9. Inventory of Mitigation Measures

Aesthetics

AE-1 Prior to the issuance of building permits, the Project Applicant shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the property in a manner meeting the approval of the Manager, OC Planning, or designee. Lighting shall be designed to minimize visibility of light sources by directing lighting toward the on-site structures and not illuminating areas outside property boundaries.

Air Quality

- AQ-1 During construction, the Project Applicant shall ensure the use of enhanced control measures for diesel exhaust emissions to maintain NOX impacts at a less than significant level. These measures shall include:
 - Utilize well-tuned off-road construction equipment
 - During grading, require that contractors use Tier 3 on all heavy equipment (excavators, graders, and scrapers exceeding 100 HP rated power) if the entire project is graded at one time for NOX emissions, unless use of such mitigation is demonstrated to be technically infeasible for a given piece of equipment
 - During grading, require that contractors employ oxidation catalysts during grading for excavation graders and scrapers exceeding 100 HP rated power if the entire project is graded at one time, unless use of such mitigation is demonstrated to be technically infeasible for a given piece of equipment.
 - Enforce 5-minute idling limits for on-road trucks and off-road equipment
- AQ-2 During construction, the Project Applicant shall ensure that standard construction practices as set forth in the SCAQMD Handbook shall be implemented.
- AQ-3 During construction, the Project Applicant shall ensure that best management practices for dust control are implemented. These include:
 - Apply soil stabilizers or moisten areas that are inactive for 96 hours or more.
 - Prepare a high wind dust control plan
 - Address previously disturbed areas if subsequent construction is delayed more than 96 hours

- Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically three times per day)
- Wet down or cover all stockpiles with tarps at the end of each day or as needed
- Provide water spray during loading and unloading of earthen materials
- Minimize in-out traffic from construction zone
- Cover all trucks hauling dirt, sand or loose material or require all trucks to maintain at least two feet of freeboard
- Sweep streets daily if visible soil material is carried out from the construction site
- Use perimeter sandbags and wind fences for erosion control

Biological Resources

- Prior to the issuance of grading permits, the Project Applicant shall prepare a re-vegetation plan for mulefat scrub, black willow riparian forest, and blue elderberry woodland located within Blue Mud Canyon. The plan will also incorporate California black walnut into the plant palette to mitigate the loss of 0.48 or 0.22 acre of walnut woodland associated with Options 1 and Option 2, respectively. The plan shall be prepared by a qualified biologist for review and approval by the Manager of OC Planning. At a minimum, the plan shall include restoration of mulefat scrub and black willow riparian forest vegetation that also includes a black walnut component. The plan shall include replacement of habitat at a minimum a ratio of 1:1; responsibility and qualifications of the personnel to implement and supervise the plan; site selection; site preparation and planting implementation; schedule; maintenance plan/guidelines; monitoring plan; and long-term preservation.
- Bio-2 Prior to the issuance of grading permits, a detailed restoration program shall be prepared by a qualified biologist for approval by the County of Orange. The program shall provide for planting of 326 greenhouse-propagated individuals of intermediate mariposa lily in the Study Area within an undisturbed area of coastal sage scrub.
- Bio-3 Prior to the issuance of grading permits, a detailed restoration program shall be prepared by a qualified biologist for approval by the County of Orange. The program shall provide for planting of 400 greenhouse-propagated individuals of Braunton's milk-vetch in the Study Area within an undisturbed area of suitable habitat and soils, slope and exposure.
- Bio-4 Prior to the issuance of grading permits, the Project Applicant shall prepare a re-vegetation plan for mulefat scrub and black willow riparian forest located within Blue Mud Canyon. The plan will also incorporate California black walnut into the plant palette to mitigate the loss of walnut woodland

as described in Mitigation Measure Bio-1. The plan shall be prepared by a qualified biologist for review and approval by the Manager of OC Planning. At a minimum, the plan shall include: restoration of mulefat scrub and black willow riparian forest vegetation at a ratio of 1:1; responsibility and qualifications of the personnel to implement and supervise the plan; site selection; site preparation and planting implementation; schedule; maintenance plan/guidelines; monitoring plan; and long-term preservation.

- Bio-5 Prior to the issuance of grading permits, the Project Applicant shall include the following measures on the grading plan to be implemented with grading operations:
 - Prior to the commencement of clearing operations or other activities involving significant soil disturbance, all areas of mulefat scrub and black willow riparian forest habitat to be avoided shall be identified with temporary fencing or other markers that are clearly visible to construction personnel.
 - 2. A USFWS-approved Biological Monitor shall be on-site during any clearing of mulefat scrub and black willow riparian forest. The Project Applicant shall advise the U.S. Fish & Wildlife Service at least 7 calendar days but preferably 14 calendar days prior to the clearing of mulefat scrub and black willow riparian forest. The Biological Monitor shall flush avian or other mobile species from habitat areas immediately prior to brush-clearing and earth-moving activities. It shall be the responsibility of the monitoring biologist to ensure that identified bird species are not directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities to continue on a timely basis.
 - 3. Following the completion of initial clearing activities, all areas of mulefat scrub and black willow riparian forest habitat to be avoided by construction equipment and personnel shall be marked with temporary fencing or other clearly visible, appropriate markers. No construction access, parking, or storage of equipment shall be permitted within such marked areas.
- Bio-6 Prior to the issuance of grading permits, the Project Applicant shall prepare a Restoration Plan for mulefat scrub, black willow riparian forest, coast live oak riparian woodland, and other appropriate wetland/riparian habitats at an acreage ratio of 1:1 to be located within Blue Mud Canyon. The plan shall be prepared by a qualified biologist for review and approval by the Manager of OC Planning. The Restoration Plan shall include the following:
 - Impacts to living coast live oak trees within CDFW jurisdiction will be mitigated through planting liners or locally collected acorns within Blue Mud Canyon at the following ratios:
 - For healthy trees to be removed for development:
 - trees less than 5 inches diameter at breast height (DBH) should be replaced at 3:1

- trees between 5 and 12 inches DBH should be replaced at 5:1
- trees between 12 and 36 inches DBH should be replaced at 10:1
- trees greater than 36 inches DBH should be replaced at 20:1
- For damaged trees (including trees damaged by construction and fire damaged trees to be removed for development):
 - trees less than 12 inches DBH should be replaced at 3:1
 - trees greater than 12 inches DBH should be replaced at 5:1
 - Impacts to trees that were killed by the 2008 Freeway Complex Fire do not require mitigation.
- 2. The sizes, condition, and total number of impacted trees will be determined after verification of the limits of CDFW jurisdiction and prior to issuance of any permit that results in ground disturbance.
- Prior to the issuance of grading permits, the Project Applicant shall prepare a Habitat Mitigation and Monitoring Program (HMMP). The HMMP shall be prepared by a qualified biologist for review and approval by the Manager of OC Planning. The HMMP shall include responsibility and qualifications of the personnel to implement and supervise the plan; site selection; site preparation and planting implementation; schedule; maintenance plan/guidelines; monitoring plan; and long-term preservation.

The Project Applicant shall be fully responsible for the implementation of the Habitat Mitigation and Monitoring Program until the restoration areas have met the success criteria outlined in the approved plan. The Manager of OC Planning shall have final authority over mitigation area sign-off.

- Bio-8 Prior to the issuance of any grading permit the Project Applicant shall include the following measures on the grading plan to be implemented with grading operations:
 - Prior to the commencement of clearing operations or other activities involving significant soil disturbance, all areas of ACOE and CDFW jurisdiction to be avoided shall be identified with temporary fencing or other markers that are clearly visible to construction personnel.
 - 2. A USFWS-approved Biological Monitor shall be on-site during any clearing of riparian vegetation. The Project Applicant shall advise the US Fish & Wildlife Service at least 7 calendar days but preferably 14 calendar days prior to the clearing of riparian vegetation. The Biological Monitor shall flush avian or other mobile species from habitat areas immediately prior to brush-clearing and earth-moving activities. It shall be the responsibility of the monitoring biologist to ensure that identified bird species are not directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities to continue on a timely basis.
 - 3. Following the completion of initial clearing activities, all areas of ACOE and CDFW jurisdiction to be avoided by construction

equipment and personnel shall be marked with temporary fencing or other clearly visible, appropriate markers. No construction access, parking, or storage of equipment shall be permitted within such marked areas.

Bio-9 Prior to the issuance of grading permits, the Project Applicant shall include the following condition on the grading plan for implementation during vegetation removal operations:

No vegetation removal shall occur between the dates of March 15 to August 31, unless a qualified biologist surveys the Project's impact area prior to disturbance to confirm the absence of active nests. If an active nest is discovered, vegetation removal within a particular buffer surrounding the nest shall be prohibited until nesting is complete; the buffer distance shall be determined by a qualified biologist (in consultation with the CDFW or the USFWS, if applicable) and in consideration of species sensitivity and existing nest site conditions. Limits of avoidance, which can be up to 300 feet for nesting raptors, shall be demarcated with flagging or fencing. The Biologist shall record the results of the recommended protective measures described above and shall submit a memo summarizing any nest avoidance measures to the Manager of OC Planning to document compliance with applicable state and federal laws pertaining to the protection of native birds, including nesting raptors.

- Bio-10 Prior to the issuance of building permits, the Project Applicant shall prepare a resident Environmental Awareness Program to be reviewed and approved by the Manager of OC Planning. The Environmental Awareness Program is intended to increase awareness to residents of the sensitive plants, wildlife, and associated habitats that occur in the preserved open space areas. The intention of the program shall be to encourage active conservation efforts among the residents to help conserve the habitats in the preserved open space. The program shall address inadvertent impacts from the introduction of invasive plant species (including escapees), human intrusion, trash and debris, creation of ad hoc trails, domestic cats, and light pollution. At a minimum, the Environmental Awareness Program shall include the following components:
 - Informational kiosks shall be constructed at entrance points to hiking
 and equestrian trails and at various locations along the fence line that
 separates the Project Site and the open space area to inform residents
 and trail users on the sensitive flora and fauna that rely on the habitats
 found within the preserved open space. The intent of these kiosks is to
 bring awareness to the sensitive plants, wildlife and associated habitats
 which occur in the area along with discouraging creation of ad hoc
 trails and trash and debris.
 - The Project Applicant shall provide residents or the HOA for nearby subdivisions (if applicable) with a brochure that includes a list of plant species to avoid in residential landscaping to prevent the introduction of

invasive plant species and impacts from human intrusion, light pollution and domestic cats to the surrounding natural communities.

- Bio-11 Prior to the issuance of grading permits the Project Applicant shall include the following measures on the grading plan to be implemented with grading operations:
 - No clearing, grubbing, grading, or other construction activities shall occur within and in the vicinity of riparian habitat occupied by least Bell's vireo between March 15 and September 15, the breeding season of the least Bell's vireo, until the following requirements have been met:
 - 1. A qualified biologist shall survey riparian areas that would potentially be subject to construction noise levels exceeding 60 decibels [dB(A)] hourly average for the presence of least Bell's vireo. Surveys for this species shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish & Wildlife Service within the breeding season prior to the commencement of construction. If the least Bell's vireo is present, then the following conditions must be met:
 - a. Between March 15 and September 15, no clearing, grubbing, or grading of occupied least Bell's vireo habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist;
 - b. Between March 15 and September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied least Bell's vireo habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician and/or qualified biologist (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the U.S. Fish & Wildlife Service at least two weeks prior to the commencement of construction activities. Prior to the commencement of any construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist;
 - c. If it is desired to conduct construction activities adjacent to habitat determined to be occupied by least Bell's vireo during pre-construction surveys, then at least two weeks prior to the commencement of construction activities,

under the direction of a qualified acoustician and/or qualified biologist, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the least Bell's vireo. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of occupied area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician and/or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).

Construction noise shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level of it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.]

- 2. If least Bell's vireos are not detected during the protocol survey, the qualified biologist shall submit substantial evidence to the U.S. Fish & Wildlife Service that demonstrates whether or not mitigation measures such as noise walls are necessary between March 15 and September 15 as follows:
 - If this evidence indicates the potential is high for least Bell's vireo to be present based on historical records or site conditions, then condition 1.c shall be adhered to as specified above.
 - If this evidence concludes that no impacts to this species are anticipated, no further surveys or monitoring would be necessary.

Cultural Resources

CR-1 Prior to the issuance of any grading permit, a grading note shall be added to the grading plan that states: "If any unanticipated cultural resources,

including human remains, are discovered during ground-disturbing activities; work in that location shall be temporarily diverted a minimum of 25 feet away until a County qualified archaeologist can evaluate the find. Recommendations by the archaeologist and as approved by the County of Orange Planning Manager shall be complied with for any further ground-disturbing work."

CR-2 Prior to the issuance of any grading permit, the Project Applicant shall prepare and submit to the Manager, OC Planning for review and approval a Paleontological Resources Mitigation Plan as detailed in the "Archaeological and Paleontological Resources Assessment Update" for the Esperanza Hills Project, dated January 2013, prepared by Cogstone. The Paleontological Resources Mitigation Plan shall include the following:

1) paleontological resources awareness training for all earthmoving personnel, 2) monitoring of excavations more than five feet below the current surface (not for shallow excavations), 3) adjustments by the principal paleontologist to monitoring requirements based on fossil yield, depth and location of impact, and 4) recovery and curation of fossils meeting the significance criteria established in the Paleontological Resources Mitigation Plan.

Geology and Soils

- Geo-1 Prior to issuance of building permits, the Project Applicant and the County hall ensure that geologic conditions underlying design slopes and those to remain natural in areas adjacent to the development perimeter shall be investigated and analyzed for gross stability in accordance with current geotechnical engineering practice. Investigation shall include areas where larger landslides are suspected to exist, mainly in natural slope areas bordering the development, including analysis of distribution and dimension regarding conditions of gross stability.
- Geo-2 During grading, the Project Applicant and the County shall ensure that unstable areas be avoided or that design slopes determined to be grossly unstable be stabilized by construction of buttresses or stabilization fills, flattening gradients, lowering overall heights, improving stability through use of tie-back/grade-beam systems, use of geogrid, use of cement-treated-soil or similar supplemental stabilization measures or combinations of these methods.
- Geo-3 During grading, the Project Applicant shall ensure that zones of weathered bedrock be removed from back cuts and/or areas upon which new fill is to be placed.
- Geo-4 Prior to issuance of building permits, the Project Applicant shall ensure that construction across the trace of active faults and/or outside the limits of the setback zone will be avoided to the maximum extent practicable, and no residential lots are designed within the setback zone established for the Whittier Fault. Where access roads, retaining walls, bridge structures or

- structural fills are planned within the setback zone, the direction and magnitude of anticipated fault offset and severity of anticipated ground shaking shall be incorporated into the design.
- Geo-5 Prior to issuance of building permits, the Project Applicant shall ensure that the design for improvements that cross the Whittier Fault should be minimal, and the trend in which crossings are made should be oriented as nearly perpendicular (20 degrees east of north) to the trend of the fault as possible. The prefabricated bridge structure spanning Blue Mud Canyon under Option 1 shall be positioned and designed to accommodate expected fault offset. The Project Applicant shall consider use of alternative geotechnical engineering technologies to minimize impacts to structures constructed above active fault strands. These may include the incorporation of geo-fabric materials into fill bodies to add to fill strength and/or select placement of gravel blankets within subgrade areas to diffuse shear forces relating to ground rupture.
- Geo-6 Prior to issuance of building permits, the Project Applicant shall ensure that utility lines located in or near the Whittier Fault incorporate flexible joints into their design, to accommodate anticipated ground rupture in a right-lateral strike-slip sense.
- Geo-7 Prior to issuance of building permits, the Project Applicant shall verify that the existing seismic setback zone margins are appropriate for encountered geologic conditions and, where changes are warranted, evaluate any impacts to design plan elements and assure any revisions to the margins are depicted on final plan sets.
- Geo-8 Prior to issuance of building permits, the County shall ensure that the Project Applicant has provided geotechnical investigations and engineering analyses to evaluate retaining wall design and stability, establish foundation design recommendations and determine conditions of gross and surficial stability of overall wall/slope combinations. In surficially unstable slopes where no remedial grading is permitted, wall foundations shall be strengthened to accommodate a potential loss of lateral support. Where natural slopes are grossly unstable, possibly due to the presence of a larger landslide, the slope shall be stabilized or buttressed through grading methods. Where grading is not permitted, structural stabilization shall be accomplished through the design of retaining walls and/or soldier pile walls, tie backs, or some combination of both.
- Geo-9 Prior to issuance of building permits, the Project Applicant shall ensure that natural slope areas adjacent to development are analyzed for stability and estimated volumes of failure material determined. Setback zones or design of a bench in the upper slopes shall be employed to reduce the potential for failures to migrate into graded areas. Areas of rock creep influence shall require use of tie-backs and structural sheets to prevent this occurrence.

- Geo-10 Prior to issuance of building and grading permits, the Project Applicant shall ensure that the following methods are incorporated into the design to prevent slope failure:
 - Where daylight fill lots lie adjacent to ascending natural slopes, building pad elevations shall be raised, and toe-of-slope catchment troughs have been designed into which the failure materials can accumulate. These areas should be designated as "common areas" and maintained by homeowners associations.
 - In areas where a more significant volume of debris is expected, such as an area situated within the path of adjacent natural drainage swales, impact or deflection walls shall be installed.
 - Use of design stabilization fills, which are typically the width of standard grading equipment, shall be used for surficially unstable cut or fill slopes.
- Geo-11 During the conceptual design phase, the Project Applicant and the County shall ensure that no lots are designed with habitable structures within the fault hazard setback zone as determined in the Fault Study, and no building permits shall be applied for or granted for any habitable structures within the hazard fault setback zone in the future. Asymmetrical floor plans shall be avoided, because these kinds of buildings tend to twist in addition to shaking laterally.
- Geo-12 Prior to issuance of building permits, the Project Applicant shall demonstrate to the County that deep fills have undergone a cycle of "primary" settlement sufficient to allow safe construction. The Project Applicant may opt to employ supplemental geotechnical measures to minimize anticipated settlement time. Such measures could include vertical wick-drain installation, use of higher fill compaction standards, use of granular fill zones prone to less settlement, and/or placement of surcharge fills.
- Geo-13 During construction, Project Applicant and the County shall ensure that appropriate conventional engineering measures are implemented to reduce impacts of excessive differential settlement in cut/fill transition areas as determined by the County building official. These measures can include a flattening of removal profiles to 2:1 or shallower, deepening over-excavation of building pads within zones of expected impacts, use of higher compaction standards, limiting construction of certain improvements within structural setback zones or construction of stiffened foundation systems including post-tension foundations caisson walls or mat slabs as determined feasible and appropriate.
- Geo-14 During grading, the Project Applicant and the County shall ensure that removal and re-compaction of compressible native soils shall be performed in areas of proposed structural fills to minimize settlement of new fill and/or prevent loss of lateral support. The limits of removals shall extend beyond conceptual plan boundaries and potentially beyond the limits of grading

- into areas to remain natural. Where no removals are permitted beyond the boundaries of design, engineered structures shall be installed such as pin piles to achieve proper slope stability.
- Geo-15 Prior to issuance of building permits, the County shall verify that testing has been conducted to evaluate the chemical character of fill soils. Results of such testing shall be used to formulate appropriate foundation design criteria to reduce the adverse effects of corrosive soils.
- Geo-16 Prior to issuance of building permits, the County shall ensure that the Project Applicant has provided geotechnical studies to evaluate the occurrence and character of expansive clay soil on the Project Site. Based on the results of the studies, criteria for foundation design shall be formulated to reduce adverse effects such as selective grading methods including placement of adverse clay soils in deeper fill areas, or non-structural fill areas, and/or increasing the vertical distance between in-situ clayey bedrock and design structures through building pad over-excavation. Post grading studies and testing shall be conducted on finished building pads to verify the adequacy of foundation design.
- Geo-17 Prior to grading, the County shall ensure that the Project Applicant has conducted geotechnical investigations of recent alluvium deposits to evaluate the potential for liquefaction. Findings of such investigations shall be incorporated into the design of structures proposed in areas where there is a potential for liquefaction to occur.
- Geo-18 Prior to construction, the Project Applicant shall ensure that a network of subdrains and back-drains shall be installed in areas of expected groundwater or active seepage.
- Geo-19 Prior to issuance of building permits, the County shall ensure that the Project Applicant has conducted geotechnical investigations and engineering analyses in areas where proposed roadways cross existing natural gas pipelines or transmission towers exist adjacent to proposed cut slopes and designed roadway crossings to avoid or minimize damage to these facilities.

Greenhouse Gas Emissions

- GHG-1 Prior to issuance of building permits for residential units, the County shall ensure that all fireplaces are gas rather than wood burning.
- GHG-2 Prior to construction of project, the developer shall implement or develop a plan for implementation of one or more mitigation strategies for the reduction of greenhouse gas (GHG) emissions from the report "CEQA and Climate Change" prepared by the California Air Pollution Control Officers Association (CAPCOA) as updated in 2010. The total benefit of the mitigation strategies must result in a minimum 5% reduction in GHG emissions from the business-as-usual value. Alternative strategies not listed in the CAPCOA report may be used with approval of the Orange County Planning Director. The selected strategies, including measures for their

long-term maintenance, must be described in a memo submitted to and approved by the County Planning Department prior to initial occupancy of any on-site facility.

Hazards and Hazardous Materials

- Prior to the issuance of building permits the Project Applicant shall provide a Combustible Gas/Methane Assessment Study for review and approval by the OCFA. The Project Applicant shall submit and obtain OCFA approval for a Methane Control Plan to control the release of combustible gas/methane from operation oil wells in the event that measurable quantity of methane gas is identified in the Combustible Gas/Methane Assessment Study.
- Prior to the issuance of grading permits the Project Applicant shall ensure that a Phase II ESA is prepared for review and approval by the Manager of OC Planning. The Phase II ESA shall identify the abandoned well locations, and any hidden pits or accumulations of drilling mud in the vicinity of the wells. The assessment shall include a review of available well logs and abandonment documentation in order to verify regulatory compliance of previously abandoned wells. In the event pits are encountered during the Phase II ESA investigation or during grading, the pits will be sampled for hazardous substances and will be disposed of at a certified hazardous waste facility.
- Haz-3 Prior to the issuance of grading permits, the Project Applicant shall ensure that an RAP is prepared for the previously abandoned oil wells to address the appropriate measures consistent with state law.
- Haz-4 Prior to the closure of any existing oil wells, the Project Applicant shall ensure that the operators of the oil wells prepare an RAP to address appropriate measures for closure consistent with state law.
- Prior to the issuance of any grading permit that results in the disturbance of any vegetation, the Project Applicant shall submit a Fire Master Plan for review and approval by the OCFA. The Fire Master Plan shall be based on the Esperanza Hills FPEP and shall contain details regarding evacuation roads, including road surface type, firefighting staging areas, emergency secondary access, turning radii, vegetation clearance buffers along roadways, exits, and locations of hydrants and reservoir.
- Haz-6 Prior to the issuance of any occupancy permit, the Project Applicant shall submit a Community Evacuation Plan (CEP) for the Project for review by the OCFA and the OCSD and approved by the OCFA. The CEP will incorporate the information on community plans from the Orange County Office of Emergency Services and the San Diego Office of Emergency Services. The Esperanza Hills FPEP shall be the basis of the CEP, which shall include provisions for:
 - Pre-fire planning and preparations

- Post-fire recovery actions
- Communications/registering with Alert OC (Orange County's Reverse 911 system and sign-up for cell phone/text notice)
- Prevention (maintenance of fuels around buildings, gutter and roof clearance, vent protection)
- Emergency contact numbers
- Annual evacuation training schedule
- Fire Prevention Measures during High Fire Danger and Red Flag Warning periods
- Annual review and update requirements
- Wildfire Emergency Evacuation Plan Details
- On-site partial relocation versus off-site evacuation
- Revisions/updates to the CEP shall be reviewed and approved by OCFA
- Prior to the recordation of the final tract map, the Project Applicant shall record the deed restrictions for each residential lot. The deed restriction shall include any portion of the FMZs on the private lot, approved plant palettes, and prohibitions regarding combustible structures, including fencing and other accessory structures. Deed restrictions will run with the land and be conveyed to any subsequent owner of the private lot.
- Prior to the recordation of the Final Tract Map for Lots 7, 8, 9, 224, 225, 236, 237, 253, 254, ad 278 in Option 1 and Lots 8, 9, 10, 224, 225, 236, 237, 253, 254, and 278 in Option 2 that include an FMZ that extends beyond the private lot or development, the Project Applicant shall obtain written legal permission in the form of a Fuel Modification Easement from any off-site landowners. The Fuel Modification Easement shall be recorded for each lot. In any situations where the FMZ extends into biological open space or other sensitive biological areas, or other areas controlled by the County and/or resource agencies, formal written permission shall be obtained from all applicable agencies.
- Prior to the issuance of building permits, the Project Applicant shall prepare a Private Property Owners' Guide for fire-safe vegetation management, which shall be distributed by the Esperanza Hills HOA to each new home buyer. The Guide shall be based on the Orange County Fire Authority Vegetation Management Guidelines as approved in the Fuel Modification Plan approved by the OCFA. Periodic inspections by the OCFA shall be at the expense of the Esperanza Hills HOA.
- Haz-10 Prior to the recordation of the final tract map, the Project Applicant shall submit the Project Covenants, Conditions, and Restrictions (CC&Rs) to the Manager of OC Planning for review and acceptance by County Counsel and will include:
 - A reference to the Esperanza Hills FPEP to ensure compliance with the features with the plan. The HOA is required to enforce compliance with the Plan. Owners of private lots will be notified in the project's CC&Rs

- and property disclosures that they are prohibited from conducting any vegetation management activities outside their private property.
- Provisions for continuous maintenance of common areas by the Esperanza Hills Homeowners' Association and individual properties by owners. Maintenance refers to anything needed to maintain the fuel modification area in a fire safe condition as required by the OCFA, including periodic removal of undesirable, combustible vegetation; replacement of dead and dying fire-resistant plantings; maintenance of the operational integrity and programming of irrigation systems; and preservation of identification markers.
- A provision that the HOA is responsible for and has the authority to
 ensure long-term funding, and ongoing compliance with all provisions
 of the approved Fire Master Plan and Community Evacuation Plan,
 including vegetation planting, fuel modification, vegetation
 management, and maintenance requirements on all private lots, parks,
 common areas, roadsides, and open space under their control (if not
 considered biological open space). Any water quality basins, flood
 control basins, channels, and waterways should be kept clear of
 flammable vegetation, subject to the environmental restrictions.
- A provision that the HOA will annually fund and obtain an inspection and report from an OCFA-approved Wildland Urban Interface Fire Safety Inspector in June, certifying that vegetation management activities throughout the Project Site have been performed pursuant to the approved Fire Master Plan.
- Haz-11 Prior to the issuance of building permits, the Project Applicant shall submit to the Manager of OC Planning plans demonstrating a water system for the Project capable of handling the minimum fire flow storage of 1,500 gallons per minute for a 2-hour duration with a minimum residual pressure of 20 pounds per square inch.
- Haz-12 Prior to issuance of building permits, the Project Applicant shall provide a plan that depicts the appropriate number of fire hydrants and their specific locations to be constructed for each phase of development for review and approval by the OCFA Fire Marshal.
- Haz-13 Prior to ground disturbance in environmentally sensitive areas that contain sensitive habitat, cultural sites, riparian areas, biological buffer areas, detention basins, etc., the Project Applicant shall obtain written permission from the OC Planning Manager, and the appropriate resource agencies (e.g., the CDFW, the USFWS, and the ACOE) prior to any vegetation management activities occurring.
- Haz-14 Prior to the issuance of any building permit for access gates the Project Applicant shall submit for review and approval by the OCFA access gate plans consistent with the applicable Fire Code, and all operated gates shall be equipped with emergency opening devices approved by the OCFA.

Noise

- N-1 During the construction phase, Project Applicant shall ensure that all construction activities shall be limited to the hours of 7:00 a.m. to 8:00 p.m. on weekdays and Saturdays with no construction permitted on national holidays or Sundays in compliance with the Orange County Noise Ordinance. High noise-producing activities should be scheduled between the hours of 8:00 a.m. and 5:00 p.m. to minimize disruption to sensitive uses.
- N-2 During the construction phase, Project Applicant shall ensure that all construction and demolition equipment shall be fitted with properly operating and maintained mufflers.
- N-3 During the construction phase, Project Applicant shall ensure that all noise-generating construction equipment and construction staging areas should be located as far as possible from existing residences.
- N-4 During the construction phase, Project Applicant shall ensure that construction-related equipment, including heavy duty equipment, shall be turned off when not in use for more than 10 minutes.
- N-5 Prior to construction, the Project Applicant shall prepare and submit to the County for approval a haul plan for construction-related traffic that limits impacts on residential development by avoiding such residential development areas where feasible.
- N-6 During the construction phase, Project Applicant shall ensure that construction hours, allowable work days, and the telephone number of the job superintendent are clearly posted at all construction entrances to allow residents to contact the job superintendent. If the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the appropriate reporting party.

Public Services

- PS-1 Prior to issuance of the grading permit, if deemed necessary by the Orange County Fire Authority, the Project Applicant shall enter into a Secured Fire Protection Agreement with the Orange County Fire Authority providing for payment of fair share fees for impacts to capital and infrastructure needs.
- PS-2 Prior to issuance of building permits, the Project Applicant will be required to comply with Senate Bill 50 and pay the applicable school impact fees as adopted by the Placentia-Yorba Linda Unified School District.

Transportation and Traffic

T-1 For Option 1, prior to issuance of building permits, the Project Applicant shall contribute to the installation of a three-phase traffic signal at the Yorba Linda Boulevard/Via del Agua intersection in the event the Cielo Vista

- project is not constructed. The Project Applicant's fair share contribution shall be 39% with the proposed Cielo Vista project as part of the cumulative base traffic condition, and 46% without the Cielo Vista project.
- T-2 Prior to issuance of building permits, the Project Applicant shall pay a 9% fair-share contribution for the following improvement at Yorba Linda Boulevard at Savi Ranch Parkway: Widen and re-stripe the westbound approach to provide an additional (third) westbound left-turn lane.
- T-3 Prior to issuance of certificates of occupancy, Project Applicant shall pay a 9% fair-share contribution for the following improvement: extend the left-turn pocket along Yorba Linda Boulevard at Via del Agua from the existing 100 feet to 275 feet, with 11 feet in the transition area of the turn pocket to achieve 286 feet. However, the County cannot compel the City to implement such improvement. If the City does not implement the improvement, the impact will be significant and unavoidable.

Utilities and Service Systems

- U-1 Prior to issuance of building permits, the Project Applicant shall enter into a Development Agreement with the Yorba Linda Water District for the provision of water facilities and service.
- U-2 Prior to issuance of building permits, the Project Applicant shall enter into a Development Agreement with the Yorba Linda Water District for the provision of sanitary sewer facilities and service.
- U-3 Prior to issuance of building permits, project developer shall coordinate with Southern California Edison to identify the location of the connection to existing electric service lines based on the final determination of access via Option 1 or Option 2 and to protect existing transmission lines on the Project Site.
- U-4 Prior to issuance of building permits, project developer shall coordinate with Southern California Gas to identify the location of the connection to existing natural gas lines based on the final determination of access via Option 1 or Option 2.
- U-5 Prior to issuance of building permits, project developer shall coordinate with AT&T to identify the location of the connection to existing telephone service lines based on the final determination of access via Option 1 or Option 2.
- U-6 Prior to issuance of building permits, project developer shall coordinate with Time Warner Cable to determine the location of the connection to existing cable service lines based on the final determination of access via Option 1 or Option 2.