | | | | Affordable Apartments | 166 See Footnote 1 | | | |
| Subtotal | 1,797 | Subtotal | 1,084,700 | | | | | |
| 1 South | 17368 | 68.5 | 16 Numbered 2 Lettered | Single-Family Detached | 154 | none | none | 3 |
| | | | | Single-Family Attached | 96 | | | |
| | | | | Single-Family Attached | 179 | | | |
| | | | | Subtotal | 429 | | | |
| 4 | 17366 | 209.0 8 | 515 Numbered | Single-Family Detached | 137 | Retail | 70,000 | 2 |
| | | | | Single-Family Detached | 541 | | | |
| | | | | Single-Family Attached | 424 | | | |
| | | | | Subtotal | 1,102 | | | |
| 7 | 17202 | 269.3 | 697 Numbered 141 Lettered | Single-Family Detached | 255 | none | none | 1 |
| | | | | Single-Family Detached | 585 | | | |
| | | | | Subtotal | 840 | | | |
| 8 | 17364 | 172.2 | 514 Numbered 78 Lettered | Single-Family Detached | 171 | Public Facility ¹ | See Footnote 1 | 1 |
| | | | | Single-Family Detached | 555 | Child Care ¹ | See Footnote 1 | |
| | | | | Apartments- Affordable | See Footnote 1 | | | |
| | | | | Subtotal | 726 | | | |
| Total | | | | 4,894 | Total | 1,154,700 | 9 | |

¹ The footnoted public facility (church; 15,000 square feet) and child care (6,000 square feet) will be developed in either District 1 North or District 8. Both scenarios will be analyzed. The non-residential square footage and the 166 affordable apartments are shown here in District 1 to avoid double-counting.

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*Table 1-2
Neighborhood Parks to be Developed as part of the Modified Project's
Five Proposed VTTMs*

| <i>District</i> | <i>Required Neighborhood Parkland</i> | <i>Proposed Neighborhood Park</i> | <i>Acres Offered for Parkland Dedication</i> | <i>Amenities</i> |
|------------------------------------|---|---|--|--|
| Proposed Neighborhood Parks | | | | |
| 1 North | | 1A | 7.82 ² | Amphitheater (300 seat capacity), Community Building, Basketball court, tot lot, barbecues |
| | | 1B | 4.22 | Tot lot, 2 basketball courts, barbecues |
| Subtotal | 12.01 | | 12.04 | |
| 1 South | | Central Park | 4.10 | Tot lot, basketball court, barbecues |
| Subtotal | 3.08 | | 4.10 | |
| 4 | | 4A | 4.17 | 2 Basketball courts, tot lot, barbecues |
| | | 4B | 4.14 | Tot lot, basketball court, barbecues |
| Subtotal | 8.29 | | 8.31 | |
| 7 | 6.76 | 7 | 7.12 | 2 Basketball courts, sand volleyball court, tot lot, barbecues |
| 8 | 5.83 ² | 8 | 6.67 | Tot lot, basketball court, barbecues |
| Total | 35.97 | | 38.24 | |

Notes:

¹ Consistent with the approved Amended and Restated Development Agreement (ARDA), required park acreage has been calculated at 3 acres per 1,000 population except affordable units which are calculated at 2 acres per 1,000 population.

² This table assumes that the 166 affordable apartments are located in District 1. If the 166 affordable apartments are located in District 8, 37.48 acres of parkland will be provided.

The proposed amendments to VTTM 17008 consist of:

- Realignment of the following Streets: “O” Street, “LQ” Street, “Ridge Valley”, “A” Street and “B” Street, to be consistent with the most current plan of development for the Proposed Project Site;
- Adjustment of the proposed grading at lots 18, 20-35, 37-42, 44-52, G, J, L and M to be consistent with the revised Master Plan of Drainage, as well as the most current plan of development for the Proposed Project Site;
- Revision of street sections 1, 2, 7, 8, 9, 11, 14A, 14B, 14C, 22, 23, 24, 24A, 25, 28, 28A, 29, 30, 32, 33, 35, 37 and 42 to reflect previously approved deviations and to depict sidewalks and/or trails where applicable; revision of street section limits on 8, 9, 11, 28, 29, 37, and 42;
- Revision of street sections 16, 18, 30 and 34 based on the traffic analysis and addition of street sections 11A, 14A, 14B, 14C, 15A, 15B, 16A, 16B, 18A, 20A, 20B, 28A, 34A, 36, 57, 57A, 58, 59, 61 and 62; deletion of street sections 4, 5, 6, 12, 12A, 14, 15, 20 and 31A;
- Reconfiguration of the Project boundary at Lot 17 to: a) exclude Borrego Channel; and b) remove Lots 19 and “I” to make the FAA parcel "Not at Part" of the map;

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- Revision of street sections to reflect lane configurations (Trabuco Rd., Irvine Blvd., “A” Street, and “B” Street);
- Revision of the Utility Summary Table based on the roadway realignments;
- Addition of new streets “C” Street, “LN” Street, “A” Street, and “Z” Street along with their respective sections;
- Deletion of street names “T” Street, “X” Street and “Y” Street;
- Addition of Numbered Lots 36, 43 and 53-65; and
- Addition of lettered lots K, N, O, and P.

Project Design Features

The following design features (PDFs) have been incorporated into the Modified Project and have been assumed in the analyses contained in Chapter 5, *Environmental Analysis*, where appropriate. Only PDF 3-2 and 3-5 were incorporated into the Approved Project, though to a lesser extent.

- PDF 3-1 **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 vehicle miles traveled (“VMT”) by project occupants. The Modified Project increases the density of development on the Proposed Project Site as compared to the Approved Project, and locates additional housing opportunities near major employment and transportation centers. Doing so will tend to reduce VMT on a local and regional basis.
- PDF 3-2 **High Rate of Internal Trip Capture:** With the inclusion of a mix of land uses, including office, commercial, industrial, and residential in the Proposed Project Site, the Modified Project significantly reduces trips outside the Proposed Project Site. This reduces trip length and congestion on the local circulation system outside the Proposed Project Site.
- PDF 3-3 **Ultra-Low-Flow Fixtures:** The Modified Project incorporates ultra-low-flow water fixtures that meet the requirements of the Uniform Plumbing Code standards. Prior to issuance of building permit, the Applicant or its successor shall submit evidence to the satisfaction of the City’s Director of Community Development that toilets, urinals, sinks, showers, and other water fixtures installed on-site are ultra-low-flow water fixtures that meet the Uniform Plumbing Code standards.
- PDF 3-4 **Landscaping and Irrigation Systems:** The Modified Project incorporates automated, high-efficiency landscaping irrigation systems on all master landscaped areas that reduce water use, such as evapotranspiration “smart” weather-based irrigation controllers, and bubbler irrigation; low-angle, low-flow spray heads; moisture sensors; and use of a California-friendly landscape palette. Prior to approval of landscape plans, the Applicant or its successor shall submit evidence to the satisfaction of the City’s Director of Community Development that such landscaping irrigation systems will be installed so as to make the Modified Project consistent with the intent

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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.

- PDF 3-5 **Use of Reclaimed Water on All Master Landscaped Areas:** Prior to approval of landscape plans, the Applicant or its successor shall submit evidence to the satisfaction of the City’s Director of Community Development and the Irvine Ranch Water District that the landscape plans incorporate the use of reclaimed water in all master landscaped areas, including master landscaped commercial, multifamily, common, roadways, and park areas. Master landscapes shall also incorporate weather-based controllers and efficient irrigation system designs to reduce overwatering, combined with the application of a California-friendly landscape palette.
- PDF 3-6 **Material Recovery:** The Modified Project incorporates measures to reduce waste generated by Proposed Project Site residents, occupants and visitors, and to encourage recycling of solid wastes, utilizing the Orange County Integrated Waste Management Department’s 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. These measures include the requirement to include on-site recycling facilities at all commercial, retail, industrial, and multi-family residential developments. In addition, educational materials identifying available recycling programs shall be distributed to all land uses, including single-family residential.
- PDF 3-7 **Energy Star Appliances:** EnergyStar appliances (excluding refrigerators), such as dishwashers, clothes washers, clothes dryers, air conditions, furnaces, and water heaters, shall be offered or installed in all residential dwelling units.
- PDF 3-8 **Building Energy Efficiency:** Residential dwellings and non-residential buildings will be constructed so that they achieve 15 percent higher energy efficiency than the applicable standards set forth in the 2008 California Building and Energy Efficiency Standards (Title 24, Part 6 of the California Building Code).
- PDF 3-9 **Carbon Sequestration:** The Modified Project incorporates 22,340 net new trees in the Vesting Tentative Tract Map areas that, together with the approximately 48,000 trees in the Orange County Great Park, would be planted within the Proposed Project Site.
- PDF 3-10 **Reduction in Softscape Landscaped Areas:** The Modified Project reduces softscape (e.g., plants/horticultural elements of landscape design) landscaped areas by 28 percent as compared to the Approved Project.
- PDF 7-1 **Construction Noise:** Prior to issuance of grading permits, the project applicant or its successor 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, and that construction noise has been reduced.
- During construction activities, all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers, consistent with manufacturers’ standards. All stationary construction equipment shall be placed so that

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emitted noise is directed away from the noise-sensitive receptors nearest the Proposed Project Site boundaries.

- Equipment shall be staged in areas that will create the greatest distance between construction-related noise sources and the noise-sensitive receptors nearest the Proposed Project Site during all project construction.
- All construction-related activities shall be restricted to the construction hours outlined in the City's Noise Ordinance (Municipal Code Section 6-8-205).
- Haul truck and other construction-related trucks traveling to and from the Proposed Project Site shall be restricted to the same hours specified for the operation of construction equipment. To the extent feasible, haul routes shall not pass directly by sensitive land uses or residential dwellings.
- Where construction will occur adjacent to any developed/occupied noise-sensitive uses, a construction-related noise mitigation plan shall be submitted the Director of Community Development for review and approval prior to the issuance of grading permits. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of the Modified Project, through the use of such methods as: (1) temporary noise attenuation fences; (2) preferential location of equipment; and (3) use of current technology and noise-suppression equipment.
- Construction of planned sound walls that have been incorporated into the project design shall be installed prior to construction of the building foundation; or temporary sound blankets (fences typically composed of poly-vinyl-chloride-coated outer shells with absorbent inner insulation) shall be placed along the boundary of the Proposed Project Site facing the nearest noise-sensitive receptors during construction activities.

PDF 11-1 The Modified Project will provide an eastbound right turn overlap phasing at the intersection of Alton Parkway and Irvine Boulevard as a project design feature associated with on-site development activity in District 5.

1.5 SUMMARY OF PROJECT ALTERNATIVES

The CEQA Guidelines (Section 15126[a]) state that an EIR must address “a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.”

As described in Chapter 7, *Alternatives*, of this DSEIR, the following five project alternatives were identified and analyzed, and their impacts were compared to the impacts of the Modified Project:

- No Project/Density Bonus Units Not Located Alternative
- No Project/Density Bonus Units Located Alternative
- Conversion Alternative
- Relocated Residential Units Alternative

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- School Mitigation Alternative

Selection of the alternatives was based, in part, on their potential ability to reduce or eliminate at least one significant impact of the Modified Project including the following impacts determined to be significant and unavoidable:

- Air Quality
- Population and Housing
- Transportation/Traffic

Please refer to Chapter 7 for a complete discussion of how the alternatives were selected and the relative impacts associated with each alternative. The following presents a summary of each of the alternatives analyzed in the DSEIR. Project objectives are outlined in Chapter 3, *Project Description*, of this DSEIR.

1.5.1 No Project/Density Bonus Units Not Located Alternative

This first No Project Alternative is the circumstance under which the Modified Project would not proceed, and the Approved Project would be built in its place. At the time the Notice of Preparation was published for the Modified Project, the Proposed Project Site was vested for development of the Approved Project, including 4,894 dwelling units (3,625 units that have been located on a programmatic basis and 1,269 units that have not been located on a programmatic basis) and 6,585,594 square feet of nonresidential development.

Under this No Project/Density Bonus Units Not Located Alternative, the originally approved 3,625 dwelling units would be located in their existing locations under the Approved Project (1,025 dwelling units in the Lifelong Learning District [“LLD”], 1,100 dwelling units in the Park District [“PD”] and 1,500 dwelling units in the Transit Oriented District [“TOD”]) and the approximately 6.586 million square feet of non-residential development would be located as currently entitled, as set forth in Vesting Tentative Tract Map (“VTTM”) 17283. In this alternative, the 1,269 density bonus units granted pursuant to state law, City Zoning Code Section 2-3, and City of Irvine Planning Commission Resolution 08-2926, would remain unlocated on the Proposed Project Site. Additionally, the proposed reconfiguration of the residential development and the changes to the location of the non-residential uses associated with the Modified Project would not occur under this alternative.

Ability to Reduce Environmental Impacts

This No Project/Density Bonus Units Not Located Alternative would not avoid or substantially reduce any of the impacts of the Modified Project discussed above, and its impacts would generally be of the same level as the Modified Project's impacts, although its GHG impacts would likely be slightly higher. Therefore, this alternative would not represent an improvement as compared to the Modified Project.

1.5.2 No Project/Density Bonus Units Located Alternative

Under the No Project/ Density Bonus Units Located Alternative, the 1,269 density bonus units would be located on the Proposed Project Site, but rather than be as configured under the Modified Project, they would be proportionally distributed throughout the Proposed Project Site in the LLD, PD and TOD district designations. Therefore, this alternative would consist of a total of 1,380 residential units in the LLD (1,025 originally approved units + 355 density bonus units), 1,481 residential units in the PD (1,100 + 381) and

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2,033 (1,500 + 533) residential units in the TOD. However, all the other approved residential and non-residential uses would remain the same as with the No Project/Density Bonus Units Not Located Alternative. In other words, the proposed reconfiguration of the residential development and the changes to the location of the non-residential uses proposed by the Modified Project would not occur under this alternative.

Ability to Reduce Environmental Impacts

All impacts of this alternative would be similar to those of the Modified Project, although GHG emissions impacts would likely be greater without mitigation. This alternative would not avoid or substantially reduce any of the significant impacts of the Modified Project.

1.5.3 Conversion Alternative

The Conversion Alternative would include all of the changes to the Approved Project proposed by the Modified Project, and in addition would convert approximately one million square feet of non-residential uses (all 951,300 square feet of the of medical and science uses, and 56,200 square feet of the 666,600 square feet of Institutional) into 1,500 additional residential units in District 6, resulting in a higher density of housing near transit facilities. In other words, this alternative would allow a total of 6,394 dwelling units to be developed on the Proposed Project Site. Traffic generation rates were used to calculate the amount of non-residential development to be eliminated due to the creation of new residential development in order to ensure that the overall impact of development under this alternative on traffic, air quality, GHG emissions and noise would be similar to under the Modified Project.

Except as described previously, other characteristics (e.g., lighting, landscaping, etc.) of the Modified Project would be the same in this alternative. The potential environmental impacts associated with this alternative are described in the following analysis and are compared to the environmental impacts associated with the Modified Project.

It is assumed that housing units added to District 6 would be single-family attached units and/or multifamily units. Both of those types of units have estimated household sizes of 2.29 persons per the City's General Plan. Thus, the 1,500 added residential units would house an estimated 3,435 persons, for total population generation by this alternative of 15,840.

Ability to Reduce Impacts

This alternative would reduce the Modified Project's impacts to population and housing since more residential dwelling units and less non-residential development would be constructed. This alternative would also slightly reduce impacts to aesthetics and hazards and hazardous materials. However, this alternative would have slightly greater impacts than the Modified Project on public services, and utilities and service systems.

1.5.4 Relocated Residential Units Alternative

This alternative would relocate 125 single-family detached residential units that are located in District 4 under the Modified Project to District 1; no changes would be made to the amount or location of non-residential development, or to the numbers and locations of residential units in Districts 7 and 8 under the Modified Project. The relocated residential units would be split between Districts 1 North and 1 South. In this alternative, the total number of residential units developed would be the same as for the Modified Project (4,894 units). The number of residential units that would be relocated is about 2.5 percent of the 4,894 total

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units that would be developed. All proposed development in this alternative would occur in the same five VTTMs as proposed by the Modified Project. All other components of the Modified Project are the same in this alternative. In addition, all mitigation measures from the Certified EIR are assumed to apply to this alternative, and the Modified Project mitigation measures could apply equally to this alternative.

As the total numbers of residential units by unit type in this alternative would be the same as that of the Modified Project, the buildout population projection for this alternative would be the same as that of the Modified Project.

The overall development footprint in this alternative would be shifted slightly, compared to that of the Modified Project, from District 4 to Districts 1 North and 1 South. However, the total development footprint would remain within the five VTTMs proposed under the Modified Project and would not change substantially under this alternative as compared to the Modified Project.

Ability to Reduce Impacts

This alternative would slightly reduce the hazards and hazardous materials impacts compared to those of the Modified Project due to slightly reduced wildfire hazards. All other impacts of this alternative would be similar to those of the Modified Project.

1.5.5 School Mitigation Alternative

In response to IUSD's response to the NOP for the Modified Project, this alternative has been developed to include development of a high school for 2,600 students on a 40-acre site. The precise location of the high school site has not been determined, but would be somewhere in the Proposed Project Site. In this alternative the two K-8 schools proposed as part of the Modified Project would be retained; thus, this alternative would involve development of three schools on the Proposed Project Site. The high school would be within the boundaries of the IUSD, and IUSD would operate the school.

The high school has not yet been designed; however, based on other school planning projects, an average of 125 square feet of building area per student is considered reasonable for a high school. Thus, it is estimated that the high school would comprise roughly 325,000 square feet in building area. As the high school in this alternative would be developed in addition to other non-residential land uses in the Modified Project, the total amount of non-residential development in this alternative would be approximately 6,911,000 square feet; that is, about five percent greater than in the Modified Project.

Aside from development of the additional high school, all characteristics of this alternative (total residential units developed, density bonus units developed, intensity of non-residential development, and distribution of development among Districts, etc.) would be the same as the Modified Project. In addition, this alternative would incorporate the already-imposed mitigation measures from the Certified EIR, and all mitigation measures recommended for the Modified Project would be recommended for this alternative.

The attendance boundaries of the proposed high school have not been determined. The five Districts (and VTTMs) that would be developed under the Modified Project, and under this alternative, are all in the current attendance areas of either Northwood High School or Irvine High School, which are both IUSD high schools. Thus, the simplest way for IUSD to create an attendance area for the proposed high school would be to reallocate parts of the existing attendance areas of Northwood and Irvine High Schools to the new attendance area for the new high school. Both the Modified Project, and this alternative at buildout are estimated to

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generate 805 high school students, which alone is not enough to make a new high school feasible for IUSD. Therefore, it is assumed that the current attendance boundaries for IUSD high schools would be modified to generate the balance of the students for the new high school.

It is assumed in this alternative that the overall district boundaries of IUSD and Saddleback Valley Unified School District would remain in their current locations.

Ability to Reduce Impacts

This alternative would not reduce any impact of the Modified Project except impacts to school services, which would nevertheless be less than significant for the Modified Project, and traffic. All other impacts of this alternative would either be slightly greater or similar to those of the Modified Project.

1.6 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the Modified Project, the major issues to be resolved include decisions by the City of Irvine, as lead agency, related to the following:

1. Whether this DSEIR adequately analyzes the environmental impacts of the Modified Project.
2. Whether the benefits of the Modified Project override those environmental impacts which cannot be feasibly avoided or mitigated to a level of insignificance.
3. Whether the land use changes proposed by the Modified Project are compatible with the character of the existing area.
4. Whether the identified project design features and mitigation measures should be adopted or modified.
5. Whether there are other mitigation measures that should be adopted for the Modified Project in addition to the mitigation measures recommended in the DSEIR.
6. Whether there are any alternatives to the Modified Project that would substantially lessen any of its significant impacts and achieve most of its basic project objectives.

1.7 AREAS OF CONTROVERSY

In accordance with Section 15123(b)(2) of the CEQA Guidelines, the DSEIR must identify areas of controversy known to the lead agency, including issues raised by agencies and the public. The only area of known controversy concerning the Modified Project relates to the provision of school facilities within the Proposed Project Site. This DSEIR has taken this issue into consideration and the comments received from the various agencies and jurisdictions in response to the NOP. Written comments received during the NOP period, which extended from January 26 to February 26, 2011, are contained in Appendix B. A summary of the NOP comments is provided in Section 2.2, *Notice of Preparation and Initial Study*, of this DSEIR.

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Prior to preparation of the DSEIR, a public scoping meeting was held on March 23, 2011, at Irvine City Hall, Conference and Training Center. The scoping meeting was held to determine the concerns of responsible and trustee agencies, stakeholders, and the community regarding the Modified Project. The scoping meeting was attended by members of the public. No issues were raised during the scoping meeting.

1.8 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION

Table 1-3 summarizes the conclusions of the environmental analyses contained in this DSEIR. Table 1-3 includes a summary of the environmental impacts of the Modified Project; mitigation measures, project design features, and existing plans, programs, and policies that reduce potential significant impacts of the Modified Project; and the level of significance of each significant impact after implementation of mitigation and/or implementation of the project design features and existing plans, programs, and policies.

Table 1-3

Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| Environmental Impact | Level of Significance Before Mitigation | Plans, Programs, and Policies [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM] | Level of Significance After Mitigation |
|---|---|--|--|
| 5.1 AESTHETICS | | | |
| 5.1-1 Development of the Proposed Project Site pursuant to the Modified Project would change, but not substantially degrade, the visual character of the Proposed Project Site. | Less than significant | <p>Plans, Programs, and Policies There are no PPPs that apply to the Modified Project.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | Less than significant |
| 5.1-2 Development pursuant to the Modified Project may increase sources of light and glare. | Less than significant | <p>Plans, Programs, and Policies PPP 1-1 Prior to the issuance of building permits, the applicant shall demonstrate they have met the Irvine Uniform Security Code requirements for lighting by providing the below listed items for a complete review by the Police Department. Failure to provide a complete lighting package will result in the delay of satisfaction of this condition (City Standard Condition 3.6).</p> <ol style="list-style-type: none"> a. Electrical plan showing light fixture locations, type of light fixture, height of light fixture, and point-by-point photometric lighting analysis overlaid on the landscape plan with a tree legend. The photometric plan should only show those fixtures used to meet the Irvine Uniform Security Code requirements. b. Corresponding fixture cut-sheets (specifications) of those lights used to meet the Irvine Uniform Security Code. c. Site plan demonstrating that landscaping shall not be planted so as to obscure required light levels. d. Site plans that are full-scale and legible. <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures</p> | Less than significant |

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*Table 1-3
Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation*

| <i>Environmental Impact</i> | <i>Level of Significance Before Mitigation</i> | <i>Plans, Programs, and Policies [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]</i> | <i>Level of Significance After Mitigation</i> |
|-----------------------------|--|--|---|
| | | <p><i>Applicable Mitigation Measures from the Certified EIR</i> Each mitigation measure specified for the Approved Project in the Certified EIR is set forth below. This DSEIR proposes that Mitigation Measures A-1 and A-2 from the Certified EIR be modified for the Modified Project as set forth below; deletions from the original mitigation measures are identified in strikeout text and <u>underlined text</u> is used to signify new additions. As part of this DSEIR, minor revisions to the following Mitigation Measures are being proposed to make them consistent with the adopted conditions of approval for the Approved Project. The proposed changes do not result in any new significant impacts.</p> <p>A1. Prior to issuance of building grading permits, lighting plans and signage plans for <u>residential or non-residential</u> new development shall be reviewed by the Community Development Department to ensure that minimal light intrusion and spillover into adjacent residential areas occurs.</p> <p>A2. Prior to the issuance of building grading permits <u>for residential and non-residential development</u>, and during the master plan review process for future development in the project area, the Director of Community Development shall ensure that mirrored and highly reflective surfaces are discouraged or, where proposed, shall be accompanied by a design-level glare impact analysis that demonstrates no adverse visual impairment to motorists or other visual nuisance occurs.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | |

Table 1-3

Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| Environmental Impact | Level of Significance Before Mitigation | Plans, Programs, and Policies [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM] | Level of Significance After Mitigation |
|---|---|---|--|
| 5.2 AIR QUALITY | | | |
| 5.2-1 The Modified Project is consistent with the applicable air quality management plan. | Less than significant | <p>Plans, Programs, and Policies</p> <p>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.</p> <p>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 SoCAB.</p> <p>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.</p> <p>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.</p> <p>PPP 2-5 SCAQMD Rule 445 – Wood-Burning Devices: SCAQMD prohibits installation of wood-burning devices such as fire places and wood-burning stoves in new development unless the development is located at an elevation above 3,000 feet or if existing infrastructure for natural gas service is not available within 150-feet of the development. All fireplaces installed within the Proposed Project Site will be natural gas fueled fireplaces.</p> <p>Project Design Features</p> <p>PDF 3-1 Compact/Mixed-Use Development: The California Energy Commission</p> | Less than significant |

Table 1-3
Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| <i>Environmental Impact</i> | <i>Level of Significance Before Mitigation</i> | <i>Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]</i> | <i>Level of Significance After Mitigation</i> |
|-----------------------------|--|--|---|
| | | <p>(“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 Modified Project increases the density of development on the Proposed Project Site as compared to the Approved Project, and locates additional housing opportunities near major employment and transportation centers. Doing so will tend to reduce VMT on a local and regional basis.</p> <p>PDF 3-2 High Rate of Internal Trip Capture: With the inclusion of a mix of land uses including office, commercial, industrial, and residential in the Proposed Project Site, the Modified Project significantly reduces trips outside the Proposed Project Site. This reduces trip length and congestion on the local circulation system outside the Proposed Project Site.</p> <p>PDF 3-7 Energy Star Appliances: EnergyStar appliances (excluding refrigerators), such as dishwashers, clothes washers, clothes dryers, air conditions, furnaces, and water heaters, shall be offered or installed in all residential dwelling units.</p> <p>PDF 3-8 Building Energy Efficiency: Residential dwellings and non-residential buildings will be constructed so that they achieve 15 percent higher energy efficiency than the 2008 Building and Energy Efficiency Standards (Title 24, Part 6 of the California Building Code).</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | |

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|---|---|--|--|
| 5.2-2 The Modified Project would exceed SCAQMD's regional construction emissions thresholds for VOC, NO _x , CO, PM ₁₀ , and PM _{2.5} . | Significant | <p>Plans, Programs, and Policies PPPs 2-3 and 2-4 apply.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures Applicable Mitigation Measures from the Certified EIR The following mitigation measures were included in the Certified EIR for the Approved Project. These mitigation measures are also included in the Modified Project. Modifications to the original mitigation measures are identified in strikeout text to indicate deletions and <u>underlined</u> to signify additions. The modifications are being proposed in order to account for the latest improvements in emission control technologies and updated SCAQMD recommendations for reducing air pollutant emissions.</p> <p>AQ1 Prior to the start of demolition and construction within the project area, adjacent sensitive receptors shall be informed of the planned demolition and construction activities. Measures to avoid significantly impacting these receptors shall be developed and implemented by the project proponent in coordination with these uses. Other applicable mitigation measures such as erection of fences around construction areas; staggered use of equipment near sensitive receptors; diversion of truck trips away from receptors; etc.; shall be employed as necessary. Compliance with this measure shall be verified by the Director of Community Development.</p> <p>AQ2 Prior to the commencement of construction activities required to demolish and/or remove existing DON infrastructure, including runways, the Director of Community Development shall receive and approve a construction emissions mitigation plan from the chosen demolition contractor. Prior to the issuance of grading permits, the application of any future development project shall submit, and the Director of Community Development shall approve a construction emissions mitigation plan. The plans shall identify implementation procedures for each of the following emissions reduction measures and all feasible mitigation measures shall be implemented. If certain measures are determined infeasible, an explanation thereof shall be provided.</p> <ul style="list-style-type: none"> • Evaluate the availability and use, if available, of low emission (i.e., | Significant and Unavoidable |

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|-----------------------------|--|---|---|
| | | <p>methanol or natural gas powered) construction equipment instead of diesel for each construction phase.</p> <ul style="list-style-type: none"> • <u>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, which is:</u> <ul style="list-style-type: none"> • <u>Year 2006 or newer construction equipment for engines rated equal to 175 horsepower (hp) and greater;</u> • <u>Year 2007 and newer construction equipment for engines rated equal to 100 hp but less than 175 hp; and</u> • <u>Year 2008 and newer construction equipment for engines rated equal to or greater than 50 hp but less than 100 hp.</u> <p><u>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.</u></p> <ul style="list-style-type: none"> • Water exposed soils at least twice <u>three times</u> daily and maintain equipment and vehicle engines in good condition and in proper tune. • Wash off trucks leaving the site. • Replace ground cover on construction sites when it is determined that the site will be undisturbed for lengthy periods. • Reduce speeds on unpaved roads to less than 15 miles per hour. • Halt all grading and excavation operations when wind speeds exceed 25 miles per hour. • Suspend all emission generating activities during smog alerts. • Use propane or butane-powered on-site mobile equipment instead of diesel/gasoline, whenever feasible. • Properly maintain diesel-powered on-site mobile equipment. • <u>Prohibit nonessential idling of construction equipment to five minutes or less in compliance with California Air Resources Board's Rule 2449.</u> | |

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| | | <ul style="list-style-type: none"> • Sweep streets with SCAQMD Rule 1186 compliant PM₁₀-efficient vacuum units at the end of the day if substantial visible soil material is carried over to the adjacent streets. • Use electricity from power poles rather than temporary on-site diesel or gasoline-powered generators, whenever feasible. • Use of low-VOC asphalt. • 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. Cover all trucks hauling dirt, sand, soil or other loose material to and from the site. • Provide temporary traffic controls (e.g., flag persons) during all phases of construction to ensure minimum disruption of traffic. • Schedule construction activities that affect traffic flow on adjoining streets to off-peak hours to the extent possible. • Reroute construction trucks away from congested streets, whenever feasible. • Provide dedicated turn lanes for movement of construction trucks and equipment on and off-site, whenever feasible. • <u>Use coatings and solvents with a volatile organic compound (VOC) content lower than required under SCAQMD 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 pre-coated/natural colored building, where feasible. Use of low-VOC paints and spray method shall be included as a note on architectural building plans.</u> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are available to mitigate impacts.</p> | |

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|---|--|--|---|
| <p>5.2-3 Long-term operation of the Modified Project would exceed SCAQMD's regional operational thresholds for VOC, NO_x, CO, and PM_{2.5}.</p> | <p>Significant</p> | <p>Plans, Programs, and Policies PPPs 2-1 and 2-5 apply.</p> <p>Project Design Features Implementation of PDFs 3-1, 3-2, 3-7, and 3-8.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> AQ3 Prior to the issuance of building permits for any future development, the applicant shall submit, and Director of Community Development shall have approved, an operation-emissions mitigation plan. The plan shall identify implementation procedures for each of the following emissions reduction measures and all feasible mitigation measures shall be implemented. If certain measures are determined infeasible, an explanation thereof shall be provided.</p> <ul style="list-style-type: none"> • Utilize built-in energy-efficient appliances to reduce energy consumption and emissions. • Utilize energy-efficient and automated controls for air conditioners and lighting to reduce electricity consumption and associated emissions. • Install special sunlight-filtering window coatings or double-paned windows to reduce thermal loss, whenever feasible. • Utilize light-colored roofing materials as opposed to dark roofing materials to conserve electrical energy for air-conditioning. • Provide shade trees in residential subdivisions as well as public areas, including parks, to reduce building heating and cooling needs, whenever feasible. • Ensure that whenever feasible, commercial truck traffic is diverted from local roadways to off-peak periods. • Centralize space heating and cooling for multiple-family dwelling units and commercial space. • Orient buildings north/south for reducing energy-related combustion emissions. • Use solar energy, when feasible. • Use high rating insulation in walls and ceilings. | <p>Significant and Unavoidable</p> |

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|--|---|---|--|
| | | <p>AQ4 Prior to the issuance of building permits, At the time of residential and commercial lease and sales agreements, future sales information on available housing and employment opportunities within the project area shall be provided to employees and residents of the project area, so as to encourage employees to live within the residential developments planned on-site and future residents to find employment nearby.</p> <p>AQ5 Prior to the issuance of building permits, At the time of residential and commercial lease and sales agreements, the applicant shall demonstrate to the satisfaction of the Director of Community Development that future employment generating nonresidential development shall include measures to reduce vehicle trips including: the promotion of carpool incentives and alternative work schedules, easy access to public transit systems, trail linkages between uses, low emissions vehicles fleets, and the provision of on-site facilities such as banking and food courts, and bicycle parking facilities, and other transportation demand management measures, as deemed appropriate.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are identified.</p> | |
| 5.2-4 Construction of the Modified Project would not expose sensitive receptors to significant air pollutant concentrations. | Less than significant | <p>Plans, Programs, and Policies PPPs 2-3 and 2-4 apply.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> Implementation of Mitigation Measures AQ1 and AQ2.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | Less than Significant. |
| 5.2-5 The Modified Project would not expose sensitive receptors to elevated concentrations of CO at intersections. | Less than significant | <p>Plans, Programs, and Policies There are no PPPs that apply to the Modified Project.</p> | Less than Significant. |

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|---|---|---|--|
| | | <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were outlined in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | |
| 5.3 GREENHOUSE GAS EMISSIONS | | | |
| <p>5.3-1 The Modified Project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment.</p> | <p>Less than Significant</p> | <p>Plans, Programs, and Policies</p> <p>PPP 3-1 City of Irvine Construction and Demolition ("C&D") Debris Recycling and Reuse Ordinance: The 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.</p> <p>PPP 3-2 SCAQMD Rule 445 – Wood-Burning Devices: SCAQMD prohibits installation of wood-burning devices such as fire places and wood-burning stoves in new development unless the development is located at an elevation above 3,000 feet or if existing infrastructure for natural gas service is not available within 150-feet of the development. All fireplaces installed within the Proposed Project Site will be natural gas fueled fireplaces.</p> <p>PPP 3-3 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 Proposed Project Site, 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</p> | <p>Less than Significant.</p> |

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| | | <p>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.</p> <p>PPP 3-4 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).</p> <p>PPP 3-5 California Renewable Portfolio Standard: CARB's 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").</p> <p>PPP 3-6 California 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</p> | |

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| | | <p>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.</p> <p>PPP 3-7 Federal Corporate Average Fuel Economy ("café") 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.</p> <p>PPP 3-8 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 emissions on new motor vehicles.</p> <p>PPP 3-9 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 Modified Project is consistent with SB 375 strategies to reduce VMT and associated GHG emissions in that it represents a</p> | |

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| | | <p>compact, mixed-use development, improves the jobs/housing balance in the city of Irvine and the Orange County Council of Governments Subregion, and provides access to mass transit. According to SCAG's 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.</p> <p>Citywide Operational Strategies</p> <p>PPP 3-10 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.</p> <p>PPP 3-11 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. 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.</p> <p>PPP 3-12 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..</p> <p>Project Design Features</p> <p>PDF 3-1 Compact/Mixed-Use Development: The California Energy Commission</p> | |

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| | | <p>(“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 vehicle miles traveled (“VMT”) by project occupants. The Modified Project increases the density of development on the Proposed Project Site as compared to the Approved Project, and locates additional housing opportunities near major employment and transportation centers. Doing so will tend to reduce VMT on a local and regional basis.</p> <p>PDF 3-2 High Rate of Internal Trip Capture: With the inclusion of a mix of land uses, including office, commercial, industrial, and residential in the Proposed Project Site, the Modified Project significantly reduces trips outside the Proposed Project Site. This reduces trip length and congestion on the local circulation system outside the Proposed Project Site.</p> <p>PDF 3-3 Ultra-Low-Flow Fixtures: The Modified Project incorporates ultra-low-flow water fixtures that will meet the requirements of the Uniform Plumbing Code standards. Prior to issuance of building permit, the Applicant or its successor shall submit evidence to the satisfaction of the City’s 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 standards.</p> <p>PDF 3-4 Landscaping and Irrigation Systems: The Modified Project incorporates automated, high-efficiency landscaping irrigation systems on all master landscaped areas that reduce water use, such as evapotranspiration “smart” weather-based irrigation controllers, and bubbler irrigation; low-angle, low-flow spray heads; moisture sensors; and use of a California-friendly landscape palette. Prior to approval of landscape plans, the Applicant or its successor shall submit evidence to the satisfaction of the City’s Director of Community Development that such landscaping irrigation systems will be installed so as to make the Modified 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.</p> | |

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| | | <p>PDF 3-5 Use of Reclaimed Water on All Master Landscaped Areas: Prior to approval of landscape plans, the Applicant or its successor shall submit evidence to the satisfaction of the City’s Director of Community Development and the Irvine Ranch Water District (“IRWD”) that the landscape plans incorporate the use of reclaimed water in all master landscaped areas, including master landscaped commercial, multifamily, common, roadways, and park areas. Master landscapes shall also incorporate weather-based controllers and efficient irrigation system designs to reduce overwatering, combined with the application of a California-friendly landscape palette.</p> <p>PDF 3-6 Material Recovery: The Modified Project incorporates measures to reduce waste generated by Proposed Project Site residents, occupants and visitors, and to encourage recycling of solid wastes, utilizing the Orange County Integrated Waste Management Department’s 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. These measures include the requirement to include on-site recycling facilities at all commercial, retail, industrial, and multi-family residential developments. In addition, educational materials identifying available recycling programs shall be distributed to all land uses, including single-family residential.</p> <p>PDF 3-7 Energy Star Appliances: EnergyStar appliances (excluding refrigerators), such as dishwashers, clothes washers, clothes dryers, air conditions, furnaces, and water heaters, shall be offered or installed in all residential dwelling units.</p> <p>PDF 3-8 Building Energy Efficiency: Residential dwellings and non-residential buildings will be constructed so that they achieve 15 percent higher energy efficiency than the applicable standards set forth in the 2008 California Building and Energy Efficiency Standards (Title 24, Part 6 of the California Building Code).</p> <p>PDF 3-9 Carbon Sequestration: The Modified Project incorporates 22,340 new trees in the Vesting Tentative Tract Map areas that, together with the approximately 48,000 new trees in the Orange County Great Park, would be planted within the Proposed Project Site.</p> | |

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| | | <p>PDF 3-10 Reduction in Softscape Landscaped Areas: The Modified Project reduces softscape (e.g., plants/horticultural elements of landscape design) landscaped areas by 28 percent as compared to the Approved Project.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were outlined in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | |
| <p>5.3-2 The Modified Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.</p> | <p>Less than Significant</p> | <p>Plans, Programs, and Policies Implementation of PPPs 3-1 and 3-12.</p> <p>Project Design Features Implementation of PDFs 3-1 through 3-11.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were outlined in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | <p>Less than Significant.</p> |
| <p>5.4 HAZARDS AND HAZARDOUS MATERIALS</p> | | | |
| <p>5.4-1 The Modified Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.</p> | <p>Less than significant</p> | <p>Plans, Programs, and Policies There are no PPPs that apply to this impact.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR.</p> | <p>Less than significant</p> |

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|---|---|--|--|
| | | Additional Mitigation Measures for the Modified Project No additional mitigation measures are required. | |
| 5.4-2 The Modified Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. | Significant | <p>Plans, Programs, and Policies</p> <p>PPP 4-2 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(s) of the California Health and Safety Code.</p> <p>PPP 4-4 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 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.</p> <p>PPP 4-5 Prior to site demolition activities, building materials must be carefully assessed for the presence of asbestos-containing materials (“ACMs”), 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.</p> | Less than significant |

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|-----------------------------|--|--|---|
| | | <p>PPP 4-6 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.</p> <p>PPP 4-7 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(s) of the California Health and Safety Code.</p> <p>PPP 4-8 Evidence of soil and/or groundwater contamination (e.g., chemical odors, staining) unrelated to above/underground storage tank releases may be encountered during site development. The appropriate agency (e.g., OCHCA, DTSC, or the RWQCB) shall be notified if these conditions are encountered during construction or grading activities. With their oversight, an environmental site assessment shall be completed and a determination shall be made as to whether cleanup is required. Cleanup activities are required to be consistent with all applicable federal, State and local rules, regulations, and laws. A cleanup would not be considered complete until confirmatory samples of soil and/or groundwater reveal levels of contamination below the standards established by the oversight agency. Alternatively, a risk assessment may be prepared for the site to determine that there are no human or environmental risks associated with leaving contamination below specific levels in place. Construction in the impacted area shall not proceed until a “no further action” clearance letter or similar determination is issued by the oversight agency, or until a land use covenant is implemented.</p> | |

Table 1-3

Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| Environmental Impact | Level of Significance Before Mitigation | Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM] | Level of Significance After Mitigation |
|----------------------|---|--|--|
| | | <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures Applicable Mitigation Measures from the Certified EIR Each mitigation measure specified for the Approved Project in the Certified EIR is set forth below. This DSEIR proposes that Mitigation Measures HH1 and HH2 from the Certified EIR be modified for the Modified Project as set forth below; deletions from the original mitigation measures are identified in strikeout text and <u>underlined text</u> is used to signify new additions. Where modifications are being proposed, an explanation for the modification is set forth prior to the revised mitigation measure. The remaining hydrology and hazardous materials Mitigation Measures are the same for the Modified Project as for the Approved Project.</p> <p>The Certified EIR’s Mitigation Measure HH1 requires updating because much of the abatement it requires has been completed since the Certified EIR was prepared. In addition, many of its requirements are triggered upon the transfer of the property from the Navy to the City of Irvine, and that transfer has already occurred for a substantial portion of the property associated with the Modified Project. Therefore, this DSEIR modifies Mitigation Measure HH1 to read as follows:</p> <p>HH1 <u>For any remaining structures known to contain asbestos-containing materials (“ACMs”) that will be renovated and/or demolished, Heritage Fields shall ensure that all asbestos is removed and disposed of in accordance with applicable federal, state and local regulatory requirements.</u></p> <p><u>Prior to occupancy, renovation or demolition of any remaining structures constructed before October 1988, and in which the presence of ACMs is unknown, an asbestos survey shall be conducted by Heritage Fields. This requirement can be waived if an architect or project engineer responsible for the construction of the structure or an accredited asbestos inspector signs a statement that no ACM was specified as a building material, and to the best of their knowledge, no ACMs were used as a building material. If the asbestos survey identifies ACMs, the applicant shall ensure that all asbestos is removed and disposed of in accordance with applicable federal, state and</u></p> | |

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*Table 1-3
Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation*

| <i>Environmental Impact</i> | <i>Level of Significance Before Mitigation</i> | <i>Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]</i> | <i>Level of Significance After Mitigation</i> |
|-----------------------------|--|--|---|
| | | <p><u>local regulatory requirements.</u></p> <p><u>Any existing structures in which ACMs have been identified and which will remain in use shall be addressed in an Operation and Maintenance Plan and must be managed in accordance with applicable laws.</u></p> <p><u>Any renovation and/or lead-based paint (“LBP”) abatement activities on residential units at former MCAS El Toro, shall be conducted in accordance with all applicable federal, state and local regulatory requirements.</u></p> <p>HHH a. Prior to the conveyance of the property and issuance of subsequent grading permits, where the presence of ACMs is identified, the DON or its transferee shall ensure that all available information concerning ACMs has been provided to the City of Irvine, and the purchasers of the property, including:</p> <ul style="list-style-type: none"> • The type, location and condition of ACMs • The results of any asbestos testing • Description of asbestos control measures taken, if any • The costs or time necessary to remove existing ACMs • The results of any site specific asbestos inventory updates <p>b. For any structures known to contain ACMs that will be renovated and/or demolished prior to transfer, the DON shall ensure that all asbestos is removed and disposed of in accordance with applicable federal, state and local regulatory requirements.</p> <p>e. Prior to transfer of any structure constructed before October 1988,</p> | |

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Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| Environmental Impact | Level of Significance Before Mitigation | Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM] | Level of Significance After Mitigation |
|----------------------|---|--|--|
| | | <p>scheduled for renovation and/or demolition, and in which the presence of ACMs is unknown, an asbestos survey shall be conducted by the DON. This requirement can be waived if an architect or project engineer responsible for the construction of the structure or an accredited asbestos inspector signs a statement that no ACM was specified as a building material, and to the best of their knowledge, no ACMs were used as a building material.</p> <p>d. Any existing structures in which ACMs have been identified and which will remain in use shall be addressed in an Operation and Maintenance Plan and must be managed in accordance with applicable laws.</p> <p>e. Any renovation and/or LBP abatement activities on residential units at former MCAS El Toro, shall be conducted in accordance with all applicable federal, state and local regulatory requirements.</p> <p>HH5 Prior to the issuance of a grading permit, the applicant shall prepare and the Director of Community Development shall approve a protocol plan (including but not limited to worker training, health and safety precautions, additional testing requirements, and emergency notification procedures) in the event that unknown hazardous materials are discovered during grading, construction, and/or related development activities. Additionally, said protocol plan will be revised should the discovery of previously unknown hazardous materials be made during any of the above mentioned development activities. The applicant and/or property owner that discovers contamination due to past military operations not previously identified by the Department of Navy (“DON”) shall be responsible for notifying the DON, appropriate regulatory agencies, and the Director of Community Development of the City of Irvine in a timely manner. Additionally, said Protocol Plan shall be revised should the discovery of previously unknown hazardous materials be made during any of the above mentioned development activities.</p> <p>HH6 The City of Irvine shall develop and maintain the location and status, as well as other pertinent information, of all monitoring wells on the former MCAS El</p> | |

Table 1-3
Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| <i>Environmental Impact</i> | <i>Level of Significance Before Mitigation</i> | <i>Plans, Programs, and Policies [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]</i> | <i>Level of Significance After Mitigation</i> |
|--|--|---|---|
| | | <p>Toro in a geographic information systems database (“GIS”). The City will review all permit applications on the former air station for monitoring well locations that may be affected by a permit, and require applicants to maintain appropriate access. Access to monitoring wells will be limited to authorized personnel.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | |
| <p>5.4-3 The Modified Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.</p> | <p>Less than significant</p> | <p>Plans, Programs, and Policies PPPs 4-2 and 4-4 through 4-8 apply.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures Applicable Mitigation Measures from the Certified EIR Implementation of Mitigation Measures HH1 and HH5.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | <p>Less than significant</p> |

Table 1-3

Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| <i>Environmental Impact</i> | <i>Level of Significance Before Mitigation</i> | <i>Plans, Programs, and Policies [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]</i> | <i>Level of Significance After Mitigation</i> |
|---|--|--|---|
| <p>5.4-4 The Modified Project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.</p> | <p>Significant</p> | <p>Plans, Programs, and Policies PPP 4-1 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 Regional Water Quality Control Board 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.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> The Certified EIR’s Mitigation Measure HH2 requires updating because its requirements are triggered upon the transfer of the property from the Navy to the City of Irvine, and that transfer has already occurred for a substantial portion of the property associated with the Modified Project. In addition, since the Certified EIR was prepared, FOSTs 4, 5 and 6 have been issued and each of them specifies in detail the nature of the restrictions and institutional controls that must be implemented. Therefore, this DSEIR modifies Mitigation Measure HH2 to read as follows:</p> <p>HH2 <u>The portions of the Proposed Project Site located on the active Installation Restoration Program (“IRP”) Sites listed in Table 5.4-2, Action Required</u></p> | <p>Less than significant</p> |

Table 1-3
Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| Environmental Impact | Level of Significance Before Mitigation | Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM] | Level of Significance After Mitigation |
|----------------------|---|---|--|
| | | <p><u>IRP Sites and Zoning – Modified Project.</u> of the DSEIR for the Modified Project shall be used only in accordance with the requirements of the applicable Final Finding of Suitability for Transfer or Finding of Suitability to Lease, including in strict compliance with all lease restrictions (such as restrictions against soil or groundwater disturbance without approval from the Department of the Navy and regulators) and all institutional controls (such as restrictions against disturbing the integrity of physical remedial components like caps or groundwater treatment systems and other restrictions imposed by the Department of the Navy).</p> <p>HH2 a. Prior to transfer, the City shall receive from the DON, with the concurrence of the appropriate regulatory agencies, a statement that the “Action Required” IRP Site 3 is to be conveyed for restricted use and that all institutional controls have been identified and implemented. The City of Irvine will adopt appropriate rules, policies, and regulations necessary to avoid actions that compromise the integrity of the remediated sites and that uphold the institutional controls. The actions of the City of Irvine shall be in accordance with the General Development Standards for the zone, which requires the Planning Commission to approve a master plan for the entire Planning Area indicating location, acreage, and types of land use within the Planning Area. As stated under Sec. 9-51-5 General Development Standards, boundaries and acreages are approximate and shall be established by master plan approval.</p> <p>b. Prior to transfer, if the DON chooses to impose temporary restrictions on the use of Sites 16 and 24 pending adequate remediation of groundwater, the City of Irvine shall receive from the DON a statement of temporary restrictions on the use of the sites and the release of the sites for restricted use following implementation of adequate remediation of groundwater. The City of Irvine shall adopt appropriate rules, policies, and regulations necessary to avoid actions that compromise the integrity of the remediated sites and that uphold the institutional controls. The actions of the City of Irvine shall be in accordance with the General Development Standards for</p> | |

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Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| <i>Environmental Impact</i> | <i>Level of Significance Before Mitigation</i> | <i>Plans, Programs, and Policies [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]</i> | <i>Level of Significance After Mitigation</i> |
|---|--|---|---|
| | | <p>the zone, which requires the Planning Commission to approve a master plan for the entire Planning Area indicating location, acreage, and types of land use within the Planning Area. As stated under Sec. 9-51-5 General Development Standards, boundaries and acreages are appropriate and shall be established by master plan approval.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | |
| <p>5.4-5 The Modified Project is not located within an airport land use plan, where such a plan has not been adopted, within two miles of a public airport or public use airport.</p> | <p>Less than significant</p> | <p>Plans, Programs, and Policies There are no PPPs that apply to the Modified Project.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures Applicable Mitigation Measures from the Certified EIR No mitigation measures were identified in the Certified EIR.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | <p>Less than significant</p> |
| <p>5.4-6 The Modified Project is not located in the vicinity of a private airstrip.</p> | <p>Less than significant</p> | <p>Plans, Programs, and Policies There are no PPPs that apply to this impact.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures Applicable Mitigation Measures from the Certified EIR No mitigation measures were identified in the Certified EIR.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | <p>Less than significant</p> |
| <p>5.4-7 The Modified Project would not impair implementation of or physically</p> | <p>Less than significant</p> | <p>Plans, Programs, and Policies There are no PPPs that apply to this impact.</p> | <p>Less than significant</p> |

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Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

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|--|--|--|---|
| interfere with an adopted emergency responses plan or emergency evacuation plan. | | <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | |
| 5.4-8 The Modified Project could expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. | Significant | <p>Plans, Programs, and Policies PPP 4-3 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).</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> HH3 The Community Development Department, in coordination with the Orange County Fire Authority (OCFA), will be responsible for review of all development plans, which would include evaluation of very high fire severity zones, special fire protection plans, and any requirements for fuel modification zones. Projects potentially impacted by wildland fire hazards will be subject to OCFA Guidelines for “Development Within and Exclusion from Very High Fire Severity Zones” and “Fuel Modification Plans and Maintenance.” Additionally, all demolition, renovation, and construction activities in the project area will be subject to review by OCFA to ensure adequate fire protection, water flow, emergency access, design features, etc., according to the standards of the Uniform Fire Code and the California Fire Code. Due to the implementation of these standard fire protection procedures, the modified project is not anticipated to result in significant short- or long-term adverse impacts related to fire</p> | Less than significant |

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Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| Environmental Impact | Level of Significance Before Mitigation | Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM] | Level of Significance After Mitigation |
|--|---|---|--|
| | | <p>hazards. HH4 Prior to issuance of occupancy permits of any existing structure at the former MCAS El Toro, a fire life-safety evaluation of the structure including recommendations for improvements required for compliance with current Building Codes for use of existing structures adopted by the City of Irvine and plans for any required improvements shall be submitted to the Chief Building Official for review and approval.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | |
| 5.5 HYDROLOGY AND WATER QUALITY | | | |
| <p>5.5.1-1 The Modified Project would not substantially increase surface water flows into drainage systems, though compliance with OCFCD policies and procedures will be required. .</p> | <p>Significant</p> | <p>Plans, Programs, and Policies PPP 4-1 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 (Standard Condition A.6):</p> <ul style="list-style-type: none"> 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 post-development 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. <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i></p> | <p>Less than significant</p> |

Table 1-3
Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| Environmental Impact | Level of Significance Before Mitigation | Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM] | Level of Significance After Mitigation |
|--|---|---|--|
| | | <p>H/WQ3 Prior to approval of the first tentative tract or parcel map in the project area, detailed hydrologic and hydraulic analysis shall be conducted. Studies and analysis shall be prepared in accordance with OCFCO methodologies and standards and the Flood Control Master Plan for San Diego Creek, as well as any additional guidelines in effect at the time of project design. Recommendations contained in the hydrology studies and/or hydraulic analysis to address drainage/flooding issues related to proposed development shall be implemented. Compliance with this measure shall be verified by the Community Development Department.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | |
| <p>5.5.1-2 The Modified Project would not locate addition development areas within a 100-year flood hazard area.</p> | <p>Less than significant</p> | <p>Plans, Programs, and Policies There are no PPPs that apply to this impact.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> The Certified EIR identified two mitigation measures to reduce the effects on hydrology. Both of these mitigation measures are incorporated into both the Approved Project and the Modified Project, and as demonstrated previously, ensure that the Modified Project's impacts are less than significant. This DSEIR proposes that Mitigation Measure H/WQ4 from the Certified EIR be modified for the Modified Project as set forth below; deletions from the original mitigation measures are identified in strikeout text and <u>underlined text</u> is used to signify new additions.</p> <p>H/WQ4 Prior to issuance of a building permit <u>for any unit within the 100-year floodplain</u>, developers with property located in the newly delineated 100-year floodplain shall be required to construct such improvements as necessary to remove the property from the 100-year floodplain. Additionally, the developer shall prepare a Letter of Map Revision (LOMR) request to have the FIRMs</p> | <p>Less than significant</p> |

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Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

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|---|--|--|---|
| | | <p>revised to remove the development areas from the 100-year floodplain upon completion of the approved flood control facilities. The LOMR request shall be filed upon completion of design of the flood control improvements to contain or redirect the 100-year flood flows away from the property.</p> <p>After the improvements are constructed, Record Drawings and a maintenance agreement with, or letter from, a public agency shall be submitted to FEMA to complete the LOMR process</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | |
| <p>5.5.2-1 The Modified Project would not substantially alter the drainage pattern of the proposed project site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.</p> | <p>Less than significant</p> | <p>Plans, Programs, and Policies PPP 4-1 applies.</p> <p>PPP 4-2 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 (Standard Condition A.7):</p> <ol style="list-style-type: none"> a. Potential for perched groundwater intrusion into the shallow groundwater zone upon buildout. 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. <p>PPP 4-3 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) and relevant Permit Registration Documents have been filed with the State Water Resources Control Board and that a WDID is issued. Such evidence shall consist of a copy of the NOI Receipt letter with WDID retrieved from the State Water Resources Control Board Stormwater Multi-Application and Report Tracking System (SMARTS) website or the Regional Water Quality Control Board, or a letter from either agency stating that the NOI has been filed (Standard Condition</p> | <p>Less than significant</p> |

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|----------------------|---|--|--|
| | | <p>A.10).</p> <p>PPP 4-4 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 (Standard Condition A.13).</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures Applicable Mitigation Measures from the Certified EIR Like the Approved Project, the Modified Project will incorporate two mitigation measures to reduce its effects on water quality. Implementation of Mitigation Measures H/WQ1 and H/WQ2 (listed below) ensure that the Modified Project's impacts on water quality will be less than significant.</p> <p>H/WQ1 Prior to issuance of a grading permit, the applicant shall provide evidence that the development of the project area shall comply with City of Irvine adopted Grading and Water Quality Ordinances to ensure that the potential for soil erosion is minimized on a project-by-project basis. Specifically, the NPDES discharge permitting requirements to which the City is obligated will ensure that construction activities reduce, to the maximum extent feasible, the water quality impacts of construction activities. The NPDES permit guidance states that "industrial/commercial construction operations that result in a disturbance of one acre or more of total land area...and residential construction sites that result in the disturbance of five acres or more...shall be required to develop and implement BMPs...to control erosion and siltation and contaminated runoff from the construction sites." Note: In March 2003 this provision will apply to residential construction sites that result in the disturbance of one acre or more.</p> <p>The City's standard conditions of approval indicate that a Storm Water Pollution Prevention Plan (SWPPP) shall be prepared prior to the approval of grading</p> | |

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|-----------------------------|--|---|---|
| | | <p>permits for any project site in order to reduce sedimentation and erosion. The SWPPP shall include the adoption of erosion and sediment control practices such as desilting basins and construction site chemical control management measures.</p> <p>Additionally, prior to the issuance of a grading permit, project applicants must submit, and the Director of Community Development or designee must have approved, a Water Quality Management Plan (WQMP). The WQMP must identify the Best Management Practices (BMPs) that will be used on the site to control predictable pollutant runoff after the site is occupied. Ongoing operations after construction would be subject to the Countywide Municipal NPDES Stormwater Permit, for which the City is a Co-Permittee. This WQMP shall identify, at a minimum, the routine, structural, and non-structural measures specified in the Countywide NPDES DAMP Appendix which they are applicable to a project, the assignment of long-term maintenance responsibilities (specifying the developer, parcel owner, maintenance association, lessee, etc.), and shall reference the location(s) of structural BMPs.</p> <p>Also in accordance with standard City project permitting and approval procedures, Notices of Intent (NOI) for coverage of projects under the General Construction Activity Storm Water Runoff Permit will be submitted to the State Water Resources Control Board prior to issuance of grading permits in the project area. This requirement will be met to the satisfaction of the Director of Community Development of any disturbance of one acre or more of soil in the project area. Also in force during the period of construction would be the General Dewatering NPDES permit of the Santa Ana RWQCB, as well as the provisions of the Countywide Permit.</p> <p>The Mitigation Measures will be implemented in accordance with local and State regulatory requirements. As future projects are planned and designed in the project area, specific BMPs and other water quality control methods will be utilized to reduce water quality degradation in the Newport Bay watershed. Future projects in the proposed project area will acknowledge and implement those additional requirements that may be imposed by RWQCB in the future. Compliance with these measures shall be verified by the Community</p> | |

Table 1-3
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|---|--|--|---|
| | | <p>Development Department.</p> <p>H/WQ2 Prior to issuance of a grading permit, evidence (e.g., in the form of a construction management plan) shall be provided that demonstrates that all stormwater runoff and dewatering discharges from the project area shall be managed to the maximum extent practicable or treated as appropriate to comply with water quality requirements identified in the Santa Ana Regional Water quality Control Board Basin Plan, including Total Maximum Daily Load (TMDL) Implementation Plan adopted for this watershed.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | |
| <p>5.5.2-2 The Modified Project would not significantly increase water pollution concentrations from the Proposed Project Site during long-term operations or alter the quality of stormwater runoff, or otherwise substantially degrade water quality.</p> | <p>Less than significant</p> | <p>Plans, Programs, and Policies PPPs 4-1 through 4-4 apply.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> Implementation of Mitigation Measures H/WQ1 and H/WQ2.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | <p>Less than significant</p> |

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|--|---|---|--|
| 5.6 LAND USE AND PLANNING | | | |
| 5.6-1 Implementation of the Modified Project would not be in conflict with an applicable adopted land use plan, policy or regulation. | Less than significant | <p>Plans, Programs, and Policies There are no PPPs that apply to this impact.</p> <p>Project Design Features The PDFs related to land use are set forth in other sections of this DSEIR.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | Less than significant |
| 5.7 NOISE | | | |
| 5.7-1 The Modified Project would not substantially elevate traffic noise levels above local noise standards at noise-sensitive receptors proximate to the Proposed Project Site. | Less than significant | <p>Plans, Programs, and Policies There are no PPPs that apply to this impact.</p> <p>Project Design Features There are no PDFs that apply to this impact.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | Less Than Significant |
| 5.7-2 The Modified Project could expose noise-sensitive receptors within the Proposed Project Site to noise levels that exceed the City's interior noise standard of 45 dBA CNEL or the City's exterior standard of 65 dBA CNEL. | Significant | <p>Plans, Programs, and Policies PPP 7-2 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 demonstrate that the development will be sound attenuated against present and projected noise levels including stationary, roadway, aircraft, helicopter, and railroad noise to meet City interior and exterior noise standards. The final acoustical report shall include all information</p> | Less Than Significant |

Table 1-3
Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

| Environmental Impact | Level of Significance Before Mitigation | Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM] | Level of Significance After Mitigation |
|----------------------|---|---|--|
| | | <p>required by the City's Acoustical Report Information Sheet (Form 42-48). The report shall be accompanied by a list identifying the sheet(s) of the building plans that include required sound attenuation measures (Standard Condition 3.5).</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> N1 Prior to the issuance of building permits for lots facing or located near major highways such as Irvine Boulevard, the project applicant shall provide a final noise study to the Director of Community Development that demonstrates how the exterior and interior noise requirements (65 dBA CNEL and 45 dBA CNEL, respectively) of the City's Noise Ordinance will be met. To attain the exterior and interior noise requirements, the final noise study shall include, but not be limited to the following measures and shall be shown on the final map:</p> <p>Exterior</p> <ul style="list-style-type: none"> • Provide a minimum six-foot high noise barrier for single-family detached residences shown in Figures 5.7-3 through 5.7-7 of this DSEIR. <p>Interior</p> <ul style="list-style-type: none"> • Provide a "windows closed" condition, requiring a means of mechanical ventilation (e.g., air conditioning) for all residential units. • Provide standard and upgraded dual-glazed windows with a minimum Sound Transmission Coefficient (STC) rating of 26. Specific window recommendations shall be made once final architectural plans are available and detailed interior noise reduction calculations can be calculated based on actual building assembly details. | |

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*Table 1-3
Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation*

| <i>Environmental Impact</i> | <i>Level of Significance Before Mitigation</i> | <i>Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]</i> | <i>Level of Significance After Mitigation</i> |
|--|--|---|---|
| | | N2 Prior to authorization to use, occupy and/or operate, the project applicant shall submit evidence to the satisfaction of the Director of Community Development that occupancy disclosure notices for residential units with patios and/or balconies that do not meet the City's exterior noise standard of 65 dBA CNEL will be provided to all future tenants pursuant to the City's Noise Ordinance. | |
| 5.7-3 Stationary sources of noise generated by the Modified Project would comply with the City of Irvine Municipal Code and would not substantially increase ambient noise levels at sensitive receptors proximate to the Proposed Project Site. | Less Than Significant | <p>Plans, Programs, and Policies In addition to PPP 7-2, the following PPP also reduces stationary sources of noise:</p> <p>PPP 7-1 Chapter 2 (Noise) of the Irvine Municipal Code, also known as the City's Noise Ordinance, outlines the regulations necessary to control unnecessary, excessive and annoying noise in the City. The provisions of this chapter are applicable to nontransportation-related stationary noise sources. It outlines the noise level measurement criteria; establishes the noise zones and the maximum permitted exterior and interior noise standards in each zone; and discloses special noise provisions for construction, truck delivery and maintenance activities. For example, as outlined in Section 6-8-205 of the Noise Ordinance, no construction shall be permitted outside of the hours of 7:00 AM to 7:00 PM Monday through Friday and 9:00 AM to 6:00 PM Saturdays, unless a temporary waiver is granted by the Chief Building Official or 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.</p> <p>Project Design Features There are no PDFs that apply to this impact.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR.</p> | Less Than Significant |

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|--|---|--|--|
| | | <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are necessary.</p> | |
| <p>5.7-4 Construction-related activities of the Modified Project would not result in a substantial increase in temporary construction noise.</p> | <p>Less than significant</p> | <p>Plans, Programs, and Policies Implementation of PPPs 7-1 and 7-2 and: PPP 7-3 Title 5 (Planning), Division 10 (Grading Code and Encroachment Regulations), Chapter 1 (Grading Code), Section 5-10-127.G (Import and Export of Earth Materials) of the Irvine Municipal Code, states that if a grading project includes the movement of earth material to or from the site in an amount considered substantial by the Chief Building Official, the permittee is required to submit the proposed haul route for review and approval by the Chief Building Official. Special conditions of the grading permit may be imposed that require alternate routes or other measures in consideration of the possible impact on the adjacent community environment or effect on the public right-of-way itself.</p> <p>Project Design Features PDF 7-1 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.</p> <ul style="list-style-type: none"> • During construction activities, all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers, consistent with manufacturers' standards. All stationary construction equipment shall be placed so that emitted noise is directed away from the noise-sensitive receptors nearest the Proposed Project Site boundaries. • Equipment shall be staged in areas that will create the greatest distance between construction-related noise sources and the noise-sensitive receptors nearest the Proposed Project Site during all project construction. • All construction-related activities shall be restricted to the construction hours outlined in the City's Noise Ordinance (Municipal Code Section 6-8-205)). • Haul truck and other construction-related trucks traveling to and from the | <p>Less than significant</p> |

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|-----------------------------|--|---|---|
| | | <p>Proposed Project Site shall be restricted to the same hours specified for the operation of construction equipment. To the extent feasible, haul routes shall not pass directly by sensitive land uses or residential dwellings.</p> <ul style="list-style-type: none"> • Where construction will occur adjacent to any developed/occupied noise-sensitive uses, a construction-related noise mitigation plan shall be submitted the Director of Community Development for review and approval prior to the issuance of grading permits. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of the Modified Project, through the use of such methods as: (1) temporary noise attenuation fences; (2) preferential location of equipment; and (3) use of current technology and noise-suppression equipment. • Construction of planned sound walls that have been incorporated into the project design shall be installed prior to construction of the building foundation; or temporary sound blankets (fences typically composed of poly-vinyl-chloride-coated outer shells with absorbent inner insulation) shall be placed along the boundary of the Proposed Project Site facing the nearest noise-sensitive receptors during construction activities. <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are necessary.</p> | |

Table 1-3
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|---|---|--|--|
| <p>5.7-5 The Modified Project would not generate excessive vibration levels during construction.</p> | <p>Less than significant</p> | <p>Plans, Programs, and Policies PPP 7-1 limiting construction activities to the hours prescribed by the City’s Municipal Code also reduce vibration impacts.</p> <p>Project Design Features There are no PDFs that apply to this impact.</p> <p>Applicable Mitigation Measures from the Certified EIR No mitigation measures were identified in the Certified EIR.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are necessary.</p> | <p>Less Than Significant</p> |
| <p>5.8 POPULATION AND HOUSING</p> | | | |
| <p>5.8-1 The Modified Project would not result in a change in the number of residents and housing units or in project-generated employment. However, since the Modified Project’s jobs-housing ratio of 3.37 is still greater than Irvine’s existing jobs-housing ratio of 2.45, the significant impact to jobs-housing balance would remain.</p> | <p>Significant</p> | <p>Plans, Programs, and Policies PPP 8-1 Compliance with the City’s Housing Element policies provides a strategic blueprint to ensure the siting of new very low, low, and moderate income housing units in future development projects under the Modified Project to help the City continue to meet its State fair share housing targets. The Housing Ordinance mandates that all projects with 50 or more housing units shall set-aside 15 percent of the total units for very low, low, and moderate income households.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures Applicable Mitigation Measures from the Certified EIR No mitigation measures were identified in the Certified EIR.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are available.</p> | <p>Significant and unavoidable</p> |

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|--|---|---|--|
| 5.9 PUBLIC SERVICES | | | |
| FIRE PROTECTION AND EMERGENCY SERVICES | | | |
| 5.9-1 The Modified Project would result in the already approved 1,269 density bonus units being located within the Orange County Fire Authority service boundaries, thereby increasing the requirement for fire protection facilities and personnel. | Less than significant | <p>Plans, Programs, and Policies</p> <p>PPP 9-1 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.</p> <p>PPP 9-2 Prior to approval of the first certificate of occupancy, the Project Applicant shall arrange for and have passed an inspection, to be performed by the Police Department and the Orange County Fire Authority, to ensure compliance with the Emergency Access Plan requirements. The inspector shall verify test acceptance and locations of all Knox boxes and key switches as depicted on the approved plan (Standard Condition 4.9).</p> <p>PPP 9-3 Prior to the issuance of the first building permit, the applicant shall submit and have approved by the Chief of Police an Emergency Access Plan, which identifies and locates all Knox Boxes, Knox key switches, and Click2Enter radio access control receivers. Said plan shall be incorporated into the plan set approved for building permits (Standard Condition 3.17).</p> <p>PPP 9-4 Prior to the issuance of the first building permit, the applicant shall have executed a Secured Fire Protection Agreement with the Orange County Fire Authority (Standard Condition A.15).</p> <p>Project Design Features</p> <p>There are no PDFs that apply to this impact.</p> <p>Mitigation Measures</p> <p><i>Applicable Mitigation Measures from the Certified EIR</i></p> <p>HH 3 The Community Development Department, in coordination with the Orange County Fire Authority (OCFA), will be responsible for review of all development plans, which would include evaluation of very high fire severity zones, special fire protection plans, and any requirements for fuel modification zones. Projects potentially impacted by wildland fire hazards will be subject to OCFA Guidelines for “Development Within and Exclusion from Very High Fire</p> | Less than significant |

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|--|---|--|--|
| | | <p>Severity Zones” and “Fuel Modification Plans and Maintenance.” Additionally, all demolition, renovation, and construction activities in the project area will be subject to review by OCFA to ensure adequate fire protection, water flow, emergency access, design features, etc., according to the standards of the Uniform Fire Code and the California Fire Code. Due to the implementation of these standard fire protection procedures, the Proposed Project is not anticipated to result in significant short- or long-term adverse impacts related to fire hazards.</p> <p>HH 4 Prior to issuance of occupancy permits of any existing structure at the former MCAS El Toro Base, a fire life-safety evaluation of the structure including recommendations for improvements required for compliance with current Building Codes for use of existing structures adopted by the City of Irvine and plans for any required improvements shall be submitted to the Chief Building Official for review and approval.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | |
| POLICE PROTECTION | | | |
| 5.9-2 The Modified Project would result in the already approved 1,269 density bonus units being located within the City of Irvine Police Department service boundaries, thereby increasing the requirement for police protection facilities and personnel. | Less than significant | <p>Plans, Programs, and Policies PPPs 9-2 and 9-3 apply.</p> <p>PPP 9-5 The project applicant shall comply with all applicable requirements of the City of Irvine Uniform Security Code (Municipal Code Title 5, Division 9, Chapter 5).</p> <p>PPP 9-6 Prior to the issuance of the first building permit, a Construction Site Security Plan, per the Irvine Uniform Security Code, Section 5-9-521, shall be approved by the Chief of Police. Said plan shall be incorporated into the plan set approved for building permits (Standard Condition 3.20).</p> <p>PPP 9-7 Prior to approval of the first certificate of occupancy , the Project Applicant shall demonstrate to the City’s Police Department that an Opticom traffic light control system has been installed at all signalized intersections servicing or</p> | Less than significant |

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|---|---|--|--|
| | | <p>adjacent to the Proposed Project Site (Condition of Approval).</p> <p>PPP 9-8 The project applicant shall implement the concepts of Crime Prevention Through Environmental Design in the design and layout of individual development projects within the Proposed Project Site to reduce criminal opportunity and calls for police service. Implementation of these concepts shall be verified by the City’s Police Department during the development review process (Condition of Approval).</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | |
| SCHOOL SERVICES | | | |
| <p>5.9-3 The Modified Project would locate the already approved 1,269 density bonus units within the Irvine Unified School District boundaries and relocate 945 dwelling units into the Irvine Unified School District boundaries, which would generate students and impact the school enrollment capacities of area schools.</p> | <p>Less than significant</p> | <p>Plans, Programs, and Policies PPP 9-9 Pursuant to California 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 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.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures</p> | <p>Less than significant</p> |

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|--|--|--|---|
| | | <p>Applicable Mitigation Measures from the Certified EIR No mitigation measures were identified in the Certified EIR.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | |
| LIBRARY SERVICES | | | |
| 5.9-4 The Modified Project would generate additional population beyond what was analyzed in the Certified EIR, thereby increasing the service needs for the local libraries. | Less than significant | <p>Plans, Programs, and Policies PPP 9-10 In the event that a city-wide library impact fee is adopted and in force, the developer shall pay this fee prior to issuance of building permits for new development.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures Applicable Mitigation Measures from the Certified EIR No mitigation measures were identified in the Certified EIR.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | Less than significant |
| 5.10 RECREATION | | | |
| 5.10-1 The Modified Project would not result in an increase in population and therefore would not increase the use of existing park and recreation facilities. | Less than significant | <p>Plans, Programs, and Policies There are no PPPs that apply to this impact.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures Applicable Mitigation Measures from the Certified EIR No mitigation measures were identified in the Certified EIR.</p> <p>Additional Mitigation Measures for the Modified Project</p> | Less than significant |

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|--|---|---|---|
| <p>5.10-2 The Modified Project would involve development and/or dedication of approximately 38.24 acres of neighborhood parks and 15.01 acres of private amenities, totaling approximately 54 acres. The impact of such development is discussed throughout chapter 5 of this DSEIR.</p> | <p>Less than significant</p> | <p>No additional mitigation measures are required.</p> <p>Plans, Programs, and Policies There are no PPPs that apply to this impact.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | <p>Less than significant</p> |
| <p>5.11 TRANSPORTATION/TRAFFIC</p> | | | |
| <p>5.11-1 Trip generation associated with the Modified Project would not impact levels of service for the existing area roadway system. However, under the Modified Project, two additional intersections would be impacted.</p> | <p>Significant</p> | <p>Plans, Programs, and Policies There are no PPPs that apply to this impact.</p> <p>Project Design Features PDF 11-1 The Modified Project will provide an eastbound right turn overlap phasing at the intersection of Alton Parkway at Irvine Boulevard as a project design feature associated with on-site development activity in District 5.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> The Certified EIR identified mitigation measures TRAN1 through TRAN8 which, if fulfilled prior to specified development approvals, would eliminate or substantially reduce the traffic and circulation effects of development analyzed in the Certified EIR. This DSEIR proposes that several mitigation measures from the Certified EIR be deleted (because they have been completed or they are no longer necessary in light of the NITM Program and new mitigation measures being proposed for Modified Project-specific impacts identified in the Traffic Study for the Modified Project) or modified for the Modified Project as set forth below; deletions from the original mitigation measures are identified in strikeout text and <u>underlined text</u> is used to signify new additions.</p> | <p>Significant and unavoidable. The analysis concludes that with implementation of the listed mitigation, impacts from the Modified Project will be reduced to less than significant. However, because some of the mitigation measures must be implemented by other jurisdictions (e.g. City of Lake Forest, CalTrans), the City cannot control implementation of such measures. Should the identified mitigation measures not be implemented for reasons beyond the City's control,</p> |

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|-----------------------------|--|---|--|
| | | <p>TRAN 1 Prior to the approval of any final map (other than a financing and conveyance map) allocating building intensity within Planning Areas 30 and 51, and prior to issuances of any building permits for permanent improvements within Planning Areas 30 and 51, the landowner or subsequent project applicant shall either (i) apply for annexation of any areas within the final map to the Irvine Spectrum Transportation Management Association (TMA) (“Spectrumotion”) in accordance with Article X of the recorded Declaration of Covenants, Conditions and Restrictions (CC&Rs) for the Irvine Spectrum TMA, including any supplementary or amended CC&Rs, to reduce traffic, air quality and noise impacts or (ii) develop and implement a similar transportation management plan containing the elements and meeting the criteria described below as approved by the Director of Public Works:</p> <p>Transportation Management Plan (TMP)</p> <p>The development and implementation of a Transportation Management Plan is an identified mitigation measure to manage transportation access for Planning Areas 30 and 51. This document summarizes the key elements of the TMP.</p> <p>A. Introduction</p> <p>The purpose of this document is to provide an outline for a comprehensive TMP for the Planning Areas 30 and 51 (“Great Park TMP”). This report is not intended to provide the specific details of the plan, but rather to highlight the key components and provide direction for subsequent detailed planning and implementation activities. When preparation of the TMP is undertaken, all of the agency and stakeholders will be invited to provide input.</p> <p>The applicant may elect to annex Planning Area 51 and a portion of Planning Area 30 into the Irvine Spectrum Transportation Management Association (Spectrumotion). Spectrumotion is a private, non-profit Transportation Management Association (TMA) formed to reduce traffic congestion in Irvine Spectrum. Spectrumotion promotes, markets, and subsidizes alternatives to solo-commuting and assists the business community in complying with trip reduction related requirements. Membership is mandatory to property owners with deed restrictions requiring participation in the TMA. Membership dues</p> | <p>traffic impacts would remain significant and unavoidable.</p> |

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|-----------------------------|--|---|---|
| | | <p>provide the funding for the Association and its programs, which offer a variety of employer and commuter services focused on reducing vehicular trip generation.</p> <p>In the event that the applicant elects not to annex into Spectrumotion, a TMP similar to that provided by Spectrumotion will be developed and implemented. This document sets forth the components of the TMP should it be necessary.</p> <p>B. Transportation Management Plan Framework The key elements of the Great Park TMP are set forth below: New Hire Orientation: Inform newly hired employees of commuting services available to them. Public Transportation Pass Sales: Provide a central location for purchase of passes to available transit services (i.e., OCTA buses, Metrolink, Amtrak, etc.). Vanpool and Carpool Formation Assistance: Perform all of the administrative work necessary to establish van pools and car pools. On-site Promotions: Hold rideshare promotions at work sites and assist in employer assistance promotions. Telecommuting/Alternative Work Schedule Consulting: Assist employers in developing and implementing a telecommuting or alternative work schedule program. Personalized Commute Consulting: Provide a personalized commute profile to any commuter, which includes carpool match list containing the names of other commuters in the North Irvine Sphere that live and work near each other. Website: Maintain a website with all of their program information available. Rideshare Promotions: Conduct high visibility rideshare promotions as a means to advertise its services. Subsidies: To the extent financially feasible, offer subsidies to assist in the formation of vanpools, the formation of carpools, and to encourage the trying of transit services. Public Agency Coordination: Work closely with various public and quasi-public agencies to improve bus and commuter rail service to the Spectrum and North Irvine Sphere areas.</p> <p>C. Transportation Management Plan Implementation</p> | |

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|----------------------|---|---|--|
| | | <p>As part of the TMP, a process will be established to monitor its effectiveness in reducing peak hour trip generation in the Planning Areas 30 and 51. Provision shall be made for the Plan to be modified as appropriate to enhance its effectiveness.</p> <p>TRAN2 — Prior to the issuance of the first building permit, City shall establish, and the landowner or subsequent project applicant shall commit to participate in, a transportation system/infrastructure fee program to fund improvements identified as mitigation measures listed in Tables 5.2-16 and 5.2-17 of the OCGP FEIR.</p> <p>TRAN2 — Prior to issuance of any building permits for permanent improvements within Planning Areas 30 and 51, the landowner or subsequent project applicant shall implement or contribute its percentage funding responsibility for traffic improvements as identified in the NITM Ordinance.</p> <p>TRAN3 — Prior to approval of each Tentative Map or Master Plan that allocates intensity for numbered lots, the landowner or subsequent project applicant shall prepare, subject to City review and approval, an updated traffic study consistent with the City of Irvine Traffic Study Guidelines inclusive of a phasing plan for traffic improvements associated with the subject Tentative Map or Master Plan that allocates intensity for numbered lots. The traffic study area shall be the same as the study area utilized in the NITM Nexus Study. The phasing plan will specify the timing, funding, construction, and responsibilities for all traffic improvements identified in the updated traffic study. The updated traffic study will determine whether any additional or alternative traffic improvements are necessary based on updated traffic forecasts. The updated traffic study will evaluate at a minimum the cumulative impact of the subject map and/or Master Plans that allocates intensity and all previously approved or concurrently submitted maps and/or Master Plans. The methodology for the study area, applicable land use and circulation modifications, and standards for assessing and mitigating impacts employed in the updated traffic study shall be consistent with a City approved traffic study scope of work. The landowner or subsequent project applicant shall construct or bond for and enter into a funding agreement for necessary improvements identified in</p> | |

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| <i>Environmental Impact</i> | <i>Level of Significance Before Mitigation</i> | <i>Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]</i> | <i>Level of Significance After Mitigation</i> |
|-----------------------------|--|--|---|
| | | <p>the updated traffic study and/or participate in the NITM program (OCGP FEIR Mitigation Measure TRAN2) to the extent that the improvements identified in the updated traffic study are listed in Tables 5.2-16 and 5.2-17 of the OCGP FEIR.</p> <p>Traffic signals that are on-site or directly related to the development in Planning Areas 30 and 51 will be installed as warranted through the mitigation implementation plan process.</p> <p>TRAN4 — In conjunction with the preparation of any updated traffic study as required in Mitigation Measure TRAN3 for each master tentative map or equivalent, and assuming that a regional transportation agency has not already programmed and funded the warranted improvements to the impacted freeway mainline or freeway/toll way ramp locations in conjunction with fulfilling its regional role, that landowner or subsequent project applicant and the City will take the following actions:</p> <ol style="list-style-type: none"> 1. — The City shall ensure that the updated traffic study identifies the project's proportionate impact on the specific freeway mainline and/or freeway toll way ramp locations and its percentage responsibility for mitigating these impacts (assuming tolled conditions on the Transportation Corridors) based on thresholds of significance, performance standards and methodologies used in the OCGP FEIR and established in the Orange County Congestion Management Program and City of Irvine Traffic Study Guidelines. 2. — The City shall estimate the cost of the project's percentage responsibility in cooperation with Caltrans and the Transportation Corridor Agency. 3. — The landowner or subsequent project applicant shall enter into an agreement with the City prior to recordation of the first final map for each Master Tentative map or equivalent to establish the method and timing of payment of the identified percentage responsibility. 4. — The City shall allocate landowner or subsequent project applicant's percentage contribution to traffic improvements that result in improved traffic flow on the impacted mainline and ramp locations, including but not limited to construction of physical or operational improvements, contributions to mandated trip reduction or transit programs, or funding | |

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|----------------------|---|---|--|
| | | <p>participation in a regional transportation improvement fee program, if adopted.</p> <p><u>TRAN6</u> The project shall mitigate to insignificant levels all project impacts at significantly impacted study area intersections. Tables 5.2-16 and 5.2-17 in the OCGP FEIR show the mitigation program for each phase. With regard to impacts that require improvements in other jurisdictions, the City of Irvine shall cooperate with the affected jurisdiction to ensure that the improvements are constructed in a timely manner.</p> <p><u>TRAN7</u> Assuming that a regional transportation agency has not already programmed and funded the improvements, The City of Irvine shall coordinate with Caltrans and the Transportation Corridor Agencies, and submit for their approval proposed plans for modifications to the state highway system and the transportation corridors, as required to provide ramp connections to Trabuco Road. If needed, the City shall prepare a Project Study Report, a new Connection Request, and a Detailed Traffic Revenue Study for review by Caltrans and the Transportation Corridor Agency for the proposed connection of Trabuco Road to the Eastern Transportation Corridor. The City shall perform toll and revenue impact studies for any mitigation measure (improvement) that may be impacted by the non-complete clause or any similar agreement restricting a public agency's authority to construct improvement.</p> <p><u>TRAN28</u> Following adoption of a land use plan and circulation plan for the Great Park property and before the issuance of any building permits within the base property, the City of Irvine shall entered into request a cooperative study with OCTA and other affected jurisdictions to amend the Orange County Master Plan of Arterial Highways (MPAH). Marine Way, Trabuco Road from the SR-133 toll way to "O" Street (formerly College Road), and Ridge Valley (formerly Y Street) should be included on the MPAH.</p> <p>Additional Mitigation Measures for the Modified Project</p> <p><u>TRAN3</u> Prior to issuance of the first building permit for permanent structures, a Fee Reallocation Study shall be completed by the Applicant to recalculate the NITM Fees, reflecting any fair share allocation modifications. This Fee Reallocation</p> | |

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| | | <p>Study shall be included under a separate cover to be approved by the Director of Public Works in consultation with the NITM Advisory Committee.</p> <p>TRAN4 Prior to approval of the last final map for the Modified Project (or any portion thereof in the event that the final map is approved in multiple phases), the landowner or subsequent property owner shall pay its fair share of the costs of the following mitigation in an amount to be mutually agreed upon between the landowner or subsequent property owner and the City and reflective of the costs of the mitigation at the time of payment:</p> <ul style="list-style-type: none"> • 286 Jeffrey Road & Roosevelt: Restripe the eastbound approach to provide a shared through / right turn lane. • 361 Bake Parkway & Portola Parkway: Restripe the northbound approach to provide a shared through/left lane (which currently exists as a through lane) and modify the traffic signal for a north/south split phase signal operation. Alternatively, restripe the northbound approach to provide dual left turn lanes in combination with a single through lane and single right turn lane, and modify signal operation to include northbound right turn overlap phase. • 374 Lake Forest & Portola Parkway (Pending Projects analysis impact): Convert the existing northbound approach from de-facto right-turn to a dedicated right-turn, and modify the existing traffic signal operation to include right turn overlap phase. | |
| 5.11-2: The Modified Project complies with adopted policies, plans, and programs for alternative transportation. | Less than significant. | <p>Plans, Programs, and Policies There are no PPPs that apply to the Modified Project.</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were outlined in the Certified EIR.</p> | Less than significant |

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|---|---|--|--|
| | | <i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required. | |
| 5.12 UTILITIES AND SERVICE SYSTEMS | | | |
| WATER SERVICES | | | |
| 5.12-1 Existing and planned Irvine Ranch Water District water supplies and delivery systems are adequate to meet the forecasted water demand of the Modified Project. | Less than significant | <p>Plans, Programs, and Policies</p> <p>PPP 12-1 Requirement to Use Recycled Water: Irvine Ranch Water District (IRWD) will identify areas within the Sub Area Master Plan that are capable of receiving service from the IRWD’s recycled water system, and will determine the feasibility of providing recycled water service to these areas. 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.</p> <p>PPP 12-2 Connection Fees: The Project Applicant 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 Modified Project.</p> <p>PPP 12-3 Fire Flow Analysis: In accordance with IRWD requirements, each District in the Modified Project 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</p> <p>Project Design Features</p> <p>PDF 3-3 Ultra-Low-Flow Fixtures: The Modified Project incorporates ultra-low-flow water fixtures that will meet the requirements of the Uniform Plumbing Code standards. Prior to issuance of building permit, the Applicant or its successor shall submit evidence to the satisfaction of the City’s 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 standards.</p> | Less than significant |

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| | | <p>PDF 3-4 Landscaping and Irrigation Systems: The Modified Project incorporates automated, high-efficiency landscaping irrigation systems on all master landscaped areas that reduce water use, such as evapotranspiration “smart” weather-based irrigation controllers, and bubbler irrigation; low-angle, low-flow spray heads; moisture sensors; and use of a California-friendly landscape palette. Prior to approval of landscape plans, the Applicant or its successor shall submit evidence to the satisfaction of the City’s Director of Community Development that such landscaping irrigation systems will be installed so as to make the Modified 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.</p> <p>PDF 3-5 Use of Reclaimed Water on All Master Landscaped Areas: Prior to approval of landscape plans, the Applicant or its successor shall submit evidence to the satisfaction of the City’s Director of Community Development and the Irvine Ranch Water District (“IRWD”) that the Modified Project incorporates the use of reclaimed water in all master landscaped areas, including master landscaped commercial, multifamily, common, roadways, and park areas. Master landscapes shall also incorporate weather-based controllers and efficient irrigation system designs to reduce overwatering, combined with the application of a California-friendly landscape palette.</p> <p>Mitigation Measures Applicable Mitigation Measures from the Certified EIR No mitigation measures were identified in the Certified EIR.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | |
| WASTEWATER | | | |
| 5.12-2 IRWD has adequate wastewater treatment capacity to meet the Modified Project’s estimated wastewater generation, and project development would not require construction of new or | Less than significant | <p>Plans, Programs, and Policies PPP 12-2 applies.</p> <p>Project Design Features Implementation of PDF 3-3.</p> | Less than significant |

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|--|---|---|--|
| expanded wastewater treatment facilities. | | <p>Mitigation Measures Applicable Mitigation Measures from the Certified EIR No mitigation measures were identified in the Certified EIR.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | |
| SOLID WASTE | | | |
| 5.12-3 There is sufficient landfill capacity in the region for Modified Project-generated solid waste. | Less than significant | <p>Plans, Programs, and Policies</p> <p>PPP 12-4 The City of Irvine Construction and Demolition (C&D) Debris Recycling and Reuse 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.</p> <p>PPP 12-5 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.</p> <p>PPP 12-6 The Irvine Sustainability Community Initiative (Initiative Ordinance 10-11), adopted by the voters of the City as Initiative Measure S on November 2, 2010, and certified by the City Council on December 14, 2010, became effective December 24, 2010. The ordinance was adopted to ratify and implement policies in support of renewable energy and environmental programs for a sustainable community. It outlines the City's direction for continuing to develop and implement programs geared towards green building, renewable energy and sustainability. For example, the City would continue to develop and implement recycling, zero waste or other innovative onsite business programs to divert waste from landfills and also continue to develop and implement the use of</p> | Less than significant |

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|-----------------------------|--|--|---|
| | | <p>native, California-friendly and drought-tolerant landscaping.</p> <p>PPP 12-7 Prior to the issuance of grading permits for a project that involves the demolition of an asphalt or concrete parking lot on site, the applicant shall submit a waste management plan demonstrating compliance with the requirements of Title 6, Division 7 of the City of Irvine Municipal Code relating to recycling and diversion of demolition waste as applicable to said project. Over the course of demolition or construction, the applicant shall ensure compliance with all code requirements related to the use of City-authorized waste haulers (Standard Condition 2.24).</p> <p>PPP 12-8 Prior to the issuance of building permits for a project that involves new construction or that involves the demolition or renovation of existing buildings on site, the applicant shall comply with requirements of Title 6, Division 7 of the City of Irvine Municipal Code relating to recycling and diversion of construction and demolition waste as applicable to said project. Over the course of demolition or construction, the applicant shall ensure compliance with all code requirements related to the use of City-authorized waste haulers (Standard Condition 3.7).</p> <p>Project Design Features There are no PDFs of the Modified Project that apply.</p> <p>Mitigation Measures <i>Applicable Mitigation Measures from the Certified EIR</i> SW1 It is anticipated that much of the solid waste resulting from the demolition, dismantling, or other deconstruction of the aged structures and property, including but not limited to buildings and runways, at MCAS El Toro is contaminated with lead-based paints, asbestos, or other materials that may render it unsuitable for recycling or reuse. At the sole cost and expense of the project applicant, in order to evaluate this condition and determine the feasibility of recycling of solid waste material from the MCAS El Toro site by ordinary means, a technical evaluation by a qualified environmental consultant must be conducted. The technical evaluation shall include sufficient sample testing of all types of solid waste materials to be generated by the project to analyze its composition. A copy of the full technical evaluation and its findings must be submitted to the City of Irvine Community Development Department. The City</p> | |

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|-----------------------------|--|---|---|
| | | <p>of Irvine must confirm the adequacy of the technical evaluation prior to authorizing the demolition, dismantling, or deconstruction project to proceed. If it is determined by the technical evaluation that material is contaminated and prohibited from being recycled by ordinary means, a further evaluation must be conducted to identify and evaluate other feasible methods approved by state law to divert the material from landfills. This may include the delivery of the waste material to other appropriate non-disposal or transformation facilities, such as “waste-to-energy” (WTE) plants.</p> <p>SW2 For that solid waste which is determined to be inappropriate for recycling (as that term is defined by California Public Resources Code Section 40180), the project applicant must submit a written plan to the City and implement such plan to ensure that 75% of the material, or the maximum amount feasible as determined by the technical evaluation, is diverted from the landfill through other methods that comply with state statutes and regulations.</p> <p>SW3 For that solid waste which the technical study deems to be suitable for recycling, the project applicant must submit a written plan to the City and implement such plan to ensure that solid waste material generated by the demolition, dismantling, or deconstruction project, land use operations and maintenance is collected by a City authorized solid waste hauler or recycling agent, and that a minimum of 75% of the solid waste from the project is diverted from landfills by recycling, as that term is defined by California Public Resources Code Section 40180 (“Recycling” does not include transformation, as defined in Public Resources Code Section 40201).</p> <p>SW4 To ensure ongoing compliance with these mitigation measures, the project applicant will be required to submit solid waste tonnage reports to the City of Irvine on City approved forms, accompanied by “weight ticket” receipts from state-certified disposal, nondisposal, or transformation facilities, on a quarterly basis to demonstrate that solid waste diversion has occurred in accordance with these required mitigation measures and in a manner that is consistent with, and not detrimental to, the efforts of the City of Irvine to comply with AB939.</p> | |

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|--|---|---|--|
| | | <p>To assure compliance with applicable statutes related to the disposal of solid waste, it is necessary for the City to require appropriate and effective mitigation measures to limit the disposal and ensure significant recycling of solid waste on-site.</p> <p>SW 5 For green waste, the project applicant must submit a written plan to the City and implement such plan to ensure that the green waste material generated by landscape maintenance operations is collected by a City authorized waste hauler or recycling agent, that the maximum feasible amount of that collected green waste is recycled, and that a minimum of 50% of the green waste from the project is diverted from landfills by recycling, as that term is defined by California Public Resources Code Section 40180.</p> <p>Additional Mitigation Measures for the Modified Project No additional mitigation measures are required.</p> | |
| ELECTRICITY, NATURAL GAS, AND TELECOMMUNICATIONS | | | |
| 5.12-4 Existing and/or proposed utility facilities would be able to accommodate Modified Project-generated utility demands, including electricity, natural gas and telecommunications. | Less than significant | <p>Plans, Programs, and Policies</p> <p>PPP 12-9 California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6, of the California Code of Regulations ("Title 24"), were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The Title 24 standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2008 Title 24 standards, which establish energy efficiency requirements for new construction, went into effect January 1, 2010. Projects that apply for a building permit on or after that date must comply with the 2008 Title 24 standards.</p> <p>PPP 12-10 California's 2010 Green Building Standards Code, Title 24, Part 11 of the California Code of Regulations ("2010 Green Code") is mandatory and went into full effect on January 1, 2011. The 2010 Green Code requires all new buildings in the state to be more energy efficient and environmentally responsible than the 2008 Standards. It was established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction. The 2010 Green Code contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction,</p> | Less than significant |

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|-----------------------------|--|--|---|
| | | <p>material selection, natural resource conservation, site irrigation conservation, and more.</p> <p>Project Design Features</p> <p>PDF 3-7 Energy Star Appliances: EnergyStar appliances (excluding refrigerators), such as dishwashers, clothes washers, clothes dryers, air conditions, furnaces, and water heaters, shall be offered or installed in all residential dwelling units.</p> <p>PDF 3-8 Building Energy Efficiency: Residential dwellings and non-residential buildings will be constructed so that they achieve 15 percent higher energy efficiency than the applicable standards set forth in the 2008 California Building and Energy Efficiency Standards (Title 24, Part 6 of the California Building Code).</p> <p>PDF 3-11 The Great Park Net Zero Energy Use: The Great Park will achieve a net zero increase in energy use. This will be accomplished through installation of solar energy and other alternative energy use.</p> <p>Mitigation Measures</p> <p><i>Applicable Mitigation Measures from the Certified EIR</i> No mitigation measures were identified in the Certified EIR.</p> <p><i>Additional Mitigation Measures for the Modified Project</i> No additional mitigation measures are required.</p> | |