INTRODUCTION

This section includes two subsections. As discussed in Chapters 1 and 2 of this Final EIR, Alternative 5 (Modified Planning Area 1 Only Alternative) is being added to this Final EIR in response to public comments raised during the Draft EIR public comment period, including those pertaining to density under the Yorba Linda General Plan, and the County's June 2, 2015 approval of the Esperanza Hills Project. Subsection 1 presents a detailed description of Alternative 5 as well as an environmental analysis regarding the potential impacts that would result from the implementation of Alternative 5. Subsection 2 provides corrections and/or additions to the Draft EIR as a result of comments received on the document.

1. ALTERNATIVE 5: MODIFIED PLANNING AREA 1 ONLY ALTERNATIVE

a. Description of Alternative 5

As shown on Figure 3-1, Alternative 5 Land Use Plan, the Modified Planning Area 1 Only Alternative (Alternative 5) would not include development of Planning Area 2. Figure 3-2, Alternative 5 Site Plan, illustrates the site plan for Alternative 5. Alternative 5 would develop Planning Area 1 with 83 single-family residential lots and associated improvements. Alternative 5 would have a gross density of 1.0 dwelling units per acre and would occupy the same 41.3 acres of the project site associated with Planning Area 1, with 42.7 acres of the site preserved as permanent open space. Like the Project, access to Planning Area 1 under Alternative 5 would be from Via del Agua to the south of the project site. Alternative 5's site access and internal street network (which would be privately owned and maintained) would be the same as with Planning Area 1 under the proposed Project. The reduction in the number of lots in Planning Area 1 compared to the Project would occur because of wider residential lots. The overall extent of grading, landscaping, lighting, utilities, and other project design features associated with Alternative 5 would be less than the grading, landscaping, lighting, utilities, and other project design features associated with the Project given that, unlike the Project, Alternative 5 does not propose any development on Planning Area 2. As with the Project, existing on-site oil wells and facilities would be abandoned or re-abandoned in connection with Alternative 5. Also as with the Project, a 1.8-acre oil drilling pad would be developed for future development as a separate project should the oil operators choose to relocate to this area of the project site under this Alternative. Thus, all oil-related activities associated with Alternative 5 would be same as the Project.

Overall, compared to the proposed Project, due to the elimination of Planning Area 2 and reduced density in Planning Area 1, Alternative 5 would include 29 fewer units, would reduce the area of development by 6.4 acres, and would increase permanent open space by 6.4 acres. Alternative 5 would provide for a gross density of 1.0 units to the acre, which is consistent with the density requirements under the Yorba Linda General Plan, compared to 1.3 units to the acre under the Project. This Alternative would also be consistent with the existing General Plan for the County of Orange, which designates Planning Area 2 as Open Space.

The land use plan for this Alternative also reflects a potential access corridor contemplated by the Esperanza Hills Specific Plan, which is considered to be a related project for purposes of the Alternative 5 cumulative impact analysis. This potential access corridor would run east to west across the Cielo Vista site just north of Planning Area 1 under one of two configurations. First, Alternative 3 - Access Option 2B, as described and depicted in the certified Esperanza Hills Final EIR, would cross the Cielo Vista site and continue west through City open space connecting with San Antonio Road approximately 1,850 feet south of Aspen way. Figure 3-1 illustrates the approximate location of the access corridor through the Cielo Vista site under Option 2B. Under Option 2B, the access corridor through the Cielo site would serve as the primary access to the Esperanza Hills site, with a separate ingress/egress road for secondary and emergency purposes that would exit south from the Esperanza Hills project site to Stonehaven Drive.

The other potential access corridor configuration is referred to Modified Option 2 and was included in the entitlements approved for the Esperanza Hills Specific Plan by the Orange County Board of Supervisors on June 2, 2015. Under this access configuration, a potential access corridor from the Esperanza Hills site would connect to Aspen Way, which connects into San Antonio Road. Figure 3-1 illustrates the approximate location of the access corridor through the Cielo Vista site under Modified Option 2. Under Modified Option 2 and similar to Option 2B, the access corridor through the Cielo site would serve as the primary access to the Esperanza Hills site, with a separate ingress/egress road for secondary and emergency purposes that would exit south from the Esperanza Hills project site to Stonehaven Drive.

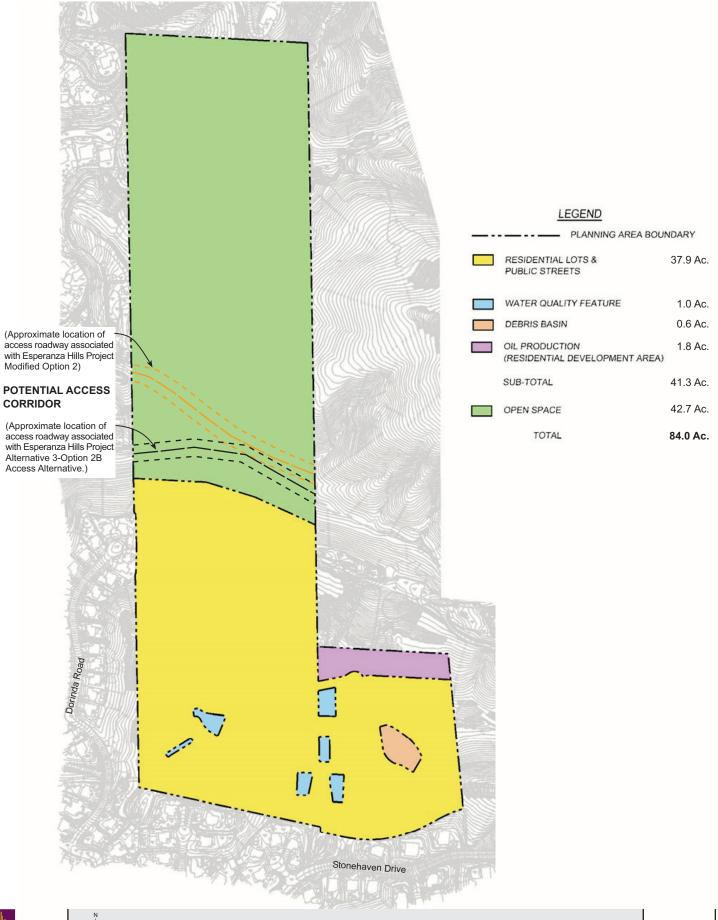
Although the potential access corridor associated with the Esperanza Hills Project (Option 2B and Modified Option 2) is not proposed as a component of the Cielo Vista Project or as an alternative to the Cielo Vista Project, the potential cumulative impacts of this corridor across the Cielo Vista project site are discussed herein. The impact analysis of the potential access corridor provided below for each issue evaluated in Chapter 4.0 of the Cielo Vista Draft EIR considers the analysis of Alternative 3 - Access Option 2B and Option 2, as necessary, provided in the Esperanza Hills Final EIR. Option 2 in the Esperanza Hills Final EIR provides primary access for Esperanza Hills via Aspen Way and a separate ingress/egress exit for emergency purposes only, exiting south from Esperanza Hills to Stonehaven Drive. Thus, impacts under Option 2 Modified are for the most part largely similar to Option 2.

In addition, the cumulative impacts under the Option 2B or Option 2 Modified configurations are similar in many of the impact categories. As stated in the Esperanza Hills Final EIR, site disturbance and grading would be largely similar for all access options. Thus, for each of the impact analyses provided under the "Esperanza Hills Potential Access Corridor" subheadings below, the analysis of impacts relating to the potential access corridor applies to both potential access configurations unless specifically stated otherwise or referenced to one of the access configuration scenarios.

(1) Environmental Impact Categories

(a) Aesthetics

Under Alternative 5, there would be 12 fewer residences in Planning Area 1 compared to the Project. Thus, with a decreased density in Planning Area 1, there would be proportionately less visual impacts in Planning Area 1 under this Alternative compared to the Project. Planning Area 2 would not be developed under this Alternative and as such, no visual quality/character or scenic view impacts would occur in the northern portion of the project site. Because no visual impacts would occur in Planning Area 2 and proportionately less visual impacts would occur in Planning Area 1 under this Alternative, the visual impact under this Alternative is concluded to be proportionately less than that of the Project. Since no recognized scenic resources occur on the site, no impacts regarding scenic resources would occur under this Alternative and



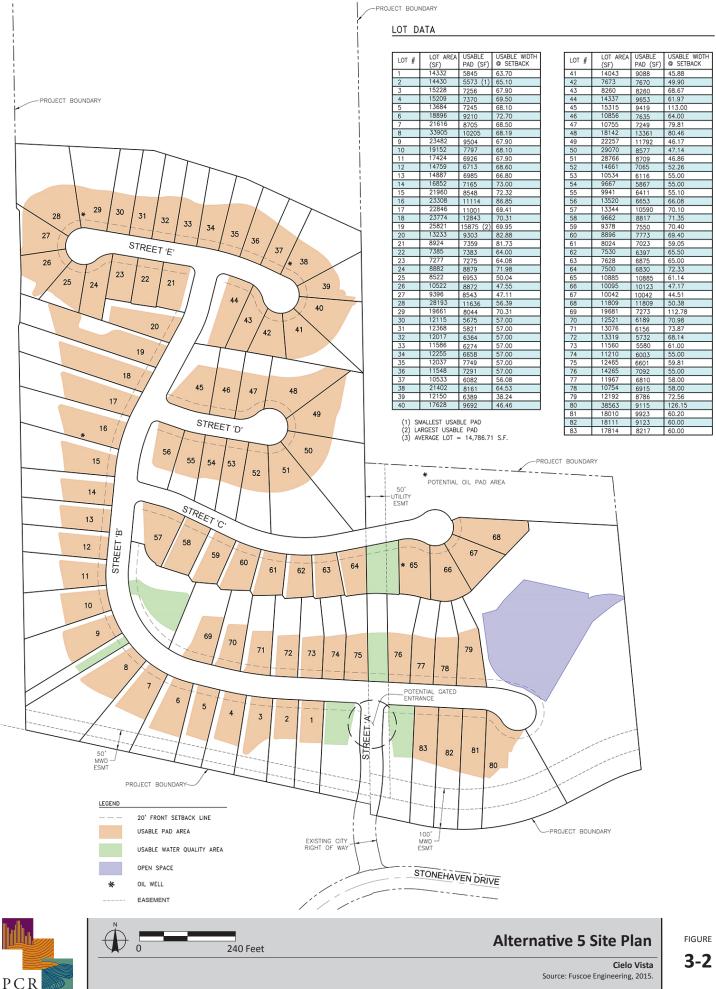


No scale

Alternative 5 Land Use Plan

FIGURE

Cielo Vista Project Source: Cielo Vista Area Plan, Sage Community Group, Inc., 2013; PCR Services Corporation, 2015. 3-1



the Project. With Planning Area 2 not being developed under this Alternative and fewer residences being developed in Planning Area 1, less light and glare impacts would occur under this Alternative compared to the Project. Overall, because Planning Area 2 will not be developed and will instead remain as open space along with a reduced density in Planning Area 1, aesthetics impacts would be less under this Alternative compared to the Project's already less than significant impacts.

Esperanza Hills Potential Access Corridor. Given the Cielo Vista site's topography, the access corridor would not be visible from areas south of the Cielo Vista project site. Views of the corridor would be limited to several residential properties and neighborhood streets west of the project site and to areas north of the site in Casino Ridge. The corridor is anticipated to include evergreen trees along the northern side of the road to shield the roadway from views from neighboring uses to the west and north.¹ An informal mix of evergreen and deciduous streetscape trees is also anticipated to be planted along both sides of the corridor. The planting plan would avoid uniform spacing to minimize visual contrast with the surrounding natural open space. Any lighting along the corridor would have light fixtures that are directed downward to prevent spillover into surrounding areas. With the landscape plantings and shielded and directed lighting, the potential access corridor do not change the less than significant cumulative impact findings in the Draft EIR in regards to the aesthetic impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant combined cumulative aesthetic impacts would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative aesthetics impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(b) Air Quality

Although this Alternative would not include development within Planning Area 2, the same grading envelope would occur within Planning Area 1 under this Alternative and the Project. With the same grading envelope and street system proposed for Planning Area 1, the same maximum daily construction emissions would occur during the grading phase of Planning Area 1 under this Alternative and the Project. However, as this Alternative would not include development of Planning Area 2, and would yield fewer residences in Planning Area 1, the duration of construction related air emissions would be less than that of the Project and the overall amount of construction emissions would be proportionately less than the Project.

With 29 fewer residences than the Project, the number of vehicular trips would decrease by approximately 26% compared to the Project. Mobile (vehicular) source emissions comprise the majority of a development project's criteria air pollutant emissions inventory and overall operational emissions. Because development of this Alternative would include fewer dwelling units than the Project, the Project's less than significant operation-related air quality impacts would be proportionately less under this Alternative. Operational emissions under this Alternative would not exceed the regional pollutant thresholds established by the SCAQMD during summer or winter conditions similar to the Project. Overall, due the decreased daily operational emissions, the extent of exposure of pollutant emissions on the public, including sensitive receptors, would be proportionately less under this Alternative would

¹ Exhibit 6-20, Conceptual Entry Road, Option 2B, in Esperanza Hills Draft EIR (November 2013) illustrates the potential access corridor under Option 2B. A similar landscape and planting plan is assumed for the access corridor under Modified Option 2.

be consistent with the SCAQMD's AQMP. Further, as single-family uses under both this Alternative and the Project would not result in adverse odor impacts, odor impacts would be generally similar (i.e., less than significant impact) under both this Alternative and Project.

Esperanza Hills Potential Access Corridor. As stated in the Esperanza Hills Final EIR, site disturbance and grading would be largely similar for all access options. With respect to construction-related emissions associated with the potential access corridor, the Esperanza Hills Final EIR indicated that constructionrelated emissions would be less than significant through compliance with applicable South Coast Air Quality Management District (SCAQMD) rules and regulations, along with implementation of the mitigation measures prescribed therein. The extent of construction-related air quality impacts are assessed based on maximum daily emissions. The maximum daily emissions associated with the Esperanza Hills Project would not change based on the access configuration, since the largest and most intensive construction work would occur as part of the larger project east and north of the access points. For operational emissions, both the Cielo Vista Draft EIR and Esperanza Hills Final EIR (under all access options) conclude that their respective projects would have less than significant operational air quality impacts. The Esperanza Hills Final EIR concluded that operational emissions would not significantly impact nearby residential sensitive receptors. Accordingly, the re-distribution of traffic with the potential access corridor does not change the less than significant impact conclusions relative to air quality impacts on sensitive receptors in the local project vicinity, including those residential receptors closest to the Esperanza Hills potential access corridor. Overall, with implementation of the applicable mitigation measures, the potential access corridor would result in less than significant air quality impacts. The less than significant impacts (after mitigation) of the access corridor do not change the less than significant (after mitigation) cumulative impact findings in the Draft EIR in regards to the air quality impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant combined cumulative air quality impacts (after mitigation) would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative air quality impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(c) Biological Resources

Under this Alternative, Planning Area 2 would remain vacant and undeveloped, and no ground disturbing activities would occur in this area. Vegetation communities existing within Planning Area 2 would remain. Since no sensitive plant species occur on the site, no impacts to sensitive plant species would occur.

As discussed in Draft EIR Section 4.3, *Biological Resources*, impacts to sensitive natural communities would be less than significant given their diminished functions and values as habitat and the relative abundance of these vegetation communities throughout the region, much of which is protected in government preserves. Under this Alternative, impacts to sensitive natural communities in Planning Area 1 would include the following: blue elderberry woodland (0.89 acres); blue elderberry woodland/laurel sumac chaparral/mixed coastal sage scrub (2.57 acres); encelia scrub (2.31 acres); and southern willow scrub (0.05 acres). Overall, a total of approximately 5.83 acres of sensitive natural communities would be impacted under this Alternative. In comparison, the Project would impact a total of approximately 14.56 acres of sensitive natural communities (refer to Table 4.3-3 for acreages of natural communities impacts by the Project). Thus, approximately 8.73 acres of sensitive natural communities would be avoided under this Alternative when compared to the Project. Alternative 5 would avoid the Project's direct impacts to sensitive natural communities and jurisdictional features/wetlands within Planning Area 2. Jurisdictional features/wetlands in Planning Area 2 include those within Drainages A and A1-3, as described in Section 4.3. In total, these drainages include approximately 0.27 acre of USACE jurisdictional features and 0.98 acre of CDFW jurisdictional features. The Project would impact approximately 1.6 acres of least Bell's vireo habitat, including 0.6 acre in Planning Area 1 and approximately 1-acre associated with Planning Area 2. The impacted habitat in Planning Area 2 would be avoided in this Alternative. All regulatory requirements and additional mitigation measures identified for the Project would still be applicable under this Alternative in order to reduce impacts in Planning Area 1 to a less than significant level. Further, by not developing Planning Area 2, the extent of potential impacts on migratory species would be proportionately less under this Alternative when compared to the Project. Overall, the Project's less than significant impacts (after mitigation) on biological resources would be proportionately decreased under this Alternative.

Esperanza Hills Potential Access Corridor. Since no sensitive plant species occur on the site, no impacts to sensitive plant species would occur. The only sensitive wildlife species known to occur on the project site is least bell's vireo, with such habitat occurring in the potential access corridor. The potential access corridor would result in direct impacts to sensitive natural communities such as southern willow scrub and blue elderberry woodland, as well as jurisdictional "waters of the U.S." The Esperanza Hills Final EIR includes mitigation measures to reduce potentially significant impacts to least bell's vireo, sensitive natural communities and jurisdictional features to a less than significant level. These mitigation measures would be implemented by the Esperanza Hills Project to ensure potentially significant impacts to biological resources in the potential access corridor are reduced to a less than significant level. Nesting birds protected under the Migratory Bird Treaty Act could occur within the potential access corridor. However, the Esperanza Hills Final EIR includes mitigation to ensure that potentially significant impacts to nesting birds are avoided. Finally, the habitat associated with the Cielo Vista project study area provides live-in habitat for wildlife and may support some movement on a local scale; however, it does not function as a regional wildlife movement corridor since it does not connect two or more habitat patches due to the surrounding development. Therefore, this habitat does not function to facilitate regional wildlife movement due to the extensive urbanization that has occurred on north, south, and west sides of the project study area. Overall, with implementation of the applicable mitigation measures, the potential access corridor would result in less than significant biological resources impacts. The less than significant impacts (after mitigation) of the access corridor do not change the less than significant (after mitigation) cumulative impact findings in the Draft EIR in regards to the biological resources impacts associated with related projects.

Further, with the elimination of Planning Area 2 under Alternative 5, the Project's already less than significant combined cumulative biological resources impacts (after mitigation) would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative biological resources impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(d) Cultural Resources

As there are no historic resources on the Cielo Vista project site, neither Alternative 5 nor the Project would result in impacts on historical resources. Although the Project would alter a greater quantity of land than this Alternative, both would require archaeological and paleontological monitoring (per the prescribed mitigation measures) by qualified experts to ensure that potentially significant impacts on unknown resources are reduced to a less than significant level. Also, impacts on previously unknown human remains,

under the Project and this Alternative, would be treated in the same manner consistent with applicable regulatory requirements and the prescribed mitigation measure. Nevertheless, development of Planning Areas 1 and 2 together would result in greater land disturbance and potential for impacts to unknown archaeological and paleontological resources, as well as human remains. Therefore, impacts to archaeological and paleontological resources, as well as human remains, would be less under this Alternative when compared to the Project.

<u>Esperanza Hills Potential Access Corridor</u>. The Esperanza Hills Final EIR did not identify any cultural resources within its project boundaries. Nonetheless, development of the access corridor could result in impacts to previously unknown archaeological (including human remains) and paleontological resources. However, the Esperanza Hills Final EIR includes mitigation measures that would reduce potentially significant impacts to previously unknown archaeological and paleontological resources to a less than significant level. Overall, with implementation of the applicable mitigation measures, the potential access corridor would result in less than significant cultural resources impacts. The less than significant impacts (after mitigation) of the access corridor do not change the less than significant (after mitigation) cumulative impact findings in the Draft EIR in regards to the cultural resources impacts associated with related projects.

Further, with the elimination of Planning Area 2 under Alternative 5, the Project's already less than significant combined cumulative cultural resources impacts (after mitigation) would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative cultural resources impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(e) Geology and Soils

As Planning Area 2 would not be developed under this Alternative, the amount of grading and raw earthwork would be reduced by approximately 100,000 cubic yards when compared to the Project. The number of residential units would be 29 fewer under this Alternative compared to the Project. Also, the number of people potentially exposed to seismic or geologic hazards would be less under this Alternative compared to the Project. All regulatory requirements and additional mitigation measures identified for the Project would still be applicable under this Alternative in order to reduce impacts, including potential seismic impacts related to the Whittier fault, to a less than significant level. Overall, due to the decreased number of people exposed to seismic and geologic hazards and Alternative 5's smaller development footprint, impacts would be less under this Alternative than under the Project. With regards to hazards pertaining to soil erosion, the potential for soil erosion, loss of topsoil and expansive soil impacts would all be less under this Alternative would not develop Planning Area 2.

<u>Esperanza Hills Potential Access Corridor</u>. The Esperanza Hills access corridor would cross the Whittier fault zone. The corridor would be constructed in accordance with the applicable standards of the California Building Code (CBC), which contains seismic design criteria, and relevant applicable City of Yorba Linda and/or County ordinances and policies for construction in seismic hazard zones. In addition, the corridor construction project would comply with and implement the Esperanza Hills' project-specific geotechnical recommendations and mitigation measures identified in its Final EIR. While there would be some level of seismic risk and/or other related geologic hazards, compliance with the Esperanza Hills' project-specific geotechnical evaluation and compliance with relevant seismic design criteria and regulations would ensure that such risks are reduced to the extent feasible, and as such geologic impacts due to seismic hazards are considered less than significant. Additionally, implementation of a project-specific Storm Water Pollution

Prevention Plan (SWPPP) and best management practices (BMPs), required for the Esperanza Hills Project, would reduce potentially significant soil erosion or loss of topsoil impacts to a less than significant level. Overall, the potential access corridor would result in less than significant geology and soils impacts. The less than significant impacts of the access corridor do not change the less than significant (after mitigation) cumulative impact findings in the Draft EIR in regards to the geology and soils impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant combined cumulative geology and soils impacts (after mitigation) would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative geology and soils impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(f) Greenhouse Gas Emissions

As discussed in the Air Quality analysis above, the overall construction extent and schedule of this Alternative would be shorter than that of the Project. Thus, GHGs generated during construction-related activities would be proportionately lower than the Project. Operationally, with 29 fewer residences than the Project, the number of vehicular trips and residences would decrease by approximately 26% compared to the Project. Accordingly, GHG emissions and associated global climate change impacts from mobile (vehicular) sources and residential uses (i.e., fossil fuels burned for heat, the use of certain products that contain GHG) would be proportionately reduced under this Alternative.

The Project would result in 2,283 tons of Total CO₂e per year (only 36 tons of the total are related to construction emissions – see Table 4.6-4 in section 4.6, *Greenhouse Gas Emissions*). With 29 fewer residences, total annual CO₂e for Alternative 5 would be below the SCAQMD's 3,000 MTCO₂e per year threshold for determining a significant impact pursuant to SCAQMD's recommended Tier 3 screening threshold for all land use types. As such, and like the Project, Alternative 5's GHG impacts would be less than significant, with impacts being proportionately less under Alternative 5 due to the reduction in residential units compared to the Project.

Also like the Project, this Alternative would be consistent with Title 24 requirements and consistent with the State's overarching goals to reach 1990 GHG levels by 2020 per AB 32. Thus, Alternative 5's impacts regarding consistency with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be less than significant, and similar to the Project.

Esperanza Hills Potential Access Corridor. As stated in the Esperanza Hills Final EIR, site disturbance and grading would be largely similar for all access options. The overall amount of greenhouse gas emissions associated with development of the potential access corridor would be substantially similar to the other access options evaluated in the Esperanza Hills Final EIR. The Esperanza Hills Project and hence Option 2B and Modified Option 2 would exceed the SCAQMD's GHG threshold of significance. Thus, the Esperanza Hills Final EIR concluded that all access options would result in significant and unavoidable GHG impacts, as would Modified Option 2. Overall, with implementation of the applicable mitigation measures, the potential access corridor in and of itself would result in less than significant GHG impacts given it would represent only a small portion of the overall extent of grading as part of the Esperanza Hills Project. However, the less

than significant impacts (after mitigation) of the access corridor would not change the significant and unavoidable cumulative GHG impacts associated with related projects.

However, as discussed in the Draft EIR, other air quality districts within the state have established that projects which are consistent with project-level GHG thresholds would not be "cumulatively considerable".² As both the Project and Alternative 5 (with a smaller development footprint and fewer units) would be below the SCAQMD project-level and AB 32 significance thresholds, the Project's already less than significant combined cumulative GHG impacts (after mitigation) would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative GHG impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(g) Hazards and Hazardous Materials

Alternative 5 and the Project both include development of residential uses that would not involve the routine transport, use, or disposal of significant amounts of hazardous materials, although Alternative 5 includes fewer residential units than the Project. Any risk associated with ordinary household or general commercial cleaners, solvents, painting supplies, pesticides for landscaping and pool maintenance, etc. would be reduced to a less than significant level through compliance with applicable regulatory requirements for both the Project and Alternative 5. During construction activities, to the extent required for remediation, any contaminated soils or materials removed from the site would occur in a similar manner as under the Project. As such, similar less than significant impacts regarding the routine transport, use, or disposal of hazardous materials would occur for both this Alternative and the Project.

As with the Project, existing on-site oil wells and facilities would be abandoned or re-abandoned in connection with Alternative 5. Also as with the Project, a 1.8-acre oil drilling pad would be developed for future development as a separate project should the oil operators choose to relocate to this area of the project site under this Alternative. Thus, all oil-related activities would be same as the Project.

Both Alternative 5 and the Project would be required to mitigate the potentially significant impacts associated with past and current oil operations on the project site, as well as methane hazards. Implementation of the prescribed mitigation would ensure that construction workers and future residents under the Project and this Alternative are not exposed to hazardous materials during accident conditions. As such, impacts in this regard would be similar under this Alternative and the Project.

Since Planning Area 2 would be preserved as open space, no fuel modification would be provided in the northern portion of the project site. Under both this Alternative and the Project, there would be available capacity to accommodate the projected traffic volumes, in addition to emergency vehicles. Neither this Alternative nor the Project would conflict with an adopted emergency response/evacuation plan. However, despite the proportionate decrease in traffic, due to the fact that this alternative would provide less protection from wildfires to the adjacent residential uses to the west of the site as compared to the Project, it is concluded that while Alternative 5's impacts regarding emergency response/evacuation would be less than significant, they would be incrementally greater under this Alternative than under the Project.

² Bay Area Air Quality Management District Proposed Air Quality CEQA Thresholds of Significance. May 3, 2010.

Finally, with respect to evacuation, Linscott, Law & Greenspan, Engineers (LLG) prepared a Fire Evacuation Analysis for the Esperanza Hills project addressing the theoretical duration that it would take to evacuate that development and the existing and proposed residential developments in the vicinity of that development, including the proposed 112-unit Project and 11 approved but unbuilt homes in Casino Ridge, under the proposed Esperanza Hills' Option 2, Option 2A, and Option 2B scenarios. Based on an effective roadway capacity of 1,200 vehicles per hour per lane (vphpl) on Via del Agua, San Antonio Road, Dorinda Road, and Stonehaven Drive, all of the approximately 1,272 homes in the study area (including Cielo Vista) could optimally evacuate to Yorba Linda Boulevard within 75 minutes. However, assuming that all residents depart their homes within the first 30 minutes, full evacuation of the study area may practically take up to 2.5 hours via San Antonio Road and up to 60 minutes via Stonehaven Drive. Approximately 85% of the Cielo Vista trips would utilize Via Del Agua and Stonehaven to evacuate to Yorba Linda Boulevard. Evacuation of Via Del Agua and Stonehaven, standing alone, would take 30 minutes under optimum conditions, and may practically take 60 minutes. While this report, which is discussed in detail in Topical Response TR-3, did not separately consider the possibility of Alternative 5's 29-unit density reduction, its conclusions can conservatively be applied to Alternative 5, which would result in fewer evacuation trips than the Project and therefore incrementally increase the speed of evacuation.

Esperanza Hills Potential Access Corridor. The construction of the potential access corridor would be subject to similar regulatory requirements and site-specific development standards and mitigation measures as prescribed in the Cielo Vista Draft EIR to ensure that potentially significant impacts regarding methane hazards and hazardous materials, including existing on-site contaminated soils, are reduced to a less than significant level. Thus, similar to the Project, construction of the potential access corridor would result in less than significant hazardous materials impacts after implementation of the site specific mitigation measures and compliance with applicable regulatory requirements. The less than significant impacts (after mitigation) of the access corridor do not change the less than significant (after mitigation) cumulative impact findings in the Draft EIR in regards to the hazardous materials impacts associated with related projects.

Further, with the elimination of Planning Area 2 under Alternative 5, the Project's already less than significant combined cumulative hazardous materials impacts (after mitigation) would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative hazardous materials impact (including both Esperanza Hills access options) would not be cumulatively considerable.

As concluded in the Esperanza Hills Final EIR, similar to the Cielo Vista Draft EIR, with implementation of the prescribed mitigation measures and the PDFs, wildland fire impacts would be less than significant. Under existing conditions, no fuel modification exists on the Esperanza Hills project site. Accordingly, with that Project's fuel modification features, the risk of wildland fires would be reduced when compared to existing conditions. The potential access corridor under Option 2B is identified in the Final EIR as being superior to Options 1 and 2 of the Esperanza Hills Project with respect to community evacuation in the event of a fire. As the Modified Option 2 would also provide primary access through the Cielo Vista site and secondary access to Stonehaven similar to Option 2B, it is concluded that Modified Option 2B would also be superior to Options 1 and 2 of the Esperanza Hills Project with respect to community evacuation in the event of a fire. The corridor would not conflict with an adopted emergency response plan. If implemented, the access corridor would become part of the Esperanza Hills Community Evacuation Plan that can be incorporated into the Yorba Lina Community Evacuation Plan when it is drafted. Overall, the potential access corridor in and of itself would result in less than significant emergency response/evacuation impacts. The less than significant impacts of the access corridor do not change the less than significant cumulative impact findings in the Draft EIR in regards to the emergency response/evacuation impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant combined cumulative emergency response/evacuation impacts would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative emergency response/evacuation impact (including both Esperanza Hills access options) would not be cumulatively considerable.

With regards to fuel modification and wildland fire impacts, Esperanza Hills under Option 2B and Modified Option 2 would provide fuel modification east of the Cielo Vista site as part of that Project similar to its other access options. Thus, existing residences to the west of Cielo Vista's Planning Area 2 would be provided new fuel modification as part of the Esperanza Hills Project Option 2B and Modified Option 2, albeit at a farther distance when compared to the Cielo Vista Project. Overall, the potential access corridor in and of itself would result in less than significant wildland fire impacts. The less than significant impacts of the access corridor do not change the less than significant (after mitigation) cumulative impact findings in the Draft EIR in regards to the wildland fire impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant combined cumulative wildland fire impacts (after mitigation) would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative wildland fire impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(h) Hydrology and Water Quality

Under Alternative 5, the total amount of impervious surface area would be reduced when compared to the Project since Planning Area 2 would not be developed and fewer residences would be included in Planning Area 1 compared to the Project. With 29 fewer residences under this Alternative, there would be less potential for subsequent pollutant discharge compared to the Project. Improvements and BMPs, similar to those described for the Project, would be required to address stormwater runoff or for water quality treatment for this Alternative. Because this Alternative would result in fewer residences, it would result in a corresponding lower potential for subsequent pollutant discharge and water quality impacts would be proportionately less.

Both this Alternative and the Project would be designed to maintain existing drainage patterns and postdevelopment runoff volumes would not significantly exceed the pre-development condition. A similar drainage system would be provided in Planning Area 1 for both the Project and this Alternative as presented in Section 4.8 of the Draft EIR, with revisions incorporated into Chapter 3.0 of this Final EIR. Post development runoff volume under both this Alternative and the Project would be consistent with that allowed by applicable regulatory requirements such that on- or off-site significant drainage and hydrology impacts do not occur. In addition, consistent with applicable regulatory requirements, construction of either this Alternative or the Project would not substantially increase stormwater flow rates or result in substantial erosion. As such, similar impacts regarding drainage and runoff patterns would occur under this Alternative and the Project. Similar to the Project, this Alternative would not result in a noticeable change in groundwater infiltration rates. Therefore, the Project and this Alternative would have similar less than significant impacts with respect to groundwater supplies or groundwater recharge.

Esperanza Hills Potential Access Corridor. The Esperanza Hills Final EIR indicates that construction of that Project, including the potential access corridor, would implement numerous PDFs and be subject to

conditions of approval (COA), including a SWPPP, to ensure compliance with applicable water quality standards during construction. Standard erosion controls would be implemented to ensure impacts with respect to erosion are less than significant. The BMPs identified in the Final Esperanza Hills Water Quality Management Plan (WQMP) would remove and/or prevent pollutants from substantially degrading the water quality of runoff from the access corridor, thereby, minimizing the potential for operational water quality impacts. Similar to the Project, per applicable regulatory requirements, the Esperanza Hills Project would be required to ensure that it does not increase flows or alter the drainage pattern such that substantial erosion or flooding would not occur on- and off-site. As part of the site-specific hydrology analysis for the Esperanza Hills Project, runoff quantities would also need to be within the capacity of the storm drain system serving that site and if not, appropriate infrastructure upgrades would need to be provided by that Project. As the Esperanza Hills Project would be required to comply with the same hydrology-related regulatory requirements as the Cielo Vista Project, the impact on downstream drainage facilities, flooding and erosion would be less than significant. Overall, the potential access corridor would result in less than significant hydrology and water quality impacts. The less than significant impacts of the access corridor do not change the less than significant cumulative impact findings in the Draft EIR in regards to the hydrology and water quality impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant combined cumulative hydrology and water quality impacts would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative geology and soils impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(i) Land Use and Planning

Unlike the Project, Alternative 5 would not require an Amendment of the County's General Plan to change the land use designation in Planning Area 2 from Open Space to Suburban Residential land use because Planning Area 2 would be retained as open space. For the same reason, a zone change for Planning Area 2 from A1(O) to R-1, Single Family Residence District would not be necessary under this Alternative. Without Planning Area 2, this Alternative would include a total of 42.7 acres of open space, which would be 6.4 acres of additional open space compared to the Project.

The City of Yorba Linda identifies the project site for Low Density residential uses with a range of 0 - 1.0 dwelling units per acre. The Project's proposed density would be at 1.33 dwelling units per acre, while the Modified Planning Area 1 Only Alternative would have a density of 1.0 dwelling units per acre. Although the Project would have a density that is compatible with surrounding neighborhoods, the density proposed by the Alternative would be within that specified by the City's Low Density land use designation. Similar to the Project, implementation of this Alternative would be consistent with the City and County land use plans or policies, zoning, and land use designations of the site and with relevant land use goals and policies. For that reason, and because no land use changes or discretionary approvals associated with Planning Area 2 would be needed under this Alternative, land use impacts are concluded to be less than the Project.

Esperanza Hills Potential Access Corridor. The Esperanza Hills Final EIR concludes that land use impacts for that Project under any of its access options would be less than significant. The corridor would be implemented as part of the Esperanza Hills Specific Plan such that it would be in conformance with the County of Orange and City of Yorba Linda General Plan and zoning regulations. No land use related

mitigation measures would be required specifically for the access corridor. Overall, the potential access corridor would result in less than significant land use impacts. The less than significant impacts of the access corridor do not change the less than significant cumulative impact findings in the Draft EIR in regards to the land use impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant combined cumulative land use impacts would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative land use impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(j) Noise

While the grading envelope of Planning Area 1 under this Alternative and the Project would be the same, given that Alternative 5 would not develop Planning Area 2 and would result in fewer homes on Planning Area 1, the Project's less than significant short-term noise impacts would be proportionately less under this Alternative. Similarly, the elimination of Planning Area 2 and the reduction in density in Planning Area 1 mean that operational stationary source and mobile source noise impacts would be proportionately less under this Alternative. Short- and long-term vibration impacts from Planning Area 2 are not anticipated to be perceivable by the surrounding community under the Project, while vibration impacts from Planning Area 1 would be also be largely and for the most part unperceivable by the surrounding community. Thus, similar less than significant vibration impacts are anticipated under this Alternative and the Project.

Esperanza Hills Potential Access Corridor. Construction–related noise level impacts associated with the potential access corridor would be within the maximum levels analyzed in the Cielo Vista Draft EIR given the more distant proximity of residential uses to the access corridor compared to those located nearest to Planning Area 1, along with an anticipated similar mix and maximum daily use of construction equipment. Since construction noise impacts associated with construction activities in Planning Area 1 would be less than significant, construction noise impacts associated with the access corridor would also be less than significant. The Esperanza Hills Final EIR concludes that mobile source noise levels associated with the construction of the Esperanza Hills Project as part of its various access options would not exceed acceptable noise standards on surrounding sensitive residential uses, including future Cielo Vista residences in Planning Area 1.

The Cielo Vista Draft EIR cumulative long-term mobile source noise impact analysis in Section 4.10 provides a cumulative mobile-source impact analysis which accounts for traffic noise associated with both the Cielo Vista and Esperanza Hills Projects. The analysis accounts for Esperanza Hills traffic via Stonehaven Drive (Option 1 in the Esperanza Hills Final EIR), as well as traffic through the Cielo Vista site to Aspen Way ("Access Alternative via Aspen Way" or Option 2). While the latter scenario represents a slightly different access route than Option 2B, the traffic distribution pattern to the surrounding local roadway network would be very similar, with traffic ultimately being distributed to San Antonio and Yorba Linda Boulevard similar to Option 2B. However, it is noted that under Option 2B, the San Antonio roadway access option would be the primary entrance, with the Stonehaven access being the secondary entrance. Accordingly, some traffic would be distributed to the secondary entrance. Modified Option 2 would be similar to Option 2B in that Esperanza Hills' primary access traffic would be distributed to San Antonio Road and Yorba Linda Boulevard, with secondary access traffic being distributed to Stonehaven Drive.

Under Alternative 5, no Cielo Vista traffic would be distributed to Aspen Way or San Antonio Road. All Cielo Vista traffic would be distributed to Via Del Agua and Stonehaven Drive. Thus, the mobile source noise impacts along Via Del Agua and Stonehaven Drive, as well as the surrounding local roadway network, would be within the scope of cumulative impacts evaluated for Option 1, which were concluded to be less than significant impact.

Overall, with implementation of the applicable mitigation measures, the potential access corridor would result in less than significant noise impacts. The less than significant impacts (after mitigation) of the access corridor do not change the less than significant (after mitigation) cumulative impact findings in the Draft EIR in regards to the noise impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant combined cumulative noise impacts (after mitigation) would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative noise impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(k) Population and Housing

This Alternative would result in 29 fewer residences and approximately 93 fewer residents than the Project (approximately 358 residents for the Project).³ The population growth associated with the Project and this Alternative would be within the SCAG population estimates and growth anticipated by the County of Orange General Plan Housing Element. Housing provided under the Project and this Alternative would be made available to meet the Orange County area's Regional Housing Needs Assessment demand. Therefore, this Alternative would result in less than significant population and housing impacts, with impacts being similar under this Alternative and the Project.

Esperanza Hills Potential Access Corridor. Development of the access corridor would not displace any existing housing. The access corridor in and of itself would not result in direct population growth. The same number of dwelling units would be developed under the Esperanza Hills Project with or without the corridor. As concluded in the Esperanza Hills Final EIR, population and housing impacts would be less than significant as development of the Esperanza Hills site was anticipated in the City of Yorba Linda and County General Plans.

Considering the same number of units would be developed as part of the Esperanza Hills Project with the corridor, the potential access corridor would result in less than significant population and housing impacts. The less than significant impacts of the access corridor do not change the less than significant cumulative impact findings in the Draft EIR in regards to the population and housing impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant combined cumulative population and housing impacts would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative

³ Based on 3.2 persons per dwelling unit.

population and housing impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(I) Public Services

This Alternative would result in 29 fewer residences and approximately 93 fewer residents than the Project (approximately 358 residents for the Project).⁴ Accordingly, the demand for public services generated at the project site would be decreased by approximately 26% when compared with the Project due to the decrease of population, including the Project's impact on police, fire, schools, and libraries. However, all regulatory requirements, required development fees, and additional mitigation measures identified for the Project would still be applicable under this Alternative in order to reduce impacts to a less than significant level. Overall, due to the decreased demand for public services to serve the lower number of residences, this Alternative would result in a reduction of the Project's already less than significant public services impacts.

Esperanza Hills Potential Access Corridor. Development of the access corridor in and of itself would not increase the demand for public services. With the same number of dwelling units being developed under the Esperanza Hills Project with or without the corridor, the demand for public services would remain the same. It is acknowledged that per the Esperanza Hills Final EIR, the potential access corridor would provide a benefit to police and fire personnel with easier access compared to the Esperanza Hills Option 1, and potentially reduced response time.

Considering the same number of units would be developed as part of the Esperanza Hills Project with the corridor, the potential access corridor would result in less than significant public services impacts. The less than significant impacts of the access corridor do not change the less than significant (after mitigation) cumulative impact findings in the Draft EIR in regards to the public services impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant (after mitigation) combined cumulative public services impacts would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative public services impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(m) Recreation

This Alternative and the Project would both accommodate future trail alignments through and adjacent to the project site. This Alternative would result in 29 fewer residences and approximately 93 fewer residents than the Project (approximately 358 residents for the Project). The decrease in population under this Alternative would proportionately decrease the demand for parks and recreational facilities compared to the Project. This Alternative would create a demand for 1.06 acres of parkland, as compared to 1.43 acres of parkland under the Project. All regulatory requirements, required development fees, and additional mitigation measures identified for the Project would still be applicable under this Alternative in order to reduce impacts to a less than significant level. Overall, due to the decreased demand for parks and

⁴ Based on 3.2 persons per dwelling unit.

recreational facilities, this Alternative would result in a reduction of the Project's already less than significant recreation impacts.

Esperanza Hills Potential Access Corridor. Development of the access corridor in and of itself would not increase the demand for recreational services or facilities. With the same number of dwelling units being developed under the Esperanza Hills Project with or without the corridor, the demand for recreation services and facilities would remain the same. Per the Esperanza Hills Final EIR, the potential access corridor is anticipated to include a 15-foot wide multi-use trail and allow for connections to the Casino Ridge trails system and Chino Hills State Park Old Edison Trail.

Considering the same number of units would be developed as part of the Esperanza Hills Project with the corridor, the potential access corridor would result in less than significant recreation impacts. The less than significant impacts of the access corridor do not change the less than significant (after mitigation) cumulative impact findings in the Draft EIR in regards to the recreation impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant (after mitigation) combined cumulative recreation impacts would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative recreation impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(n) Transportation/Traffic

This Alternative would result in a proportionate decrease in vehicular trips compared to the Project as it would result in result in 29 fewer residences and approximately 93 fewer residents than the Project. With 29 fewer residences than the Project, the number of daily vehicular trips would be 794 representing a decrease of approximately 278 trips or approximately 26% fewer trips compared to the Project (the Project results in approximately 1,072 daily trips). During the A.M. and P.M. peak hours, the Project would result in 84 and 113 trips, respectively. Under this Alternative, trips during the A.M. and P.M. hours would be 62 and 84, respectively. This Alternative, like the Project, would implement mitigation that would fund improvements (i.e., traffic signal) to the Via Del Agua and Yorba Linda Boulevard intersection such that the service level is made acceptable to LOS A. Based on the minor decrease in the number of additional trips during the peak hours generated under this Alternative, the LOS for other study area intersections is anticipated to be similar to those under the Project. Overall, this Alternative would result in a proportionate decrease of the Project's already less than significant traffic impacts on the local and regional traffic network.

Neither this Alternative nor the Project would significantly impact CMP facilities because the number of daily trips would be well below the threshold of 2,400 trips to require further CMP analysis; CMP impacts would be less than significant and similar under this Alternative and the Project. No design hazards or conflicts with alternative transportation facilities would occur in association with Planning Area 2 under the Project as analyzed in Section 4.14 of the Draft EIR. Accordingly, with the circulation network being the same in Planning Area 1 for the Project and Alternative 5, neither this Alternative nor the Project would result in substantial hazards associated with design features, or conflict with plans, policies, or regulations related to alternative transportation. Similar less than significant impacts would occur under this Alternative and the Project in these regards. Also, like the Project, this Alternative would provide adequate emergency access consistent with County and OCFA standards. As with the Project, there would be available capacity to

accommodate the projected traffic volumes, in addition to emergency vehicles, under this Alternative. Thus, emergency access impacts under this Alternative would be less than significant and similar to those under the Project.

Esperanza Hills Potential Access Corridor. With regards to construction related traffic and pedestrian safety, per Mitigation Measure 4.14-1, the Cielo Vista Project would be required to prepare a Construction Staging and Traffic Management Plan to be implemented during construction of the Project. The Construction Staging and Traffic Management Plan would be required to consider related project construction traffic, particularly the Esperanza Hills Project. Any construction-related traffic impacts associated with the potential access corridor would be adequately addressed in the Construction Staging and Traffic Management Plan. The Esperanza Hills Project would require implementation of a similar Plan to appropriately manage construction related traffic and pedestrian safety. Thus, construction-related traffic impacts associated with the corridor would be less than significant.

The Esperanza Hills Final EIR evaluated traffic impacts associated with the Esperanza Hills access Option 2B, including traffic generated by the Cielo Vista Project. Generally, traffic impacts under Option 2B would be similar to Modified Option 2, since Esperanza Hill's primary access traffic would be distributed to San Antonio (via Aspen Way) and secondary access traffic would be distributed to Stonehaven under both access configurations. As discussed therein, a significant traffic impact would occur at the intersection of Yorba Linda Boulevard and Via Del Agua. However, the mitigation prescribed therein includes installation of a new traffic signal at the impacted intersection. The Cielo Vista Draft EIR prescribes this same mitigation measure for traffic impacts at this intersection. The Esperanza Hills and Cielo Vista Projects would each pay their fair share costs of the traffic signal installation. With the installation of the traffic signal, potentially significant cumulative operational traffic impacts would therefore be reduced to a less than significant level.

The Cielo Vista Draft EIR cumulative traffic impact analysis in Section 4.14 provides a cumulative traffic impact analysis which accounts for traffic associated with both the Cielo Vista and Esperanza Hills Projects. The analysis accounts for Esperanza Hills traffic via Stonehaven Drive (Option 1 in the Esperanza Hills Final EIR), as well as traffic through the Cielo Vista site to Aspen Way ("Access Alternative via Aspen Way" or Option 2). While the latter scenario represents a slightly different access route than Option 2B, the traffic distribution pattern to the surrounding local roadway network would be very similar, with traffic ultimately being distributed to San Antonio and Yorba Linda Boulevard similar to Option 2B. However, it is noted that under Option 2B, the San Antonio roadway access option would be the primary entrance, with the Stonehaven access being the secondary entrance. Accordingly, some traffic would be distributed to the secondary entrance.

Under Alternative 5, no Cielo Vista traffic would be distributed to Aspen Way or San Antonio Road. All Cielo Vista traffic would be distributed to Via Del Agua and Stonehaven Drive. Thus, the traffic impacts along Via Del Agua and Stonehaven Drive, as well as the surrounding local roadway network, would be within the scope of cumulative impacts evaluated for Option 1, which were concluded to be less than significant impact after implementation of the prescribed mitigation measures.

Overall, with implementation of the applicable mitigation measures, the potential access corridor would result in less than significant traffic impacts. The less than significant impacts (after mitigation) of the access

corridor do not change the less than significant (after mitigation) cumulative impact findings in the Draft EIR in regards to the traffic impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant combined cumulative traffic impacts (after mitigation) would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative traffic impact (including both Esperanza Hills access options) would not be cumulatively considerable.

With regard to hazardous design features and conflicts with alternative transportation facilities and programs, the Esperanza Hills Project including the potential access corridor, similar to the Project, would be subject to appropriate City and/or County review to ensure that no hazardous design features proposed by that Project and no conflicts occur with alternative transportation facilities and programs. The Cielo Vista Project does not have any design features that would be interconnected with the potential access corridor such that a hazardous design-related traffic impact could occur. Thus, the potential access corridor would result in less than significant hazardous design-related or alternative transportation facilities impacts. The less than significant impacts of the access corridor do not change the less than significant cumulative impact findings in the Draft EIR in regards to the hazardous design-related or alternative transportation facilities impacts associated with related projects.

Further, with the elimination of Planning Area 2 under Alternative 5, the Project's already less than significant combined cumulative hazardous design-related or alternative transportation facilities impacts would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative hazardous design-related or alternative transportation facilities impact (including both Esperanza Hills access options) would not be cumulatively considerable.

Also, as discussed under subsection (g) *Hazards and Hazardous Materials*, above, Option 2B and Modified Option 2 would be superior to Options 1 and 2 of the Esperanza Hills Project with respect to community evacuation in the event of a fire. If implemented, the access corridor would become part of the Esperanza Hills Community Evacuation Plan that can be incorporated into the Yorba Lina Community Evacuation Plan when it is drafted. Thus, the potential access corridor in and of itself would result in less than significant emergency access impacts. The less than significant impacts of the access corridor do not change the less than significant cumulative impact findings in the Draft EIR in regards to the emergency access impacts.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant combined cumulative emergency access impacts would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative emergency access impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(o) Utilities and Service Systems

This Alternative would result in 29 fewer residences and approximately 93 fewer residents than the Project (approximately 358 residents for the Project). As such, this Alternative would result in less demand for water; and decreased wastewater and solid waste generation by approximately 26%. All regulatory requirements, required development fees, and additional mitigation measures identified for the Project would still be applicable under this Alternative in order to reduce impacts to a less than significant level. The

decrease in dwelling units under this Alternative compared to the Project would represent a negligible decrease in water demand compared to the overall service area of the YLWD. In addition, any change to the water storage requirements as prescribed by Yorba Linda Water District's (YLWD) Northeast Area Planning Study due to the Alternative's reduced number of dwelling units or development footprint would be determined by YLWD Staff, with the Project Applicant paying a fair-share cost for any such improvements per Mitigation Measure 4.15-1 (similar to the Project). Accordingly, water supply impacts would be less than significant, similar to the Project. Overall, due to the decreased demand for water, wastewater and solid waste public utilities and services systems, these services and utilities related impacts would be proportionately less under this Alternative when compared to the Project's already less than significant impacts. In addition, without Planning Area 2, the extent of new stormwater facilities would be reduced under this Alternative when compared to the Project. As such, the extent of the Project's less than significant impacts associated with stormwater facilities would be proportionately lower under this Alternative. This Alternative and the Project would both comply with applicable solid waste regulations to a similar extent. As such, impacts in this regard under this Alternative would be similar to the Project.

Esperanza Hills Potential Access Corridor. Development of the access corridor in and of itself would not increase the demand on public utilities and service systems. With the same number of dwelling units being developed under the Esperanza Hills Project with or without the corridor, the demand on utilities and service systems would not substantially change. Water would be provided to the Cielo Vista and Esperanza Hills projects by the Yorba Linda Water District via off- and –on site water system improvements, as necessary. The District would also connect with on-site sewer systems to provide local sewer service. Existing Southern California Gas lines would remain in place and be avoided by construction activities. The potential access corridor would not interfere with the ability of utility lines to provide service to the Cielo Vista or Esperanza Hills Projects.

Considering the same number of units would be developed as part of the Esperanza Hills Project with the corridor, the potential access corridor would result in less than significant utilities and service systems impacts. The less than significant impacts of the access corridor do not change the less than significant (after mitigation) cumulative impact findings in the Draft EIR in regards to the utilities and service systems impacts associated with related projects.

Further, with the elimination of Planning Area 2 and reduced density in Planning Area 1 under Alternative 5, the Project's already less than significant (after mitigation) combined cumulative utilities and service systems impacts would be proportionately less under Alternative 5. Thus, Alternative 5's incremental contribution to a cumulative utilities and service systems impact (including both Esperanza Hills access options) would not be cumulatively considerable.

(2) Impact Summary

A comparative summary of the environmental impacts associated with the Modified Planning Area 1 Only Alternative with the environmental impacts anticipated under the Project is provided in Table 3-1 at the end of this EIR subsection.

(3) Relationship of the Alternative to Project Objectives

Section 15124(b) of the CEQA *Guidelines* states that the Project Description shall contain "a statement of the objectives sought by the proposed project." As set forth by the CEQA *Guidelines*, the list of objectives that the County and project applicant seeks to achieve for the Project is provided below.

- 1. Implement a land plan at a density compatible with adjacent single family residential neighborhoods and provide a balance of residential and open space land uses adequately served by public facilities, infrastructure, and utilities.
- 2. Provide for 36 acres of contiguous open space which can be offered for dedication to a public agency or to be maintained as private open space.
- 3. Ensure that the provision of contiguous open space accommodates jurisdictional planning for local parks to the extent appropriate for the topography, as well as trail connections.
- 4. Provide a single family residential project with a sufficient number of units allowing for necessary infrastructure and open space in separate but related planning areas so that the property cannot be further subdivided.
- 5. Create two planning areas that are responsive to the site's topography and that are consistent with adjacent single family neighborhoods.
- 6. Create an aesthetically pleasing and distinctive residential neighborhood identity through design concepts to be developed by an experienced merchant builder(s).
- 7. Implement a circulation system providing pedestrian connectivity within each Project neighborhood and the existing residential neighborhoods surrounding the project site.
- 8. Concentrate development of new residential uses within defined areas and provide buffering of open space areas from new development.
- 9. Implement a land plan that optimizes view potential for the community's residents.
- 10. Implement a development plan for a cohesive neighborhood environment through the following design goals.
 - a. Encouragement of walking by providing landscaped sidewalks creating an inviting street scene for pedestrians.
 - b. Create a project perimeter open space setting for the residents through dedicated or private open space.
- 11. Develop a project consistent with County and other agency planning and regulatory standards.

The ability of the Modified Planning Area 1 Only Alternative to meet the stated objectives of the Project is summarized in Table 3-2 at the end of this EIR section. The following provides a description of the Modified Planning Area 1 Only Alternative's ability to meet the Project's objectives.

- <u>Objective #1</u> Although Planning Area 1 would have a slightly reduced density (1.0 du/acre) compared to the Project (1.3 du/acre) and Planning Area 2 would not be developed, this Alternative would be visually compatible with surrounding land uses and consistent from a land use perspective similar to the Project. This Alternative, similar to the Project, would provide a balance of residential and open space land uses adequately served by public facilities, infrastructure, and utilities. Overall, this Alternative would fully meet this objective similar to the Project.
- <u>Objective #2</u> As this Alternative would not include development of Planning Area 2, an additional 6.4 acres of open space could be dedicated to a public agency or maintained as private open space when compared to the Project. Thus, this Alternative would fully meet this objective similar to the Project.
- <u>Objective #3</u> Neither this Alternative nor the Project would conflict with jurisdictional planning efforts for local parks and trails. This Alternative and the Project would both accommodate planned City of Yorba Linda trails through the project site. Thus, this Alternative would fully meet this objective similar to the Project.
- <u>Objective #4</u> Both this Alternative and the Project would require infrastructure improvements to support the proposed residential uses. While this Alternative would include more open space than the Project, both the Project and this Alternative would dedicate the open space area(s) for permanent open space to a public agency or an appropriate land conservation/trust organization to ensure the property is not further subdivided. Thus, this Alternative would fully meet this objective similar to the Project.
- Objective #5 Both this Alternative and the Project would be responsive to the site's topography in a similar manner as the extent of grading in Planning Area 1 would not be substantially different. This Alternative would include only one planning area, as compared to two planning areas proposed by the Project. Regardless, despite Planning Area 1 having a slightly reduced density (1.0 du/acre) compared to the Project (1.3 du/acre) and Planning Area 2 not being developed, this Alternative would be visually compatible with surrounding land uses and consistent from a land use perspective similar to the Project. This Alternative would fully meet the intent of this objective similar to the Project.
- Objective #6 Both this Alternative and the Project would be constructed by an experienced merchant builder(s) in a manner to meet or exceed both County and City of Yorba Linda design standards, resulting in a well-designed neighborhood. While Planning Area 1 would be developed at a slightly reduced density under this Alternative compared to the Project, this Alternative would be visually compatible and consistent with the adjacent single-family residential neighborhoods similar to the Project. Thus, this Alternative would fully meet this objective similar to the Project.
- <u>Objective #7</u> Both this Alternative and the Project would implement a circulation system providing pedestrian connectivity within each neighborhood and the existing residential neighborhoods surrounding the project site. Thus, this Alternative would fully meet this objective similar to the Project.
- <u>Objective #8</u> Both this Alternative and the Project would concentrate development of new residential uses within a defined area and provide buffering of natural open space areas from new development. Thus, this Alternative would fully meet this objective similar to the Project.
- <u>Objective #9</u> Both this Alternative and the Project would implement a land plan that optimizes view potential for its community residents. The site circulation plan for this Alternative in Planning Area 1

would be the same as the Project, with Planning Area 1 under this Alternative being developed at a reduced density. Similar views would be available for this Alternative and the Project within Planning Area 1. Thus, this Alternative would fully meet this objective similar to the Project.

- <u>Objective #10</u> Both this Alternative and the Project would have similar landscaped sidewalks, and a similar perimeter open space setting that would provide for a cohesive neighborhood environment. Thus, this Alternative would fully meet this objective similar to the Project.
- <u>Objective #11</u> Both this Alternative and the Project would be consistent with County and other agency planning and regulatory standards. Thus, this Alternative would fully meet this objective similar to the Project.

(4) Environmentally Superior Alternative

Section 15126.6(e)(2) of the *CEQA Guidelines* indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR. The *CEQA Guidelines* also state that should it be determined that the No Project Alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives. With respect to identifying an environmentally superior alternative among those analyzed in this EIR, the range of feasible alternatives to be considered includes Alternative 1, the No Project/No Development Alternative; Alternative 2, the Planning Area 1 Only Alternative; Alternative 5, the Modified Planning Area 1 Only Alternative.

Table 3-1, *Comparison of Impacts Associated with the Alternatives and Impacts of the Project*, provides a summary comparison of the impacts associated with each of the proposed alternatives with the impacts of the Project. The ability of the Alternatives to meet the stated objectives of the Project is summarized in **Table 3-2**, *Project Alternatives' Ability to Meet Project Objectives*.

Based on the evaluation of impacts presented in the Alternatives analysis above and the findings regarding each Alternative's ability to meet the Project's stated objectives summarized in Table 3-2, Alternative 5, the Modified Planning Area 1 Only Alternative, is determined to be the environmentally superior alternative. While the No Project Alternative would result in "no impacts" for the vast majority of all environmental issues areas, it would fail to meet any of the Project Objectives. As summarized in Table 3-1, of Alternatives 2 through 5, the Modified Planning Area 1 Only Alternative (Alternative 5) would result in the most reduced (or less) impacts when compared to the Project. This is primarily due to its proportionate decrease in units and development footprint associated with the elimination of Planning Area 2 compared to the Project. Alternative 5 would result in reduced (or less) impacts in 13 of the 15 issue areas evaluated in the Draft EIR. The next closest alternative in reducing impacts, Alternative 3, would reduce impacts in 8 of the 15 issue areas evaluated in the Draft EIR. Also, the Modified Planning Area 1 Only Alternative 3 only Alternative would fully meet the Project Objectives similar to the Project.

Table 3-1

Comparison of Impacts Associated with the Alternatives and Impacts of the Project

	Project Imp	Alternative 1 Alternative 2 No Project/ No Planning Area 1 Only Impact Development Alternative		Alternative 3 Large Lot /Reduced Grading Alternative	Alternative 4 Contested Easement Alternative	Alternative 5 Modified Planning Area 1 Only Alternative	
A. Aesthetics	1						-
Visual Character	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Greater (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)
Scenic Views	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Greater (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)
Scenic Resources	No Impact		Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)
Light and Glare	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)
B. Air Quality	-						
AQMP Consistency	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Construction Emissions	Less Significant Mitigation	Than With	Less (No Impact)	Similar (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)
Operational Emissions	Less Significant	Than	Less (No Impact)	Greater (Less Than Significant)	Less (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)
Exposure to substantial pollutant concentrations	Less Significant	Than	Less (No Impact)	Greater (Less Than Significant)	Less (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)
Odors	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
C. Biological Resources	•						
Sensitive Species	Less Significant Mitigation	Than With	Less (No Impact)	Less (Less Than Significant With Mitigation)	Greater (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)

Comparison of Impacts Associated with the Alternatives and Impacts of the Project

	Project Impa	ct	Alternative 1 No Project/ No Development	Alternative Planning Area : Alternativ	L Only	Alternative 3 Large Lot /Redu Grading Alterna	iced	Alternative Contested Ease Alternative	ment	Alternative Modified Plar Area 1 On Alternativ	nning Iy
Riparian Habitat/Natural Communities		Than With	Less (No Impact)	Less (Less Significant Mitigation)	Than With	Greater (Less Significant Mitigation)	Than With	Similar (Less Significant Mitigation)	Than With	Less (Less Significant Mitigation)	Than With
Wetlands		Than With	Less (No Impact)	Less (Less Significant Mitigation)	Than With	Greater (Less Significant Mitigation)	Than With	Similar (Less Significant Mitigation)	Than With	Less (Less Significant Mitigation)	Than With
Migratory Species		Than With	Less (No Impact)	Less (Less Significant Mitigation)	Than With	Greater (Less Significant Mitigation)	Than With	Similar (Less Significant Mitigation)	Than With	Less (Less Significant Mitigation)	Than With
D. Cultural Resources											
Historic Resources	No Impact		Similar (No Impact)	Similar (No In	ipact)	Similar (No Im	pact)	Similar (No Im	pact)	Similar (No In	npact)
Archaeological Resources		Than With	Less (No Impact)	Less (Less Significant Mitigation)	Than With		Than With	Similar (Less Significant Mitigation)	Than With	Less (Less Significant Mitigation)	Than With
Paleontological Resources		Than With	Less (No Impact)	Less (Less Significant Mitigation)	Than With		Than With	Similar (Less Significant Mitigation)	Than With	Less (Less Significant Mitigation)	Than With
Human Remains		Than With	Less (No Impact)	Less (Less Significant Mitigation)	Than With		Than With	Similar (Less Significant Mitigation)	Than With	Less (Less Significant Mitigation)	Than With
E. Geology and Soils											
Earthquakes/Slope Stability		Than With	Less (No Impact)	Greater (Less Significant Mitigation)	Than With		Than With	Similar (Less Significant Mitigation)	Than With	Less (Less Significant Mitigation)	Than With
Soil Erosion		Than With	Less (No Impact)	Less (Less Significant Mitigation)	Than With		Than With	Similar (Less Significant Mitigation)	Than With	Less (Less Significant Mitigation)	Than With

Comparison of Impacts Associated with the Alternatives and Impacts of the Project

	Project Impact	Alternative 1 No Project/ No Development	Alternative 2 Planning Area 1 Only Alternative	Alternative 3 Large Lot /Reduced Grading Alternative	Alternative 4 Contested Easement Alternative	Alternative 5 Modified Planning Area 1 Only Alternative	
Expansive Soils	Less Than Significant With Mitigation	Less (No Impact)	Less (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)	
F. Greenhouse Gas Emis	ssions						
GHG Emissions	Less Than Significant	Less (No Impact)	Greater (Significant and Unavoidable)	Less (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)	
Plan Consistency	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	
G. Hazards and Hazardous Materials							
Hazardous Materials - Use, Disposal, Transport	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	
Hazardous Materials – Accident Conditions	Less Than Significant With Mitigation	Less (No Impact)	Similar (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	
Hazardous Materials – Site Locations	Less Than Significant With Mitigation	Less (No Impact)	Similar (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	
Emergency Response/Evacuation Plan	Less Than Significant	Less (No Impact)	Greater (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Greater (Less Than Significant)	
Wildland Fires	Less Than Significant With Mitigation (Beneficial Impact)	Greater (No Beneficial Impact)	Greater - Less Than Significant With Mitigation (Reduced Beneficial Impact)	Greater - Less Than Significant With Mitigation (Reduced Beneficial Impact)	Similar (Less Than Significant With Mitigation)	Greater - Less Than Significant With Mitigation (Reduced Beneficial Impact)	

Comparison of Impacts Associated with the Alternatives and Impacts of the Project

	Project Impact		Alternative 1Alternative 2No Project/ NoPlanning Area 1 OnDevelopmentAlternative		Alternative 3 Large Lot /Reduced Grading Alternative	Alternative 4 Contested Easement Alternative	Alternative 5 Modified Planning Area 1 Only Alternative	
H. Hydrology and Wate	er Quality							
Water Quality	Less Significant	Than	Less (No Impact)	Greater (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)	
Drainage Patterns and Runoff Volumes	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	
Groundwater Supplies	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	
I. Land Use and Plannin	ng							
Plan Consistency	Less Significant	Than	Less (No Impact)	Greater (Significant and Unavoidable)	Greater (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)	
J. Noise								
Construction Noise	Less Significant	Than	Less (No Impact)	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)	
Operational Noise	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)	
Vibration	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	
K. Population and Hous	sing							
Population Growth	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	
L. Public Services								
Fire	Less Significant Mitigation	Than With	Less (No Impact)	Greater (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)	

Comparison of Impacts Associated with the Alternatives and Impacts of the Project

	Project Imp	pact	Alternative 1 No Project/ No Development	Alternative 2 Planning Area 1 Only Alternative	Alternative 3 Large Lot /Reduced Grading Alternative	Alternative 4 Contested Easement Alternative	Alternative 5 Modified Planning Area 1 Only Alternative
Police	Less Significant	Than	Less (No Impact)	Greater (Less Than Significant)	Less (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant With Mitigation)
Schools	Less Significant Mitigation	Than With	Less (No Impact)	Greater (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)
Libraries	Less Significant	Than	Less (No Impact)	Greater (Less Than Significant With Mitigation)	Less (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant With Mitigation)
M. Recreation	·						
Parks and Recreational Facilities	Less Significant Mitigation	Than With	Less (No Impact)	Greater (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)
N. Traffic/Transporta	tion						
Traffic	Less Significant Mitigation	Than With	Greater (No Beneficial Impact)	Greater (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)
Congestion Management Plan (CMP)	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Design Hazards	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Emergency Access	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Alternative Transportation	Less Significant	Than	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)

Comparison of Impacts Associated with the Alternatives and Impacts of the Project

D. Utilities and Service Systems Wastewater Less Treatment Significa				Grading Alternative	Alternative	Alternative
Wastewater						_
i reatment orginited	Than nt	Less (No Impact)	Greater (Less Than Significant)	Less (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)
Wastewater Capacity Less	Than	Less (No Impact)	Greater (Less Than	Less (Less Than	Similar (Less Than	Less (Less Than
Significa	nt		Significant)	Significant)	Significant)	Significant)
Water Supply Less Mitigation		Less (No Impact)	Greater (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)	Similar (Less Than Significant With Mitigation)	Less (Less Than Significant With Mitigation)
Stormwater Facilities Less	Than	Less (No Impact)	Less (Less Than	Similar (Less Than	Similar (Less Than	Less (Less Than
Significa	nt		Significant)	Significant)	Significant)	Significant)
Landfills Less	Than	Less (No Impact)	Greater (Less Than	Less (Less Than	Similar (Less Than	Less (Less Than
Significa	nt		Significant)	Significant)	Significant)	Significant)
Solid Waste Less	Than	Less (No Impact)	Similar (Less Than	Similar (Less Than	Similar (Less Than	Similar (Less Than
Regulations Significa	nt		Significant)	Significant)	Significant)	Significant)

Table 3-2

Alternatives' Ability to Meet Project Objectives

	Ability to Meet Project Goal/Objective						
Project Objective	Proposed Project	Alternative 1 No Project/No Development	Alternative 2 Planning Area 1 Only	Alternative 3 Large Lot /Reduced Grading	Alternative 4 Contested Easement Alternative	Alternative 5 Modified Planning Area 1 Only Alternative	
1. Implement a land plan at a density compatible with adjacent single family residential neighborhoods and provide a balance of residential and open space land uses adequately served by public facilities, infrastructure, and utilities.	Fully Meets	Does Not Meet	Partially Meets	Partially Meets	Fully Meets	Fully Meets	
	Objective	Objective	Objective	Objective	Objective	Objective	
2. Provide for 36 acres of natural and contiguous open space which can be offered for dedication to a public agency or to be maintained as private open space.	Fully Meets	Does Not Meet	Fully Meets	Does Not Meet	Fully Meets	Fully Meets	
	Objective	Objective	Objective	Objective	Objective	Objective	
3. Ensure that the provision of contiguous open space accommodates jurisdictional planning for local parks to the extent appropriate for the topography, as well as trail connections.	Fully Meets	Does Not Meet	Fully Meets	Fully Meets	Fully Meets	Fully Meets	
	Objective	Objective	Objective	Objective	Objective	Objective	
4. Provide a single family residential project with sufficient number of units allowing for necessary infrastructure and open space in separate but related planning areas so that the property cannot be further subdivided.	Fully Meets	Does Not Meet	Fully Meets	Partially Meets	Fully Meets	Fully Meets	
	Objective	Objective	Objective	Objective	Objective	Objective	

Alternatives' Ability to Meet Project Objectives

Project Objective	Proposed Project	Alternative 1 No Project/No Development	Alternative 2 Planning Area 1 Only	Alternative 3 Large Lot /Reduced Grading	Alternative 4 Contested Easement Alternative	Alternative 5 Modified Planning Area 1 Only Alternative
5. Create two planning areas that are responsive to the site's topography and that are consistent with adjacent single family neighborhoods.	Fully Meets Objective	Does Not Meet Objective	Partially Meets Objective	Fully Meets Objective	Fully Meets Objective	Fully Meets Objective
6. Creation of an aesthetically pleasing and distinctive residential neighborhood identity through design concepts to be developed by an experienced merchant builder(s).	Fully Meets Objective	Does Not Meet Objective	Partially Meets Objective	Fully Meets Objective	Fully Meet Objective	Fully Meets Objective
7. Implement a circulation system providing pedestrian connectivity within each Project neighborhood and the existing residential neighborhoods surrounding the project site.	Fully Meets Objective	Does Not Meet Objective	Fully Meets Objective	Fully Meets Objective	Fully Meets Objective	Fully Meets Objective
8. Concentrate development of new residential uses within a defined area and provide buffering of open space areas from new development.	Fully Meets Objective	Does Not Meet Objective	Fully Meets Objective	Does Not Meet Objective	Fully Meets Objective	Fully Meets Objective
9. Implement a land plan that optimizes view potential for the community's residents.	Fully Meets Objective	Does Not Meet Objective	Fully Meets Objective	Fully Meets Objective	Fully Meets Objective	Fully Meets Objective

Alternatives' Ability to Meet Project Objectives

	Ability to Meet Project Goal/Objective						
Project Objective	Proposed Project	Alternative 1 No Project/No Development	Alternative 2 Planning Area 1 Only	Alternative 3 Large Lot /Reduced Grading	Alternative 4 Contested Easement Alternative	Alternative 5 Modified Planning Area 1 Only Alternative	
 10. Implement a development plan for a cohesive neighborhood environment through the following design goals. a. Encouragement of walking by providing landscaped sidewalks creating an inviting street scene for pedestrians. b. Create a project perimeter open space setting for the residents through dedicated or private open space. 	Fully Meets Objective	Does Not Meet Objective	Fully Meets Objective	Fully Meets Objective	Fully Meets Objective	Fully Meets Objective	
11. Develop a project consistent with County and other agency planning and regulatory standards.	Fully Meets Objective	Does Not Meet Objective	Partially Meets Objective	Fully Meets Objective	Fully Meets Objective	Fully Meets Objective	
Source: PCR Services Corporation, 2015.						•	

2. OTHER CORRECTIONS AND ADDITIONS

This subsection provides changes and additions to the Draft EIR that have been made to clarify, correct, or add to the information provided in that document as a result of comments received on the document. These changes and additions are based on comments received on the Draft EIR during the public review period and/or new information that has become available since publication of the Draft EIR. Deletions are shown with strikethrough and additions are shown with a <u>double underline</u>. Changes to the Draft EIR are indicated below under the respective EIR section heading. These changes do not add significant new information to the Draft EIR, nor do they result in new or more severe significant environmental impacts from the Project.

These corrections and/or additions to the Draft EIR do not include the changes with regard to adding Alternative 5, as discussed in Chapter 5.0 of the Draft EIR, including a discussion of the Environmentally Superior Alternative.

EXECUTIVE SUMMARY

1. Page ES-1. Modify 2nd paragraph with the following changes:

<u>The 84-acre project site is located within an unincorporated area of the County of Orange, but is also</u> <u>located within the Sphere of Influence of the City of Yorba Linda</u>. Regional access to the project site is provided via State Route (SR) 91 (91 Freeway) located approximately two miles southwest of the site. The nearest arterial to the project site is Yorba Linda Boulevard, which is located approximately 0.25 miles to the south of the site. From Yorba Linda Boulevard, the site is accessed by Via del Agua and by San Antonio <u>Road</u> through Aspen Way. The Casino Ridge residential community abuts the project site on the north, and established residential neighborhoods abut the project site on the south and west. An undeveloped parcel commonly referred to as the Esperanza Hills property abuts the project site on the east. The project site and the adjacent undeveloped parcel to the east are within an area commonly referred to as the Murdock Properties. The majority of the 84-acre project site is vacant, with the exception of several operational and abandoned oil wells and various dirt roads and trails which traverse the site.

2. Page ES-1 AND ES-2. Modify 4th paragraph beginning on page ES-1 and 1st full paragraph on ES-2 with the following changes:

The Orange County General Plan designates approximately 41 acres of the project site as Suburban Residential "1B", which permits development of residential land uses at a density of 0.5-18 dwelling units per acre, and approximately 43 acres of the project site as Open Space (5). The entire project site is <u>mostly</u> zoned A1(O) – General Agricultural with Oil Production Overlay, <u>with a small area along</u> the southernmost boundary zoned A1 – General Agriculture, per the Orange County Zoning Map. The project site is also within the City of Yorba Linda Sphere of Influence (SOI). The City of Yorba Linda Land Use Map identifies the project to be within Area Plan C – Murdock Property. The Murdock property land use designation, inclusive of the project site, is Low Density residential with a range of 0-1.0 dwelling unit per acre. Per the City Zoning Maps, the project site is designated as UNC – Unincorporated Area. No specific development standards are identified with the Unincorporated zoning designation.

Implementation of the Project would require approval of a General Plan Amendment by the County of Orange Board of Supervisors for 6.4 acres comprising Planning Area 2 to change the General Plan Land Use Designation for this portion of the site from Open Space (5) to Suburban Residential (1B). The Project would also require approval of a zone change by the County of Orange Board of Supervisors for Planning Area 1 from <u>A1 and</u> A1(O) (General Agricultural with Oil Production Overlay) to R-1 (Single Family Residence District) and R-1(O) (Single Family Residence District with Oil Production Overlay) and a zone change for Planning Area 2 from A1(O) to R-1, permitting development of single-family detached residential dwellings on minimum 7,500 square foot lots.

3. Page ES-1. Modify 2nd paragraph with the following changes:

<u>The 84-acre project site is located within an unincorporated area of the County of Orange, but is also</u> <u>located within the Sphere of Influence of the City of Yorba Linda</u>. Regional access to the project site is provided via State Route (SR) 91 (91 Freeway) located approximately two miles southwest of the site. The nearest arterial to the project site is Yorba Linda Boulevard, which is located approximately 0.25 miles to the south of the site. From Yorba Linda Boulevard, the site is accessed by Via del Agua and by San Antonio <u>Road</u> through Aspen Way. The Casino Ridge residential community abuts the project site on the north, and established residential neighborhoods abut the project site on the south and west. An undeveloped

4. Page ES-2. Add the following sub-section below sub-section "c. Project Access":

d. Project Design Features

Project Design Features (PDFs) are specific design elements proposed by the Applicant that have been incorporated into the Project to prevent the occurrence of or to minimize the significance of potential environmental effects. Because PDFs have been incorporated into the Project, they do not constitute mitigation measures, as defined by Section 15126.4 of the State CEQA Guidelines (Title 14 of the California Code of Regulations). However, PDFs would be included in the Mitigation Monitoring and Reporting Program (MMRP) to ensure their implementation as a part of the Project. As with mitigation measures, if the Project is modified through the public hearing process in a manner that would require modification(s) to the PDFs, the Applicant may be permitted to modify the PDFs before they are included in the MMRP proposed for adoption. The Project would include the following PDFs related to: Aesthetics, Hazards and Hazardous Material, Hydrology and Water Quality, Traffic/Transportation, and Utilities and Service Systems.

Aesthetics

<u>Site Design</u>

- PDF 1-1:The Project would provide up to 112 detached, single-family residences up to two-storiesin height within two clustered planning areas (Planning Areas 1 and 2) to maximize the
potential for open space and retain the primary east-west canyon within the central
portion of the site. (This PDF to be verified prior to issuance of a building permit by the
Manager, OC Development Services.)
- PDF 1-2:
 A primary community entry would be established at the intersection of "A" Street and Via

 del Agua (see Figure 2-12, Primary Entry at Via Del Agua, in Section 2.0, Project

Description, of this EIR). The entries to the project site would include a blend of hardscape and planting elements, in addition to low-level entry lighting. No entry gates would be installed. (This PDF to be verified prior to issuance of a building permit by the Manager, OC Development Services.)

Building Design/Materials

PDF 1-3:Non-reflective and/or anti-glare building materials would be used. The selected color
palette for each architectural style should share a "common sense" approach to the use of
materials and colors indigenous to the region and compatibility with existing
surrounding residential land use. (This PDF to be verified prior to issuance of a building
permit by the Manager, OC Development Services.)

Open Space/Landscape Plan

- PDF 1-4:
 The Project would provide approximately 36 acres of undeveloped open space which can

 be offered for dedication to a public agency or an appropriate land conservation/trust

 organization.
 Or, the open space would be owned and maintained by the Project HOA.

 (This PDF to be verified prior to recordation of a subdivision map by the Manager, OC

 Development Services.)
- PDF 1-5: As shown in the *Conceptual Landscape Plan* (Figure 2-11 and Table 2-2), landscaped areas or natural open space areas would be located adjacent to existing residential development to serve as natural buffers between existing residential neighborhoods and proposed homes. The plant palette would include native and appropriate non-native drought tolerant trees, groundcovers and shrubs that would be compatible with the existing native plant communities found within the site. The landscape design would emphasize the planting of long-lived plant species that are native to the region or well adapted to the climatic and soil conditions of the area. In addition, any invasive nonnative species that appears on the California Invasive Plant Council (Cal-IPC) list of invasive species would be excluded from the landscape plan plant palette. (This PDF to be verified prior to issuance of a building permit by the Manager, OC Development Services.)
- PDF 1-6:As shown in the Streetscapes Plan (see Figure 2-13), the planting plan for streets shall
include shrubs, grasses, and stands of native and non-native trees. Uniformed spacing of
trees shall be avoided. (This PDF to be verified prior to issuance of a grading permit by
the Manager, OC Development Services.)
- PDF 1-7:
 Landscape treatment of all areas shall emphasize the planting of shade trees along streets

 to contrast with open space.
 Street trees and trees planted near walkways or street curbs

 shall be selected and installed to prevent damage to sidewalks, curbs, gutters and other
 improvements. (This PDF to be verified in a landscape plan prior to issuance of a grading

 permit by the Manager, OC Development Services.)
 Image: Contrast Services.)
- PDF 1-8:Plantings would be installed around the 1.8-acre parcel located in Planning Area 1 that
may be designated for continued oil operations to screen most, if not all, of the oil-related
facilities within this area. (This PDF to be verified prior to issuance of a grading permit
for the oil-related facilities by the Manager, OC Development Services.)

<u>Lighting</u>

PDF 1-9:All exterior lighting would be directed downward and "night sky friendly," in compliance
with the Codified Ordinances of the County of Orange Section 7-9-55.8 requirements for
exterior lighting. All lights would be designed and located so that all direct light rays are
confined to the property. No lighting would be cast directly outward into open space
areas. Specimen trees may be up-lit into the canopy to avoid creating dark sides of the
trees in instances where such lighting could be directed onto the tree canopy to avoid
light spillage above and beyond the tree. (Mitigation Measure 4.1-1 would ensure
compliance with the code requirements.)

<u>HOAs</u>

- PDF 1-10:One or more HOAs may be established for the maintenance of private common areaimprovements within residential Planning Areas of the project site.Privateimprovements to be maintained by either the HOA or private property owners mayinclude, but are not limited to:
 - <u>Parkway landscaping within the rights of ways of all local streets.</u>
 - <u>Slopes within the boundary of a Planning Area, fuel modification zones, detention and</u> <u>water quality treatment basins and facilities.</u>
 - <u>Community and neighborhood entries and signage, and common open space areas</u> <u>within residential Planning Areas.</u>
 - <u>Community perimeter walls and fencing.</u>
 - Landscape areas of lots, common area wall surfaces, and slopes internal to the Project along residential local streets.
 - <u>Common area landscaping and lighting.</u>

(This PDF to be verified prior to issuance of a certificate of use and occupancy by the Manager, OC Development Services.)

Hazards and Hazardous Materials

Oil Production Operations

- PDF 7-1: Prior to grading for development, existing on-site oil wells and facilities, and production facilities would be abandoned or re-abandoned, as necessary, in accordance with the standards of the State of California Division of Oil, Gas and Geothermal Resources (DOGGR). All other containers associated with oil production shall also be disposed in accordance with applicable regulatory requirements.
- PDF 7-2:No new residences (habitable structures) would be developed within 150 feet of any
surface operational oil well; or within 50 feet of a subsurface pumping unit/well enclosed
within a concrete vault, or as otherwise approved by the Director, OC Development
Services. The buffer(s) would be clearly dimensioned on all applicable plans prior to
issuance of building permits to the satisfaction of the Manager, OC Development Services.
- <u>PDF 7-3:</u> No new residences (habitable structures) would be developed within ten feet of abandoned wells. The 10-foot buffer would be clearly dimensioned on all applicable

plans prior to issuance of permits to the satisfaction of the Manager, OC Development Services.

- PDF 7-4:All new wells drilled in the 1.8-acre "oil drilling pad" parcel located in Planning Area 1 for
potential continued oil operations would be drilled per applicable DOGGR, OCFA and
County of Orange requirements.
- PDF 7-5:The oil drilling pad would not be accessible to the public. Plantings, barriers, signage, and
information would be provided where necessary to ensure public safety. (This PDF to be
verified prior to issuance of permits for the oil operations by the Manager, OC
Development Services.)
- PDF 7-6:Access to the oil drilling pad shall be provided within existing oil field service roads. No
new roadways for servicing existing or proposed oil wells would be constructed through
open space areas. (This PDF to be verified prior to issuance of permits for the oil
operations by the Manager, OC Development Services.)
- PDF 7-7: The Applicant/developer would provide written notification to all future homeowners regarding the previous use of the site as an oilfield and the extent of continued oil production activities in the area. (Evidence of this PDF to be verified prior to issuance of certificate of use and occupancy by the Manager, OC Development Services.)
- <u>PDF 7-8:</u> At the time oil operations on the 1.8-acre parcel cease, any wells would be abandoned and contaminated soils would be remediated pursuant to all applicable requirements, if necessary.
- Fire Protection
- PDF 7-9:Prior to issuance of a building permit, the Project would implement a fire protection plan
that would comply with OCFA's standards for VHFHSZ/SFPA. (This PDF to be verified
prior to issuance of building permits for habitable structures by the Manager, OC
Development Services.)
- PDF 7-10:The Project would incorporate fire-resistant construction for all structures adjoining
open space areas including the use of fire-resistant building materials. Such materials
would be clearly shown on construction drawings and reviewed and approved by the
Manager, OC Development Services prior to issuance of a building permit.
- PDF 7-11: All structures would be protected with smoke detectors and National Fire ProtectionAssociation (NFPA) 13-D Automatic Fire Sprinklers. Such features would be clearlyshown on construction drawings and reviewed and approved by the Manager, OCDevelopment Services prior to issuance of a building permit.
- <u>PDF 7-12:</u> The project shall include fuel modification/management zones to help suppress wildland fires in accordance with OCFA guidelines.
- PDF 7-13:The Project would incorporate a landscape plan that utilizes a plant palette consisting of
fire resistant plants, native and appropriate non-native drought tolerant species in
accordance with OCFA guidelines. In addition, long-term maintenance responsibilities
would remove from all fuel modification zones any invasive non-native species that

appear on the California Invasive Plant Council (Cal-IPC) list of invasive species to prevent these from becoming established. (This PDF to be verified prior to issuance of building permits by the Manager, OC Development Services.)

PDF 7-14:Per OCFA requirements, fire hydrants would be spaced at 600 feet or less and minimum
fire access requirements would be met or exceeded (28-foot minimum road width, 17-
foot inside and 38-foot outside turning radius). (This PDF to be verified prior to
recordation of a subdivision map by the Manager, OC Development Services.)

Hydrology and Water Quality

- PDF 8-1:The Project would implement a Water Quality Management Plan (WQMP) and a Storm
Water Pollution Prevention Plan (SWPPP). The WQMP would include detailed sizing
parameters for the basins and would provide guidelines for the proper maintenance of
the water quality basins. The WQMP and SWPPP would identify the BMPs to be
implemented by the Project that would reduce pollution levels in stormwater discharge
in compliance with applicable water quality standards. These plans would be reviewed
and approved by the Manager, OC Development Services prior to recordation of the
subdivision map.
- PDF 8-2:Riprap aprons or other types of energy dissipators would be located at all points of
concentrated discharge where flow velocity exceeds five feet per second (ft/s) to mitigate
the outlet velocity so as to minimize the potential for downstream erosion. These points
of discharge would not be limited to storm drain outlets but would also include brow
ditches and other forms of storm water conveyance. Riprap aprons would be designed
and sized in conformance with regional sizing criteria found in the "County of Orange
Local Drainage Manual", dated August 2005. Other designs and sizing criteria can be
found in the FHWA's "Hydraulic Engineering Circular Number 14, Third Edition" HEC
14, including a "Riprap Basin" that could be used. Prior to the issuance of any grading or
building permit, the riprap aprons would be identified in the Project's Final Drainage
Study to be reviewed and approved by the Manager, Permit Services.
- PDF 8-3:Sediment basins would be located upstream of all proposed storm water conveyance
systems within the project site. Prior to the issuance of any grading or building permit,
the sediment basins would be identified in the Project's Final Drainage Study to be
reviewed and approved by the Manager, Permit Services.
- PDF 8-4:To be determined in consultation with County of Orange Public Works, if determined
appropriate, the receiving storm drain within the project site (the headwall intercepts
proposed at the end of "B" and "F" Streets) would be downsized by a 6-inch reduction in
capacity to reduce the peak flow to existing conditions by throttling down flow,
effectively detaining peak flows by the use of a hydraulic reduction. The ponding caused
by such hydraulic reduction in capacity would be maintained on the project site, ensuring
that no offsite property is impacted by attenuating the peak flow. If this pdf is necessary,
prior to the issuance of any grading or building permit, the storm drain sizing would be
identified in the Project's Final Drainage Study to be reviewed and approved by the
Manager, Permit Services.
- PDF 8-5:All developed pad elevations would be constructed at a minimum of 3-foot (or greater)above the anticipated peak water surface elevation to ensure that no residential structure

would be flooded within the project site. (This PDF to be verified prior to issuance of a building permit by the Manager, OC Development Services.)

<u>Noise</u>

<u>PDF 10-1:</u> Noise attenuation measures, which may include, but are not limited to, temporary noise <u>barriers or noise blankets around stationary construction noise sources, shall be</u> implemented where feasible.

Traffic/Transportation

- <u>PDF 14-1:</u> All local streets proposed by the Project would meet the minimum street design and size standards of the City of Yorba Linda and the County of Orange. (This PDF to be verified prior to recordation of a subdivision map by the Manager, OC Development Services.)
- PDF 14-2:Landscape plans would take into consideration service lines, traffic safety sight line
requirements, and structures on adjacent properties to avoid conflicts as trees and shrubs
mature. The landscape plans would be approved by the Manager, OC Development
Services prior to issuance of building permits.
- <u>PDF 14-3:</u> The stopping sight distance at Via del Agua and the proposed Street A would meet or <u>exceed the County's Standard Plan No. 1117 requirements for stopping sight distance.</u> <u>(This PDF to be verified prior to recordation of a subdivision map by the Manager, OC</u> <u>Development Services.)</u>

Utilities and Service Systems

- PDF 15-1:
 Builder-installed indoor appliances, including dishwashers, showers and toilets, would be

 low-water use.
 (This PDF would be verified prior to issuance of certificates of use and

 occupancy for a unit as approved by the Manager, OC Development Services.)
- PDF 15-2:Drought-tolerant, native landscaping would be used in public common areas to reduce
water consumption. The plant pallete for the Project would ultimately be determined
based on OCFA requirements for use of fire-resistant plants in high fire-prone areas, but
in consideration of applicable City of Yorba Linda and County of Orange landscaping
requirements. (This PDF to be verified through the Landscape Plan review prior to
issuance of a building permit by the Manager, OC Development Services.) (Also, see PDF
1-7 in Section 4.1, Aesthetics, of this EIR.)
- PDF 15-3:Community landscape areas would be designed on a "hydrozone" basis to group plants
according to their water and sun requirements. The plant pallete for the Project would
ultimately be determined based on OCFA requirements for use of fire-resistant plants in
high fire-prone areas, but in consideration of applicable City of Yorba Linda and County of
Orange landscaping requirements. (This PDF to be verified through the Landscape Plan
review prior to issuance of a building permit by the Manager, OC Development Services.)
(Also, see PDF 1-7 in Section 4.1, Aesthetics, of this EIR.)
- PDF 15-4:Irrigation for both public and private landscape areas would be designed to be water-
efficient and comply with Section 7-9-133.5, Landscape Water Use Standards, of the
Orange County Code of Ordinances. All irrigation systems would have automatic
controllers designed to properly water plant materials given the site's soil conditions, and
irrigation systems for all public landscapes would have automatic rain shut-off devices.

Drip irrigation would be encouraged. Spray systems would have low volume, measured as gallons per minute (GPM), matched-precipitation heads. Prior to approval of the tentative map, the Project Applicant would obtain approval from the Manager, Permit Services of a preliminary landscape plan including the above listed conservation features and compliance with the County's County of Orange Landscape Code (Ord. No. 09-010).

5. Page ES-5. Modify the 2nd bullet point under "Recreation" with the following changes:

Impacts on existing and planned equestrian facilities trails (refer to Section, 4.13, Recreation, of this Draft EIR); and

6. Page ES-7. Modify the last sentence of the 1st paragraph with the following changes:

The public agency, in this case the County of Orange, will evaluative the status and effect of the mitigation and indicate either that mitigation requirements are being met or that mitigation measures require modification to achieved the identified level of mitigation.

7. Page ES-9. Modify the 1st sentence of the last paragraph with the following changes:

Section 15126.6(e)(2) of the *CEQA Guidelines* indicates that an analysis of alternatives, including the "No Project-Alternative," to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR.

8. Page ES-10 to ES-40. Modify Table ES-1 to include applicable PDFs and revised mitigation measures as included in this Final EIR Chapter. 1st sentence of the last paragraph with the following changes:

Table ES-1 shown on proceeding pages.

Table ES-1

Issue	Project Impact	Mitigation Measures <u>and</u> <u>Project Design Features (PDFs)</u>	Level of Significance After Mitigation
Aesthetics <u>SCENIC VISTA/VISUAL CHARACTER AND VISUAL QUALITY</u> – Project implementation would alter the views of and across the project site with the development of the proposed residential uses. However, no significant scenic views from surrounding areas would be substantially diminished or obstructed by the Project. Further, the Project would be visually consistent and compatible with the single-family residential uses to the north, west and south of the project site. As such, the Project would not substantially degrade the existing visual character or quality of the site and its surroundings. Impacts would be less than significant in these regards.	Less Than Significant Impact	No mitigation measures are necessary. <u>The following PDFs would ensure impacts in this</u> <u>regard are less than significant: PDF 1-1 to 1-8, and</u> <u>PDF 1-10.</u>	Less Than Significant Impact
<u>SCENIC RESOURCES</u> - Project implementation would not substantially damage scenic resources or other locally recognized desirable aesthetic natural features within a scenic highway and no impact would occur in this regard.	No Impact	No mitigation measures are necessary.	No Impact
LIGHT AND GLARE - Implementation of the Project would result in new lighting similar to that of the adjacent single- family residential neighborhoods. The Project would not create new sources of substantial light or glare which would adversely affect day or nighttime views in the area. Thus, light and glare impacts would be less than significant. To ensure that all Project lighting is implemented in a manner consistent with County Code requirements, Mitigation Measure 4.1-1 has been prescribed for the Project and will be included in the Mitigation Monitoring and Reporting Program (MMRP) for the Project.	Less Than Significant Impact	Mitigation Measure 4.1-1 Prior to issuance of any building permit, the Project Applicant/Developer shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the property project site consistent with Sec. 7-9-55.8, Site Development Standards, of the Orange County Zoning Code; and to in a manner meeting the approval of the Manager, Permit Services (County of Orange). Prior to the final inspection, the Project Applicant/Developer shall provide a letter from the Electrical Engineer, licensed Landscape Architect, or licensed Professional Designer that a field test has been performed after dark and that the light rays are confined to the premises. The letter shall be	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
		submitted to the Manager, OC Inspection for review and approval.	
		<u>The following PDFs would also ensure impacts in</u> <u>this regard are less than significant: PDF 1-3 and 1-</u> <u>9.</u>	
Air Quality			
<u>CONSISTENCY WITH AIR QUALITY PLAN</u> - With implementation of prescribed mitigation measures, the Project would not violate any air quality standard, substantially contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase of any criteria pollutant for which the project region in non-attainment. Therefore, the Project would not conflict with or obstruct implementation of the South Coast Air Quality Management District's Air Quality Management Plan.	Potentially Significant Impact	Refer to Mitigation Measures 4.2-1 and 4.2-2 below. No additional mitigation measures are necessary.	Less Than Significant Impact
<u>COMPLIANCE WITH EMISSION STANDARDS</u> - With implementation of prescribed mitigation measures, the Project would not violate any air quality standard, substantially contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment. As such, potentially significant impacts would be reduced to a less than significant level in these regards.	Potentially Significant Impact	Mitigation Measure 4.2-1Prior to the issuance of grading permits, the contractor shall provide evidence to the Manager, Permit Services that compliant with SCAQMD Rule 403 all disturbed unpaved roads and disturbed areas within the project site shall be watered at least three times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day. and during construction, that the following measures shall be implemented to reduce fugitive dust emissions:•Apply water and/or nontoxic chemical soil	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
		 stabilizers according to manufacturer's specification to all construction areas expected to be inactive for 10 or more days. Reapply as needed to minimize visible dust. Apply water three times daily or nontoxic chemical soil stabilizers according to manufacturer's specifications to all unpaved parking or staging areas or unpaved road surfaces. Enclose, cover, water three times daily, or apply approved chemical soil stabilizers to exposed piles of dirt, sand, soil, or other loose materials. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period. The determination of wind speed conditions in excess of 25 miles per hour shall be based on the following criteria: (A) For facilities with an on-site anemometer: (i) When the on-site anemometer registers at least two wind gusts in excess of 25 miles per hour if there is no recurring wind gust in excess of 25 miles per hour within a consecutive 30-minute period. 	

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
ISSUE		(B) For facilities without an on-site	Alter Willigation
		anemometer:	
		(i) When wind speeds in excess of 25 miles	
		per hour are forecast to occur in Yorba	
		Linda for that day. This condition shall	
		apply to the full calendar day for which the	
		<u>forecast is valid; or</u>	
		(ii) When wind speeds in excess of 25 miles	
		per hour are not forecast to occur, and	
		fugitive dust emissions are visible for a	
		distance of at least 100 feet from the origin	
		of such emissions, and there is visible	
		evidence of wind driven fugitive dust.	
		All trucks hauling dirt, sand, soil, or other loose	
		materials are to be covered or should maintain at	
		least two feet of freeboard (i.e., minimum vertical	
		distance between top of the load and the top of	
		the trailer), in accordance with Section 23114 of	
		the California Vehicle Code.	
		Sweep streets at the end of the day, or more	
		frequently as needed to control track out.	
		■ <u>To prevent dirt and dust from unpaved</u>	
		construction roads from impacting the	
		surrounding areas, install roadway dirt control	
		measures at egress points from the Project Site	
		(or areas of the Site actively grading). These may	
		be wheel washers, rumble strips, manual	
		sweeping, or other means effective at removing	
		loose dirt from trucks and other equipment	

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
		 before leaving the site. Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads. Plant ground cover in planned areas as quickly as possible after grading. All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized. Mitigation Measure 4.2-2 Prior to the issuance of grading permits, the contractor shall provide evidence to the Manager, Permit Services that compliant with SCAQMD Rule 403 traffic speeds on unpaved roads and project site areas shall be reduced to 15 miles per hour or less. 	
<u>SENSITIVE RECEPTORS EXPOSURE TO POLLUTANTS</u> - Implementation of the Project would not expose sensitive receptors in the vicinity of the project area to substantial pollutant concentrations with implementation of the prescribed mitigation measures. A less than significant impact would occur in this regard.	Potentially Significant Impact	Refer to Mitigation Measures 4.2-1 and 4.2-2 below. No additional mitigation measures are necessary.	Less Than Significant Impact
<u>ODORS</u> - The Project does not contain land uses typically associated with emitting objectionable odors. The Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with Project construction and operation would be less than significant.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> <u>Project Design Features (PDFs)</u>	Level of Significance After Mitigation
Biological Resources <u>CANDIDATE, SENSITIVE, AND SPECIAL STATUS SPECIES</u> - Implementation of the Project could result in a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status species, threatened or endangered in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Wildlife Service. Compliance with applicable regulatory requirements and implementation of the prescribed mitigation measure would reduce potentially significant impacts to a less than significant level.	Potentially Significant Impact	Mitigation Measure 4.3-1 Prior to impacts in least Bell's vireo occupied habitat (i.e., southern willow scrub and mule fat scrub), the Project Applicant/developer shall obtain regulatory permits by way of an authorization pursuant to FESA and CESA. On- and/or off-site replacement and/or enhancement of least Bell's vireo habitat shall be provided by the Project Applicant at a ratio no less than 2:1, in coordination with the regulatory permitting processes of the USFWS and CDFW. Off- site replacement may include, but is not limited to, the purchase of mitigation credits in an agency- approved off-site mitigation bank supporting least Bell's vireo. A Mitigation Plan approved by the USFWS and/or CDFW, as appropriate, shall be provided to the Manager, OC Planning Development Services prior to issuance of a grading permit.	Less Than Significant Impact
RIPARIAN HABITAT AND SENSITIVE NATURAL <u>COMMUNITIES</u> - Impacts on sensitive natural communities are considered less than significant given their diminished functions and values as habitat and the relative abundance of these vegetation communities throughout the region, much of which is protected in government preserves. Therefore, mitigation measures for impacts to sensitive communities in and of themselves are not warranted.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
<u>WETLANDS</u> - Implementation of the Project could result in substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means. However, compliance with applicable regulatory requirements and implementation of the prescribed	Potentially Significant Impact	Mitigation Measure 4.3-2 Prior to the issuance of a grading permit, the Project Applicant shall be required to obtain regulatory permits by way of a CWA Section 404 permit, a CWA Section 401 Water Quality Certification, and/or a California Fish and Game Code Section 1602 Streambed Alteration Agreement for impacts to jurisdictional features	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
mitigation measure would reduce potentially significant impacts in these regards to a less than significant level.		regulated by the USACE, RWQCB, and/or CDFW and provide documentation of same to the OC Planning <u>Development Services</u> Manager. The following measures may be required by the Agencies, unless required otherwise by the Agencies:	
		1. On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S." /"waters of the State" at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-project conditions (i.e., pre-project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.	
		2. On- and/or off-site replacement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-project conditions (i.e., pre-project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.	
<u>WILDLIFE MOVEMENT</u> - Implementation of the Project would potentially interfere with the regional movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. However, compliance with applicable regulatory requirements and implementation of the prescribed mitigation measure would reduce potentially significant impacts in these regards to a less than significant level.	Less Than Significant Impact	 Mitigation Measure 4.3-3 Prior to issuance of a grading permit, the Project Applicant shall demonstrate to the satisfaction of the Manager, OC Planning Development Services that the following requirements have been Included in the Project construction plan: 1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to 	Less Than Significant Impact

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
		nesting birds.	
		2. Any construction activities that occur during	
		the nesting season (February 15 to August 31 for	
		songbirds; January 15 to August 31 for raptors)	
		shall require that all suitable habitat be thoroughly	
		surveyed for the presence of nesting birds by a	
		qualified biologist before commencement of clearing. If any active nests are detected, a buffer of	
		at least 300 feet (500 feet for raptors), or as	
		determined appropriate by the biological monitor,	
		shall be delineated, flagged, and avoided until the	
		nesting cycle is complete as determined by the	
		biological monitor to minimize impacts.	
		<u>3. A qualified biologist shall survey for active bird</u>	
		nests or mammal burrows in all Project site areas	
		that could potentially be exposed to construction	
		noise levels exceeding 60 dBA. Where active bird	
		nests or mammal burrows are discovered, no	
		construction activities shall occur that would result	
		in noise levels exceeding 60 dBA at the active nest	
		or burrow location. Construction restriction areas shall be staked or fenced under the supervision of	
		the qualified biologist prior to the commencement	
		of construction activities during the breeding	
		season dates listed above.	

		Mitigation Measures and	Level of Significance
Issue Cultural Resources	Project Impact	Project Design Features (PDFs)	After Mitigation
HISTORICAL RESOURCES - No historic resources are located on the project site. As such, there is no potential for the Project to cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. No impact would occur in this regard.	No Impact	No mitigation measures are necessary.	No Impact
ARCHAEOLOGICAL RESOURCES - Implementation of the Project would not cause a substantial adverse change in the significance of a known archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines. However, there is potential for the Project to impact previously undiscovered archaeological resources during construction activities associated with the Project. This potentially significant impact would be reduced to a less than significant level with implementation of the prescribed mitigation measures.	Potentially Significant Impact	 Mitigation Measure 4.4-1 Prior to the issuance of any grading permit, the Applicant shall provide written evidence to the Manager, OC Planning Development Services, that the Applicant has retained a qualified archaeological monitor to conduct spot-check daily observations of construction excavations into younger Quaternary Alluvium during construction-related ground disturbing activities (i.e., grading and excavation) until the archaeological monitor determines further observations are not necessary based on soil conditions and presence/absence of archaeological resources. The spot-check observations shall target the flatter areas of the project site such as hilltops, ridge lines, and canyon bottoms, which are more conducive to retaining archaeological resources since such areas were prime locations for prehistoric occupation as compared to areas of steeper topography. Mitigation Measure 4.4-2 In the event that archaeological resources are unearthed during ground-disturbing activities, the archaeological monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the find so that the find can be evaluated. Work 	Less Than Significant Impact

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
		shall be allowed to continue outside of the vicinity	
		of the find. All archaeological resources unearthed	
		by Project construction activities shall be evaluated	
		by the archaeologist. The Applicant shall coordinate	
		with the archaeologist and the County to develop an	
		appropriate treatment plan for the resources to	
		reduce impacts to any significant resources to a less	
		than significant level. Treatment measures to be	
		considered first shall be avoidance or preservation	
		in place. If preservation or avoidance of the	
		resource is not appropriate, as determined by the	
		archaeologist and the County, then the resource	
		shall be removed from its location and appropriate	
		data recovery conducted to adequately recover	
		information from and about the archeological	
		resource. Treatment may include implementation	
		of archaeological data recovery excavations to	
		remove the resource or preservation in place. All	
		archaeological resources recovered shall be	
		documented on California Department of Parks and	
		Recreation Site Forms to be filed with the South	
		Central Coastal Information Center. The landowner,	
		in consultation with the archaeologist and the	
		County shall designate repositories in the event that	
		archaeological material is recovered.	
		Mitigation Measure 4.4-3 The archaeological	
		monitor shall prepare a final report at the	
		conclusion of archaeological monitoring. The report	
		shall be submitted by the Applicant to the County,	
		the South Central Information Center, and	
		representatives of other appropriate or concerned	
		agencies to signify the satisfactory completion of the	
		Project and required mitigation measures. The	
		report shall include a description of resources	

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
		unearthed, if any, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources. Mitigation Measure 4.4-4 If archaeological resources are encountered during implementation of the Project when the archaeological monitor is not present, ground-disturbing activities shall temporarily be redirected from the vicinity of the find <u>by the construction contractor</u> . The Applicant shall immediately notify a qualified archaeologist of the find. The archaeologist shall coordinate with the Applicant as to the immediate treatment of the find until a proper site visit and evaluation is made by the archaeologist. The Applicant shall then follow the procedures outlined in Mitigation Measure 4.4-2. The archaeologist shall also determine the need for full-time archaeological monitoring for any ground-disturbing activities in the area of the find thereafter and training of construction workers, as appropriate.	
PALEONTOLOGICAL RESOURCES/UNIQUE GEOLOGIC <u>FEATURE</u> - Implementation of the Project would not directly or indirectly destroy a known unique paleontological resource or site or unique geologic feature. However, there is potential for the Project to impact previously undiscovered paleontological resources at depth during construction excavations associated with the Project. This potentially significant impact would be reduced to a less than significant level with implementation of the prescribed mitigation measures.	Potentially Significant Impact	Mitigation Measure 4.4-5 Prior to issuance of any grading permit, the Applicant shall retain a qualified paleontologist <u>certified by the County of</u> <u>Orange, Development Services Department (County</u> <u>Property Permits)</u> who shall attend a pre- grading/excavation meeting and develop a paleontological monitoring program for excavations into sediments associated with the fossiliferous older Quaternary Alluvium, Yorba and Sycamore Canyon Members of the Puente Formation, and Quaternary landslides deposits. A qualified	Less Than Significant Impact

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
		paleontologist is defined as a paleontologist meeting the criteria established by the Society for Vertebrate Paleontology. The qualified paleontologist shall supervise a paleontological monitor who shall be present at such times as required by the paleontologist during construction excavations into the fossiliferous deposits mentioned above. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring shall be determined by the paleontologist and shall be based on the rate of excavation and grading activities, the materials being excavated, and the depth of excavation, and if	Arter Mitigation
		found, the abundance and type of fossils encountered. Mitigation Measure 4.4-6 If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation and, if necessary, salvage. At the paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Any fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles	

lssue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
Issue	Project Impact	 Project Design Features (PDFs) Paleontological Curation Center at the California State University, Fullerton. Accompanying notes, maps, and photographs shall also be filed at the repository. Mitigation Measure 4.4-7 The Paleontologist and/or paleontological monitor shall conduct sampling and screening of the underlying sediments at the project site for the presence or absence of microfossils. The monitor shall collect various samples (consisting of approximately 200 pounds of sediment) from the spoils piles, sidewalls, or bottoms of an exposed excavation pit across the project site and use wet- or dry-screening techniques off-site for the recovery of microfossils. If the sample yields an appropriate concentration of microfossils, a bulk sediment sample may be warranted. Mitigation Measure 4.4-8 Prior to the release of the grading bond, the paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the Applicant for approval by the Manager, OC Planning Development Services. In addition, the report shall be submitted to the Natural History Museum of Los Angeles County, and other appropriate or concerned agencies to signify 	After Mitigation
HUMAN REMAINS - Implementation of the Project would not disturb any known human remains, including those	Potentially Significant	 bind appropriate of concerned agencies to signify the satisfactory completion of the Project and required mitigation measures. Mitigation Measure 4.4-9 If human remains are encountered unexpectedly during implementation 	Less Than

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
interred outside of formal cemeteries. However, there is potential for the Project to impact previously undiscovered human remains at depth during construction excavations associated with the Project. This potentially significant impact would be reduced to a less than significant level with implementation of the prescribed mitigation measure.	Impact	Project Design readies (PDF3) of the Project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the land owner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the	Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
		descendants all reasonable options regarding the descendants' preferences for treatment.	
		Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.	
Geology and Soils		1	
<u>SEISMIC AND GEOLOGIC STABILITY HAZARDS</u> - Implementation of the Project could expose people or structures to fault rupture, strong seismic ground shaking, strong seismic-related ground failure, liquefaction, landslides and other ground failure hazards. However, compliance with applicable regulatory requirements and implementation of the prescribed mitigation measure would reduce potentially significant impacts in these regards to a less than significant level.	Potentially Significant Impact	Mitigation Measure 4.5-1 Prior to the issuance of <u>precise</u> grading permits unless noted as otherwise below <u>or otherwise agreed to by County's</u> <u>engineering geologist</u> , the Project Applicant/developer shall submit a final site specific, design-level geotechnical investigation prepared by a California-licensed professional engineering geologist and geotechnical engineer to the County of Orange Public Works Manager, Subdivision and Grading, or his/her designee and the County's registered geotechnical engineer or third-party registered engineer <u>engineering</u> <u>geologist</u> for review, approval and implementation pursuant to the final site specific, design-level geotechnical investigation as outlined below. The investigation shall comply with all applicable State and local code requirements, including the current building code in effect at the time of <u>precise</u> grading	Less Than Significant Impact

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
		permit issuance, and shall provide the following:	
		a) Prior to recordation of the final map, the	
		geotechnical evaluation shall identify the Whittier	
		Fault trace location, orientation, and frequency of	
		activity by subsurface investigations consisting of	
		boring and trenching activities. The fault trace shall	
		be mapped and based on the specific location of the	
		fault trace, the Project's proposed residences shall	
		be set back from the fault trace in accordance with	
		State setback requirements. The investigation and	
		report shall comply with the Alquist-Priolo	
		Earthquake Fault Zone Act. <u>As set forth in the letter</u>	
		from Tim Lawson, LGC Geotechnical, Inc. to Larry	
		Netherton re Location of Whittier Fault, Cielo Vista,	
		Tentative Tract Map No. 17341, County of Orange,	
		California, dated July 31, 2014, the primary trace of	
		the Whittier Fault is well-defined as a narrow fault	
		zone less than approximately 15 feet-wide along the	
		east-west drainage in the central portion of the	
		<u>Cielo Vista site. The geotechnical investigation</u>	
		required by this mitigation measure shall evaluate	
		the potential for additional fault traces south of this	
		zone and determine if any additional fault traces are	
		"active" (i.e., a fault that has ruptured the ground	
		surface within the Holocene Age (approximately the	
		last 11,000 years)) by subsurface investigations	
		consisting of trenching activities. Based on the	
		results of this geotechnical investigation, the	
		Project's proposed residences shall be set back from	
		the fault trace in accordance with State setback	
		requirements. The investigation shall comply with	
		the Alquist-Priolo Earthquake Fault Zone Act.	
		b) Conduct additional fault trenching as necessary	

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
		and as recommended in the letter from Tim Lawson,	
		LGC Geotechnical, Inc. to Larry Netherton re	
		Discussion of Potential Implications of Subsurface	
		Geological Features in the Southern Portion of Cielo	
		Vista, Tentative Tract Map No. 17341, County of	
		Orange, California, dated August 1, 2014, to confirm	
		that the fault traces identified in the area of FT-1	
		and FT-4 are not active. Should this area not be	
		determined to be active, a 75-foot setback zone	
		would be recommended for those lots along the	
		south side of the active Whittier Fault as delineated	
		per subsection (a), above, and, on the north side of	
		the active Whittier Fault, a setback zone ranging	
		from 50 feet on the west site of the site to	
		approximately 120 feet on the east side of the site.	
		In addition, a 10-foot overexcavation and	
		recompaction below pad grade for the proposed	
		structures in Lots 18 to 56 is recommended as well	
		as post-tensioned foundations. If faults observed in	
		FT-1 and FT-4 are determined to be active, precise	
		grading permits for Lots 20-52, 66-70, 83-89, 96-98	
		and 109-112 shall not be issued unless additional	
		studies are prepared and approved by the County's	
		registered engineering geologist confirming that	
		some or all of these lots are suitable for residential	
		construction.	
		b)c) Include a stability analysis consisting of down-	
		hole logging of large-diameter borings in the areas	
		of suspected landslides and other areas of potential	
		slope stability issues to characterize the slopes and	
		engineering analysis to determine what, if any,	
		stabilization measures are necessary. For potential	
		global and local slope failures, a factor of safety for	
		slope stability of equal to or greater than 1.5 and 1.1	

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
		for static and seismic loading conditions,	
		respectively, is the generally accepted minimum for	
		new residential construction. Where existing	
		and/or proposed slopes are found to have a factor	
		of safety lower than these minimum requirements,	
		the <u>development</u> slopes shall either need to be	
		setback from, or mitigation methods implemented	
		to improve the stability $of_{\underline{i}}$ the slopes to these	
		minimum levels. Slopes with less than the	
		minimum factor of safety must be sufficiently	
		setback so that at the location of the proposed	
		residential structures, at least the minimum	
		required factor of safety is achieved. Potential	
		methods of mitigation against slope stability issues	
		related to potentially unstable existing and	
		proposed slopes, including existing landslides,	
		typically include partial or complete landslide	
		removal, excavation and construction of earthen	
		buttresses, and/or shear keys. Landslide removal	
		requirements, the locations, depths, widths, and	
		lengths of the buttresses/shear keys shall be	
		determined via geotechnical investigation and	
		analysis during the design phase of the Project and	
		confirmed during site grading.	
		<u>c)d)</u> Conduct representative sampling and	
		laboratory expansion testing of the onsite soils to	
		identify the locations of on-site expansive or	
		<u>compressible</u> soils. Where <u>unsuitable</u> expansive	
		soils are found, site-specific design criteria (i.e.,	
		foundation design parameters) and remedial	
		grading techniques (i.e., primarily removal,	
		moisture conditions and recompaction of unsuitable	
		soils) shall be identified in the design-level	
		geotechnical report to remove <u>and/or mitigate</u>	

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
		Project Design reatures (PDFS)unsuitableexpansivesoilsthatcouldcreategeotechnical stability hazards to the Project.d)e)Determine structural design requirements asprescribedby the most current version of theCaliforniaBuildingCode, includingapplicableCounty amendments, to ensure that structures andinfrastructure can withstand ground accelerationsexpected from known active faults.Project plans for foundation design, earthwork, andsitepreparationshallincorporateall of themitigations in the site-specific investigations.TheCounty'sregisteredgeotechnicalengineerengineeringgeologistshall review the site-specificinvestigations, provideanyadditionalnecessarymeasures tomeetBuildingCoderequirements, andincorporateallapplicablerecommendationsfromtheinvestigationin thedesignplansand shallensure that all plans for theProject meet currentBuildingCoderequirements.	
<u>SOIL EROSION OR THE LOSS OF TOPSOIL</u> - Implementation of the Project could result in substantial soil erosion or the loss of topsoil. Compliance with applicable regulatory requirements would ensure impacts in these regards are less than significant.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
<u>EXPANSIVE SOILS</u> - Implementation of the Project could expose people or property to substantial risks associated with expansive soils. Implementation of the prescribed mitigation measure would reduce potentially significant impacts in this regard to a less than significant level.	Potentially Significant Impact	Refer to Mitigation Measure 4.5-1. No additional mitigation measures are necessary.	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
Greenhouse Gas Emissions			
<u>GENERATION OF GHGs</u> - Based on the applicable threshold of significance utilized by the County of Orange, Project implementation would not generate greenhouse gas emissions, either directly or indirectly, such that a significant impact on the environment would occur. A less than significant impact would occur in this regard.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
<u>CONSISTENCY WITH APPLICABLE GHG PLANS</u> - The Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. As such, a less than significant impact would occur in this regard.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
Hazards and Hazardous Materials			
<u>HAZARDOUS MATERIALS</u> - Implementation of the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
<u>RISK OF UPSET</u> - Implementation of the Project could 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. However, compliance with applicable regulatory requirements and implementation of the prescribed mitigation measures would reduce potentially significant impacts in these regards to a less than significant level.	Potentially Significant Impact	Mitigation Measure 4.7-1 Prior to the issuance of grading permits, the Project Applicant/developer shall submit the Soil Management Plan (SMP) prepared by a California-licensed professional geologist to the County of Orange Public Works Manager, Subdivision and Grading, or his/her designee for review, approval and implementation by the Project Proponent. The SMP shall include the protocol for the handling and/or disposal of impacted soils, as well as subsurface structures (i.e., underground storage tanks), that could potentially be encountered during construction activities. The SMP shall include protocols for: screening of soil	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
		exhibiting impacts, handling of volatile organic compounds (VOC) contaminated soils; stockpile management; vapor suppression and dust control, surface water protection, soil stockpile sampling; sampling frequency; and exporting of contaminated soils.	
		Mitigation Measure 4.7-2 During ground disturbing construction activities, should VOC contaminated soils be encountered as a result of the screening methods prescribed by the Soils Management Plan (refer to Mitigation Measure 4.7-1), ground disturbing construction activities shall be immediately halted. Ground disturbing activities shall not resume until a VOC mitigation plan in accordance with South Coast SCAQMD Rule 1166 has been reviewed and approved by the SCAQMD Executive Officer. The VOC mitigation plan shall set forth requirements to control the emission of VOCs from excavating, grading, handling and treating VOC-contaminated soil consistent with SCAQMD Rule 1166.	
		Mitigation Measure 4.7-3 Prior to the issuance of grading permits, a qualified environmental consultant shall prepare and submit a site-specific health and safety plan (HASP) to the County of Orange Public Works Manager, Subdivision and Grading, or his/her designee for review and approval. The HASP shall be implemented in conjunction with the Soils Management Plan (refer to Mitigation Measure 4.7-1) when handling soil with suspected or confirmed chemical of concern (COC) impacts. At a minimum, the HASP shall identify the potential COCs and/or other hazards of concern and establish guidelines and/or procedures	

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
		for controlling/minimizing exposures to potential COCs/hazards, including the appropriate level(s) of personal protective equipment (PPE). The general contractor shall be responsible for non-COC-related health and safety concerns associated with the excavation (e.g., excavation stability, stockpile placement, heavy equipment operation).	
		Mitigation Measure 4.7-4 After decommissioning of the oil facilities on the project site, a qualified environmental consultant shall inspect the abandoned wells and perform a review of well decommission documentation. Also, DOGGR shall be contacted to perform a "Construction Site Review" of the abandoned wells on the subject site to determine whether the wells have been abandoned to current standards, as well as verify that adequate distances of wells to proposed structures is proposed. If these are not adequate, the siting of proposed structures and/or proper measures to well features shall be conducted to the satisfaction of DOGGR. The results of the reviews shall be provided to the RWQCB, OCFA, DOGGR, and OCHCA.	
		Mitigation Measure 4.7-5 The Project Applicant shall retain a qualified environmental consultant to profile the unidentified substance in the unlabeled 55-gallon drum and facilitate its disposal in accordance with regulatory guidelines, including DOGGR, RWQCB, OCFA, OCHCA and/or any other agency with jurisdiction over such disposal measures. If soil staining occurs around and/or beneath the container and the contents of the drum	

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
		are determined to be hazardous, soil sampling shall be performed to determine if impacts to the near surface soils have occurred. If so, soil shall be removed in accordance with the measures included in the Project's SMP to be implemented pursuant to Mitigation Measure 4.7-1.	
		Mitigation Measure 4.7-6 Prior to grading activities and concurrent with decommissioning of the on-site oil facilities, the Project Applicant shall retain a qualified environmental consultant/California registered engineer and/or geologist with demonstrated proficiency in the subject of soil gas investigation and mitigation to prepare a combustible gas/methane assessment study to the OCFA for review and approval, prior to grading activities. The study shall be prepared to meet the combustible soil gas hazard mitigation requirements set forth in OCFA's Combustible Soil Gas Hazard Mitigation Guideline C-03. Prior to conducting the gas/methane assessment study, the site drill locations shall be pre-approved by the OCFA as to ensure approval of the report. Based on the results of the study, methane mitigation measures, which may include, but are not limited to, the use of vapor barriers and/or sealed utility conduits, and other mitigation measures shall be identified in a mitigation plan for implementation during construction and operation of the Project. The mitigation plan shall be subject to review and approval by the OCFA prior to grading activities.	

Issue	Project Impact	Mitigation Measures <u>and</u> <u>Project Design Features (PDFs)</u>	Level of Significance After Mitigation
EXISTING ON-SITE HAZARDS - Although the Project would be located on a site that could include hazardous materials as a result of past and current on-site oil production activities, implementation of the applicable PDFs, the prescribed mitigation measures and compliance with applicable regulatory requirements would ensure that no significant hazard occur to the public or the environment.		Refer to Mitigation Measures 4.7-1 to 4.7-6. No additional mitigation measures are necessary. <u>The following PDFs would also ensure impacts in</u> <u>this regard are less than significant: PDF 7-1 to 7-8.</u>	
<u>EMERGENCY RESPONSE PLAN</u> - Implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
<u>WILDLAND FIRES</u> - Implementation of the 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. However, compliance with applicable regulatory requirements and implementation of the project design features and prescribed mitigation measures would reduce potentially significant impacts in these regards to a less than significant level.	Potentially Significant Impact	Mitigation Measure 4.7-7 Areas within Planning Area 1 (including, but not limited to areas located adjacent to lots 40, 41, 49, 50, 85, 86, and 87) not capable of providing a typical 170-foot fuel modification zone, shall increase the irrigated zone(s) to 100 feet and shall provide six-foot high block walls/radiant heat walls constructed of block/tempered glass over block at the bottom of the fuel modification zone. The block walls/radiant heat walls shall be placed where the fuels below the structure are not of continuous nature and not in alignment with the slope and Santa Ana winds and/or the predominant winds. The block walls/radiant heat walls shall be perpendicular to the wind, but parallel with the slope. In most cases, the block walls/radiant heat walls shall be located at the property line/base of the irrigated zone and down slope from the native vegetation. Increased irrigated zones and block walls/radiant heat walls design and location shall be subject to the review	Less Than Significant Impact

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
		and approval of the OCFA, prior to issuance of	
		certificates of use and occupancy.	
		Mitigation Measure 4.7-8 Structures with	
		deficient fuel modification lots 39-42, 49-52, 69, 70,	
		and 85-88 shall be protected with NFPA 13-D	
		Automatic Fire Sprinklers including the attics and	
		small spaces. Lots 96-112 shall be protected with	
		NFPA 13-D Automatic Fire Sprinklers including	
		attics and small spaces to mitigate for roadway	
		access longer than 800-feet. Such features shall be	
		indicated on construction drawings prior to	
		issuance of a building permit.	
		Mitigation Macauna 47.0 Eval modification	
		Mitigation Measure 4.7-9 Fuel modification	
		easements for maintaining the fuel modification areas must list the OCFA as an authorized user.	
		These easements are recorded as part of the	
		mapping process. Prior to recordation of the	
		CC&R's, OCFA must approve language allowing	
		OCFA access to HOA owned property for the	
		purpose of inspecting the fuel modification, plant	
		palette, and added improvements to ensure	
		maintenance of the fire safe zones. In addition,	
		CC&R's shall provide landscaping and maintenance	
		guidelines to ensure that each residential lot is fire-	
		safe and list allowable improvements such as patio	
		structure, play equipment construction, and fencing	
		materials. The CC&R's shall be recorded prior to	
		issuance of certificate of use and occupancy.	
		Mitigation Measure 4.7-10 For the safety of	
		construction personnel, neighboring homes, and	
		firefighting safety in the wildland areas, the Project	
		Applicant, under the supervision of the Fire Chief,	

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
		 and prior to issuance of building permits shall have completed the Project roadways in accordance with applicable OCFA and/or County design standards in the area prior to building permit issuance. Mitigation Measure 4.7-11 Prior to issuance of building permits, a service letter from the water agency serving the project area shall be submitted and approved by the OCFA water liaison describing the water supply system, pump system, and fire flow and lists the design features to ensure fire flow during a major wildfire incident. <u>The following PDFs would also ensure impacts in this regard are less than significant: PDF 7-9 to 7-14.</u> 	
Hydrology and Water Quality			
<u>WATER QUALITY</u> - Construction and operation of the Project would comply with all applicable regulatory requirements regarding water quality. Compliance with applicable regulatory requirements and implementation of the project design features, including Best Management Practices (BMPs) as part of the Project's Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP), would ensure that construction and operational water quality impacts are less than significant.	Less Than Significant Impact	No mitigation measures are necessary. <u>The following PDFs would ensure impacts in this</u> <u>regard are less than significant: PDF 8-1 to 8-3.</u>	Less Than Significant Impact
DRAINAGE PATTERNS AND STORMWATER DRAINAGE SYSTEM - The Project would be designed to maintain existing drainage patterns of the site and area. Post development runoff would be consistent with applicable regulatory requirements such that the post-project site would not result in significant hydrology impacts	Less Than Significant Impact	No mitigation measures are necessary. <u>The following PDFs would ensure impacts in this</u> <u>regard are less than significant: PDF 8-3 to 8-5.</u>	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> <u>Project Design Features (PDFs)</u>	Level of Significance After Mitigation
downstream such that flooding or erosion would occur on- or off-site. Furthermore, the Project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage. Compliance with applicable regulatory requirements and implementation of the project design features would ensure impacts regarding changes in drainage patterns and stormwater flows are less than significant.			
<u>GROUNDWATER SUPPLIES</u> - The Project would be served by a municipal water supply. The additional impervious surfaces created by the Project would not result in a substantial change in groundwater infiltration rates. Furthermore, there would be no noticeable change in any aquifer volume or a lowering of the local groundwater table due to a change in groundwater recharge rates as a result of Project implementation. Thus, the Project would have a less than significant impact with respect to groundwater supplies or groundwater recharge.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
Land Use and Planning			
<u>CONSISTENCY WITH APPLICABLE LAND USE PLAN,</u> <u>POLICY, OR REGULATION/COMPATIBILITY WITH</u> <u>SURROUNDING USES</u> - Implementation of the Project, with approval of the requested discretionary actions, would be consistent with the applicable goals, objectives and policies within the County's General Plan and Zoning Code. Further, the analysis conducted in this EIR has concluded that with implementation of the prescribed mitigation measures, the Project would not result in significant and unavoidable physical impacts on the environment. As such, less than significant impacts due to inconsistencies with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project, including conflicts with the	Less Than Significant Impact	No <u>land use</u> mitigation measures are necessary. <u>However, it acknowledged that all of the PDFs and</u> <u>mitigation measures identified in the EIR would</u> <u>ensure that less than significant physical impacts</u> <u>occur on the environment.</u>	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> <u>Project Design Features (PDFs)</u>	Level of Significance After Mitigation
existing zoning for agricultural use.			
Noise <u>NOISE GENERATION</u> - Implementation of the Project could result in temporary increases in ambient noise levels and expose people to temporary, intermittent, and moderate to high-level noise levels. However, as the Project would comply with the County of Orange Noise Ordinance, construction noise impacts would be less than significant. Nonetheless, mitigation measures have been prescribed to minimize construction noise at the nearby noise sensitive residential land uses. The Project's residential would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the Project. However, operation of oil well facilities could result in potentially significant noise generation. Thus, mitigation has been prescribed to ensure that noise from oil well operations would result in less than significant impacts to Project residents. With implementation of the prescribed mitigation measure, long-term operational noise impacts would be less than significant.	Potentially Significant Impact	 Mitigation Measure 4.10-1 During all project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site. All operations shall comply with the County of Orange Codified Ordinance Division 6 (Noise Control). The contractor shall produce evidence that the measures are in place prior to issuance of any grading permits and as approved by the County of Orange Manager, Planning Services. Mitigation Measure 4.10-2 The construction contractor shall locate equipment staging in areas that would create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction. All operations shall comply with the County of Orange Codified Ordinance Division 6 (Noise Control). Prior to issuance of any grading permits the County of Orange Manager, Planning Services shall approve the location of the staging area. Mitigation Measure 4.10-3 The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. Haul routes shall be selected so that trips passing sensitive land uses or residential dwellings will be 	Less Than Significant Impact

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
		minimized. Further, haul routes shall be located to	
		avoid concurrent use of haul routes from other	
		related projects where sensitive receptors are	
		located along such routes. Haul routes shall be	
		approved by the Manager, OC Planning	
		<u>Development</u> Services prior to the issuance of any	
		grading permits.	
		Mitigation Measure 4.10-A (Supplemental	
		<u>Construction Noise Mitigation Measure)</u> -	
		Construction noise reduction methods such as	
		shutting off idling equipment, maximizing the	
		distance between construction equipment staging	
		areas and occupied residential areas, and use of	
		electric air compressors and similar power tools,	
		rather than diesel equipment, shall be used where	
		feasible. Unattended construction vehicles shall not	
		idle for more than 5 minutes when located within	
		500 feet from residential properties.	
		Mitigation Measure 4.10-B (Supplemental	
		<u>Construction Noise Mitigation Measure)</u>	
		Construction hours, allowable workdays, and the	
		phone number of the job superintendent shall be	
		clearly posted at all construction entrances to allow	
		surrounding property owners and residents to	
		contact the job superintendent if necessary. In the	
		event the County receives a complaint, appropriate	
		corrective actions shall be implemented.	
		Mitigation Measure 4.10-C (Supplemental	
		<u>Construction Noise Mitigation Measure)</u>	
		Two weeks prior to the commencement of	
		construction, notification must be provided to	
		surrounding land uses within 500 feet of a project	
		site disclosing the construction schedule, including	

Laura -	Ducient lunns at	Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)the various types of activities that would be occurring throughout the duration of the construction period. This notification shall give a contact phone number for any questions or complaints. All complaints shall be responded to in a method deemed satisfactory by the County of Orange.Mitigation Measure 4.10-4 of the services of a qualified acoustical engineer with expertise in design of sound isolations to ensure that operation of the on-site oil well facilities are within County's exterior noise limits at the property line of the nearest proposed residential lot. Noise measures may include, but are not limited to, screening of oil facilities, motor dampening, and/or nighttime shutdown so as to meet the County's noise requirements. Screening, if necessary, could include landscaping and/or sound wall. The acoustics analysis of the oil well facilities shall be reviewed and approved by the Manager, OC Planning Development Services, or his designee prior to issuance of building permits for the oil well facilities.PDF 10-1 would also ensure impacts in this regard are less than significant.	After Mitigation
<u>GROUNDBORNE VIBRATION AND NOISE</u> - Implementation of the Project would not result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Impacts would be less than significant in this regard.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
Population and Housing			
<u>POPULATION GROWTH</u> - Implementation of the Project would not induce substantial population growth in an area, either directly or indirectly. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
Public Services			
PROVISION OF PUBLIC SERVICES - Implementation of the Project could result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, the need for new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire, police, schools, or other public service facilities. However, compliance with applicable regulatory requirements and implementation of the project design features and prescribed mitigation measures would reduce potentially significant impacts in these regards to a less than significant level.	Potentially Significant Impact	 Fire Protection Services Refer to Mitigation Measures 4.7-1 through 4.7-11; and Mitigation Measure 4.15-1. The following mitigation measures are also prescribed. Mitigation Measure 4.12-1 Prior to issuance of a grading permit, the Project Applicant shall enter into a Secured Fire Protection Agreement with the OCFA. This Agreement shall specify the developer's pro-rata fair share funding of capital improvements and equipment, which shall be limited to that required to serve the project site Project, to the satisfaction of OCFA. Mitigation Measure 4.12-2 All new traffic signals on public access ways and all electric operating gates installed for the Project shall include the installation of optical preemption devices to the satisfaction of the OCFA and the County of Orange Manager, Subdivision and Grading Services. Police Protection Services Mitigation Measure 4.12-2B Prior to issuance of a grading permit, the Project Applicant shall enter into a secured Law Enforcement Services 	Less Than Significant Impact

		Mitigation Measures and	Level of Significance
Issue	Project Impact	Project Design Features (PDFs)	After Mitigation
		Agreement with the Orange County Sheriff's	
		Department. This Agreement shall specify the	
		developer's pro-rata fair share funding of capital	
		improvements and equipment, which shall be	
		limited to serve the project site.	
		The following PDFs would also ensure impacts in	
		this regard are less than significant: PDF 7-1 to 7-	
		<u>14.</u>	
		School Facilities	
		Mitigation Measure 4.12-3 Prior to issuance of	
		building permits and pursuant to Section 65995 of	
		the CGC, the Project Applicant shall pay the required	
		SB 50 (Section 65995 of the CGC) mitigation fees to	
		the PYLUSD as full mitigation for potential Project	
		impacts to schools.	
		School Safety - Short-Term Construction Impacts	
		Please refer to Mitigation Measure 4.14-1. The	
		following mitigation measures are also prescribed.	
		Mitigation Measure 4.12-4 During construction,	
		the Project's Construction Staging and Traffic	
		Management Plan (see Mitigation Measure 4.14-1)	
		shall include a provision for on-going	
		communication shall be maintained with school	
		administration at the Travis Ranch School, <u>Fairmont</u>	
		Elementary School and YLHS, providing sufficient	
		notice to forewarn students and parents/guardians	
		when existing pedestrian and vehicle routes to the	
		school may be impacted in order to ensure school	
		traffic and pedestrian safety. This mitigation	

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
		measure to be verified by the Manager, OC Planning <u>Development Services</u> in quarterly compliance certification reports submitted by project contractor.	
		Mitigation Measure 4.12-5 In order to ensure school traffic and pedestrian safety, during construction, construction vehicles shall not haul past the Travis Ranch School, <u>Fairmont Elementary School</u> and YLHS, except when school is not in session. If that is infeasible, construction vehicles shall not haul during school arrival or dismissal times. This mitigation measure to be verified by the Manager, OC <u>Planning Development Services</u> in quarterly compliance certification reports submitted by project contractor.	
		Mitigation Measure 4.12-6 During construction, c rossing guards shall be provided by the Project Applicant in consultation with the Travis Ranch School, <u>Fairmont Elementary School</u> and YLHS, as appropriate, when safety of students may be compromised by construction-related activities at impacted school crossings in order to ensure school pedestrian safety. This mitigation measure to be verified by the Manager, OC <u>Planning Development</u> <u>Services</u> in quarterly compliance certification reports submitted by project contractor.	
		Mitigation Measure 4.12-7 During construction, temporary traffic control, signage, and/or flaggers shall be present on Via Del Agua and Aspen Way to direct vehicular traffic and pedestrians around the construction site in order to ensure school traffic and pedestrian safety. This mitigation measure to	

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
		be verified by the Manager, OC Planning <u>Development Services</u> in quarterly compliance certification reports submitted by project contractor. Libraries Mitigation Measure 4.12-8 Prior to the issuance of building permits, the Project Applicant/developer shall comply with the development fee program for OCPL as provided in Sections 7-9-700 through 7-9-713 of the Codified Ordinances of the County of Orange and/or the development fee program for the City of Yorba Library system, to be determined in consultation with City of Yorba Linda and County of Orange Planning Staff. <u>Mitigation Measure 4.12-8(b)</u> Prior to issuance of a building permit, the Project Applicant shall enter into a capital facilities and equipment agreement with the Orange County Public Library and/or the Yorba Linda Public Library. This <u>Agreement shall specify the developer's pro-rata</u> fair share funding of capital improvements and equipment, which shall be limited to serve the project site.	
Recreation			
<u>PARK AND RECREATION FACILITIES</u> - Implementation of the Project would incrementally increase the use of existing parks and other recreational facilities in the project vicinity. Potentially significant impacts to parks and recreation facilities created by the demand of the Project would be reduced to a less than significant level with implementation	Potentially Significant Impact	Mitigation Measure 4.13-1 Prior to issuance of certificates of occupancy, the Project Applicant shall pay local park fees pursuant to the determining formula contained in the County Local Park Code, and meeting the City standards for the provision of local parks. The fees shall be paid to the OC Parks.	Less Than Significant Impact.

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
of the prescribed mitigation measures.		Such fees shall be utilized for improvements to an existing park or acquisition of land for a new park, or a combination of both to the benefit of the northeastern Yorba Linda community near the project site.	
		Mitigation Measure 4.13-2 Prior to issuance of grading permits, the Project Applicant shall coordinate with the City of Yorba Linda <u>Parks and Recreation</u> Department <u>of</u> Recreation and <u>Community Services Department</u> and OC Parks in order to identify potential planned trail alignments through the project site, as identified in the City of Yorba Linda's Riding, Hiking and Bikeway Trail Component Map. Once the trail alignments are defined by the City and/or County, the alignments shall be dedicated by the Project Applicant, to the City <u>or the County</u> either in fee or by an access and maintenance easement.	
Transportation/Traffic		1	
<u>CIRCULATION SYSTEM</u> - Implementation of the Project		Construction Impacts	
would contribute traffic to the roadway network during construction and operational activities which could result in potentially significant traffic impacts. Potentially		Refer to Mitigation Measures 4.12-4 to 4.12-7. The following mitigation measure is also prescribed.	
significant construction and operation traffic impacts would be reduced to a less than significant level with implementation of the prescribed mitigation measures.	Potentially Significant Impact	Mitigation Measures 4.14-1 Prior to the start of construction, the Project Applicant, in coordination with the County of Orange, shall devise a Construction Staging and Traffic Management Plan to be implemented during construction of the Project. The Construction Staging and Traffic Management Plan shall identify all traffic control measures, signs, and delineators to be implemented by the construction contractor through the duration of construction activities associated with the	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
		Project. The Plan shall also consider construction traffic and associated construction traffic noise from nearby simultaneous construction activities and pedestrian safety related to school routes. The Construction Staging and Traffic Management Plan shall be subject to final approval by the County of Orange Public Works Department.	Fire: mitgation
		Operational Impacts	
		Mitigation Measure 4.14-2 A traffic signal shall be installed prior to issuance of building the first <u>occupancy</u> permits, or as otherwise determined appropriate through consultation with the City of Yorba Linda, for the Project at the intersection of Via del Agua and Yorba Linda Boulevard. The Project Applicant shall pay the City of Yorba Linda its fair share cost toward installation of a traffic signal, install the traffic signal, or pay the full cost of the signal installation, with the latter two alternatives subject to reimbursement, as agreed to by the Project Applicant and the City of Yorba Linda.	
<u>CONGESTION MANAGEMENT</u> - Implementation of the Project would not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. This impact would less than significant.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
TRAFFIC HAZARDS - Implementation of the Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections). This impact would less than significant.	Less Than Significant Impact	No mitigation measures are necessary. <u>The following PDFs would ensure impacts in this</u> <u>regard are less than significant: PDF 14-1 to 14-3.</u>	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> <u>Project Design Features (PDFs)</u>	Level of Significance After Mitigation
<u>EMERGENCY ACCESS</u> - Implementation of the Project would not result in inadequate emergency access. This impact would less than significant.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
<u>ALTERNATIVE MODES OF TRANSPORTATION</u> - Implementation of the Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. This impact would less than significant.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
Utilities and Service Systems			
<u>WASTEWATER TREATMENT REQUIREMENTS</u> - Implementation of the Project would not exceed wastewater treatment requirements of the Santa Ana Regional Water Quality Control Board. Thus, a less than significant impact would occur in this regard.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
<u>WASTEWATER TREATMENT CAPACITY</u> - The Project's wastewater demand would be met by the Yorba Linda Water District and the Orange County Sanitation District wastewater system and treatment facilities. Thus, a less than significant impact would occur in this regard.	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact
WASTEWATER AND WATER INFRASTRUCTURE/ WATER SUPPLY - Implementation of the Project would not require the construction of new wastewater treatment facilities or expansion of existing off-site facilities, but could would require new off-site water infrastructure facilities. Implementation of the prescribed mitigation measures would reduce the Project's potentially significant impacts regarding the availability of supporting water infrastructure to a less than significant level. Further, the Project would have sufficient water supplies available to	Potentially Significant Impact	Refer to Mitigation Measure 4.7-11. The following mitigation measure is also prescribed. Mitigation Measure 4.15-1 To address the Project's need for water storage, the Project Applicant shall pay a fair-share cost to the YLWD for infrastructure improvements identified in the Northeast Area Planning Study that are required to support the Cielo Vista Project. The payment shall reflect a proportional fair-share of the costs	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> Project Design Features (PDFs)	Level of Significance After Mitigation
serve the Project from existing entitlements and resources. Thus, impacts regarding water supply would be less than significant.		attributable to the Cielo Vista Project toward improvements YLWD has proposed that include construction of facilities which directly benefit and are needed for capacity and conveyance at the project site as determined by District Staff. No grading permits shall be issued for the Project until these improvements are implemented by YLWD and are operational to the satisfaction of the OCFA, unless otherwise determined acceptable by the YLWD and OCFA. <u>The following PDFs would ensure impacts in this</u> <u>regard are less than significant: PDF 15-1 to 15-4.</u>	
STORMWATER FACILITIES - Implementation of the Project could require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. However, compliance with applicable regulatory requirements and implementation of the prescribed mitigation measures would reduce potentially significant impacts in these regards to a less than significant level.	Potentially Significant Impact	As discussed in Section 4.8, <i>Hydrology and Water</i> <i>Quality</i> , the Project would include new on-site stormwater drainage facilities that would be constructed in accordance with applicable regulatory requirements. Further, no new off-site storm drain facilities would be required as part of the Project. Environmental impacts associated with development of the Project, including on-site drainage facilities have been evaluated throughout this document. As concluded in this document, all potentially significant impacts associated with development of the Project, including on-site stormwater drainage facilities, would be less than significant after implementation of the prescribed mitigation measures. Therefore, impacts would be less than significant in this regard.	Less Than Significant Impact
<u>SOLID WASTE DISPOSAL</u> - The Project would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs. Thus, a less than significant impact would occur regarding	Less Than Significant Impact	No mitigation measures are necessary.	Less Than Significant Impact

Issue	Project Impact	Mitigation Measures <u>and</u> <u>Project Design Features (PDFs)</u>	Level of Significance After Mitigation	
landfill capacity.				
<u>COMPLIANCE WITH SOLID WASTE REQUIREMENTS</u> - The Project would comply with applicable federal, state, and local statutes and regulations related to solid waste. Thus, a less than significant impact would occur in this regard.	Less Inan Significant	No mitigation measures are necessary.	Less Than Significant Impact	

CHAPTER 2.0, PROJECT DESCRIPTION

1. Page 2-2. Modify 2nd paragraph with the following changes:

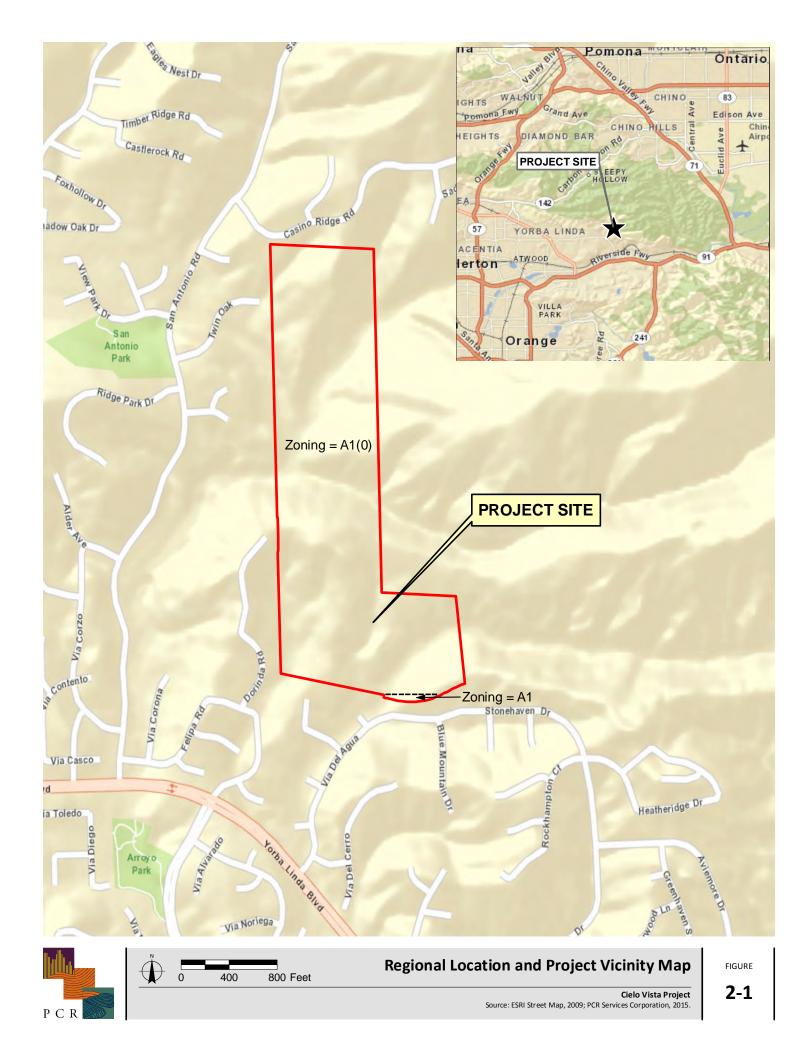
<u>A branch of tThe</u> Whittier Fault <u>Rupture Hazard</u> Zone traverses the project site in an east-west direction. The fault zone is <u>located within traverses through a portion of</u> the open space area of the Project<u>, as well as through some residential lots within Planning Areas 1 and 2 (refer to Figure 4.5-1 in Section 4.5, *Geology and Soils*). The Whittier Fault trace traverses only through a portion of the <u>Project's open space and some residential lots within Planning Area 1</u>. In addition, a potential ancient landslide exists along the primarily north-west facing slope located within the northerly portion of the project site. As discussed below, this geologic feature lies within the Project's open space area and would not be affected by proposed development.</u>

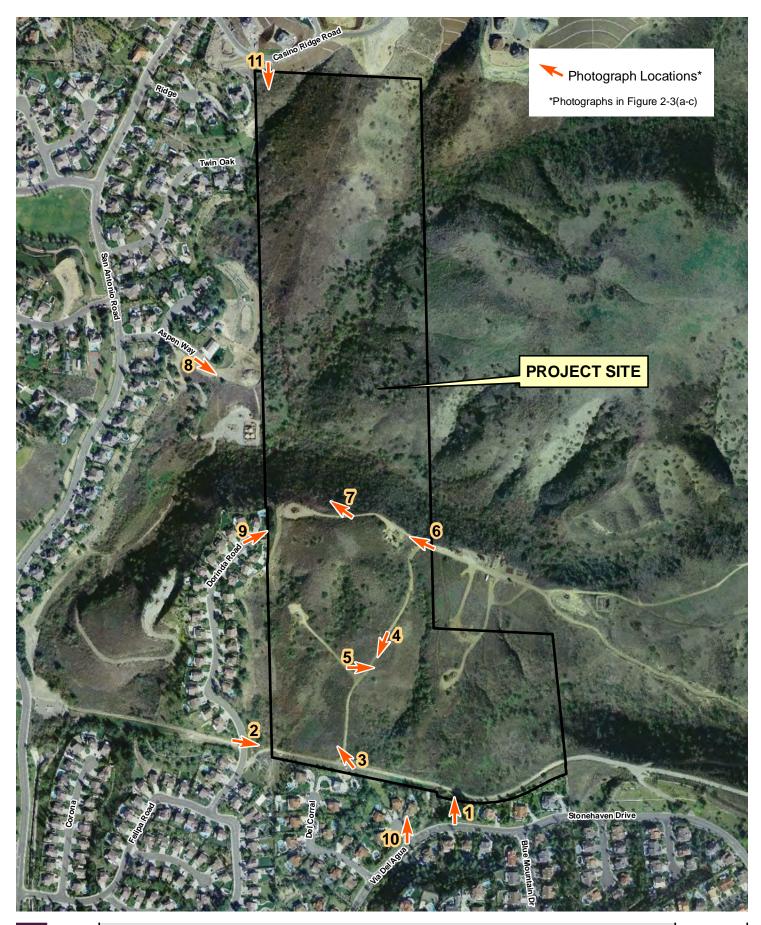
2. Page 2-2. Modify the last paragraph with the following changes:

The Orange County General Plan designates approximately 41 acres of the project site as Suburban Residential "1B", which permits development of residential land uses at a density of 0.5-18 dwelling units per acre, and approximately 43 acres of the project site as Open Space (5). The entire project site is <u>mostly</u> zoned A1(O) – General Agricultural with Oil Production Overlay, with a small area along the southernmost boundary zoned A1 – General Agriculture (see Figure 2-1), per the Orange County Zoning Map. The project site is also within the City of Yorba Linda Sphere of Influence (SOI). The City of Yorba Linda General Plan indicates that the SOI is representative of the long-term, probable future physical boundaries and service area of the City. The Project Applicant intends to may seek annexation to the City in the future through an annexation agreement to be negotiated with the City prior to issuance of building permits.

3. Page 2-3 and 2-4. Modify Figures 2-1 and 2-2 to illustrate correctly illustrate southern project site boundary. Figure 2-1 also shows the on-site zoning designations.

The revised Figures 2-1 and 2-3 are shown on the following pages. Figure 2-1 has been revised to illustrate the on-site County zoning designations. The southern boundary in both figures has been revised to include APN 351-852-05, a 50-foot wide parcel spanning the easterly portion of the southern project site boundary. This parcel was inadvertently omitted from the Draft EIR's exhibits, but was accounted for in the Project impact analysis throughout the EIR. The building footprints and lots proposed by the Project would remain as presented in the Draft EIR. This parcel would be subject to applicable fuel modification requirements. No significant revisions to the EIR text/analysis due to the graphical error are necessary. Because the boundary revision does not affect the analysis, mitigation measures or impact conclusions presented in the Draft EIR, further revisions to the figures in the Draft EIR would not provide meaningful data or insight regarding the significance of the impacts evaluated in the Draft EIR. Accordingly, further revisions to the figures in the Draft EIR are not necessary.







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350

700 Feet

Aerial Photograph FIGURE

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Cielo Vista Project Source: ESRI Street Map, 2009; PCR Services Corporation, 2015. 2-2

4. Page 2-10. Modify 2nd paragraph with the following changes:

Implementation of the Project would require approval of a General Plan Amendment by the County of Orange Board of Supervisors for 6.4 acres comprising Planning Area 2 to change the General Plan Land Use designation for this portion of the site from Open Space (5) to Suburban Residential (1B). The Project would also require approval of a zone change by the County of Orange Board of Supervisors for Planning Area 1 from <u>A1 and</u> A1(0) to R-1 and R-1(0) and a zone change for Planning Area 2 from A1(0) to R-1, Single Family Residence District, permitting development of single family detached residential dwellings on minimum 7,500 square foot lots.

5. Page 2-13. Modify last paragraph with the following changes:

Street "A" would serve as the access roadway to Planning Area 1 and extend approximately 150 feet north from a connection at Via del Agua to the southerly boundary of the site. Within the project site, Street "A" would extend north to intersect with Street "B." Street "B" forms the backbone local street for Planning Area 1 extending east to west and north to south. Streets "A" and "B" are planned with a total right of way of 56 feet and include a 40-foot wide travel area and a 4-foot sidewalk separated from the street by a 4-foot wide landscaped parkway between the curb and sidewalk on both sides of the street. <u>Street "A" will not allow parking and will be signed "No Stopping at Any Time."</u> Street "B" would provide for parking on both sides of the street. The design for Streets "A" and "B" is illustrated in Figure 2-7.

6. Page 2-17. Modify Figure 2-8. The reference to OCEMA has been changed to OCPWD.

See figure on page below.

7. Page 2-22. Modify 2nd paragraph with the following changes:

Potable Water. The project site is within the service area of the Yorba Linda Water District (YLWD). Points of connection for water utilities that would serve the Project exist in Aspen Way and Via Del Agua. On-site water facilities planned for the Project include a system of 8-inch-diameter mains within local streets connecting to existing 8-inch-diameter mains located within Via Del Agua and Aspen Way. Section 4.15, *Utilities and Service Systems*, of this EIR includes a detailed discussion of the Project's proposed water facilities plan. As discussed therein, the YLWD recently completed the Northeast Area Planning Study which identified water infrastructure improvements/upgrades to occur in the project area vicinity, some of which would support the Project. The improvements, which are expected to include water tanks (or water reservoirs), new or expanded water lines, pumping facilities and upgrades to booster stations, would be designed and constructed by YLWD the developer. Although the improvements would occur within the YLWD Northeast Planning Area, and could include improvements such as water tanks on or proximate to the Cielo Vista project site, the specific locations, designs, and extent of the improvements are not known. Once the facilities are further planned and designed, YLWD would evaluate the potential for the construction or operation of these facilities to result in significant impacts.

8. Page 2-23. Modify the paragraph titled" Off-Site Improvements" with the following changes:

<u>*Off-Site Improvements.*</u> The Project would include minor improvements<u>, such as paving and landscaping</u>, within the right-of-way in Via Del Agua and Aspen Roads near the Project entrances to provide access to the project site.

9. Pages 2-27. Modify Table 2-2, *Cielo Vista Conceptual Plant Palette*, with the following changes:

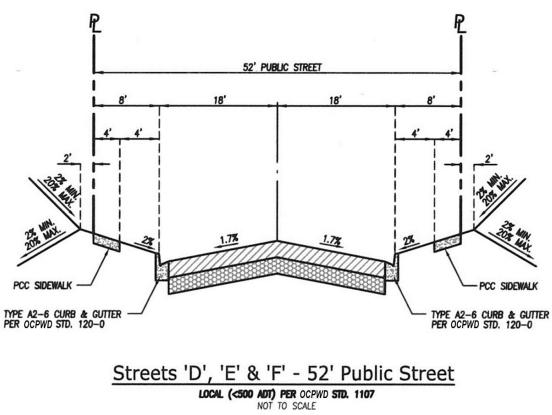
Table 2-2

Cielo Vista Conceptual Plant Palette

Scientific Species Name	Common Name
Trees	
Agonis Flexuosa	Peppermint Tree
Arbutus 'Marina'	Arbutus
Callistemon viminalis	Weeping bottlebrush
Geijera parviflora	Australian Willow
Lagerstroemia indica (mildew resistant hybrids)	Crape Myrtle
Loshostemon Lophostemon confertus	Brisbane Box
Melaceca <u>Melaleuca</u> spp.	Melaleuca
Olea europaea 'Wilsonii'	Fruitless Olive
Quercus ilex	Holly Oak
Pinus spp.	Pine
Rhus Landea <u>lancea</u>	African Sumac
Schinus Molle	California Pepper Tree

10. Page 2-32. Modify PDF 1-5 with the following changes:

PDF 1-5: As shown in the *Conceptual Landscape Plan (*Figure 2-11 and Table 2-2), landscaped areas or natural open space areas would be located adjacent to existing residential development to serve as natural buffers between existing residential neighborhoods and proposed homes. The plant palette would include native and appropriate non-native drought tolerant trees, groundcovers and shrubs that would be compatible with the existing native plant communities found within the site. The landscape design would emphasize the planting of long-lived plant species that are native to the region or well adapted to the climatic and soil conditions of the area. In addition, any invasive non-native species that appears on the California Invasive Plant Council (Cal-IPC) list of invasive species would be excluded from the landscape plan plant palette. (This PDF to be verified prior to issuance of a building permit by the Manager, OC Planning Development Services.)





Sections of Local Streets D, E and F

FIGURE 2-8

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11. Page 2-35. Modify PDF 7-13 with the following changes:

PDF 7-13: The Project would incorporate a landscape plan that utilizes a plant palette consisting of fire resistant plants, native and appropriate non-native drought tolerant species in accordance with OCFA guidelines. <u>In addition, long-term maintenance responsibilities would remove from all fuel modification zones any invasive non-native species that appear on the California Invasive Plant Council (Cal-IPC) list of invasive species to prevent these from becoming established. (This PDF to be verified prior to issuance of building permits by the Manager, OC <u>Planning Development Services</u>.)</u>

12. Page 2-37. Modify subsection 7. Construction Schedule, with the following changes:

7. CONSTRUCTION SCHEDULE

It is anticipated that construction of the Project could commence as early as early 2014 in late 2015 and would last approximately 2.5 to 3 years. Assuming this construction time frame for site work, the earliest the first units would be ready for initial occupancy would be in $\frac{2015}{2017}$. The occupancy date is subject to change based on the construction start date and future market conditions. For purposes of this EIR analysis, it is assumed that construction of the Project would occur in one phase and that the Project would be fully occupied in $\frac{2015}{2018}$.

13. Page 2-37. Modify the following bullet point to the list of approvals under the County of Orange.

Zone Change by the County of Orange Board of Supervisors for Planning Area 1 from <u>A1 and</u> A1(0) to R-1 and R-1(0) and a zone change for Planning Area 2 from A1(0) to R-1, Single Family Residence District, permitting development of single family detached residential dwellings on minimum 7,500 square foot lots.

14. Page 2-37. Add the following bullet point to the list of approvals under the County of Orange.

<u>Certification of the Environmental Impact Report (EIR).</u>

15. Page 2-38. Modify the list of approvals under the Yorba Linda Water District with the following changes:

Yorba Linda Water District (YLWD)

- Connection to the YLWD potable water supply.
- <u>Connection to sewer (wastewater) systems.</u>

CHAPTER 3.0, BASIS FOR CUMULATIVE ANALYSIS

1. Page 3-5. Modify Figure 3-1. Related Project No. 1 has been identified as the Esperanza Hills Project.

Please see figure on page below.

SECTION 4.1, AESTHETICS

- **1.** Page 4.1-1. Modify the subsection "(2) Local" with the following changes:
 - (2) Local

(a) County of Orange General Plan

County of Orange General Plan

The Scenic Highways Plan of the General Plan identifies the County's scenic highway routes and provides policy guidelines to incorporate safety, utility, economy, and aesthetics into the planning, design and construction of scenic highways. The scenic highway designation is intended to minimize the visual impact on the highway from land development upon the significant scenic resources along the route. The nearest Scenic Viewshed Highway to the project site is the 91 Freeway. Due to intervening topography and development, the project site is not visible from the 91 Freeway or any other County scenic highway. As such, the County's Scenic Highway policy guidelines would not be applicable to the Project.

The Land Use and Resources Elements of the General Plan also include various policies to protect natural resources within the County and to ensure new development projects are visually compatible with adjacent areas. The Project's consistency with these policies is discussed in the impact analysis below.

<u>County of Orange Zoning Code</u>

<u>The Codified Ordinances of the County of Orange Section 7-9-55.8(f) provides requirements for</u> <u>exterior lighting. As stated therein, "All lights shall be designed and located so that direct light rays</u> <u>shall be confined to the premises."</u>



LEGEND:

- 1 Esperanza Hills
- North Yorba Linda Estates
- (3) Hover/Bastanchury Holding Co.
- (4) Yorba Linda Town Center
- 5 Oakcrest Terrace
- 6 Canal Annex-Savi Ranch
- 7 Nixon Archive Site
- 8 SWC Bastanchury/Lakeview
- (9) Friends Christian High School



No scale

(10) Prospect (Greenhouse)

- (1) Wabash & Rose
- (12) Yorba Linda/Prospect
- (13) Postal Annex SE Lemon & Eureka
- (14) 4622 Plumosa
- (15) Lakeview & Mariposa
- (16) Palisades at Vista del Verde
- (17) Mountain Park
- 18 La Floresta

Related Projects Map

FIGURE

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2. Page 4.1-7. Modify PDF 1-5 with the following changes:

PDF 1-5: As shown in the *Conceptual Landscape Plan* (Figure 2-11 and Table 2-2), landscaped areas or natural open space areas would be located adjacent to existing residential development to serve as natural buffers between existing residential neighborhoods and proposed homes. The plant palette would include native and appropriate nonnative drought tolerant trees, groundcovers and shrubs that would be compatible with the existing native plant communities found within the site. The landscape design would emphasize the planting of long-lived plant species that are native to the region or well adapted to the climatic and soil conditions of the area. <u>In addition, any</u> <u>invasive non-native species that appears on the California Invasive Plant Council (Cal-IPC) list of invasive species would be excluded from the landscape plan plant palette. (This PDF to be verified prior to issuance of a building permit by the Manager, OC <u>Planning Development Services.</u>)</u>

3. Page 4.1-9. Modify the 3rd paragraph with the following changes:

Although construction activities would result in large graded areas devoid of vegetation that would be exposed to views from the surrounding residential areas, short-term construction impacts would be less than significant because of their temporary and commonplace nature <u>in its</u> <u>and</u> interruption to surrounding views to and across the site and the visual character of the project site.

4. Pages 4.1-27. Modify Mitigation Measure 4.1-1 with the following changes:

Mitigation Measure 4.1-1 Prior to issuance of any building permit, the Project Applicant/Developer shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the property project site consistent with Sec. 7-9-55.8, Site Development Standards, of the Orange County Zoning Code; and to in a manner meeting the approval of the Manager, Permit Services (County of Orange). Prior to the final inspection, the Project Applicant/Developer shall provide a letter from the Electrical Engineer, licensed Landscape Architect, or licensed Professional Designer that a field test has been performed after dark and that the light rays are confined to the premises. The letter shall be submitted to the Manager, OC Inspection for review and approval.

5. Pages 4.1-35. Modify the list of "References" with the following changes:

<u>County of Orange. County of Orange General Plan. Chapter III. Land Use Element. Chapter IV.</u> <u>Transportation Element. Chapter VI. Resources Element. March 22, 2011.</u>

<u>County of Orange. County of Orange General Plan.</u> <u>Scenic Highway Plan. Chapter IV. Transportation</u> <u>Element. April 2005.</u>

<u>County of Orange Municipal Code. http://library.municode.com. Various Sections as updated</u> <u>through March 2014.</u>

- <u>City of Yorba Linda General Plan. Chapter II Land Element. Chapter IV. Recreation and Resources</u> <u>Element. Adopted 1993.</u>
- <u>City of Yorba Linda Municipal Code. Various Sections. http://library.municode.com. Updated</u> <u>through January 2014.</u>

SECTION 4.2, AIR QUALITY

1. Page 4.2-2. Modify Table 4.2-1. Table 4.2-1 updated with the latest version of the CARB Ambient Air Quality Standards table (June 4, 2013).

Please see table on page below.

2. Page 4.2-9. Modify the "Wind Patterns and Project Location" discussion with the following changes:

(3) Wind Patterns and Project Location

The distinctive climate of the project area and the Basin is determined by its terrain and geographical location. The Basin is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter.

Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

As shown in **Figure 4.2-1**, *Wind Rose for La Habra Station*, wind patterns at the nearest monitoring station are characterized by westerly and southwesterly on-shore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

Please see figure on page below.

Table 4.2-1

Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Averaging	California S	tandards ¹	National Standards ²		2
Pollutant	Time	Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O₃)	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet	_	Same as	Ultraviolet
	8 Hour	0.070 ppm (137 µg/m ³)	Photometry	0.075 ppm (147 µg/m ³)	Primary Standard	Photometry
Respirable Particulate	24 Hour	50 μg/m ³	Gravimetric or	150 µg/m ³	Same as	Inertial Separation and Gravimetric
Matter (PM10) ⁸	Annual Arithmetic Mean	20 µg/m³	Beta Attenuation	_	Primary Standard	Analysis
Fine Particulate	24 Hour	_	_	35 µg/m³	Same as Primary Standard	Inertial Separation
Matter (PM2.5) ⁸	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m³	and Gravimetric Analysis
Carbon	1 Hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)	-	
Monoxide	8 Hour	9.0 ppm (10 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	_	Non-Dispersive Infrared Photometry (NDIR)
(CO)	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	(112111)	—	—	(12.1.)
Nitrogen Dioxide (NO ₂) ⁹	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase	100 ppb (188 μg/m ³)	_	Gas Phase
	Annual Arithmetic Mean	0.030 ppm (57 μg/m ³)	Chemiluminescence	0.053 ppm (100 μg/m ³)	Same as Primary Standard	Chemiluminescence
	1 Hour	0.25 ppm (655 µg/m ³)		75 ppb (196 μg/m³)	—	
Sulfur Dioxide	3 Hour	_	Ultraviolet	_	0.5 ppm (1300 µg/m ³)	Ultraviolet Flourescence; Spectrophotometry
(SO ₂) ¹⁰	24 Hour	0.04 ppm (105 µg/m ³)	Fluorescence	0.14 ppm (for certain areas) ¹⁰	_	(Pararosaniline Method)
	Annual Arithmetic Mean	_		0.030 ppm (for certain areas) ¹⁰	—	
	30 Day Average	1.5 μg/m ³		-	_	
Lead ^{11,12}	Calendar Quarter	_	Atomic Absorption	1.5 μg/m ³ (for certain areas) ¹²	Same as	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	_		0.15 µg/m ³	Primary Standard	
Visibility Reducing Particles ¹³	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	e No National		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹¹	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			
See footnotes on next page …						

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (6/4/13)

Table 4.2-1 (cont.)

Ambient Air Quality Standards

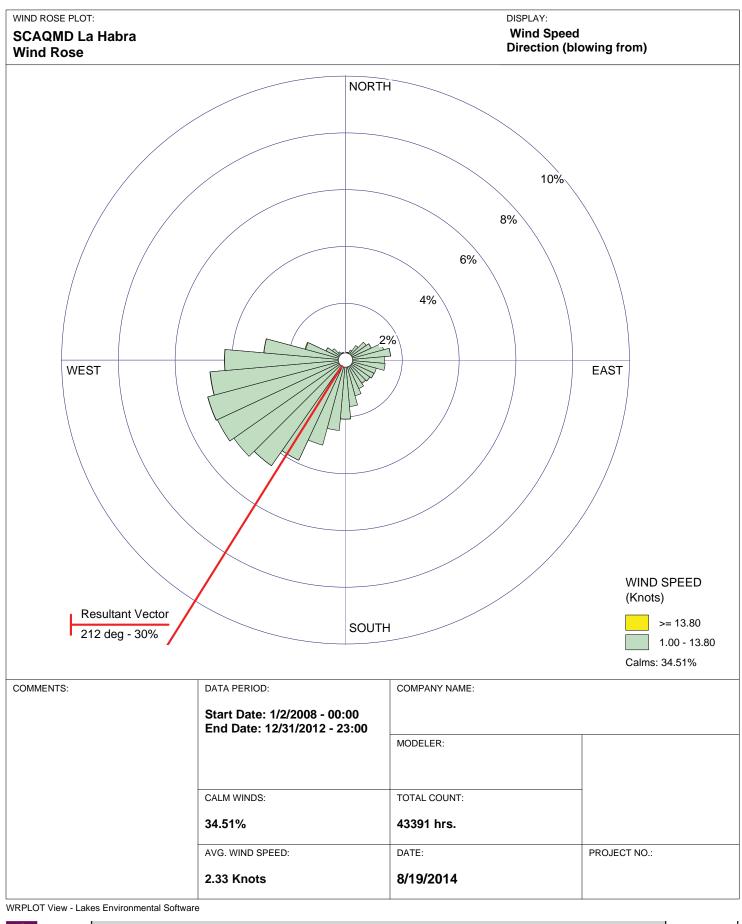
- California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and
 particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be
 equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the
 California Code of Regulations.
- 2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
- 3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- 4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- 5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
- 8. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 μg/m³ to 12.0 μg/m³. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM10 standards (primary and secondary) of 150 μg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- 9. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- 10. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

- 11. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- 12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- 13. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (6/4/13)





Wind Rose for La Habra Station

FIGURE **4.2-1**

Cielo Vista Project Source: South Coast Air Quality Management District, 2014. This page intentionally blank.

3. Page 4.2-13. Modify last paragraph with the following changes:

The most recent three (3) years of data available is shown on **Table 4.2-3**, *Project Area Air Quality Monitoring Summary* 2008–2010 2009-2011 *Air Monitoring Data*^{*a*}. Table 4.2-3 also identifies the number of days standards were exceeded for the study area, which was chosen to be representative of the local air quality at the project site. Additionally, data for SO₂ has been omitted from this analysis as attainment is regularly met in the Basin and few monitoring stations measure SO₂ concentrations.

4. Page 4.2-15. Revise Table 4.2-3 with the following changes:

Revised table shown on page below.

5. Page 4.2-16. Modify 2nd full paragraph with the following changes:

The duration of activities was estimated based on the Project's expected opening year and specific construction activities were modeled utilizing CalEEMod model defaults for the number and type of equipment that would be used were utilized, as appropriate. Also, as stated above, OFFROAD2001 OFFROAD 2011 was utilized to accurately depict "site preparation" and grading activities.

6. Page 4.2-18. Modify second to last paragraph with the following changes:

<u>Vehicles</u>. Project operational (vehicular) impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the project site. The Project related operational air quality impact centers primarily on the vehicle trips generated by the project. Trip characteristics available from the report, *Cielo Vista Traffic Impact Analysis* (Urban Crossroads, Inc., February 22, 2013) were utilized in this analysis (included as Appendix K \underline{L} in this EIR).

7. Page 4.2-24. Modify the 1st paragraph with the following changes:

As discussed above, the appropriate SRA for the LST is the Riverside area (SRA 23). LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. <u>It is noted that with regards to asbestos, the types of rocks known to contain asbestos include serpentine and ultramafic rock. Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human hazard when airborne. The project is located in Orange County, which is not among the counties listed as containing serpentine and ultramafic rock.^{5b} Therefore, the impact from naturally occurring asbestos (NOA) during Project construction would be minimal to none. The nearest existing sensitive receptor to the development boundaries are located immediately adjacent to the project site. As such, the LSTs for receptors at 25 meters are utilized in this analysis. **Table 4.2-7**, *Localized Significance Summary Construction (Without Mitigation)*, identifies the unmitigated localized impacts at the nearest receptor location in the vicinity of the project site. It should be noted that the impacts without mitigation do not take credit for reductions achieved through best management practices (BMPs) and standard regulatory requirements (SCAQMD's Rule 403). As outlined above in the description of Project Features, there must be compliance with SCAQMD's Rule 403. As shown in Table 4.2-7, without mitigation, emissions during construction activity would exceed the SCAQMD's localized significance thresholds</u>

Table 4.2-3

Project Area Air Quality Monitoring Summary 2009–2011 Air Monitoring Data*

		Year		
Pollutant	Standard	2009	2010	2011
Ozone (O₃)				
Maximum 1-Hour Concentration (ppm)		0.115	0.118	0.095
Maximum 8-Hour Concentration (ppm)		0.082	0.096	0.074
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	4	2	1
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	9	4	3
Number of Days Exceeding Federal 1-Hour Standard	> 0.12 ppm	θ	θ	0
Number of Days Exceeding Federal 8-Hour Standard	> 0.075 ppm	3	1	0
Number of Days Exceeding Health Advisory	<u>≥ 0.15 ppm</u>	θ	θ	0
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)	_	4	3	-
Maximum 8-Hour Concentration (ppm)	_	2.3	1.8	2.1
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	θ	θ	0
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	θ	θ	0
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	θ	θ	0
Nitrogen Dioxide (NO ₂)				
Maximum 1-Hour Concentration (ppm)		0.10	0.0825	0.0698
Annual Arithmetic Mean Concentration (ppm)		0.0206	0.0201	0.0177
Number of Days Exceeding State 1-Hour Standard	<mark>≻ 0.18 ppm</mark>	θ	θ	0
Inhalable Particulates (PM ₁₀) ^b				
Maximum 24-Hour Concentration (µg/m ³)		63	43	53
Annual Arithmetic Mean (µg/m³)	_	30.9	22.4	24.8
Number of Samples Exceeding State Standard	> 50 μg/m³	1	θ	2
Number of Samples Exceeding Federal Standard	<mark>≻ 150 μg/m</mark> ³	θ	θ	0
Fine Particulates (PM _{2.5}) [*]				
Maximum 24-Hour Concentration (µg/m ³)	_	64.6	31.7	<u> 39.2</u>
Annual Arithmetic Mean (µg/m³)	_	11.8	10.2	11
Number of Samples Exceeding Federal 24-Hour Standard	> 35 μg/m³	4	40	2

North Orange County (SRA 16) monitoring station data used unless otherwise noted.
 Central Orange County (SRA 17) monitoring station data.

Source: South Coast AQMD (www.aqmd.gov)

T<u>able 4.2-3</u>

Project Area Air Quality Monitoring Summary 2009–2011 Air Monitoring Data^a

			Year					
<u>Pollutant</u>	<u>Standard</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>				
<u>Ozone (O₃)</u>	<u>Ozone (O₃)</u>							
Maximum 1-Hour Concentration (ppm)	<u></u>	<u>0.118</u>	<u>0.095</u>	<u>0.100</u>				
Maximum 8-Hour Concentration (ppm)	<u></u>	<u>0.096</u>	<u>0.074</u>	<u>0.078</u>				
Number of Days Exceeding State 1-Hour Standard	<u>> 0.09 ppm</u>	<u>2</u>	<u>1</u>	<u>3</u>				
Number of Days Exceeding State 8-Hour Standard	<u>> 0.07 ppm</u>	<u>4</u>	<u>3</u>	<u>3</u>				
Number of Days Exceeding Federal 1-Hour Standard	<u>> 0.12 ppm</u>	<u>0</u>	<u>0</u>	<u>0</u>				
Number of Days Exceeding Federal 8-Hour Standard	<u>> 0.075 ppm</u>	<u>1</u>	<u>0</u>	<u>2</u>				
Number of Days Exceeding Health Advisory	<u>≥ 0.15 ppm</u>	<u>0</u>	<u>0</u>	<u>0</u>				
<u>Carbon Monoxide (C</u>	<u>(0)</u>							
Maximum 1-Hour Concentration (ppm)	<u></u>	<u>3</u>	=	=				
Maximum 8-Hour Concentration (ppm)		<u>1.8</u>	<u>2.1</u>	<u>2.4</u>				
Number of Days Exceeding State 1-Hour Standard	<u>> 20 ppm</u>	<u>0</u>	<u>0</u>	<u>0</u>				
<u>Number of Days Exceeding Federal / State 8-Hour Standard</u>	<u>> 9.0 ppm</u>	<u>0</u>	<u>0</u>	<u>0</u>				
Number of Days Exceeding Federal 1-Hour Standard	<u>> 35 ppm</u>	<u>0</u>	<u>0</u>	<u>0</u>				
<u>Nitrogen Dioxide (Ne</u>	<u>0₂)</u>							
Maximum 1-Hour Concentration (ppm)		<u>0.0825</u>	<u>0.0698</u>	<u>0.0675</u>				
Annual Arithmetic Mean Concentration (ppm)		0.0201	<u>0.0177</u>	<u>0.0180</u>				
Number of Days Exceeding State 1-Hour Standard	<u>> 0.18 ppm</u>	<u>0</u>	<u>0</u>	<u>0</u>				
<u>Inhalable Particulates (</u>	<u>РМ₁₀)ь</u>							
<u>Maximum 24-Hour Concentration (μg/m³)</u>		<u>43</u>	<u>53</u>	<u>48</u>				
<u>Annual Arithmetic Mean (μg/m³)</u>		<u>22.4</u>	<u>24.8</u>	<u>22.4</u>				
Number of Samples Exceeding State Standard	<u>> 50 µg/m³</u>	<u>0</u>	<u>2</u>	<u>0</u>				
Number of Samples Exceeding Federal Standard	<u>> 150 μg/m³</u>	<u>0</u>	<u>0</u>	<u>0</u>				
<u>Fine Particulates (PM_{2.5})</u>								
<u>Maximum 24-Hour Concentration (μg/m³)</u>		<u>31.7</u>	<u>39.2</u>	<u>50.1</u>				
<u>Annual Arithmetic Mean (μg/m³)</u>		<u>10.2</u>	<u>11</u>	<u>10.81</u>				
Number of Samples Exceeding Federal 24-Hour Standard	<u>> 35 μg/m³</u>	<u>40</u>	<u>2</u>	<u>4</u>				
North Orange County (SRA 16) monitoring station data used unless otherwise Central Orange County (SRA 17) monitoring station data.	noted.							

Source: South Coast AQMD (www.aqmd.gov)

7. Page 4.2-24. Modify the 1st paragraph with the following changes: (Continued)

for emissions of $PM_{2.5}$. Because the $PM_{2.5}$ emissions exceed the LST for that pollutant, a potentially significant impact would occur. Mitigation Measures 4.2.-1 and 4.2-2 are prescribed to reduce $PM_{2.5}$ emissions impacts to a less than significant level.

 5b
 California Office of Planning and Research Memorandum Re: Addressing Naturally Occurring Asbestos in CEQA

 Documents. August 1, 2007.

8. Page 4.2-25. Revise Mitigation Measure 4.2-1 with the following changes:

- Mitigation Measure 4.2-1 Prior to the issuance of grading permits, the contractor shall provide evidence to the Manager, Permit Services that compliant with SCAQMD Rule 403 all disturbed unpaved roads and disturbed areas within the project site shall be watered at least three times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day. <u>and during construction, that the following measures shall be implemented to reduce fugitive dust emissions:</u>
 - <u>Apply water and/or nontoxic chemical soil stabilizers according to manufacturer's</u> specification to all construction areas expected to be inactive for 10 or more days. <u>Reapply as needed to minimize visible dust.</u>
 - <u>Apply water three times daily or nontoxic chemical soil stabilizers according to</u> <u>manufacturer's specifications to all unpaved parking or staging areas or unpaved</u> <u>road surfaces.</u>
 - <u>Enclose, cover, water three times daily, or apply approved chemical soil stabilizers to</u> <u>exposed piles of dirt, sand, soil, or other loose materials.</u>
 - <u>Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period.</u>

<u>The determination of wind speed conditions in excess of 25 miles per hour shall be</u> based on the following criteria:

(A) For facilities with an on-site anemometer:

- (i) When the on-site anemometer registers at least two wind gusts in excess of 25 miles per hour within a consecutive 30-minute period. Wind speeds shall be deemed to be below 25 miles per hour if there is no recurring wind gust in excess of 25 miles per hour within a consecutive 30-minute period; or
- (B) For facilities without an on-site anemometer:
 - (i) When wind speeds in excess of 25 miles per hour are forecast to occur in Yorba Linda for that day. This condition shall apply to the full calendar day for which the forecast is valid; or
 - (ii) When wind speeds in excess of 25 miles per hour are not forecast to occur, and fugitive dust emissions are visible for a distance of at least 100 feet from

the origin of such emissions, and there is visible evidence of wind driven fugitive dust.

- <u>All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should</u> maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code.</u>
- <u>Sweep streets at the end of the day, or more frequently as needed to control track out.</u>
- <u>To prevent dirt and dust from unpaved construction roads from impacting the</u> <u>surrounding areas, install roadway dirt control measures at egress points from the</u> <u>Project Site (or areas of the Site actively grading). These may be wheel washers,</u> <u>rumble strips, manual sweeping, or other means effective at removing loose dirt from</u> <u>trucks and other equipment before leaving the site.</u>
- <u>Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads.</u>
- <u>Plant ground cover in planned areas as quickly as possible after grading.</u>
- <u>All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.</u>

SECTION 4.3, BIOLOGICAL RESOURCES

1. Page 4.3-6. Modify 1st paragraph with the following changes:

The Chino Hills State Park is located to the north and east of the project study area and occupies 12,452 acres. The Chino Hills State Park is a broad swath of open space that provides the same variety of habitat and wildlife found on the project study area but in less disturbed conditions due to the effect of the 2008 Freeway Complex fire that affected the property and the protected nature of the park. The 2008 Freeway Complex Fire burned across the entire Cielo Vista site and 95% of the Park.

2. Page 4.3-20. Modify the 4th sentence in the 1st paragraph with the following changes. This correction is also applicable to the last sentence in the 1st full paragraph on page 22 of the Biological Resources Assessment (BRA); and the 3rd paragraph on page 1, the last sentence of the 1st paragraph on page 20, and the 1st sentence of the last paragraph on page 26 of the Investigation of Jurisdictional Waters and Wetlands (aka Jurisdictional Delineation) included in Appendix C of the Draft EIR.⁸

There is approximately 6,836 6,979 linear feet of streambed and 0.87 0.88 acres of USACE/RWQCB jurisdiction ("waters of the U.S.") and 2.07 2.16 acres of CDFW jurisdiction.

⁸ The nominal increase in linear feet and acreage of the jurisdictional features is due to the extension of Drainage B near the southern project site boundary as shown in the revised Figure 4.3-4. This nominal increase is a minor technical clarification to the Draft EIR analysis. This increase does not represent a substantial increase in the severity of impacts evaluated in the Draft EIR, does not result in new significant impact, and does not change the mitigation measures prescribed in the Draft EIR. According, this does not constitute "significant new information" added to the EIR.

3. Page 4.3-20. Modify Table 4.3-2 with the following changes. This correction also applies to Table 2 on page 25 of the BRA and Table 3 on page 20 of the Jurisdictional Delineation included in Appendix C of the Draft EIR.

Table 4.3-2

Jurisdictional Features

Drainage Name	Length (feet)	USACE Jurisdiction (acres) ^{a,b}	CDFW Jurisdiction (acres) ^{a,b}	Flow Classification
Drainage A	1,827	0.31 (0.14)	0.89 (0.14)	Intermittent
Drainage A1	640	0.00 (0.15)	0.18 (0.15)	Perennial
Drainage A1.1	444	0.01	0.03	Ephemeral
Drainage A2	469	0.04	0.10	Ephemeral
Drainage A3	978	0.07	0.18	Ephemeral
Drainage B£	923 <u>1,066</u>	0.11 <u>0.12</u>	0.29 <u>0.38</u>	Ephemeral
Drainage B1	1,160	0.03	0.08	Ephemeral
Drainage B2	395	0.01	0.03	Ephemeral
Total Grand Total	6,836 <u>6,979</u> 6,836 <u>6,979</u>	0.58 <u>0.59</u> (0.29) 0.87 <u>0.88</u>	1.78 <u>1.87</u> (0.29) 2.07 <u>2.16</u>	

^a Jurisdictional acreages often overlap and are therefore not additive (e.g., USACE acreages are included in the total CDFW jurisdictional acreages).

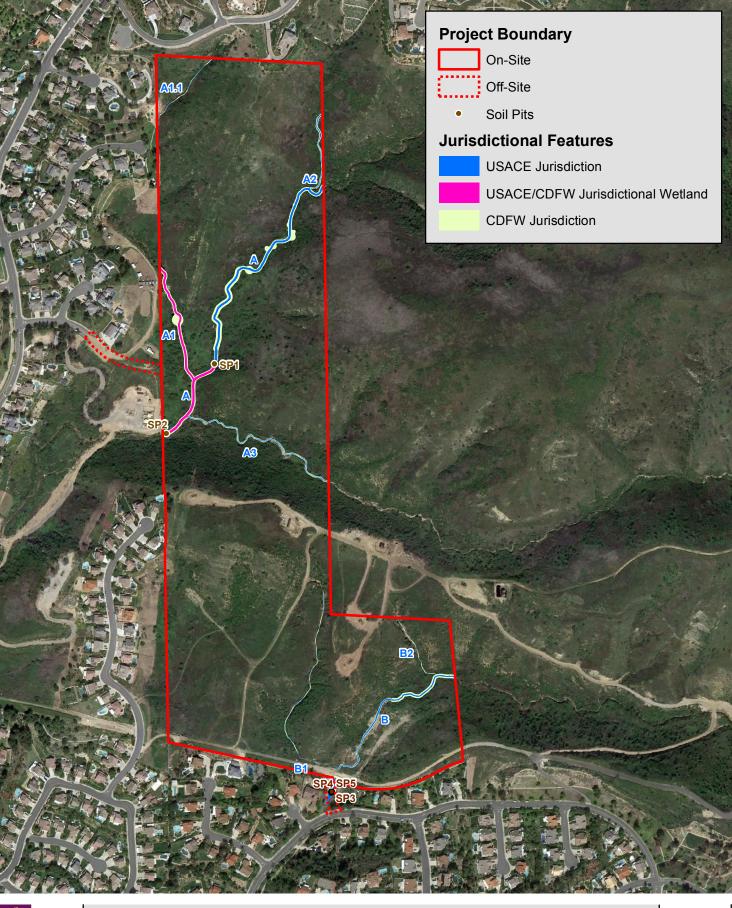
^b Acreages in parentheses indicate wetlands.

^c Additional acreages are based on a delineation performed by Ezekiel Cooley on 10-07-15 to address projection issues with the project boundary.

Source: PCR Services Corporation, 2013, 2015.

4. Page 4.3-22. Revise Figure 4.3-4 to correctly illustrate Drainage B near southern project site boundary. This correction also applies to Figure 7 on page 24 of the BRA and Figure 5 on page 21 of the Jurisdictional Delineation included in Appendix C of the Draft EIR.

See revised Figure 4.3-4 on following page.



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0

500

1,000 Feet

Jurisdictional Features FIGURE

Cielo Vista Source: Google Earth, 2011; PCR Services Corporation, 2013. 4.3-4

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5. Page 4.3-23. Modify the 2nd sentence of the 1st full paragraph with the following changes. This correction is also applicable to the 2nd sentence in the 3rd full paragraph on page 22 of the BRA included in Appendix C of the Draft EIR.

The drainage feature enters the site along the eastern project boundary approximately 350 feet north of the southeast corner of the property and extends for approximately 923 <u>1,066</u> linear feet in a southwest trending orientation.

6. Page 4.3-31. Modify the third sentence of the second paragraph with the following changes:

This statute imposes the obligation on federal agencies to ensure that their actions (such as issuing federal CWA permits for this Project) are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its designated critical habitat. This obligation is enforced through the procedural requirement that agencies, such as the USACE, initiate consultation with USFWS on any actions that may affect a threatened or endangered species. During the FESA Section 7 consultation anticipated that will be required for this Project, USFWS would gather all relevant information concerning the Project and the potential Project-related impacts on the least Bell's vireo (i.e., the Project Applicant would submit a species-specific Biological Assessment), prepare its opinion with respect to whether the Project is likely to jeopardize the continued existence of the species (i.e., the USFWS would issue a Biological Opinion), and recommend mitigation/conservation measures where appropriate. The mitigation is anticipated to would be similar to Mitigation Measure 4.3-1, prescribed below. Implementation of Mitigation Measure 4.3-1 would reduce the Project's potentially significant impacts on the least Bell's vireo to a less than significant level. With the potential loss of 1.64 acres of least Bell's vireo habitat as a result of Project implementation, this mitigation measure requires habitat replacement or enhancement at up to twice the acreage lost in order to support the survival of this endangered species under the federal and state endangered species acts.

7. Page 4.3-36. Modify the 1st paragraph under Impact Statement 4.3-3 with the following changes. This correction is also applicable to the 1st full paragraph on page 49 and the 1st sentence of the 4th full paragraph on page 59 of the BRA included in Appendix C of the Draft EIR.

The Project would result in impacts to 0.42 0.43 acre of USACE/RWQCB "waters of the U.S.", 1.38 1.47 acres of CDFW jurisdictional streambed and associated riparian habitat, and 0.24 acre of USACE/RWQCB and CDFW jurisdictional wetland areas (refer to **Table 4.3-4**, *Impacts on Jurisdictional Features*, and **Figure 4.3-8**, *Impacts on Jurisdictional Features*,). Impacts to jurisdictional waters are considered potentially significant.

8. Page 4.3-36. Modify the last sentence on page 4.3-36 with the following changes. This correction is also applicable to the 1st full paragraph on page 49 of the BRA included in Appendix C of the Draft EIR

With implementation of this mitigation measure, the loss of 0.66 <u>0.67</u> acres of jurisdictional streambed and associated riparian habitat under federal law and <u>1.62</u> <u>1.71</u> acres of jurisdictional streambed and associated riparian habitat under state law would be replaced off-site at up to twice the acreage lost as a result of Project grading and construction.

9. Page 4.3-38. Revise Figure 4.3-8 to correctly illustrate Drainage B near southern project site boundary:

See revised Figure 4.3-8 on page 3-107.

10. Page 4.3-39. Modify Table 4.3-4 with the following changes. This correction also applies to Table 4 on page 49 of the BRA included in Appendix C of the Draft EIR

Table 4.3-4

Impacts on Jurisdictional Features

Drainage Name	Length (feet)	USACE Jurisdiction (acres) ^{a,b}	CDFW Jurisdiction (acres) ^{a,b}	Flow Classification
Drainage A	1,409	0.25 (0.10)	0.74 (0.10)	Intermittent
Drainage A1	640	0.00(0.14)	0.18 (0.14)	Perennial
Drainage A1.1	0	0.00	0.00	Ephemeral
Drainage A2	0	0.00	0.00	Ephemeral
Drainage A3	316	0.02	0.06	Ephemeral
Drainage B <u></u>	923 <u>1,066</u>	0.11 <u>0.12</u>	0.29 <u>0.38</u>	Ephemeral
Drainage B1	1,160	0.03	0.08	Ephemeral
Drainage B2	395	0.01	0.03	Ephemeral
Total Grand Total	4 <u>,842</u>	0.42	1.38 <u>1.47</u> (0.24) 1.62 <u>1.71</u>	

^a Jurisdictional acreages often overlap and are therefore not additive (e.g., USACE acreages are included in the total CDFW jurisdictional acreages).

^b Acreages in parentheses indicate wetlands.

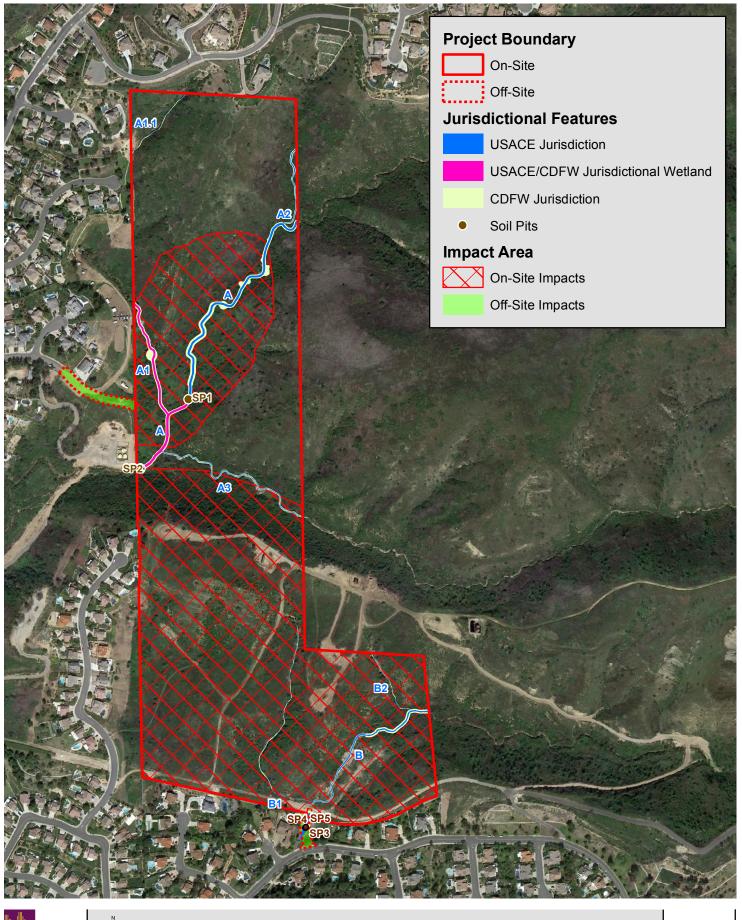
^c Additional acreages are based on a delineation performed by Ezekiel Cooley on 10-07-15 to address projection issues with the project boundary.

Source: PCR Services Corporation, 2013, 2015.

11. Page 4.3-40. Modify Mitigation Measure 4.3-3 with the following changes:

Mitigation Measure 4.3-3Prior to issuance of a grading permit, the Project Applicant shall
demonstrate to the satisfaction of the Manager, OC Planning Development Services that the
following requirements have been included in the Project construction plan:

- 1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.
- 2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) shall require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors), or as determined





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appropriate by the biological monitor, shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.

3. <u>A qualified biologist shall survey for active bird nests or mammal burrows in all</u> <u>Project site areas that could potentially be exposed to construction noise levels</u> <u>exceeding 60 dBA. Where active bird nests or mammal burrows are discovered,</u> <u>no construction activities shall occur that would result in noise levels exceeding</u> <u>60 dBA at the active nest or burrow location. Construction restriction areas shall</u> <u>be staked or fenced under the supervision of the qualified biologist prior to the</u> <u>commencement of construction activities during the breeding season dates listed</u> <u>above.</u>

12. Page 4.3-43. Modify the third paragraph with the following changes:

Eighteen related projects have been identified within the cumulative impacts study area and are listed in Section 3.0 of this EIR. Seventeen of the 18 related projects are proposed within currently developed suburban areas. Related Project No. 1 <u>The Esperanza Hills Project</u> is the only related project that would result in development along the wildland urban interface and is proposed to be located immediately to the east of the Cielo Vista Project. Combined, the Cielo Vista Project and Related Project No. 1 <u>Esperanza Hills Project</u> comprise the total cumulative impacts as discussed below.

SECTION 4.4, CULTURAL RESOURCES

1. Page 4.4-11. Modify Mitigation Measure 4.4-1 with the following changes:

Mitigation Measure 4.4-1 Prior to the issuance of any grading permit, the Applicant shall provide written evidence to the Manager, OC <u>Planning Development Services</u>, that the Applicant has retained a qualified archaeological monitor to conduct spot check <u>daily</u> observations of construction excavations into younger Quaternary Alluvium during construction-related ground disturbing activities (i.e., grading and excavation) <u>until the archaeological monitor determines further observations are not necessary based on soil conditions and presence/absence of archaeological resources. The spot-check observations shall target the flatter areas of the project site such as hilltops, ridge lines, and canyon bottoms, which are more conducive to retaining archaeological resources since such areas were prime locations for pre-historic occupation as compared to areas of steeper topography.</u>

2. Page 4.4-11. Modify Mitigation Measure 4.4-2 with the following changes:

Mitigation Measure 4.4-2 In the event that archaeological resources are unearthed during ground-disturbing activities, the archaeological monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the find so that the find can be evaluated. Work shall be allowed to continue outside of the vicinity of the find. All archaeological resources unearthed by Project construction activities shall be evaluated by the archaeologist. The Applicant shall coordinate with the archaeologist and the County to

develop an appropriate treatment plan for the resources to reduce impacts to any significant resources to a less than significant level. Treatment measures to be considered first shall be avoidance or preservation in place. If preservation or avoidance of the resource is not appropriate, as determined by the archaeologist and the County, then the resource shall be removed from its location and appropriate data recovery conducted to adequately recover information from and about the archaeological resource. Treatment may include implementation of archaeological data recovery excavations to remove the resource or preservation in place. All archaeological resources recovered shall be documented on California Department of Parks and Recreation Site Forms to be filed with the South Central Coastal Information Center. The landowner, in consultation with the archaeologist and the County shall designate repositories in the event that archaeological material is recovered.

3. Page 4.4-12. Modify Mitigation Measure 4.4-4 with the following changes:

Mitigation Measure 4.4-4 If archaeological resources are encountered during implementation of the Project when the archaeological monitor is not present, grounddisturbing activities shall temporarily be redirected from the vicinity of the find by the construction contractor. The Applicant shall immediately notify a qualified archaeologist of the find. The archaeologist shall coordinate with the Applicant as to the immediate treatment of the find until a proper site visit and evaluation is made by the archaeologist. The Applicant shall then follow the procedures outlined in Mitigation Measure 4.4-2. The archaeologist shall also determine the need for full-time archaeological monitoring for any grounddisturbing activities in the area of the find thereafter and training of construction workers, as appropriate.

4. Page 4.4-13. Modify Mitigation Measure 4.4-5 with the following changes:

Mitigation Measure 4.4-5 Prior to issuance of any grading permit, the Applicant shall retain a qualified paleontologist certified by the County of Orange, Development Services <u>Department (County Property Permits)</u> who shall attend a pre-grading/excavation meeting and develop a paleontological monitoring program for excavations into sediments associated with the fossiliferous older Quaternary Alluvium, Yorba and Sycamore Canyon Members of the Puente Formation, and Quaternary landslides deposits. A qualified paleontologist is defined as a paleontologist meeting the criteria established by the Society for Vertebrate Paleontology. The qualified paleontologist shall supervise a paleontological monitor who shall be present at such times as required by the paleontologist during construction excavations into the fossiliferous deposits mentioned above. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring shall be determined by the paleontologist and shall be based on the rate of excavation and grading activities, the materials being excavated, and the depth of excavation, and if found, the abundance and type of fossils encountered.

SECTION 4.5, GEOLOGY AND SOILS

1. Page 4.5-7. Modify Figure 4.5-1. Figure shows approximate Whittier Fault location.

Please see figure on page 3-113.

2. Pages 4.5-17. Modify Mitigation Measure 4.5-1 with the following changes:

- **Mitigation Measure 4.5-1** Prior to the issuance of <u>precise</u> grading permits unless noted as otherwise below <u>or as otherwise agreed to by County's engineering geologist</u>, the Project Applicant/developer shall submit a final site specific, design-level geotechnical investigation prepared by a California-licensed professional engineering geologist and geotechnical engineer to the County of Orange Public Works Manager, Subdivision and Grading, or his/her designee and the County's registered geotechnical engineer or third-party registered engineer <u>engineering geologist</u> for review, approval and implementation pursuant to the final site specific, design-level geotechnical investigation as outlined below. The investigation shall comply with all applicable State and local code requirements, including the current building code in effect at the time of <u>precise</u> grading permit issuance, and <u>shall provide the following</u>:
 - a) Prior to recordation of the final map, the geotechnical evaluation shall identify the Whittier Fault trace location, orientation, and frequency of activity by subsurface investigations consisting of boring and trenching activities. The fault trace shall be mapped and based on the specific location of the fault trace, the Project's proposed residences shall be set back from the fault trace in accordance with State setback requirements. The investigation and report shall comply with the Alquist-Priolo Earthquake Fault Zone Act. As set forth in the letter from Tim Lawson, LGC Geotechnical, Inc. to Larry Netherton re Location of Whittier Fault, Cielo Vista, Tentative Tract Map No. 17341, County of Orange, California, dated July 31, 2014, the primary trace of the Whittier Fault is well-defined as a narrow fault zone less than approximately 15 feet-wide along the east-west drainage in the central portion of the Cielo Vista site. The geotechnical investigation required by this mitigation measure

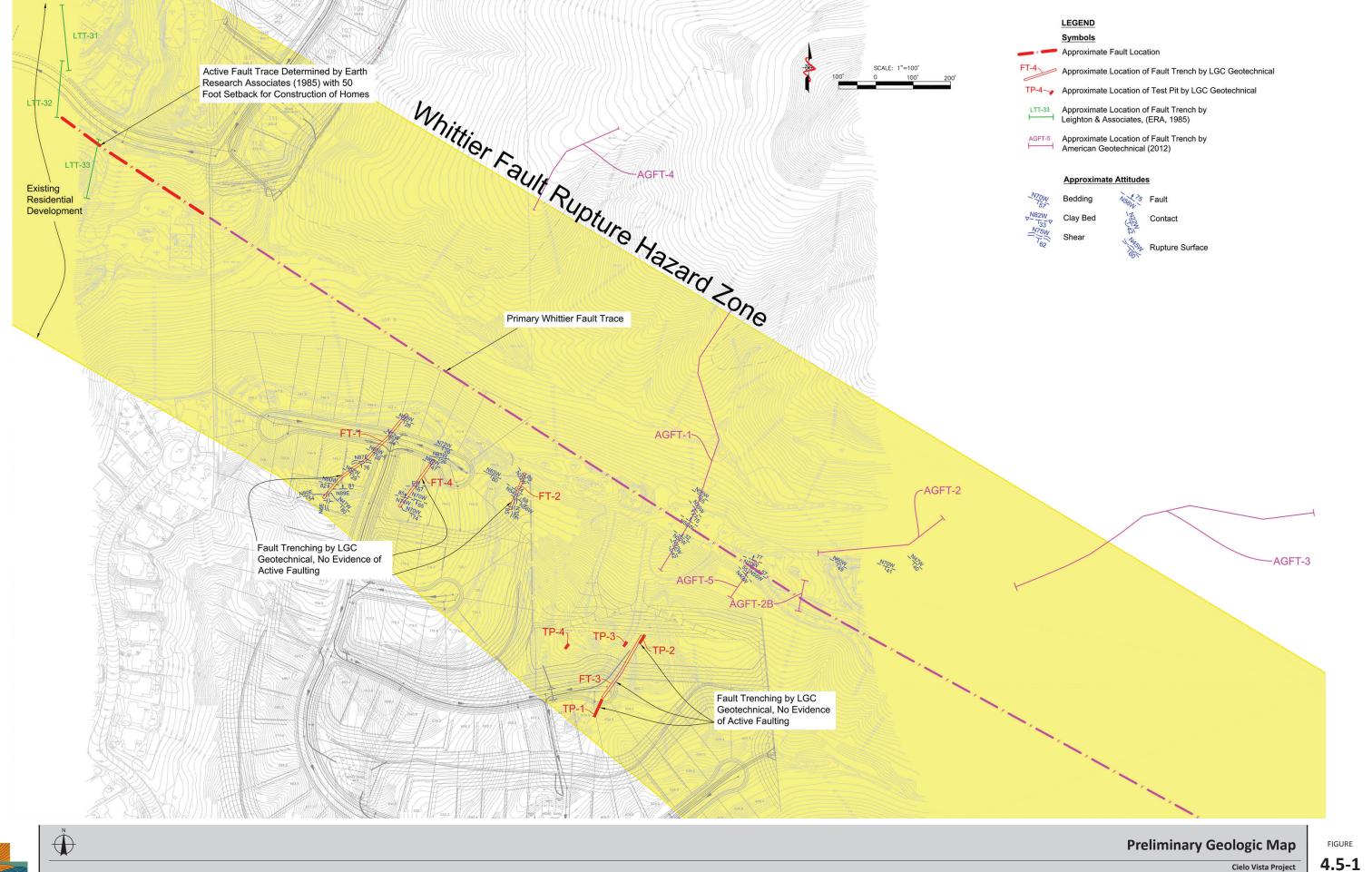
2. Pages 4.5-17. Modify Mitigation Measure 4.5-1 with the following changes: (Continued)

shall evaluate the potential for additional fault traces south of this zone and determine if any additional fault traces are "active" (i.e., a fault that has ruptured the ground surface within the Holocene Age (approximately the last 11,000 years)) by subsurface investigations consisting of trenching activities. Based on the results of this geotechnical investigation, the Project's proposed residences shall be set back from the fault trace in accordance with State setback requirements. The investigation shall comply with the Alquist-Priolo Earthquake Fault Zone Act.

b) Conduct additional fault trenching as necessary and as recommended in the letter from Tim Lawson, LGC Geotechnical, Inc. to Larry Netherton re Discussion of Potential Implications of Subsurface Geological Features in the Southern Portion of Cielo Vista, Tentative Tract Map No. 17341, County of Orange, California, dated August 1, 2014, to confirm that the fault traces identified in the area of FT-1 and FT-4 are not active. Should this area not be determined to be active, a 75-foot setback zone would be recommended for those lots along the south side of the active Whittier Fault as delineated per subsection (a), above, and, on the north side of the active Whittier Fault, a setback zone ranging from 50 feet on the west site of the site to approximately 120 feet on the east side of the site. In addition, a 10-foot overexcavation and recompaction below pad grade for the proposed structures in Lots 18 to 56 is recommended as well as post-tensioned foundations. If faults observed in FT-1 and FT-4 are determined to be active, precise grading permits for Lots 20-52, 66-70, 83-89, 96-98 and 109-112 shall not be issued unless additional studies are prepared and approved by the County's registered engineering geologist confirming that some or all of these lots are suitable for residential construction.

- b)c) Include a stability analysis consisting of down-hole logging of large-diameter borings in the areas of suspected landslides and other areas of potential slope stability issues to characterize the slopes and engineering analysis to determine what, if any, stabilization measures are necessary. For potential global and local slope failures, a factor of safety for slope stability of equal to or greater than 1.5 and 1.1 for static and seismic loading conditions, respectively, is the generally accepted minimum for new residential construction. Where existing and/or proposed slopes are found to have a factor of safety lower than these minimum requirements, the development slopes shall either need to be setback from, or mitigation methods implemented to improve the stability of, the slopes to these minimum levels. Slopes with less than the minimum factor of safety must be sufficiently setback so that at the location of the proposed residential structures, at least the minimum required factor of safety is achieved. Potential methods of mitigation against slope stability issues related to potentially unstable existing and proposed slopes, including existing landslides, typically include partial or complete landslide removal, excavation and construction of earthen buttresses, and/or shear keys. Landslide removal requirements, the locations, depths, widths, and lengths of the buttresses/shear keys shall be determined via geotechnical investigation and analysis during the design phase of the Project and confirmed during site grading.
- c)d) Conduct representative sampling and laboratory expansion testing of the onsite soils to identify the locations of on-site expansive or compressible soils. Where unsuitable expansive soils are found, site-specific design criteria (i.e., foundation design parameters) and remedial grading techniques (i.e., primarily removal, moisture conditions and recompaction of unsuitable soils) shall be identified in the design-level geotechnical report to remove and/or mitigate unsuitable expansive soils that could create geotechnical stability hazards to the Project.
- <u>d)e)</u> Determine structural design requirements as prescribed by the most current version of the California Building Code, including applicable County amendments, to ensure that structures and infrastructure can withstand ground accelerations expected from known active faults.

Project plans for foundation design, earthwork, and site preparation shall incorporate all of the mitigations in the site-specific investigations. The County's registered <u>geotechnical engineer engineering geologist</u> shall review the site-specific investigations, provide any additional necessary measures to meet Building Code requirements, and incorporate all applicable recommendations from the investigation in the design plans and shall ensure that all plans for the Project meet current Building Code requirements.









Cielo Vista Project Source: LGC Geotechnical, Inc., 2014.

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SECTION 4.6, GREENHOUSE GAS EMISSIONS

1. Page 4.6-22. Modify fourth paragraph with the following changes:

<u>Mobile Source Emissions.</u> GHG emissions would also result from mobile sources associated with the Project. These mobile source emissions will result from the typical daily operation of motor vehicles by visitors, employees, and customers. Project mobile source emissions are dependent on both overall daily vehicle trip generation. Trip characteristics available from the report, *Cielo Vista Traffic Impact Analysis* (Urban Crossroads, Inc., July 2012 February 22, 2013) were utilized in this analysis. This report is included as Appendix K <u>L</u> in this Draft EIR.

2. Page 4.6-26. Add the following text below the 1st paragraph in the discussion of "Consistency with Applicable GHG Plans":

Further, as discussed previously, SB 375 was enacted to reduce GHG emissions by requiring MPOs to develop an SCS as part of their RTP. As a result, SCAG has included an SCS element to their RTP which encompasses the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Riverside. Each SCS must outline the strategies being undertaken in order to reduce GHG emissions from automobiles and light trucks in the region. SB 375 also allows for subregional council of governments to develop a subregional SCS. The Orange County Council of Governments (OCCOG) has developed a subregional SCS specific to Orange County. The subregional SCS is a collective regional effort to link transportation and land uses, and includes a variety of progressive measures undertaken by Orange County jurisdictions, agencies, and groups that lead to changes in the use of automobiles and light duty trucks, resulting in reductions in GHGs. These strategies and actions are Orange County's contribution to the region's efforts to achieve both 2020 and 2035 GHG thresholds established by CARB.³³ Thus, the subregional SCS is a planning level document which includes measures intended to be implemented on a countywide scale, not measures specifically applicable to individual projects.

The OCCOG subregional SCS contains goals (VMT reduction) identical to the regional SCAG SCS. However, goals of the SCS are not project specific. As stated in the OCCOG subregional SCS, "no subregional GHG emissions reduction targets were set by CARB or SCAG. GHG emission reduction targets are only calculated at the regional level." Therefore, the SCS does not target specific projects, but reductions will be achieved on a regional level.

In order to achieve VMT and GHG reduction goals, the SCS contains several strategies and VMT reduction measures which are regional in nature. Such measures include transportation system efficiency improvements and transit oriented development. As these VMT reduction measures are more regional in nature, the Project would not be able to implement such measures. Therefore, the Project would not conflict with goals of the SCS.

Footnotes:

33 See Orange County Sustainable Communities Strategy, Executive Summary.

SECTION 4.7, HAZARDS AND HAZARDOUS MATERIALS

1. Page 4.7-10. Add the following to the end of the Regulatory Framework sub-section:

(j) South Coast Air Quality Management District

<u>The South Coast Air Quality Management District (SCAQMD) regulates emissions associated with the</u> <u>excavation and remediation of certain contaminated materials through SCAQMD Rule 1166, Volatile</u> <u>Organic Compound Emissions from Decontamination of Soil. This rule sets requirements to control</u> <u>the emission of VOCs from excavating, grading, handling and treating VOC-contaminated soil as a</u> <u>result of leakage from storage or transfer operations, accidental spillage, or other deposition. The</u> <u>rule sets standards for the handling of VOC-contaminated soil at or from an excavation or grading</u> <u>site.</u>

2. Page 4.7-11. Modify second paragraph with the following changes:

(1) Hazardous Materials/Records Review

The Phase I and II ESA and the Site Assessment Report assessed the presence or likely presence of historical, existing, or threatened releases of any hazardous substances or petroleum products into structures, soil, and/or groundwater beneath the project site, to the extent practical. These are referred to as recognized environmental conditions (RECs), as defined under the American Society of Testing and Materials (ASTM) E1528-05 E1527-00.

3. Page 4.7-17. Modify the 2nd and 3rd sentences in the 3rd paragraph with the following changes:

Based on the size and scope of the Project and the potential for hazards and hazardous materials impacts, the thresholds below are <u>including included</u> for evaluation in this EIR. <u>Please rRefer</u> to Section 6.0, *Mandatory Findings of Significance*, for a discussion other issues associated with evaluation of hazards and hazardous materials where the characteristics of the Project made it clear that effects would not be significant and further evaluation in this section was not warranted.

4. Page 4.7-19. Modify the 1st sentence following the list of PDFs with the following changes:

Please $r\underline{R}$ efer to Impact Statement 4.7-5 below for further details of the PDFs related to the Project's proposed fire protection features.

5. Page 4.7-19. Modify PDF 7-13 with the following changes:

PDF 7-13: The Project would incorporate a landscape plan that utilizes a plant palette consisting of fire resistant plants, native and appropriate non-native drought tolerant species in accordance with OCFA guidelines. <u>In addition, long-term maintenance</u> responsibilities would remove from all fuel modification zones any invasive nonnative species that appear on the California Invasive Plant Council (Cal-IPC) list of invasive species to prevent these from becoming established. (This PDF to be verified prior to issuance of building permits by the Manager, OC <u>Planning Development</u> <u>Services</u>.)

6. Page 4.7-24. Modify Mitigation Measure 4.7-4 with the following changes:

Mitigation Measure 4.7-4 After decommissioning of the oil facilities on the project site, a qualified environmental consultant shall inspect the abandoned wells and perform a review of well decommission documentation. Also, DOGGR shall be contacted to perform a "Construction Site Review" of the abandoned wells on the subject site to determine whether the wells have been abandoned to current standards, as well as verify that adequate distances of wells to proposed structures is proposed. If these are not adequate, the siting of proposed structures and/or proper measures to well features shall be conducted to the satisfaction of DOGGR. The results of the reviews shall be provided to the RWQCB, OCFA, DOGGR, and OCHCA.

7. Page 4.7-24. Modify Mitigation Measure 4.7-6 with the following changes:

Mitigation Measure 4.7-6 Prior to grading activities and concurrent with decommissioning of the on-site oil facilities, the Project Applicant shall retain a qualified environmental consultant/California registered engineer and/or geologist with demonstrated proficiency in the subject of soil gas investigation and mitigation to prepare a combustible gas/methane assessment study to the OCFA for review and approval, prior to grading activities. <u>The study shall be prepared to meet the combustible soil gas hazard mitigation requirements set forth in OCFA's Combustible Soil Gas Hazard Mitigation Guideline C-03. Prior to conducting the gas/methane assessment study, the site drill locations shall be pre-approved by the OCFA as to ensure approval of the report. Based on the results of the study, methane mitigation measures, which may include, but are not limited to, the use of vapor barriers and/or sealed utility conduits, and other mitigation measures shall be identified in a mitigation plan for implementation during construction and operation of the Project. The mitigation plan shall be subject to review and approval by the OCFA prior to grading activities.</u>

8. Page 4.7-33. Modify 3rd paragraph with the following changes:

Fire behavior relative to topography and structures within the project site is an important factor in development of the fire protection system for the Project. The largest flame length impacting the fuel modification zone would be less than 25 feet. While modeling within the Fire Behavior Report indicates that flame lengths of just under 50 feet are possible under perfect conditions, this is unlikely due to predominant winds that drive wildland fires as well as the arrangement of slopes and fuel relative to the structures. The predominant fuels within the project site are grasses, grass/scrub mixtures, and chaparral. The only locations which have areas of moderate to heavy fuels are on the northern slopes of the steeper canyon. Some of these areas would be adjacent to the project site, but none are below or immediately aligned with the wind and topography as to create a condition where slope, wind, and fuel are in full alignment. All of the fuels within the project area's fuel modification zones as shown on Figure 4.7-2(a-b) would be removed and replaced with plants from the approved palette. Flanking fire of six to eight feet maximum is expected at the property line of the lots within the development or at the base of the fuel modification zones or block walls/radiant heat walls. By compliance with the applicable regulatory requirements cited above and implementation of the prescribed mitigation measures, in all areas, the minimum requirement of providing a 2:1 safety ratio (2 flame heights/lengths in distance from the fuel modification zone) for a "safety zone" needed for protecting the structures would be achieved and in most...

SECTION 4.8, HYDROLOGY AND WATER QUALITY

The revisions included below to Chapter 4.8, *Hydrology and Water Quality*, of the Draft EIR are consistent with the Project's updated Conceptual Drainage Study and Conceptual Water Quality Management Plan (WQMP) (both included in Appendix D of this Final EIR). The reports have been updated based on public comments on the Draft EIR and per consultation with County of Orange Public Works Staff. The revised hydrology analysis meets the County's requirements in regards to modeling the required storm events per the Orange County Hydrology Manual and current County Technical Guidance Document requirements. The revisions made per the updated reports do not consist of "significant new information" added to the Draft EIR. As such, recirculation of the Draft EIR is not required by CEQA Guidelines Section 15088.5.

Per the analysis within the revised reports, the Project's hydrology and water quality impacts remain "less than significant" as concluded in the Draft EIR. As shown in the Project's updated Conceptual Drainage Study and Conceptual Water Quality Management Plan, the Project's post development runoff volume would not significantly exceed the pre-development condition and the proposed drainage facilities would allow downstream drainage courses to be consistent with existing conditions. Also, compliance with applicable regulatory requirements, as well as implementation of the PDFs and BMPs identified in the WQMP, would ensure that operation of the Project would not significantly affect the beneficial uses of the receiving waters or result in a violation of water quality standards, and would minimize the potential for contributing additional sources of polluted runoff. Thus, the Project's "less than significant" hydrology and water quality impacts would not be substantially increased, no new significant environmental impact would occur, and no new mitigation measures are proposed.

1. Page 4.8-1. Modify the 1st sentence in the last paragraph with the following changes:

- CEQA Drainage Study for Cielo Vista (herein referred to as the "Drainage Study"), prepared by Tory R. Walker Engineering, Inc., August 9, 2013;
- Hydrology Study (Onsite) for Cielo Vista Subdivision, prepared by Charles Hartman & Associates, March 28, 2013;
- Technical Memorandum Summary of Unit Hydrograph Analysis for Hydromodification Compliance of Cielo Vista, Yorba Linda, CA (herein referred to as the "Technical Drainage Memorandum"), prepared by Tory R. Walker Engineering, Inc. April 9, 2013; and
- County of Orange/Santa Ana Region Priority Project Conceptual WQMP: Cielo Vista Tentative Tract 17341, prepared by Charles Hartman & Associates July 10, 2013.
- <u>Conceptual Drainage Study Cielo Vista Tract 17341 (the "Drainage Study")</u>, prepared by <u>Fuscoe Engineering Inc. October 2015</u>; and
- <u>Conceptual Water Quality Management Plan Cielo Vista (the "WQMP")</u>, prepared by Fuscoe Engineering Inc. October 2015.

All report documents listed above are included in Appendix <u>HD</u> of this <u>Final</u> EIR.

2. Page 4.8-7. Modify the 2nd full sentence in the 1st paragraph with the following changes:

Thus, the Project must implement on-site or regional hydromodification controls such that post development runoff volume for the two year frequency storm does not exceed that of the predevelopment condition by more than five percent, and time of concentration of post development runoff for the two year storm event is not less than that for the pre-development condition by more than five percent, <u>or as otherwise allowed per County requirements</u>.

3. Page 4.8-9 and 4.8-10. Modify the 3rd to 5th paragraphs on page 4.8-9 and Tables 4.8-1 and 4.8-2 on page 10 with the following changes:

<u>There are no known onsite drainage facilities that discharge storm flows onto the project site or</u> <u>convey storm flows through the project site.</u> All storm flows are currently conveyed through the site <u>via natural v-shaped surface drainages.</u> Natural runoff from the undeveloped site area flows in a westerly direction towards two <u>three</u> receiving storm drain systems located at Stonehaven Drive to the south (referred to as the "Southern Boundary") and San Antonio Road to the west of the project site (referred to as the "Western Boundary"). These are the two points of outlet within the project site. <u>downstream of the project site at the following locations:</u>

- 1. An 8-foot wide by 7-foot high Reinforced Concrete Box (RCB), located at Stonehaven Drive to the south (also referred to as the "Southern Boundary").
- 2. A 36-inch Reinforced Concrete Pipe (RCP), located just east of Dorinda Road, north of Felipa Road (also referred to as the "Southwest Outlet").
- 3. Esperanza Channel, located between San Antonio Road and Via Corona to the west of the project site (also referred to as the "Western Boundary").

The North Site drains to the Western Boundary, while the South Site drains to the Southern Boundary <u>and Dorinda Road/Southwest Outlet</u>.

The project site is downstream of four significant offsite natural tributary areas <u>(Creeks A, B, C, and D)</u> that drain via overland flow through natural flow paths, which are ultimately intercepted by the aforementioned drainage systems.³ The four tributary areas (Creeks A, B, C, and D) that pass through the project site are illustrated in **Figure 4.8-1**, *Hydrology Map*.

Runoff from the North Site, inclusive of three large offsite tributaries tributary areas (Creeks B, C and D^{\pm}), converge onsite prior to discharging at the <u>W</u><u>Western project bB</u>oundary. The<u>se combined flows</u> (identified as Creek F) continue to drain via overland flow where they are intercepted by the drainage <u>Esperanza eC</u>hannel located adjacent to San Antonio Road <u>at the Western Boundary.⁵</u>

Footnotes

<u>3</u> The drainage (or "creek") names (i.e., A, B, C, D) in this section are based on the Conceptual WQMP and Drainage Study prepared for the Project. The drainage names differ from those described in Section 4.3, Biological Resources, which are based on a separate report: <u>Investigation of Jurisdictional Waters and Wetlands, Cielo Vista Project Site, Orange County,</u> <u>California, prepared by PCR in July 2012.</u>

- <u>4</u> With respect to Creek D, a major tributary runoff from the northwest emanates from the existing residential Tract 9813 and is conveyed towards the Cielo Vista project site via an 84inch RCP which then joins Creek D.
- <u>5</u> Creek F is identified for purposes of delineating the watercourse below the confluence of Creeks B, C and D and for the Drainage Study and Conceptual WQMP. The watercourse was thoroughly and appropriately analyzed with respect to other potential impacts, including Biological Resources, throughout the Final EIR.

With regards to <u>Runoff from</u> the South Site, Wire Springs Canyon (Creek A), inclusive of Creek A and a large offsite natural tributary area located <u>partially on-site and</u> to the west of the project site (Creek <u>E</u>), drains to the receiving <u>sS</u>outhern portion <u>Boundary and Southwest Outlet facilities, respectively.</u> of the project site, discharging to the receiving box culvert (8-feet by 7-feet) storm drain located within Stonehaven Drive.

Both t<u>T</u>he Stonehaven Drive <u>(8'x7' RCB), Tract 9813</u> and <u>San Antonio Dorinda</u> Road <u>(36" RCP)</u> facilities are owned and maintained by the <u>OCFCD</u> City of Yorba, whereas the inlet at Esperanza <u>Channel is owned and maintained by OCFCD</u>. and <u>Each facility</u> outlets to the Santa Ana River, approximately two miles south of the project site. These <u>downstream</u> storm drain facilities currently have adequate capacity to accommodate existing storm flows. **Table 4.8-1**, *Existing Conditions* (*North Site*): 2<u>5</u>-Year and 100-Year Peak Flows² — Western Boundary and **Table 4.8-2**, *Existing Conditions* (South Site): 2-Year and 100-Year Peak Flows — Southern Boundary, summarizes the 2<u>5</u>-and 100-year peak flows under existing conditions at from the upstream storm drain (Tract 9813) and at each boundary downstream receiving storm drain locations. Figure 4.8-1 illustrates the locations of the western and southern project site boundaries.

<u>Footnotes</u>

³ CEQA Drainage Study for Cielo Vista, prepared by Tory R. Walker Engineering, Inc., March 27, 2013.

Table 4.8-1

Existing Conditions (North Site): 2-Year and 100-Year Peak Flows – Western Boundary

Discharge Location	Drainage Area (Ac)	2-Year Peak Flow (cfs)	100-Year Peak Flow (cfs)
Creek B	224	131.0	459.2
Creek C	717	327.9	1,235.3
Creek D	473	275.6	968.1
Total:	1 4142	647.0 [₽]	2.425.9 ^b
Confluence of Creeks B, C, & D	1,414 ª	017.0 °	4,143.7 °

Ac = acres; cfs = cubic feet per second.

^e— In order to provide the peak flow at the confluence of Creeks B, C, and D at the Western Boundary, a single design storm was created for use in all three creeks by using correction factors based on the total area of the Creeks B, C, and D.

Deak flow for the confluence of Creeks B, C, & D is not equal to the sum of the individual peak flows for each creek as the peak flow in the hydrograph of Creek C occurs five minutes after the peak flows in Creeks B and D. Consequently, the peak discharge at the confluence is approximately 90 cfs and 200 cfs lower than the total sum of the partial peak flows for the 2-year peak flow and 100-year peak flow, respectively.

Source: CEQA Drainage Study for Cielo Vista, prepared by Tory R. Walker Engineering, Inc., August 9, 2013; and Technical Memorandum Summary of Unit Hydrograph Analysis for Hydromodification Compliance of Cielo Vista, Yorba Linda, CA, prepared by Tory R. Walker Engineering, Inc. April 9, 2013.

Table 4.8-1

Existing Conditions: 25-Year and 100-Year Peak Flows

Description	Туре	<u>Size</u>	<u>Ownership</u>	<u>25-Year Flowrate</u> <u>(cfs)</u>	<u>100-Year Flowrate</u> <u>(cfs)</u>
<u>Upstream</u>					
<u>Tract 9813</u>	<u>Circular Pipe</u>	<u>84"</u>	<u>City of Yorba Linda</u>	<u>1,160^a</u>	<u>1,580^a</u>
<u>Downstream</u>					
Esperanza Channel	<u>Open Channel</u>	<u>13'x11'</u>	<u>OCFCD</u>	<u>2,593.6</u>	<u>3,470.2</u>
<u>Storm Drain at</u> <u>Dorinda Rd.</u>	<u>Circular Pipe</u>	<u>36" RCP</u>	<u>City of Yorba Linda</u>	<u>39.4</u>	<u>52.3</u>
<u>RCB at Stonehaven</u> <u>Drive</u>	<u>RCB</u>	<u>8'x7'</u>	<u>City of Yorba Linda</u>	<u>890.4</u>	<u>1,195.5</u>

^a Flow rates are based upon the Preliminary Drainage Report for the Esperanza Hills Project, dated June 20, 2013. <u>cfs = cubic feet per second</u>

Source: Conceptual Drainage Study - Cielo Vista Tract 17341, prepared by Fuscoe Engineering Inc. October 2015.

Walker Engineering, Inc. April 9, 2013.

Table 4.8-2

Existing Conditions (South Site): 2 - Year and 100-Year Peak Flows - Southern Boundary

Discharge Location	Drainage Area (Ac)	2-Year Peak Flow (cfs)	100-Year Peak Flow (cfs)
Creek A	674 ^a	296.6 ¹	1,125.3
Ac = acres; cfs = cubic feet per s			
"— A separate design storm wo	as created for Creek A as no confl	luence analysis was required for this	creek at the Southern Boundary.
			st 9, 2013; and Technical Memorandum
Summary of Unit Hy	drograph Analysis for Hydromod	dification Compliance of Cielo Vista	, Yorba Linda, CA, prepared by Tory R.

4. Page 4.8-13. Modify the 1st sentence in the 5th paragraph with the following changes:

The Lower Santa Ana River <u>Reach 2</u> is on the <u>2012</u>303(d) list of impaired waters for <u>indicated</u> <u>bacteria impairment (pathogens).</u> (fecal coliform bacteria).

5. Page 4.8-14. Modify the 1st paragraph with the following changes:

a. Methodology

The evaluation of hydrology and water quality impacts considers applicable regulatory requirements that would apply to the Project during construction and operation. The assessment of impacts follows guidelines set forth in the Orange County Hydrology Manual and the Orange County Local Drainage Manual – January 1996. The Orange County Hydrology Manual uses a return period of 25year and 100-year storm event to describe drainage characteristics and design capacity. The 100year storm event is analyzed to model the off-site tributary flows and hydraulic conveyance through the project site. The 25-year storm is analyzed for the proposed condition street capacities and hydraulic conveyance of the onsite storm drain facilities. The analysis below compares the existing conditions to the proposed conditions with and without the Project's proposed storm drain facilities. where necessary. Per the County of Orange drainage criteria, the Unit Hydrograph method [per Section B.4 of the Orange County Hydrology Manual (OCHM)] was utilized in the Drainage Study and Technical Drainage Memorandum to analyze 2- and 100-year peak flow rates from the project site in existing and proposed developed conditions to the two points of outlet from the project site.^{7,8} The results of these studies comparisons are included within the analysis to determine the Project's consistency with the current Orange County hydromodification drainage requirements. Civil Design's Rational Hydrology Program and Unit Hydrograph Analysis was used to determine all runoff tributary to Planning Area 1. For Planning Area 2 upstream tributary runoff was sourced from the approved "Preliminary Drainage Reports for Esperanza Hills Property, Option 2" prepared by KWC Engineers, dated May 2013.

<u>Also, Iin</u> accordance with County requirements, a Conceptual WQMP was prepared for the Project which provides the basis for determining the Project's consistency with current applicable hydrology and water quality regulatory requirements. Further, the WQMP identifies project design features (i.e., BMPs) to minimize pollutants from site runoff, as well as drainage facilities, which demonstrate the Project's ability to minimize potential impacts related to hydrology and water quality. <u>In</u> addition, the WQMP evaluates the 2-year (24-hour) storm event to determine if the Project would be

<u>susceptible to hydromodification impacts, which would be considered a "hydrologic condition of concern" per the Countywide Model WQMP Technical Guidance Document (TGD) (May 2011).</u> Considering the Project characteristics and the existing conditions, hydrology and water quality impacts are evaluated in response to the Thresholds of Significance identified below, and a mitigation measure was prescribed, where applicable. All report documents referenced above are included in Appendix <u>HD</u> of this <u>Final</u> EIR.

<u>Footnotes</u>

- 7 A hydrograph is a graph of the water level or rate of flow of a body of water as a function of time, showing the seasonal change.
- 8 The unit hydrograph method is used for watersheds larger than 640 acres to estimate peak discharges and volumes of stormwater runoff. This method produces a graph of discharge vs. time for the entire length of a storm.

6. Page 4.8-17. Modify the 2nd sentence in the 1st paragraph with the following changes:

The WQMP included in Appendix \underline{HD} of this <u>Final</u> EIR is a conceptual plan intended to provide necessary information adequate for CEQA purposes.

7. Pages 4.8-17 and 4.818. Modify the list of Infiltration, Biotreatment, Hydromodification and Treatment Control BMPs with the following changes. Page 4.8-17 also references Figure 4.8-2, *Project Drainage-BMP Plan*. Figure 4.8-2 is shown page 4.8-19 of the Draft EIR. Figure 4.8-2 has been updated to show the Project's current proposed BMPs. See Figure 4.8-2(a-b) on the following pages.

Infiltration BMPs

- BMP-I<u>NF</u>1 <u>Infiltration Basins</u> The North Site would include an infiltration basin to retain flows and provide water quality treatment. <u>The basin would have a storage capacity of 0.42 acre feet or approximately 18,300 ft³.</u>
- BMP-I2Filterra UnitWater quality treatment of runoff on the South Site would include
33 filterra units (or approved equivalent stormwater filters) with planter boxes
4 feet by 8 feet within the street right-of-way of the subdivision entrance. (This
BMP is also listed under Biotreatment BMPs as BMP-BT3.)

Biotreatment BMPs

- BMP-BT1 <u>Dry Extended Detention Basins</u> -Dry extended detention basins would be utilized to detain stormwater runoff and remove suspended solids/sediment.
- BMP-BT2 <u>Contech Stormfilters</u> Water quality treatment of runoff in the South Site would include the use Contech Storm Filters (or approved equivalent).

- BMP-BT3Filterra Unit Water quality treatment of runoff in the South Site would include33 filterra units (or approved equivalent stormwater filters) with planter boxes4 feet by 8 feet within the street right-of-way of the subdivision entrance.
- BMP-BIO1Bioretention with Underdrains Planning Area 1 would incorporate four
designated basins (A, B, C and D) which include bioretention with underdrains
for on-site water quality treatment. Bioretention with underdrains are plant-
based biotreatment systems that typically consist of a ponding area, mulch layer,
planting soils and plants.
- BMP-BIO7Proprietary Vegetated Biotreatment Systems The Project would implement a
series of proprietary biotreatment systems in Planning Area 1 for water quality
treatment to treat all pollutants of concern within the site access to a medium to
high level of effectiveness. The systems would include the Modular Wetlands
Systems developed by Bio Clean Environmental Services, Inc.

Hydromodification BMPs

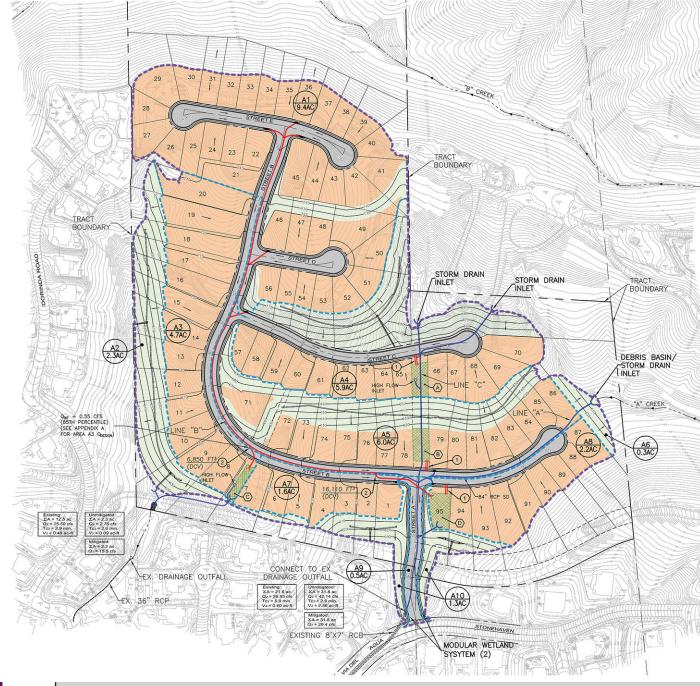
BMP-HM1Above Ground Detention BasinsThe Project would provide onsite detention to
ensure that the post development runoff volume for the two year, 24-hour peak
flows do not exceed that of the pre-development condition by more than five
percent, and the time of concentration of post development runoff for the two
year storm event is not less than that for the pre-development condition by more
than five percent. Details of the proposed detention system would be provided
in the final, design-level WQMP. The basins would be inspected/maintained at a
minimum before October 1st every year and after all major storm events.

As described above, BMP-INF1 would provide an infiltration Basin in the North Site (Planning Area 2) to retain flows and provide water quality treatment. The proposed infiltration basin would address both LID and hydromodification performance criteria. The basin would have a total storage of approximately 0.42 acre-ft of which the lower portions would be utilized for bio-filtration and hydromodification with the higher portions provided for detention. For Planning Area 1, BMP-HM1 is proposed to address peak hour runoff conditions.

<u>BMP-HM1</u> Split Flow/Bifurcation Structure – In Planning Area 1, a split-flow/bifurcation structure would be installed along storm drain Line "B" in "B" Street to bifurcate storm flows to both the 36" RCP at Dorinda Road and the 8'x7' RCB at Stonehaven Drive.

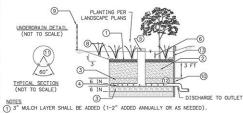
Treatment Control BMPs

BMP-TC1Contech Storm Filter- Stormwater would be treated by the actions of a series of
cartridges. Under normal conditions all stormwater leaving the Contech Storm
Filter (or approved equivalent stormwater filters) would be fully treated. During
heavy storm events, excess runoff would be conveyed through the structure
untreated through a bypass.



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PCR



2'-3' ENGINEERED SOIL DEPTH (3' DEPTH IS PREFERRED). SEE MEDIA STORAGE NOTES.

(3) UNDERDRAIN SHALL BE SURROUNDED BY 6" OF WASHED AGGREGATE.

- (4) 6" PVC WITH A 0.5% MINIMUM SLOPE. SEE ALSO NOTE 11 AND 12.
- (5) OVERFLOW RISER SHALL BE SIZED TO CONVEY LARGE STORM EVENTS PER OC HYDROLOGY MANUAL.

6 PONDING DEPTH SHOULD NOT EXCEED 18"

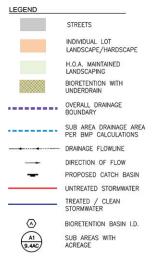
(7) 12" WIDE MINIMUM CURB OPENING.

(8) ENERGY DISSIPATOR SHALL BE SIZED BY ENGINEER.

BIORETENTION WITH UNDERDRAIN SECTION

BMP SUMMARY TABLE (SOUTH SIDE)

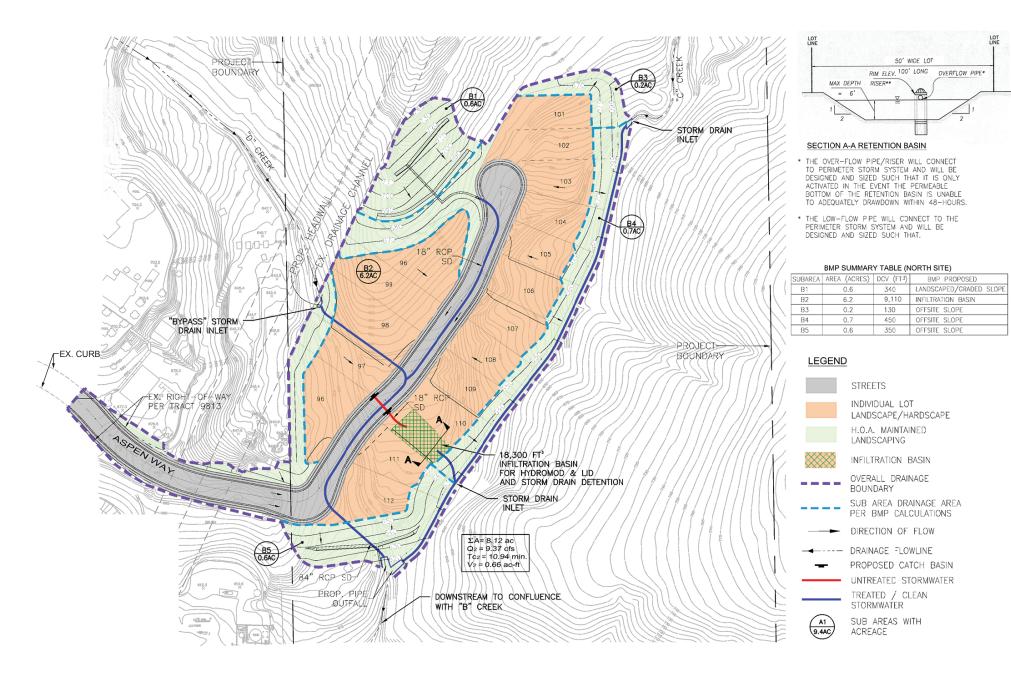
	Divir Solvivi	INT TADLE	(00011101012)
SUBAREA	AREA (ACRES)	DCV (FT3)	BMP PROPOSED
A1	9.4	13,740	BIORETENTION-BASIN D
A2	2.3		N/A-OFFSITE SLOPE
A3	4.7	6,850	BIORETENTION-BASIN C
A4	5.9	7,420	BIORETENTION-BASIN A
A5	6.0	9,760	BIORETENTION-BASIN B
A6	0.3		N/A-OFFSITE SLOPE
A7	1.6	2,370	BIORETENTION-BASIN D
A8	2.2	3,220	BIORETENTION-BASIN D
A9	0.5	1,870	MODULAR WETLANDS
A10	1.3		N/A-OFFISTE SLOPE



NOTES Untreated runoff directed via parkway culvert to

- 1 basin for bioretention. (Areas A4, A5, A8)
- Bifurcate untreated runoff for bioretention. Equivalent DCV diversion flow indicated on plan. (Areas A1, A3, A7) 2

BMP Plan (Planning Area 1) FIGURE 0 400 Feet 4.8-2a **Cielo Vista Project** Source: Fuscoe, 2015.





The filters would be cleaned out as necessary during inspection. Cartridges would be replaced every year, after any chemical spill, or as required by inspection to ensure proper function and drainage. The filters would be inspected at a minimum before October 1st every year and after all major storm events.

- BMP-TC2 <u>Filterra</u> Stormwater would be treated by entering the catch basin and flowing through several unique strata as treatment. The treated stormwater would be collected with a pipe several feet below the entrance flowline. These Filterra units (or approved equivalent stormwater units) would be installed with an impermeable liner to limit potential percolation and/or seepage into soil layers below.
- BMP-TC3 <u>Detention Basin</u> A detention basin would be constructed in the North Site to provide a volume of 10,980 cubic feet in an area 90 feet by 50 feet. The basin would have maximum 3:1 side slopes, would be vegetated, would have an open unlined bottom, and would have storm drains at both ends to accommodate inflows and outflows.

8. Page 4.8-21. Add the following BMP to the list of Non-Structural BMPs following BMP-N11:

BMP-N12Employee Training – All employees of the HOA and any contractors will require
training to ensure that employees are aware of maintenance activities that may
result in pollutants reaching the storm drain. Training will include, but not be
limited to, spill cleanup procedures, proper waste disposal, housekeeping
practices, etc.

9. Pages 4.8-21 and 4.8-22. Modify the list of Structural Source Control BMPs and Hydrology Features with the following changes:

Structural Source Control BMPs

- BMP-S1 <u>Storm Drain Stenciling</u> –Provide storm drain stenciling and signage. <u>The phrase</u> <u>"NO DUMPING! DRAINS TO OCEAN", or an equally effective phrase, would be</u> <u>stenciled on all major storm drain inlets within the project site to alert the</u> <u>public to the destination of pollutants discharged into storm water. Stencils</u> <u>would be inspected for legibility on an annual basis and re-stenciled as</u> <u>necessary.</u>
- BMP-S3 <u>Trash and Waste</u> Design and construct trash and waste storage areas to reduce pollution introduction.
- BMP-S4 <u>Irrigation Systems</u> Use efficient irrigation systems and landscape design, water conservation, smart controllers and source control.

- BMP-S5 <u>Slopes and Channels</u> Protect slopes and channels and provide energy dissipation. The Project would also incorporate requirements applicable to individual priority project categories (from SARWQCB NPDES Permit).
- BMP-S12 <u>Hillside Landscaping</u> There are a number of existing and proposed slopes on the project site. Where practical, established native vegetation would be protected in place on existing slopes. Native, drought-tolerant landscape species would be considered where practical for use on proposed slopes. Individual property owners and the Cielo Vista HOA staff would regularly inspect slopes for visible soil erosion. Bare areas would be revegetated and stabilized until a root system is firmly established. <u>All slopes would be</u> <u>vegetated and stabilized to prevent erosion, in accordance with "Efficient</u> <u>Irrigation and Landscape Design" source control BMP to prevent erosion.</u>

The following PDFs have been identified for the Project pertaining to erosion and sediment control:

- PDF 8-2: Riprap aprons or other types of energy dissipaters would be located at all points of concentrated discharge where flow velocity exceeds five feet per second (ft/s) to mitigate the outlet velocity so as to minimize the potential for downstream erosion. These points of discharge would not be limited to storm drain outlets but would also include brow ditches and other forms of storm water conveyance. Riprap aprons would be designed and sized in conformance with regional sizing criteria found in the "County of Orange Local Drainage Manual", dated August 2005. Other designs and sizing criteria can be found in the FHWA's "Hydraulic Engineering Circular Number 14, Third Edition" – HEC 14, including a "Riprap Basin" that could be used. Prior to the issuance of any grading or building permit, the riprap aprons would be identified in the Project's Final Drainage Study to be reviewed and approved by the Manager, Permit Services.
- PDF 8-3: Sediment basins would be located upstream of all proposed storm water conveyance systems within the project site. Prior to the issuance of any grading or building permit, the sediment basins would be identified in the Project's Final Drainage Study to be reviewed and approved by the Manager, Permit Services.

(3) Hydrology Features

The following PDFs have been identified for the Project to prevent the occurrence and/or minimize the significance of potential drainage and flooding impacts:

PDF 8-4: To be determined in consultation with County of Orange Public Works, if determined appropriate, the receiving storm drain within the project site (the headwall intercepts proposed at the end of "B" and "F" Streets) would be downsized by a 6-inch reduction in capacity to reduce the peak flow to existing conditions by throttling down flow, effectively detaining peak flows by the use of a hydraulic reduction. The ponding caused by such hydraulic reduction in capacity would be maintained on the project site, ensuring that no offsite property is impacted by attenuating the peak flow.⁹ If this pdf is necessary, prior to the issuance of any grading or building permit, the storm drain sizing would be identified in the Project's Final Drainage Study to be reviewed and approved by the Manager, Permit Services.

- PDF 8-2:Debris Basin The Project would include a debris basin at the most easterly cul-
de-sac in Planning Area 1 for a drainage tributary (Creek A) of approximately
636 acres, which enters the project site at this location.
- PDF 8-5<u>3</u>: All <u>developed pad habitable building floor</u> elevations would be constructed at a minimum of <u>3-feet 1-foot</u> (or greater) above the <u>anticipated peak 100-year</u> <u>flood</u> water surface elevation to ensure that no residential structure would be flooded within the project site. (This PDF to be verified prior to issuance of a building permit by the Manager, OC Planning.)

<u>Footnotes</u>

⁹ Appendix 4 of the Drainage Study includes illustrations of potential on-site detention basin locations.

10. Page 4.8-24. Modify the 3rd and 4th paragraphs with the following changes:

As detailed in the WQMP and in the discussion of Project Design Features above, the Project would include an on-site stormwater infiltration basin in Planning Area 2 that would function to contain and treat stormwater pollutants prior to leaving the site. The infiltration basin on the North Site would retain and percolate all collected stormwater.

Contaminants and sedimentation would be removed from stormwater runoff by bioretention and as such, no pollutants would be carried off the site (refer to BMP-I1, BMP-BT1 and BMP-TC3). Surface water runoff would be contained within infiltration basins (BMP-I1) with detained solids to be retained in the basins after water has infiltrated into the soil (BMP-BT1 and BMP-TC3). Stormwater flows in the South Site would be treated in a Contech[®] Storm Filter (or approved equivalent) and Filterra Units (or approved equivalent stormwater unit) to remove contaminates and sediments prior to combining with offsite/untreated discharges (refer to BMP-BT2, BMP-BT3, BMP-TC1 and BMP-TC2). Before water leaves the project site, it would pass through a series of stormwater filters to remove sediments and contaminants (BMP-BT2, BMP-BT3, BMP-TC1, and BMP-TC2).

In Planning Area 1 (South Site), the Project would incorporate four designated basins (A, B, C and D) which include bioretention with underdrains for on-site water quality treatment (see BMP-BIO1). See Figure 4.8-2 for locations of the basins. Bioretention with underdrains are plant-based biotreatment systems that typically consist of a ponding area, mulch layer, planting soils and plants. As storm water passes down through the planting soil, pollutants are filtered, adsorbed, biodegraded and sequestered by the soil and plants. Underdrains collect the treated water and return it back into the storm drain system. Bioretention has a medium treatment performance rating for treating bacteria, which is the Project's primary pollutant of concern. Since the main drive access for Planning Area 1 (off of Stonehaven Drive) lies downstream from the proposed bioretention facilities,

the Project would implement a series of proprietary biotreatment systems for water quality treatment to treat all pollutants of concern within the site access to a medium to high level of effectiveness (see BMP-BIO7). The systems would include the Modular Wetlands Systems developed by Bio Clean Environmental Services, Inc. Modular Wetlands by Modular Wetlands Systems, Inc. are proprietary biotreatment systems that utilize multi-stage treatment processes including screening media filtration, settling, and biofiltration. In accordance with the County's Model WQMP TGD, the Modular Wetland Biotreatment and bioretention/biotreatment BMPs would both be sized to treat runoff from the Design Capture Storm (85th percentile, 24-hour). Locations of the bioretention basins and biotreatment systems, as well as the tributary drainage areas, are shown on Figure 4.8-2. Also, as discussed under Impact Statement 4.8-2 below, the Project would a split flow/bifurcation structure in Planning Area 1 (BMP-HM1) to ensure that no significant downstream hydromodification impacts or "hydrologic condition of concern" occur during Project implementation.

In addition, as detailed in the WQMP, the BMPs employed under the Project would also include a host of measures to prevent pollutants from entering stormwater flows in the first place. These include the non-structural and structural source control BMPs listed in the Project Design Features section above (BMPs N1, N2, N3, N4, N11, <u>N12</u>, N14, N15, S1, S3, S4, and S5). The PDFs include installation of riprap aprons to minimize the potential for downstream erosion (PDF 8-2), as well as sediment basins to be located upstream of all proposed storm water conveyance systems within the project site (PDF 8-3). The Project requires preparation of a SWPPP and both a conceptual and design level WQMP as per PDF 8-1 to prevent contamination of surface waters during project construction and operation.

11. Pages 4.8-25 to 4.8-28. Modify the impact discussion under Impact Statement 4.8-2 (Drainage Patterns and Stormwater Drainage System) with the following changes:

As detailed in the Drainage Study for the Project, runoff from the developed areas of the project site would be collected in a drainage system within planned local streets and routed through onsite water quality BMPs prior to draining to the existing discharge locations. All developed runoff would be treated in full compliance with regional storm water quality regulations prior to mixing with natural, offsite flows. As discussed in the methodology section above, <u>peak flow determinations were obtained from the Unit Hydrograph Method for Catchment Runoff Hydrographs the assessment of impacts follows guidelines set forth in the Orange County Hydrology Manual and the Orange County Local Drainage Manual – January 1996. Please refer to the Drainage Study in Appendix HD of this Final EIR for further details on the this hydrology impact assessment. Unit Hydrograph Method for Catchment Runoff Hydrograph Method for Catchment Runoff Hydrograph Method for Study in Appendix HD of this Final EIR for further details on the this hydrology impact assessment. Unit Hydrograph Method for Catchment Runoff Hydrograph Method for System proposed for the Project to accommodate post-development surface flows is described below.</u>

Offsite runoff tributary to the North Site would be intercepted by two proposed storm drain systems. Runoff from the northern tributary area would be intercepted by a proposed headwall located to the north of Aspen Way. The flows would then be conveyed through the project site, draining to the natural existing flow path located within the project site. Flows generated by the natural tributary area to the northeast of the project site would be intercepted by a proposed headwall located at the northern end of the proposed "F" Street. These flows would then be conveyed via storm drain in a southerly direction, converging with flows from the Aspen Way tributary flows. <u>Ultimately, flows</u>

from the North Site would drain downstream approximately one-half mile in a southwesterly direction before entering the County of Orange's Esperanza Channel drainage facility at San Antonio Road.

In the South Site, runoff generated by the Wire Springs Canyon tributary (Creek A) would be intercepted via a proposed headwall located at the eastern end of the proposed "B" Street within the South Site (PDF 8-2). Debris basins capture the sediment, gravel, boulders, and vegetative debris that are washed out of the canyons during storms. The debris basin captures materials and allows the water to flow into the downstream storm drain system, thereby protecting the downstream drainage system. The remaining areas of the project site where offsite storm flows must be intercepted in order to convey peak storm flows safely through the project site do not require debris basins based upon the Army Corps of Engineers LA District Debris methods and requirements (due to the relative small natural tributary areas). These fFlows from Creek A would be conveyed in a westerly direction via storm drain, ultimately discharging to the existing 8-foot x 7-foot box culvert located within Stonehaven Drive to the south of the project site.¹¹ One adjacent localized creek, Creek E also traverses the southwesterly portion of Planning Area 1 and would be filled to create the development area. This would result in roughly 2.2 acres of the proposed developed portions of Planning Area 1, which would drain to the westerly property line, to be conveyed southerly and directed offsite towards the existing 36" RCP at Dorinda Road. To maintain drainage patterns similar to predeveloped conditions, BMP-HM1 requires a split-flow/bifurcation structure to be installed along storm drain Line "B" in "B" Street to bifurcate storm flows to both the 36" RCP at Dorinda Road and the 8'x7' RCB at Stonehaven Drive (see Figure 4.8-2).

As discussed in Chapter 4.3, *Biological Resources*, of the Draft EIR, a jurisdictional delineation of all existing ephemeral and artificially supported perennial flow features was conducted to assess the extent of "waters of the U.S., waters of the State" and/or wetlands under the jurisdiction of the United States Army Corps of Engineers (Corps)/Regional Water Quality Control Board (RWQCB), and/or streambed and associated riparian habitat under the jurisdiction of the California Department of Fish and Wildlife (CDFW). Detailed methodology and results of the jurisdictional delineation are included in *Investigation of Jurisdictional Waters and Wetlands* report prepared for the Project (refer to Appendix C of the Draft EIR). The Creek E flow features within Planning Area 1 do not possess the necessary indictors to be under the jurisdiction on any of the above referenced agencies. Indicators include such things as the "ordinary high water mark," limits of wetlands based on USACE guidelines and publications, and presence of a defined bed and bank and/or streambed associated riparian vegetation.

Table 4.8-3, *Developed Conditions (North Site): 2-Year and 100-Year Peak Flows Western Boundary*, and **Table 4.8-4**, *Developed Conditions (South Site): 2-Year and 100-Year Peak Flows – Southern Boundary* **Table 4.8-2**, *Developed Conditions: 25-Year and 100-Year Peak Flows*, summarize the developed conditions peak flows at the western and southern boundaries <u>drainage facilities</u> of <u>serving</u> the project site, <u>, respectively.</u> Figure 4.8-1 illustrates the locations of the western and southern project site boundaries, the locations of which would be same under existing and postproject conditions.

Footnotes

⁴¹— The drainage (or "creek") names (i.e., A, B, C, D) in this section are based on the Preliinary WQMP and Drainage Study prepared for the Project. The drainage names differ from those described in Section 4.3, Biological Resources, which are based on a separate report: Investigation of Jurisdictional Waters and Wetlands, Cielo Vista Project Site, Orange County, California, prepared by PCR in July 2012.

Table 4.8-3

Developed Conditions (North Site): 2-Year and 100-Year Peak Flows – Western Boundary

Discharge Location	Drainage Area (Ac)	2-Year Peak Flow (cfs)	Increase Over Existing Conditions (cfs)	100-Year Peak Flow (cfs)	Increase Over Existing Conditions (cfs)
Creek B	224	131.1	0.1	459.4	0.20
Creek C	717	328.0	0.0	1,235.3	0.01
Creek D	473	275.6	0.0	968.1	0.00
Total:					
Confluence of Creeks	1,414 [₽]	647.2 [₽]	0.1	2,426.1 ⋼	0.21
B, C, & D					

Ac = acres; cfs = cubic feet per second.

^e— In order to provide the peak flow at the confluence of Creeks B, C, and D at the Western Boundary, a single design storm was created for use in all three creeks by using correction factors based on the total area of the Creeks B, C, and D.

* Peak flow for the confluence of Creeks B, C, & D is not equal to the sum of the individual peak flows for each creek as the peak flow in the hydrograph of Creek C occurs five minutes after the peak flows in Creeks B and D. Consequently, the peak discharge at the confluence is approximately 90 cfs and 200 cfs lower than the total sum of the partial peak flows for the 2-year peak flow and 100-year peak flow, respectively.

Source: CEQA Drainage Study for Cielo Vista, prepared by Tory R. Walker Engineering, Inc., August 9, 2013; and Technical Memorandum Summary of Unit Hydrograph Analysis for Hydromodification Compliance of Cielo Vista, Yorba Linda, CA, prepared by Tory R. Walker Engineering, Inc. April 9, 2013.

Table 4.8-2

Developed Conditions: 25-Year and 100-Year Peak Flows

	<u>Stonehaven Outlet –</u> <u>8' x 7' RCB (Planning Area 1)</u>		<u>Dorinda Road Outlet –</u> <u>36" RCP (Planning Area 1)</u>		<u>West Outlet at Property Line –</u> <u>Creek F (Planning Area 2)</u>	
	<u>Q100</u> (cfs)	<u>Q25</u> (cfs)	<u>Q100</u> (cfs)	<u>Q25</u> (cfs)	<u>Q100</u> (cfs)	<u>Q25</u> (cfs)
<u>Predevelopment</u>	<u>1,195.5</u>	<u>890.4</u>	<u>52.3</u>	<u>39.4</u>	<u>3,406.1</u>	<u>2,546.2</u>
<u>Postdevelopment</u> <u>(w/PDFs)</u>	<u>1,195.5</u>	<u>890.4</u>	<u>36.1</u>	<u>30.1</u>	<u>3,406.1</u>	2,546.2
<u>Change</u>	<u>0</u>	<u>0</u>	<u>-16.2</u>	<u>-9.3</u>	<u>0</u>	<u>0</u>
<u>Detention Basin</u> (PDF 8-2)	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>7.4</u>	<u>5.6</u>

Source: Conceptual Drainage Study - Cielo Vista Tract 17341, prepared by Fuscoe Engineering Inc. October 2015.

As shown in Table 4.8-2, the post-developed condition for Planning Area 1 with implementation of the Project Design Features listed above would result in a the same amount of peak 100- and 25-year storm flows at the 8'x7' RCB at Stonehaven Drive, with a reduction in 100-and 25-Year flows occurring at the 36" RCP at Dorinda Road. By utilizing a bifurcation design to balance storm discharges, detention is not required in Planning Area 1. Per As-Built plans, the existing capacity of the 8'x7' RCB in Stonehaven Drive is 1,200 cfs and the existing capacity of the 36" RCP at Dorinda Road is 46.87 cfs. Therefore, the post-development flows would not exceed the capacities at each of the facilities serving Planning Area 1. Regarding Planning Area 2, Table 4.8-3 shows that post-developed condition would result in a the same amount of peak 100- and 25-year storm flows at the west outlet at the property line of Creek F.

In addition to the 100-year and 25-year storm analysis conducted in the Drainage Study, the WQMP provides a detailed evaluation of the 2-year (24-hour) storm event to determine if the Project would be susceptible to hydromodification impacts, which would be considered a "hydrologic condition of concern" per the Countywide Model WQMP TGD. An HCOC could occur when post development runoff volume for the 2-year, 24-hour frequency storm exceeds the pre-development condition by more than five percent, or the time of concentration (Tc) of post development runoff for the 2-year, 24-hour storm event exceeds the time of concentration of the pre-development condition for the 2-year, 24-hour storm event by more than five percent. Based on the TGD, Planning Area 1 (South Site) and Planning Area 2 (North Site) include areas identified as "potential areas of erosion, habitat, & physical structure susceptibility." Below is a summary of the WQMP modeling results. Please refer to the WQMP in Appendix D of the Final EIR for detailed modeling results and calculations of the 2-year, 24-hour frequency storm analysis.

As summarized from the WQMP, without the proposed split flow/bifurcation structure (BMP-HM1), for portions tributary to the 8'x7' RCB at Stonehaven Drive the 2-year Tc decreases by 51%, the peak runoff increases by 56%, and the volume increases by 219% as compared to the existing conditions. Due to the existing soil constraints, infiltration of the increase in volume is not feasible, and reuse demands are not sufficient to draw down the volume within 48 hours. The 2011 Model WQMP (Section 7.II-2.4.2.2) and the 4th Term MS4 Permit, identifies the following criteria:

<u>"Where the Project WQMP documents that excess runoff volume from the two-year runoff event</u> <u>cannot feasibly be retained and where in-stream controls cannot be used to otherwise mitigate</u> <u>HCOCs, the project shall implement on-site or regional hydromodification controls to:</u>

- <u>Retain the excess volume from the two-year runoff event to the MEP</u>
- <u>Implement on-site or regional hydromodification controls such that the post-development runoff two-year peak flow rate is no greater than 110 percent of the predevelopment runoff two-year peak flow rate.</u>"

<u>The WQMP model results indicate that flows tributary to the 8'x7' Stonehaven RCB would be reduced</u> by the proposed split-flow structure (BMP-HM1), thus allowing for only a 9% increase in a 2-year 24-

hour storm condition. Thus, by implementing BM-HM1, peak runoff conditions for 2-year 24-hour storm events at the 8'x7' Stonehaven RCB for Planning Area 1 would be no greater than 110 percent of predevelopment condition, which meets the County's requirements. Regarding the southwest outlet (36" RCP at Dorinda Road), when implementing the bifurcation split-flow structure per BMP-HM1, the TC would be reduced by 10% compared to predevelopment conditions and there would be no change (0%) to peak runoff conditions. Therefore, by implementing the Project's proposed drainage features, no significant hydromodification impacts or "hydrologic condition of concern" would occur to downstream facilities of Planning Area 1 based on applicable County standards.

With regards to Planning Area 2, the WQMP model results indicate that without the proposed infiltration basin (BMP-INF1), the 2-year Tc would decrease by 40.4%, the peak runoff would increase by 57%, and the volume increases by 174% (or 0.42 ac-ft) as compared to the existing conditions. However, with implementation of the proposed infiltration basin in Planning Area 2, the TC would still decrease by 40.4%, but the peak runoff would not change (0%). Also, the additional volume (0.42 acre-feet) would be captured within the infiltration basin. Routing the 2-year 24 hour storm event through the infiltration basin would reduce peak volumetric flow to comply with the hydromodification requirements and allowable discharge provisions. Therefore, by implementing an infiltration basin (BMP-INF1), no significant hydromodification impacts or "hydrologic condition of concern" would occur to downstream facilities of Planning Area 2 based on applicable County standards.

<u>Based on the above, the proposed drainage facilities described in the Drainage Study and WQMP</u> <u>would provide for adequate flood control protection per the current County of Orange Hydrology</u> <u>Manual and the County of Orange Local Drainage Manual requirements.</u>

As shown in Tables 4.8-3 and 4.8-4, the development of the project site would have has a negligible effect on the peak flows of all four creeks. The largest peak flow increase is 0.5 cfs and 0.7 cfs in Creek A for 2-Year peak flow and 100-year peak flow, respectively. These largest flow increases represent approximately 0.2% and 0.06% of the 2-year and 100 year peak flows (cfs), respectively. Such increases would not be visible or otherwise perceptible to the casual observer or residents in surrounding areas. The minimal increase in peak flow is attributable to two factors: (1) the area being developed is relatively small when compared to the size of each catchment and (2) the infiltration capacity of each catchment has already been greatly exceeded during the peak of the storm which makes the addition of impervious area somewhat irrelevant. Thus, while there would be slight increase in total runoff volume compared to existing conditions, the Project's impact on the maximum peak flows of the hydrographs for all creeks would be minimal.¹²

<u>Footnotes</u>

⁴²— CEQA Drainage Study for Cielo Vista, prepared by Tory R. Walker Engineering, Inc., August 9, 2013.

According to the hydraulic analysis as part of the Drainage Study, the existing 8-foot x 7-foot box culvert within Stonehaven Drive has sufficient capacity to convey the marginal 0.7 cfs increase in the developed condition peak flow with no risk of downstream flooding at the Southern Boundary. As

Table 4.8-4

			Increase	100-	Increase
		2 Year	Over	Year	Over
		Peak	Existing	Peak	Existing
Discharge	Drainage	Flow	Conditions	Flow	Conditions
Location	Area (Ac)	(cfs)	(cfs)	(cfs)	(cfs)
Creek A	674 -	297.1	0.5	1,126.0	0.69

Developed Conditions (South Site): 2-Year and 100-Year Peak Flows – Southern Boundary

Ac = acres; cfs = cubic feet per second.

*— A separate design storm was created for Creek A as no confluence analysis was required for this creek at the Southern Boundary.

Source: CEQA Drainage Study for Cielo Vista, prepared by Tory R. Walker Engineering, Inc., August 9, 2013; and Technical Memorandum Summary of Unit Hydrograph Analysis for Hydromodification Compliance of Cielo Vista, Yorba Linda, CA, prepared by Tory R. Walker Engineering, Inc. April 9, 2013.

the velocity of the water in the box culvert is approximately 22.5 feet per second (ft/s), standard engineering practices and design would ensure that the appropriate entrance conditions are designed to ensure that such inlet control conditions are properly conveyed inside the culvert. Similarly, the increase of 0.7 cfs at the Western Boundary of the project site is an insignificant increase in peak flow. Overall, off-site hydrology/drainage impacts would be less than significant.

Despite the negligible increase in flows at the southern and western site boundaries, the Drainage Study indicates that to minimize peak flows at the Western and Southern Boundaries, the receiving storm drain within the project site (the headwall intercepts proposed at the end of "B" and "F" Streets) could be downsized by a 6-inch reduction in capacity. This has been included as PDF 8-4. The small reduction in storm flow conveyance would reduce the peak flow by throttling down flow, effectively detaining peak flows by the use of a hydraulic reduction. The ponding caused by such hydraulic reduction in capacity would be maintained on the project site in detention basins, ensuring that no offsite property is impacted by attenuating the peak flow (BMP-HM1 and PDF 8-4)). Appendix 4 of the Drainage Study includes illustrations of potential on-site detention basin locations. In addition, all developed padelevations would be constructed at a minimum of 3-foot (or greater) above the anticipated peak water surface elevation to ensure that no residential structure would be flooded within the project site (PDF 8-5).

<u>Furthermore</u>, <u>Ww</u>ith respect to erosion under operational conditions, PDFs and BMPs required under the SWPPP, WQMP, and ESCP, would be implemented to ensure that the Project does not significantly increase erosion from the site. In addition to these measures, on-site soils would be stabilized with either established existing native vegetation, structures/paving materials, or landscaping, which would minimize the potential for substantial on-site erosion to occur. On hillsides, established native vegetation would be retained where practical, and native vegetation would be seeded on manufactured hillsides. Moreover, in accordance with BMP-S12, on-site hillsides would be regularly inspected for visible soil erosion, and bare areas would be revegetated and stabilized until a root system is firmly established. Further, a HOA would be formed to own and maintain the open space lands proposed, as well as any infrastructure that would not be accepted by the public agencies<u>or appropriate land conservation/trust organization</u>. While off-site would only nominally increase as described above, the Project would include riprap aprons or other types of energy dissipaters located at all points of concentrated discharge where flow velocity exceeds five ft/s to mitigate the outlet velocity so as to minimize the potential for downstream erosion (PDF 8-2). Points of discharge would not be limited to storm drain outlets but would also include brow ditches and other forms of storm water conveyance. Riprap aprons typically reduce velocities to below five ft/s or less, which are considered to be non-erosive. Riprap aprons spread the flow, helping to transition to the natural drainageway or to sheet flow where no natural drainageway exists. Riprap aprons would be designed and sized in conformance with regional sizing criteria found in the "County of Orange Local Drainage Manual", dated August 2005. Please refer to the analysis included under Impact Statement 4.8-1 for a further discussion of operational water quality impacts. In addition, as discussed under Impact Statement 4.8-1, construction activities associated with the Project would result in less than significant water quality impacts, including erosion-related impacts.

Given that the Project would be designed to maintain existing drainage patterns and post development runoff volume would not significantly exceed the pre-development condition, the post-project site would not result in significant hydrology impacts downstream such that flooding or erosion would occur on- or off-site. In addition, all habitable building floor elevations would be constructed at a minimum of 1-foot (or greater) above the 100-year water surface elevation to ensure that no residential structure would be flooded within the project site (PDF 8-3). Furthermore, the Project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage.¹³

Overall, based on the above, with implementation of the applicable PDFs compliance with applicable regulatory requirements, impacts regarding changes in drainage patterns and stormwater flows would be less than significant.

<u>Footnotes</u>

¹³—— County of Orange/Santa Ana Region Priority Project Water Quality Management Plan: Cielo Vista Tentative Tract 17341, prepared by Charles Hartman & Associates in August 2012.

12. Page 4.8-29. Modify the 4th paragraph with the following changes:

With respect to the South Site, soils investigations do not recommend the percolation of stormwater captured in the stormwater detention basins. Thus, the stormwater drainage system <u>would include a split flow/bifurcation structure (BMP-HM1) to bifurcate storm flows to both the 36" RCP at Dorinda Road and the 8'x7' RCB at Stonehaven Drive to ensure the capacities of downstream facilities are not exceeded and significant hydrology impacts do not occur. be designed to retain project-related sheet flows until their flow rates mimic the pre-development conditions for a two year 24-hour storm. These flows would outlet to the 8 ft x 7 ft concrete box located in Stonehaven Drive. Therefore, although the Project would increase the surface area of impervious surfaces on the South Site, because stormwater flows do not substantially infiltrate to underlying soils under existing conditions, the additional impervious surfaces on the South Site would not result in a substantial change in groundwater infiltration rates. Furthermore, there would be no noticeable change in any aquifer volume or a lowering of the local groundwater table due to a change in groundwater recharge rates as a result of Project implementation.</u>

13. Page 4.8-32. Modify the "Policy Consistency" analysis regarding Policy 3.2 with the following changes:

Policy 3.2 Maintain natural drainage	Potentially Consistent. Stormwater flows would
courses and keep them free of obstructions.	be directed to detention basins pass through
	drainage facilities in Planning Areas 1 and 2, which
	would control flows on the project site and also
	allow <u>downstream drainage courses to be</u>
	consistent with existing conditions. debris and
	sedimentation to collect within the basins instead
	of flowing downstream along the drainage courses.
	One major drainage course in the 36 acre open
	space area would be retained in its natural state,
	with unaltered flows.

14. Page 4.8-32. Modify the "Policy Consistency" analysis regarding Policy 11.1 with the following changes:

Policy 11.1 Limit disturbance of natural water bodies and drainage systems; conserve natural areas; protect slopes and channels; and minimize impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies.	Potentially Consistent. Within Planning Area 2, Creek C is planned for minor realignment to the east and would follow the base of a slope, part of the development of the residential lots. Otherwise drainage patterns would be maintained with onsite flows still collecting at the confluence of Creeks B, C and D before exiting the project site to the west. For Planning Area 1, stormwater flows would be discharged into an existing concrete box <u>B'x7' RCB</u> located in Stonehaven Drive <u>and 36" RCP</u> <u>at Dorinda Road</u> . Within the open space area, the natural on site drainage would not be altered and
	natural on site drainage would not be altered and would maintain existing flow patterns.

15. Page 4.8-32. Modify the "Policy Consistency" analysis regarding Policy 11.2 with the following changes:

16. Page 4.9-33. Modify the 1st sentence under Impact Statement 4.8-4 (Cumulative Impacts) with the following changes:

As indicated in the analysis above, consistent with applicable regulatory requirements, the Project would implement an on-site detention drainage system that provides for adequate flood control protection per the current County of Orange Hydrology Manual and the County of Orange Local Drainage Manual requirements. Given that the Project would be designed to maintain existing drainage patterns and post development runoff volume would not significantly exceed the pre-development condition, the post-project site would not result in significant hydrology impacts development runoff volume for the two year frequency storm does not exceed that of the pre-development condition by more than five percent, and the time of concentration for the post condition by more than five percent.

17. Pages 4.8-33 and 4.8-34. Modify the list of references with the following changes:

Charles Hartman & Associates. Conceptual County of Orange/Santa Ana Region Priority Project Water Quality Management Plan: Cielo Vista Tentative Tract 17341. July 10, 2013.

- Charles Hartman & Associates. Hydrology Study (Onsite) for Cielo Vista Subdivision. March 28, 2013.
- <u>Fuscoe Engineering Inc., Conceptual Drainage Study Cielo Vista Tract 17341 (the "Drainage Study").</u> <u>October 2015.</u>
- <u>Fuscoe Engineering Inc., Conceptual Water Quality Management Plan Cielo Vista (the "WQMP").</u> <u>October 2015.</u>
- LGC Geotechnical, Inc. Geotechnical Feasibility Study Proposed Development of Tentative Tract Map No. 17341, County of Orange, California. August 2, 2012.
- Tory R. Walker Engineering, Inc. CEQA Drainage Study for Cielo Vista. August 9, 2013.
- Tory R. Walker Engineering, Inc. Technical Memorandum Summary of Unit Hydrograph Analysis for Hydromodification Compliance of Cielo Vista, Yorba Linda, CA. April 9, 2013.
- U.S. Environmental Protection Agency (U.S. EPA). Establishment of Numeric Criteria for Priority Pollutants for the State of California; California Toxics Rule. EPA-823-F-97-008. 1997.

SECTION 4.9, LAND USE AND PLANNING

1. Page 4.9-2. Modify the 2nd sentence under the "Safety Element" subheading with the following changes:

The Element focuses on fire, flood, and geologic hazards; other hazards are that are locally relevant to safety issues are also discussed.

2. Page 4.9-3. Modify the 1st sentence under the "Growth Management Element" subheading with the following changes:

The Growth Management Element mandates that growth and development of the County be based on its ability to provide an adequate circulation system; adequate sheriff, fire, paramedic, and library services and other necessary facilities all while ensuring that natural resources and the natural environment is <u>are</u> protected.

3. Page 4.9-3. Modify the 5th paragraph with the following changes:

The project site is zoned as $\underline{A1}$ and A1(0) - General Agriculture with Oil Production Overlay per the Orange County Zoning Map. The purpose and permitted uses in these zones are discussed below.

4. Page 4.9-4. Modify the 2nd sentence in the 2nd full paragraph with the following changes:

The City's General Plan consists of the following elements: Land Use, Circulation, Recreation and $\pm Re$ sources, Noise, Safety, Growth Management and Housing.

5. Page 4.9-5. Modify the 1st paragraph with the following changes:

As indicated above, the Orange County General Plan designates approximately 41 acres of the project site as Suburban Residential "1B" and approximately 43 acres of the project site as Open Space (5). The entire project site is mostly zoned A1(O) – General Agriculture with Oil Production Overlay, with a small area along the southernmost boundary zoned A1 – General Agriculture, per the Orange County Zoning Map.

6. Page 4.9-6. Modify the following bullet point to the list of approvals under the County of Orange.

Zone Change by the County of Orange Board of Supervisors for Planning Area 1 from <u>A1 and</u> A1(0) to R-1 and R-1(0) and a zone change for Planning Area 2 from A1(0) to R-1, Single Family Residence District, permitting development of single family detached residential dwellings on minimum 7,500 square foot lots.

7. Page 4.9-6. Add the following bullet point to the list of approvals under the County of Orange.

• <u>Certification of the Environmental Impact Report (EIR).</u>

8. Page 4.9-7. Modify the list of approvals under the Yorba Linda Water District with the following changes:

Yorba Linda Water District (YLWD)

- Connection to the YLWD potable water supply.
- <u>Connection to sewer (wastewater) systems.</u>

9. Page 4.9-8. Modify the 1st sentence in the last paragraph with the following changes:

While the Project applicant is requesting a General Plan <u>aA</u>mendment, as discussed above, a request for a discretionary action to amend the General Plan does not in fact establish that the Project would be in conflict with the General Plan such that a substantial adverse impact to the environment would occur.

10. Pages 4.9-12 and 4.9-13. Modify the discussion under subsection (2) Codified Ordinances of the County of Orange (Zoning Code) with the following changes:

(2) Codified Ordinances of the County of Orange (Zoning Code)

The entire project site is <u>mostly</u> zoned A1(O) – General Agriculture with Oil Production Overlay, <u>with</u> <u>a small area along the southernmost boundary zoned A1 – General Agriculture</u>, per the Orange County Zoning Map. While the A1 (General Agriculture) zoning designation was established to provide for agriculture, outdoor recreational uses, and those low-intensity uses that have a predominately open space character; it is also intended as an interim zone in those areas which the General Plan may designate for more intensive urban uses in the future. The Project's proposed single-family residential uses are not permitted under this zoning designation.

The Project would require approval of a zone change for Planning Area 1 from A1 and A1(0) to R-1, Single-Family Residence District and R-1(0) and a zone change for Planning Area 2 from A1(0) to R-1, Single Family Residence District, (Oil Production) permitting development of single family detached residential dwellings on minimum 7,500 square foot lots and continued oil production on a portion of the property. The County General Plan designates approximately 41 acres of the project site as Suburban Residential (1B) and approximately 43 acres of the project site as Open Space (5). Per the Suburban Residential (1B) land use designation, the existing General Plan would allow the development of up to approximately 738 dwelling units on the project site. As indicated above, the A1 designation is in part intended as an interim zone in those areas which the General Plan may designate for more intensive urban uses in the future. Accordingly, although the proposed lowdensity single-family residences would represent a more intensive urbanized use on certain portions of the site relative to existing zoning, the A1 designation allows for such a zone change. Also, as the project site is currently within a (0) permitted oil production area, the zone change in Planning Area 1 from A1(0) to R-1(0) would not result in a conflict with the current zoning designation. It is also acknowledged that impacts associated with the current and future oil production activities have been analyzed throughout this EIR. In particular, Section 4.7, Hazards and Hazardous Materials, evaluates potential hazardous impacts regarding past and future oil production activities. As concluded therein, with implementation of the prescribed mitigation measures and compliance with applicable

regulatory requirements, less than significant hazardous materials impacts would occur. Furthermore, given the fact that no agricultural uses occur on the project site, as well as no Williamson Act Contract being applicable to the project site, no loss of existing agricultural uses would occur as a result of the proposed zone change.

11. Page 4.9-20. Modify the 6th full sentence with the following changes:

In the case of the Esperanza Hills Project, per the Notice of Preparation issued in December 2013, that project would requires a General Plan Land Use designation amendment from Open Space (5) to Suburban Residential (1B) to allow for 340 residential units on 468.9 acres.

12. Page 4.9-20. Modify the 9th full sentence with the following changes:

That project would be at a density of 0.73 dwelling units per acre and as such, would be consistent with the density allowed for that site in the County's General Plan Land Use Element and the greater the Murdock/Travis Property in the Land Use Element of the City of Yorba Linda General Plan.

SECTION 4.10, NOISE

1. Page 4.10-9. Add the following discussion to the end of the "Stationary Noise Sources" subsection :

(b) Stationary Noise Sources

The project site and surrounding area primarily consists of residential uses with schools and parks uses located within the project vicinity. Noise levels in single-family residential areas such as those adjacent to the project site typically range from 45 to 55 dBA during daytime hours and are generally less than 50 dBA during nighttime hours.

As shown in in **Figure 4.10-2**, *Noise Measurement Locations*, long-term (24-hour) measurements were conducted at one location, identified as R1 to quantify the existing noise environment. Shortterm (15-minute) measurements were recorded at two additional locations, identified as R2 and R3. The long-term ambient noise measurements at locations R1 were conducted from Wednesday, June 25, through Thursday, June 26, 2014. The short-term noise measurements at locations R2 and R3 were conducted on June 25, 2014 between the hours of 7:00 A.M. and 9:00 A.M. Descriptions of the noise measurement locations are provided below:

- <u>Measurement Location R1</u>: This measurement location is representative of the highest noise level(s) at the project site given its proximity to Dorinda Road (vehicular noise), as well as the nearby residential uses. The sound measuring device (sound level meter) was placed on the southwestern boundary of the project site along Dorinda Road.
- <u>Measurement Location R2: This measurement location represents the noise environment of</u> <u>the nearest single-family residential uses along Dorinda Road. The sound level meter was</u> <u>placed at the end of Dorinda Road west of the project site.</u>

 <u>Measurement Location R3</u>: This measurement location represents the noise environment of the nearby single-family residential uses along Aspen Way west of the project site. The sound level meter was placed at the end of Aspen Way nearby the single-family residential uses west of the project site.

The ambient noise measurements were conducted using a Larson-Davis 820 Precision Integrated Sound Level Meter (SLM). The Larson-Davis 820 SLM is a Type 1 standard instrument as defined in the American National Standard Institute (ANSI) S1.4. Measurement instruments were calibrated and operated according to manufacturer specifications. The microphone was placed at a height of 5 feet above the local grade.

The results of the ambient sound measurement data are summarized in **Table 4.10-4(b)**, *Summary of Ambient Noise Measurements*. As shown therein, the long-term measured CNEL level at Locations R1 is 51 dBA in which the primary source of noise was traffic along Dorinda Road. The measured ambient noise levels do not exceed the daytime noise limit of 55 dBA Leq and the nighttime noise limit of 50 dBA Leq.

Table 4.10-4(b)

	Measured	Ambient Noise Levels	<u>a (dBA)</u>
	<u>Daytime</u> (7 A.M. to 10 P.M.)	<u>Nighttime</u> (10 р.м. to 7 а.м.)	24-Hour Average,
Receptor Location	Hourly L _{eq}	Hourly L _{eq}	CNEL
<u>R1 –</u> <u>6/25/14 Wednesday (8:00 а.м. to 11:59 р.м.)</u> through 6/26/14 Thursday (12:00 а.м. to 8 а.м.)	<u>43 - 52</u>	<u>42 - 46</u>	<u>51</u>
<u>R2 –</u> <u>6/25/14 Wednesday (7:00 а.м. to 8:00 а.м.)</u>	<u>48</u>	<u>N/A</u>	<u>N/A</u>
<u>R3 –</u> 6/25/14 Wednesday (8:00 а.м. to 9:00 а.м.) 	<u>41</u>	<u>N/A</u>	<u>N/A</u>

Summary of Ambient Noise Measurements

<u>a</u> Detailed measured noise data, including hourly L_{eq} levels, are included in Appendix B of this Final EIR document.

Source: PCR Services Corporation, 2014.



FIGURE	Noise Measurement Locations			
		700 Feet	350	,
4.10-2	Cielo Vista Project Source: Aerial Photography-USGS, 2004; PCR Services Corporation, 2014.			



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2. Page 4.10-11. Revise sub-headings under subsection "a. Methodology" with the following changes :

a. Methodology

(1) Construction Noise Impacts

Construction noise impacts were evaluated by estimating the noise levels generated by construction activity, calculating the construction-related noise level at nearby sensitive receptor property line locations, and comparing construction-related noise to the Project significance threshold to determine significance.

(2) Off-Site Traffic Noise Impacts

Traffic generated by the Project would influence the traffic noise levels in surrounding areas. To quantify the traffic noise impacts on the surrounding areas, the changes in traffic noise levels on 32 roadway segments surrounding the project site were estimated based on the change in the average daily traffic volumes. The traffic noise levels provided in this analysis are based on the traffic forecasts provided in the Noise Study.

3. Page 4.10-17. Add the following mitigation measures to further reduce construction noise impacts:

Mitigation Measures

- **Mitigation Measure 4.10-1** During all project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site. All operations shall comply with the County of Orange Codified Ordinance Division 6 (Noise Control). The contractor shall produce evidence that the measures are in place prior to issuance of any grading permits and as approved by the County of Orange Manager, Planning Services.
- **Mitigation Measure 4.10-2** The construction contractor shall locate equipment staging in areas that would create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction. All operations shall comply with the County of Orange Codified Ordinance Division 6 (Noise Control). Prior to issuance of any grading permits the County of Orange Manager, Planning Services shall approve the location of the staging area.
- Mitigation Measure 4.10-3 The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. Haul routes shall be selected so that trips passing sensitive land uses or residential dwellings will be minimized. Further, haul routes shall be located to avoid concurrent use of haul routes from other related projects where sensitive receptors are located along such routes. Haul routes shall be approved by the Manager, OC Planning Development Services Services prior to the issuance of any grading permits.

In addition to the above prescribed mitigation measures, the following mitigation measures have been prescribed at the request of the City of Yorba Linda to further reduce construction noise impacts. In addition, PDF 10-1 would be implemented by the Project to further reduce construction noise impacts.

Mitigation Measure 4.10-A (Supplemental Construction Noise Mitigation Measure)

<u>Construction noise reduction methods such as shutting off idling equipment, maximizing the</u> <u>distance between construction equipment staging areas and occupied residential areas, and</u> <u>use of electric air compressors and similar power tools, rather than diesel equipment, shall be</u> <u>used where feasible. Unattended construction vehicles shall not idle for more than 5 minutes</u> <u>when located within 500 feet from residential properties.</u>

Mitigation Measure 4.10-B (Supplemental Construction Noise Mitigation Measure)

<u>Construction hours, allowable workdays, and the phone number of the job superintendent</u> <u>shall be clearly posted at all construction entrances to allow surrounding property owners</u> <u>and residents to contact the job superintendent if necessary. In the event the County receives</u> <u>a complaint, appropriate corrective actions shall be implemented.</u>

Mitigation Measure 4.10-C (Supplemental Construction Noise Mitigation Measure)

<u>Two weeks prior to the commencement of construction, notification must be provided to</u> <u>surrounding land uses within 500 feet of a project site disclosing the construction schedule,</u> <u>including the various types of activities that would be occurring throughout the duration of</u> <u>the construction period. This notification shall give a contact phone number for any questions</u> <u>or complaints. All complaints shall be responded to in a method deemed satisfactory by the</u> <u>County of Orange.</u>

 Project Design Feature 10-1
 Noise attenuation measures, which may include, but are not

 limited to, temporary noise barriers or noise blankets around stationary construction noise

 sources, shall be implemented where feasible.

SECTION 4.11, POPULATION AND HOUSING

1. Page 4.11-1. Modify the 1st sentence in the last paragraph with the following changes:

A Regional Housing Needs Assessment (RHNA), most recently adopted and approved by the SCAG Regional Council on July 12, 2007, includes an assessment of regional housing needs for very low income, low income, moderate income, and above moderate income groups for the planning period from January 2006 through June 2014.¹

2. Page 4.11-1. Modify sub-section (3), Regional Housing Needs Assessment (RHNA), with the following changes:

(3) Regional Housing Needs Assessment (RHNA)

A Regional Housing Needs Assessment (RHNA), most recently adopted and approved by the-SCAG Regional Council on July 12, 2007, includes an assessment of regional housing needs for very low income, low income, moderate income, and above moderate income groups for the planning period from January 2006 2014 through June 2014 October 2021.¹ The RHNA is used by local communities to address land use planning, prioritize local resource allocation, and decide how to address identified existing and future housing needs resulting from population, employment, and household growth. According to the RHNA, the housing needs for unincorporated County of Orange includes a total of 7,978 5,272 dwelling units, of which 1,777 1,240 would be very low income, 1,445 879 low income, 1,597 979 moderate income, and 3,159 2,174 above moderate income housing; refer to Table 4.11-1, Regional Housing Growth Needs of Unincorporated County of Orange.

<u>Footnotes</u>

Southern California Association of Governments Website: <u>http://www.scag.ca.gov/Housing/pdfs/rhna/RHNA_FinalAllocationPlan071207.pdf.</u>
 <u>http://www.scag.ca.gov/Documents/5thCyclePFinalRHNAplan.pdf</u>

Table 4.11-1

Regional Housing Growth Needs of Unincorporated County of Orange

Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total Households
Households	Households	Households	Households	
1,777 <u>1,240</u> *	1,445 <u>879</u>	1,597 <u>979</u>	3,159 <u>2,174</u>	7,978 <u>5,272</u>
22.3 <u>23.4</u> %	18.1 <u>17.1</u> %	20 <u>18.7</u> %	39.6 <u>40.8</u> %	100%

Half (889) of these very low units are assumed to be in the extremely-low category (Source: SCAG 2007). Source: County of Orange Housing Element, 2011; Southern California Association of Governments Website: http://www.scag.ca.gov/Housing/pdfs/rhna/RHNA_FinalAllocationPlan071207.pdf. http://www.scag.ca.gov/Documents/SthCyclePFinalRHNAplan.pdf

3. Page 4.11-3. Modify sub-section (2), Housing, with the following changes:

(2) Housing

The County of Orange <u>currently</u> contain<u>s</u>ed approximately 1,022,219 <u>1,062,966</u> housing units while the unincorporated County of Orange contain<u>s</u>ed <u>38,496_39,506</u> units<u>in 2010</u>. Current housing types in the County are depicted in **Table 4.11-3**, *Housing by Type (<u>2010 2014</u>)*.

Table 4.11-3

Housing by Type (2010 2014)

	Unincorporated County of Orange Total Units		County of Orange Total Units	
Unit Type	Number	Percent	Number	Percent
Single-family detached	30,529 <u>30,577</u>	79.3 <u>77.4</u>	<u>521,768</u> <u>538,866</u>	51.1
				<u>50.7</u>
Single-family attached	2,188 <u>3,856</u>	5.7 <u>9.8</u>	130,118	12.7
				<u>12.1</u>
Multi-family (2-4 units)	2,213 <u>862</u>	5.7 <u>2.2</u>	91,400	8.9 <u>8.7</u>
Multi-family (5+ units)	3,260 <u>3,578</u>	8.5 <u>9.1</u>	265,146	<u>25.9</u>
				<u>25.4</u>
Mobile Homes	306 <u>633</u>	0.8 <u>1.6</u>	13,787 <u>33,534</u>	1.4 <u>3.1</u>
Total	38,496 <u>39,506</u>		1,022,219	
			<u>1,062,966</u>	

Note: According to the 2010 Census, a housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room occupied (or if vacant, intended for occupancy) as separate living quarters.

Source: California Department of Finance, 2011 2014 E-5 Population and Housing Table.

Compared to Orange County as a whole, the unincorporated areas of the County have a higher percentage of single-family housing and a lower percentage of multi-family housing. Single-family homes comprise approximately $\frac{85}{87}$ percent of unincorporated County compared to only about $\frac{63}{63}$ percent of housing units in the entire County. There is a significantly greater percentage of multi-family homes in all of Orange County, over 34 percent, than in unincorporated areas, at approximately 14 <u>11.3</u> percent <u>as per Table 4.11-3</u>.²

²-Environmental Science Associates (ESA). Saddle Crest Homes Draft Environmental Impact Report #661. April 2012.

4. Page 4.11-4. Modify last sentence of subheading "a. Methodology" with the following changes:

This section includes an analysis of the population and housing units generated by the Project and how the population and housing relates to the County. Information was obtained from the State of California Department of Finance, Census 2010, SCAG, and the County of Orange. Additionally, County regulations were reviewed for project applicability, including the County's General Plan and Housing Element. Impacts on population were determined by calculating the population generated by the Project (based on the average household size for the unincorporated County of Orange <u>and</u> <u>City of Yorba Linda (as they have the same household size)</u> multiplied by the number of housing units proposed by the Project) and comparing to the population anticipated in the County.

5. Page 4.11-5. Modify the "Threshold Statement" with the following changes:

Threshold Would the project induce substantial population growth in an area, either directly <u>(for example, by proposing new homes and businesses)</u> or indirectly <u>(for example, through extension of roads or other infrastructure)</u>?

6. Page 4.11-5. Modify the 1st paragraph with the following changes:

The Project includes the construction of 112 single-family detached residential dwellings that would generate a population of approximately 358 residents.³ Per Table II-1 III-1, Building Intensity/Population Density Standards, in the Land Use Element of the County's General Plan, the Suburban Residential land use designation allows <u>a</u> maximum intensity/density characteristics and standards of 0.5 to 18 dwelling units (du) per acre₇. 2.59 persons per du, and Table II-1 further indicates that this land use category has populations that range from 1-47 persons per acre. There is a large variation in the number of persons per acre because the Suburban Residential designation includes a wide range of housing types, from estates on large lots to attached dwelling units (townhomes, condominiums, and clustered arrangements). As noted in the Land Use Element of the County's General Plan, the person per acre ranges are offered as an indicator of residential population density and do not restrict occupancy of units. As the project site includes approximately 41 acres of Suburban Residential designated land, the Project, if applying the highest characteristic number of persons per acre (47 per acre as identified in the General Plan) could support a maximum population of approximately 1,927 persons.⁴ As stated above, Project implementation would result in approximately 358 new residents. Therefore, the direct population generated by the Project would be within the maximum population anticipated for the site within the County's General Plan.

- ³ 358 persons = 112 X 3.2. Based on the average household size of 3.2 persons/household for unincorporated areas of Orange County. It should be noted that the average household size for all of Orange County is 3.0 persons/household (U.S. Census Bureau, 2010). The average household size of 3.2 persons/household is also consistent with population estimates of the City of Yorba Linda, Initial Study for Oakcrest Terrace, prepared by Impact Sciences, March 2012.
- ⁴ 1,927 persons = 47 persons/acre X 41 acres. <u>It is acknowledged that Table III-1 also cites "2.59 Persons per DU" as a population indicator of the Suburban Residential land use category. However, this population per household is based on 1990 Census data and is not representative of current household sizes expected for the Project based on 2012 data from the City of Yorba Linda (see footnote 3 above). If the current household size estimate (3.2 persons/household) were applied, to the lands designated as Suburban Residential the projected population range for such lands would increase from 1 to 47 persons per acre to approximately 1 to 57 persons per acre (3.2 persons/household x 18 units per acre).</u>

Even if applying the number of persons per dwelling unit contained in the General Plan, the Project would still not exceed the maximum population anticipated for the site within the County's General Plan. For instance, the General Plan permits up to 18 units per acre, which would amount to a total of 738 units on the 41 acres designated as Suburban Residential (18 x 41 = 738). 738 units times 2.59 persons per unit would result in a maximum population of 1,911 persons (or 2,361 persons at 3.2 persons/household). The Project proposes 358 new residents, which is significantly below the maximum contemplated in the General Plan.

7. Page 4.11-6. Modify the "Project Consistency" Analysis regarding Policy 3 of the Orange County General Plan in Table 4.11-5 with the following changes:

Consistent. The Project would introduce up to 112 single-family homes in an area designated for suburban residential land uses, which would contribute to the ability of the County to meet demands for housing, particularly single-family homes.

The RHNA most recently adopted and approved by the SCAG Regional Council on July 12, 2007 includes an assessment of regional housing needs for very low income, low income, moderate income, and above moderate income groups for the planning period from January 2006 2014

through June 2014 October 2021. The RHNA establishes targets for meeting the housing needs of diverse income groups but is not regulating in the sense that it is an evaluating criteria for the types of housing proposed by individual development projects. According to the RHNA, the housing needs for unincorporated County of Orange includes a total of 7,978 5,272 dwelling units, of which 1,777 1,240 would be very low income, 1,445 879 low income, 1,597 979 moderate income, and 3,159 2,174 above moderate income housing. The Project contributes to meeting this need at either the moderate or above moderate income levels identified as between 81-120% of area median income and above 120% of area median income, respectively. A total of 4,756 3,153 of the 7,978 5,272 units are allocated to these categories. Because Project housing price points are yet to be defined, the income subcategory for the Project's residences is to be determined.

8. Page 4.11-7. Modify the "Project Consistency" Analysis regarding Goal 3 and Policy 3 of the Orange County General Plan in Table 4.11-5 with the following changes:

Potentially Consistent. The most recent RHNA for the City identifies a total housing need of $\frac{2,039}{669}$ units between $\frac{2008}{2014}$ and $\frac{2014}{2021}$. The Project contributes to meeting this need at either the moderate or above moderate income levels identified as between 81-120% of area median income and above 120% of area median income, respectively. A total of $\frac{1,208}{396}$ of the $\frac{2,039}{669}$ units are allocated to these categories. Because Project housing price points are yet to be defined, the income subcategory for the Project's residences is to be determined.

9. Page 4.11-8. Modify 2nd paragraph with the following changes:

Although the project site is not within the City of Yorba Linda, it may be annexed in to the City at some point in the future. The 16 related projects in the City of Yorba Linda and County of Orange (including the Esperanza Hills Project) would result in an increase of 2,015 residential units with an associated increase of 6,448 people.⁶ Thus, the Project and the related Projects would include up to 2,127 housing units. While this figure would exceed the City's RHNA allocation of 2,039 <u>669</u> units if the Project were annexed into the City, the current allocation does not include areas within the City sphere of influence. These Units are included in the RHNA allocation for the unincorporated County, including the Yorba Linda sphere of influence area. Housing needs associated with annexation would be served by the housing proposed under the Project. In regard to potential growth inducing impacts, as analyzed in Section 4.8, *Hydrology and Water Quality*, Section 4.12, *Public Services*, Section 4.13, *Recreation*, Section 4.14, *Traffic/Transportation*, and Section 4.15, *Utilities and Service Systems*, impacts on infrastructure and other services would all be less than significant at the Project and cumulative level with implementation of mitigation measures and PDF's, as discussed in those sections.

10. Page 4.11-9 and 4.11-10. Modify the references to the "California Department of Finance" and "Final Regional Housing Need Allocation Plan" with the following changes:

California Department of Finance. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011 and 2012 2014. http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php. 2011 and 2012 2014.

Final Regional Housing Need Allocation Plan – Planning Period (January 1, 2006 2014 – June 30, 2014-October 1, 2021) for Jurisdictions within the Six-County SCAG Region. Approved by the SCAG Regional Council on July 12, 2007.

11. Page 4.11-13. Modify 1st paragraph with the following changes:

Compared to Orange County as a whole, the unincorporated areas of the County have a higher percentage of single-family housing and a lower percentage of multi-family housing. Single-family homes comprise approximately 85 percent of unincorporated County compared to only about 64 percent of housing units in the entire County. There is a significantly greater percentage of multi-family homes in all of Orange County, over 34 <u>approximately 35</u> percent, than in unincorporated areas, at approximately 14 percent.

SECTION 4.12, PUBLIC SERVICES

1. Page 4.12-5. Modify last paragraph with the following changes:

The OCFA goal for response (travel time) is to have the first engine on the scene within seven minutes and 20 seconds from the receipt of the call. The standard OCFA response to a medical emergency is with a paramedic engine or paramedic van, accompanied by an engine. If the medical emergency requires transportation to a hospital, a commercial (private) ambulance company would be utilized for this purpose. The response travel time to the project site is estimated at three minutes, which is within the response time goals of the OCFA. The primary access routes to the project site from the fire stations include Yorba Linda Boulevard, San Antonio Road, Aspen Way, and Via Del Agua. In 2011, the engine (E32) and medic van (M32) of Station 32 responded to 1,161 incidents and 1,486 incidents, respectively. The engine (E10) of Station 10 responded to 1,478 incidents. Thus, these stations <u>each</u> respond to approximately four service call per day on average. Historically, the vast majority of the service calls made by OCFA are for reasons other than fire response.

2. Page 4.12-10. Modify last sentence with the following changes:

The Project would introduce 112 single-family detached residential dwellings that would generate a new residential population of approximately 358 persons.¹² As mentioned above, the closest OCFA fire stations to the project site that would provide fire protection and emergency medical services are Station 32 and Station 10, with Station 32 the primary responder and Station 10 the backup responder. Station 32 and Station 10 are located approximately 0.3 miles and three miles from the project site, respectively. According to the OCFA, the response travel time to the project site is estimated at three minutes, which is well within the OCFA response time goal of seven minutes and 20 seconds. The servicing fire stations respond to approximately four calls per day on average, or approximately 1,460 calls annually.¹³ The Project would be designed, constructed and maintained in accordance with the OCFA development and construction requirements to minimize the risks associated with fires (see Project Features section above). As such, the incremental increase in population from the Project would not be substantial enough to significantly impact fire and emergency services on a daily or annual basis. It is noted that the OCFA response travel time to this Project (3 minutes) from Station 32 is less than the allocated 5 minute travel time maximum <u>OCFA</u>

goal for response (travel time) to have the first engine on the scene within seven minutes and 20 seconds from the receipt of the call.

3. Page 4.12-13. Modify Mitigation Measures 4.12-1 and 4.12-3 with the following changes:

- Mitigation Measure 4.12-1Prior to issuance of a grading permit, the Project Applicant shall
enter into a Secured Fire Protection Agreement with the OCFA. This Agreement shall specify
the developer's pro-rata fair share funding of capital improvements and equipment, which
shall be limited to that required to serve the project.ste Project.ste <a href="mail
- Mitigation Measure 4.12-2 All new traffic signals on public access ways and all electric operating gates installed for the Project shall include the installation of optical preemption devices to the satisfaction of the OCFA and the County of Orange Manager, Subdivision and Grading Services.

4. Page 4.12-13. Modify the last paragraph with the following changes:

(2) Police Protection and Law Enforcement Services

As discussed in the Existing Conditions above, the Project would be serviced by the OCSD out of the Yorba Linda Police Services Facility located at 20994 Yorba Linda Boulevard (located at Arroyo Park), which is approximately 0.25 miles from the project site. The Project would generate a population of approximately 358 residents. This incremental increase in population, compared to the City's population of approximately 67,000 people, would not create a need for expanding existing facilities or staff, construction of a new facility, or adversely impact types of services provided.⁶ With development of the <u>project</u> site, patrol routes in the area would be slightly modified to include the site, however, the <u>Department's OCSD's</u> current adequate response times would not be substantially changed such that response time objectives are compromised in any manner. Thus, impacts regarding police services would be less than significant. Nonetheless, to offset any incremental need for funding of capital improvements to maintain adequate police protection facilities and equipment, and/or personnel, the Project would be responsible for paying development impacts fees per the County of Orange, Code of Ordinances, Title 7 – Land Use and Building Regulations, Division 9 – Planning, Article 7 – Development Fees.

In the event that such a fee is not in place before issuance of grading permits and the Sheriff's Department determines that additional resources are needed to serve the project site, Mitigation Measure 4.12-2B ensures that sufficient facilities would be available for this purpose.

Mitigation Measure 4.12-2BPrior to issuance of a grading permit, the Project Applicant shall
enter into a secured Law Enforcement Services Agreement with the Orange County Sheriff's
Department. This Agreement shall specify the developer's pro-rata fair share funding of
capital improvements and equipment, which shall be limited to serve the project site.

5. Pages 4.12-15 and 4.12-16. Modify Mitigation Measures 4.12-4, 4.12-5, 4.12-6 with the following changes:

Please rRefer to Mitigation Measure 4.14-1. The following mitigation measures are also prescribed.

- Mitigation Measure 4.12-4During construction, the Project's Construction Staging and Traffic
Management Plan (see Mitigation Measure 4.14-1) shall include a provision for on-going
communication shall be maintained with school administration at the Travis Ranch School,
Fairmont Elementary School and YLHS, providing sufficient notice to forewarn students and
parents/guardians when existing pedestrian and vehicle routes to the school may be
impacted in order to ensure school traffic and pedestrian safety. This mitigation measure to
be verified by the Manager, OC Planning Development Services in quarterly compliance
certification reports submitted by project contractor.
- Mitigation Measure 4.12-5In order to ensure school traffic and pedestrian safety, during
construction, construction vehicles shall not haul past the Travis Ranch School, <u>Fairmont
Elementary School</u> and YLHS, except when school is not in session. If that is infeasible,
construction vehicles shall not haul during school arrival or dismissal times. This mitigation
measure to be verified by the Manager, OC <u>Planning Development Services</u> in quarterly
compliance certification reports submitted by project contractor.
- Mitigation Measure 4.12-6 During construction, crossing guards shall be provided by the Project Applicant in consultation with the Travis Ranch School, <u>Fairmont Elementary School</u> and YLHS, as appropriate, when safety of students may be compromised by construction-related activities at impacted school crossings in order to ensure school pedestrian safety. This mitigation measure to be verified by the Manager, <u>Planning Development Services</u> in quarterly compliance certification reports submitted by project contractor.

6. Page 4.12-16. Add the following mitigation measure under "Libraries":

Mitigation Measure 4.12-8(b)Prior to issuance of a building permit, the Project Applicant shallenter into a capital facilities and equipment agreement with the Orange County Public Libraryand/or the Yorba Linda Public Library. This Agreement shall specify the developer's pro-ratafair share funding of capital improvements and equipment, which shall be limited to serve theproject site.

7. Page 4.12-19. Modify the 1st sentence in the 2nd column regarding Goal 1 with the following changes:

Consistent. As discussed in this EIR section, the incremental increase in population from the Project would not substantially impact police protection services, including the average number of daily calls the serving police officers respond to each year; particularly given the fact that the City of Yorba Linda recently signed a five-year agreement with the Orange County Sheriff's Department <u>OCSD</u> for police services, which is expected to decrease response times.

8. Page 4.12-19. Modify the 1st sentence in the 2nd column regarding Objective 1.1 with the following changes:

Consistent. <u>Please rR</u>efer to the response above.

9. Page 4.12-19. Modify the 2nd sentence in the 2nd column regarding Policy 1 with the following changes:

Also, as discussed in Section 4.12, *Public Services* this EIR section, impacts to police services would be less than significant with implementation of the prescribed mitigation measures.

10. Page 4.12-21. Modify the last sentence in the 2nd column regarding Policy 10.1 with the following changes:

In addition, please see response to the Policy 5.4 above.

11. Page 4.12-21. Modify the 1st sentence in the 2nd column regarding Goal 10.2 with the following changes:

Potentially Consistent. <u>Please sS</u>ee response to Policy 5.4.

12. Page 4.12-22. Modify 2nd paragraph in Column 2 in Table 4.12-5 with the following changes:

Both the City and unincorporated County areas are served by the OCSD for law enforcement services. OCSD has indicated that a small population increase from the project would not affect maintenance of the staff ratio of 0.46 deputies per 1,000 population. As discussed in this EIR section, impacts regarding police facilities and services would be less than significant. Further, pursuant to County policy, the Orange County Sheriff-Coroner Department would review the Project proposal prior to its approval to ensure that adequate Sheriff patrol services are provided through a fee program or Secured Police Protection Agreement for this Project (refer to Mitigation Measure 4.12-2(B).

SECTION 4.13, RECREATION

1. Page 4.13-1. Modify the 1st paragraph with the following changes:

This section analyzes the potential impacts of the Project on recreational facilities and resources, including parks, trails, and bicycle facilities, in the County of Orange and in the vicinity of the project site <u>City of Yorba Linda</u>. The analysis provides a description of the existing recreational facilities and resources within the project area, relevant policies pertaining to recreation, and analyzes the potential impacts. Information in this section is based in part on the County of Orange General Plan (2005), the Orange County Parks Strategic Plan (2007), the County of Orange Code of Ordinances (Local Park Code), the Orange County Parks Website, the City of Yorba Linda General Plan (1993), the City of Yorba Linda Parks and Recreation Master Plan Update Report (memorandum dated March 21, 2013), and the City of Yorba Linda Recreation and Community Services Department Website <u>website</u>.

2. Page 4.13-4. Modify 3rd sentence in the 1st paragraph with the following changes:

When combined (mini, local, neighborhood, and regional), the City's recommended parkland standard if <u>is</u> 15 acres of parkland per 1,000 residents.

3. Page 4.13-6. Modify last paragraph with the following changes:

The City of Yorba Linda's *Riding, Hiking and Bikeway Trail Component Map*, (Figure 4.13-<u>42</u>) found within the City's General Plan, shows several planned trails within the project area. Trail 35a (San Antonio Park Trail) begins at Yorba Linda Boulevard near San Antonio Road. From that location the trail is proposed to extend northeast through an area of open space (part of Tract 9813) to the western edge of the project boundary.

4. Page 4.13-11. Modify "Threshold 2" with the following changes:

Threshold 2: Include recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment (refer to Impact Statement 4.13-1).

5. Page 4.13-11. Modify the last sentence with the following changes:

There are no Project Design Features (PDFs) applicable <u>to</u> parks and recreation facilities.

6. Page 4.13-12. Modify the 1st sentence in the 1st paragraph with the following changes:

As discussed in the Existing Conditions section above, there are numerous neighborhood and community parks within City of Yorba Linda that would serve the project site, in addition to regional park facilities operated <u>by</u> OC Parks and Chino Hills State Park.

7. Page 4.13-12. Modify the 2nd to last sentence in the 1st paragraph with the following changes:

With regards to San Antonio Park, there was a Level 2 demand for <u>added parking</u><u>expansion or</u> <u>improvements</u> to the park.

8. Page 4.13-12. Modify the 1st sentence to in the 2nd paragraph with the following changes:

Since the Project would contribute new residents that would utilize park neighborhood <u>park</u> and community facilities within the City of Yorba Linda, which as a City is approximately 167 acres deficient in meeting its recommended standard of a total of four acres per 1,000 residents for mini, neighborhood, and community parks, and more specifically, San Antonio Park is in need of improvements should funds become available, impacts on local and community parks facilities are considered to be a potentially significant impact.

9. Pages 4.13-16. Modify Mitigation Measure 4.13-2 with the following changes:

Mitigation Measure 4.13-2 Prior to issuance of grading permits, the Project Applicant shall coordinate with the City of Yorba Linda <u>Parks and Recreation</u> Department-of Recreation and <u>Community Services Department</u> and OC Parks in order to identify potential planned trail alignments through the project site, as identified in the City of Yorba Linda's Riding, Hiking and Bikeway Trail Component Map. Once the trail alignments are defined by the City and/or

County, the alignments shall be dedicated by the Project Applicant, to the City <u>or the County</u> either in fee or by an access and maintenance easement.

SECTION 4.14, TRAFFIC/TRANSPORTATION

1. Page 4.14-30. Modify Mitigation Measure 4.14-2 with the following changes:

Mitigation Measure 4.14-2 A traffic signal shall be installed prior to issuance of building the first occupancy permits, or as otherwise determined appropriate through consultation with the City of Yorba Linda, for the Project at the intersection of Via del Agua and Yorba Linda Boulevard. The Project Applicant shall pay the City of Yorba Linda its fair share cost toward installation of a traffic signal, install the traffic signal, or pay the full cost of the signal installation, with the latter two alternatives subject to reimbursement, as agreed to by the Project Applicant and the City of Yorba Linda.

CHAPTER 5.0, ALTERNATIVES

1. Page 5-10. Modify the 3rd to last sentence in the 2nd paragraph with the following changes:

Overall, due \underline{to} the increased daily operational emissions, the extent of exposure of pollutant emissions on the public, including sensitive receptors, would be proportionately greater under this Alternative.

2. Page 5-14. Modify the 2nd to last sentence under subsection (f) Global Climate Change, with the following changes:

Thus, this Alternative would be inconsistent <u>with</u> the State's overarching goals to reach 1990 GHG levels by 2020 per AB 32.

3. Page 5-15. Modify the 2nd sentence in the last paragraph with the following changes:

However, a zone change from <u>A1 and</u> A1(O) to the R4 "Suburban Residential" District would be required to allow for a 3,500 square foot building site area. Also, a zone change for Planning Area 2 from A1(O) to R-1, Single Family Residence District would not be necessary under this Alternative.

4. Page 5-34. Modify the 2nd sentence in the 2nd paragraph with the following changes:

Also, a zone change for Planning Area 2 from <u>A1 and</u> A1(O) to R-1, Single Family Residence District would be necessary under this Alternative.

CHAPTER 6.0, OTHER MANDATORY CEQA CONSIDERATIONS

1. Page 6-7. Modify last paragraph with the following changes:

Mitigation Measure 4.13-1 requires the Project Applicant to pay applicable park in lieu fees pursuant to the determining formula contained in the County Local Park Code, and meeting the City standards for the provision of local parks. Payment of such fees would not result in secondary environmental impacts. Mitigation Measure 4.13-2 requires that the Project Applicant coordinate with the City of Yorba Linda <u>Parks and Recreation</u> Department of Recreation and Community Services Department and OC Parks to identify potential planned trail alignments through the project site, as identified in the City of Yorba Linda's Riding, Hiking and Bikeway Trail Component Map. As the final site plan can accommodate such a trail(s), no secondary environmental impacts would occur.

2. Page 6-8. Modify the 1st paragraph with the following changes:

Mitigation Measure 4.14-1 requires the Project Applicant, in coordination with the County of Orange, to prepare a Construction Staging and Traffic Management Plan to be implemented during construction of the Project. Per Mitigation Measure 4.14-2, a traffic signal is required to mitigate project impacts at the Via del Agua and Yorba Linda Boulevard intersection with the Project paying its fair share for the signal, installing the signal, or paying the full cost for installation, with the latter two alternatives subject to reimbursement. If installation of the traffic signal were completed as part of the Project, appropriate construction practices intended to minimize impacts would be implemented. For example, the implementation of best management practices with regard to erosion, the watering of construction sites, the use of properly operating equipment, and the use of noise reduction devices would minimize environmental impacts to below applicable thresholds. In addition, with regards to lighting impacts, appropriate shielding of the traffic lights would be installed, as necessary, per City Standards. Also, in recognition of the setbacks from the nearest residences to the Via Del Agua/Yorba Linda Blvd. intersection of at least 30 feet and the intervening landscaping (inclusive of mature trees) and fencing, lighting impacts to residential uses would be less than significant. Therefore, there would be no significant secondary impacts with implementation of these mitigation measures.

Draft EIR Appendix C

In addition to the corrections/additions that are listed above under Section 4.3, *Biological Resources*, in the Draft EIR, which correspond to corrections/additions in Appendix C, below are additional correction and additions to Appendix C of the Draft EIR.

Biological Resources Assessment

1. Page A-10. Modify the list of mammals referenced in Appendix A (Floral and Faunal Compendium) of the Biological Resources Assessment with the following changes:

MAMMALS

SCIENTIFIC NAME	COMMON NAME	
Cervidae	Deer	
Odocoileus virginianus <u>Odocoileus hemionus</u>	white-tailed deer <u>mule deer</u>	

INVESTIGATION OF JURISDICTIONAL WATERS AND WETLANDS (July 25, 2012, Edited October 7, 2015)

1. Page 26. Modify first paragraph with the following changes:

On October 07, 2015 Ezekiel Cooley conducted a supplementary delineation on the off-site portion of Drainage B. Within the off-site portion of Drainage B approximately 100 linear feet has been converted to a riprap armored channel on or about 2009 based on review of available aerial imagery in Google Earth, and the downstream 40 feet consist of a cement lined head wall and apron. The cement lined portion appears to accept supplemental hydrology from adjacent landscaped slope runoff. This supplemental hydrology combined with ongoing maintenance activities in the channel appears to have created a small disturbed wetland situation. Based on the soils and hydrology assessment conducted in the field, approximately 16 linear feet of earthen streambed appear to meet the soils and hydrology criteria for wetlands as defined by the USACE. However, the area lacks vegetation indicators due to what is presumed to be ongoing maintenance that suppresses the establishment of vegetation in that drainage. Given that no vegetation could be positively identified and available aerial imagery did not exhibit the presence of vegetation in the channel, it was determined by PCR that this portion of Drainage B does not support wetlands. Moreover, the mapping of wetlands, had it been presumed present in this area, would be so small that it would not change the overall acreage of wetlands already quantified on the site. The locations of soil pits are depicted on Figure 5 and USACE data sheets are provided in Appendix B.

Drainage B contains approximately $0.11 \quad 0.12$ acre (0.11 acre on-site and 0.01 acre off-site) of ephemeral USACE/RWQCB "waters of the U.S." and $0.29 \quad 0.38$ acre (0.29 acre on-site and 0.09 acre off-site) of CDFG jurisdictional streambed and riparian vegetation.

Draft EIR Appendix L, Traffic Study

- 1. Page 8. Modify first paragraph with the following changes:
 - 1.5 Summary of Project Impacts and Mitigation Measures

This section provides a summary of direct Project impacts and associated mitigation measures. Section 2.0 *Methodologies* provides information on the methodologies used in the analyses and Section 6.0 *Opening Year (2015) Traffic Analysis* includes the detailed analysis. Although the intersection of Via del Agua at Yorba Linda Boulevard is currently operating at unacceptable LOS (i.e., LOS "F") during the <u>PMAM</u> peak hour under Existing (2012) traffic conditions, the addition of Project traffic (as measure<u>d</u> by 50 or more peak hour trips) is anticipated to contribute to the deficiency at this intersection. Based on the stated significance threshold for intersections already operating at LOS "E" or LOS "F" under pre-project conditions, the impact is considered "significant".

2. Page 21. Modify the 2nd sentence under subsection 3.2 with the following changes:

One required element $f \underline{of}$ the CMP is a process to evaluate the transportation and traffic impacts of large projects on the regional transportation system.

3. Page 35. Modify Figure 3-12 with the following changes:

Exhibit 3-12 has been corrected to maintain consistency with the intersection operational analysis provided in Table 3-1. The Exhibit has been revised to reflect acceptable peak hour operations during the PM peak hour. The revised Exhibit is shown below.

4. Page 65. Modify the 1st and 2nd paragraphs of subsection 5.4 with the following changes:

5.4 **Project Mitigation Measures**

Improvement strategies have been recommended at the study area intersection that has been identified as impacted to reduce the location's peak hour delay and improve the associated LOS grade to LOS "D" or better. As shown on Table 3-1, the addition of Project traffic has the potential to would worsen the peak hour operations of the following intersection, potentially-resulting in a potentially significant impact:

Via del Agua / Yorba Linda Boulevard (#11) – Although the intersection is currently operating at unacceptable LOS (i.e., LOS "F") during the AM peak hour under Existing (2012) traffic conditions, the addition of Project traffic (as measure<u>d</u> by 50 or more peak hour trips) is anticipated to contribute to the deficiency at this intersection. Based on the stated significance threshold for intersections already operating at LOS "E" or LOS "F" under pre-project conditions, the impact is considered "significant".

5. Page 78. Modify the 1st and 2nd paragraphs under subsection 6.5 with the following changes:

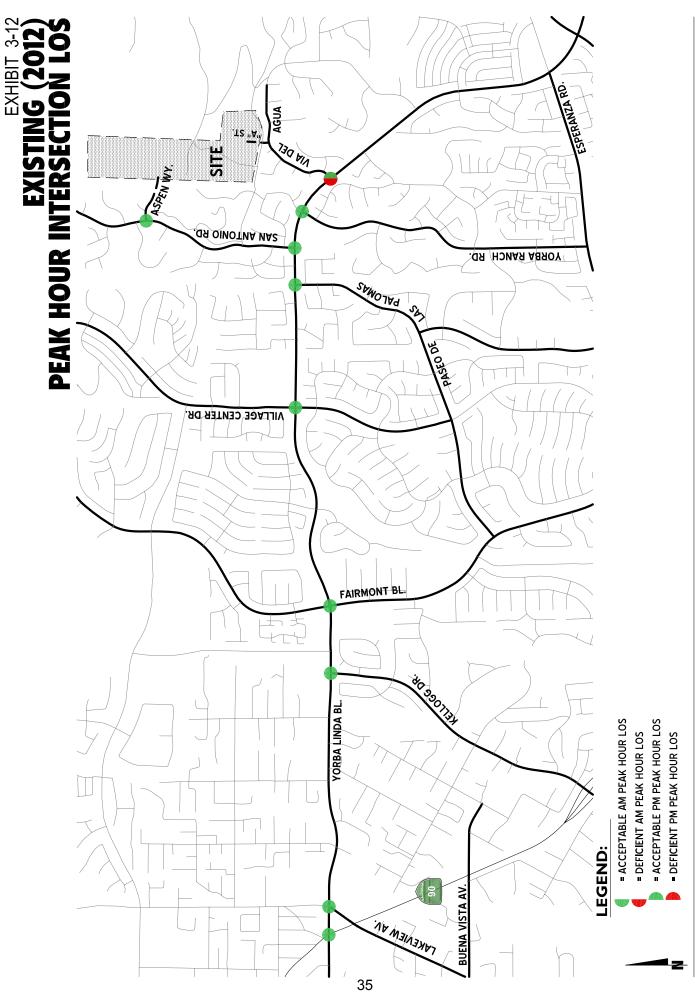
6.5 **Project Mitigation Measures**

Improvement strategies have been recommended at the study area intersection that has been identified as impacted to reduce the location's peak hour delay and improve the associated LOS grade to LOS "D" or better. As shown on Table 6-2, the addition of Project traffic has the potential to would worsen the peak hour operations of the following intersection, potentially-resulting in a potentially significant impact:

Via del Agua / Yorba Linda Boulevard (#11) – Although the intersection is currently operating at unacceptable LOS (i.e., LOS "F") during the PM peak hour under Existing (2012) traffic conditions, the addition of Project traffic (as measure<u>d</u> by 50 or more peak hour trips) is anticipated to contribute to the deficiency at this intersection. Based on the stated significance threshold for intersections already operating at LOS "E" or LOS "F" under pre-project conditions, the impact is considered "significant".

6. Page 80. Modify the last sentence 2nd paragraph with the following changes:

Exhibits 6-13 and 6-14_show the AM and PM peak hour intersection turning movement volumes for Opening Year (2015) with Project traffic conditions, with access alternative via Aspen Way.



Cielo Vista Traffic Analysis County of Orange, CA (JN - 07146:012.dwg)

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