

Alamo Glen, LLC (Applicant/Owner)

Mitigation Monitoring Program
County File #MS15-0002/RZ15-3229

20 Alamo Glen Trail
Alamo, CA 94507

March 1, 2016

Potentially Significant Impact	Mitigation Measure	Implementing Action	Timing of Verification	Responsible Department or Agency	Compliance Verification
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3. AIR QUALITY

Exhaust emissions and particulate produced by construction activities related to the project may cause exposure of the public or sensitive receptors to significant amounts of pollutants or objectionable odors.	<p>AQ-1: The following Bay Area Air Quality Management District, Basic Construction Mitigation Measures shall be implemented during project construction and shall be included on all construction plans:</p> <ul style="list-style-type: none"> a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. d. All vehicle speeds on unpaved roads shall be limited to 15 mph. e. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as 	COA	Prior to DCD approval of construction documents and throughout construction-related activity.	Project proponent and DCD.	DCD review and approval of construction documents. Verification in field by DCD inspectors.
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	<p>soon as possible after grading unless seeding or soil binders are used.</p> <p>f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.</p> <p>g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.</p> <p>h. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall</p>				

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	also be visible to ensure compliance with applicable regulations.				
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4. BIOLOGICAL RESOURCES

The project may endanger any Alameda whipsnake present on the site during construction.	BIO-1: A preconstruction survey for AWS shall be conducted by a qualified biologist not more than 48 hours prior to the start of construction. All suitable habitat features (e.g. wood piles, debris piles, etc.) that may be used by AWS shall be identified, marked and mapped during the preconstruction survey.	COA	At least 48 hours prior to the start of construction-related activity (i.e., staging, clearing, demolition, grading, tree trimming or removal).	Project proponent and project biologist.	Field verification and report by project biologist to be submitted to DCD prior to the start of construction-related activity.
	BIO-2: Potentially suitable habitat features identified during the preconstruction survey shall be removed under the direct supervision of a qualified biologist prior to the start of any other construction activities. If AWS is detected, site disturbance shall be halted until the snake has been relocated by a 10(a)(1)(A)-permitted biologist as approved and directed by the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife.	COA	Prior to the start of construction-related activity (i.e., staging, clearing, demolition, grading, tree trimming or removal).	Project proponent, and consulting biologist.	Field verification and report by project biologist to be submitted to DCD prior to the start of construction-related activity.

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	BIO-3: Following the completion of the preconstruction survey and the removal of potentially suitable habitat, a snake exclusion fence not less than four feet in height, and buried at least four inches in the ground shall be installed around the perimeter of the project site and maintained during the duration of construction.	COA	Following the completion of the preconstruction survey (BIO-1) and the removal of habitat (BIO-2), and prior to the start of construction-related activity (i.e., staging, clearing, demolition, grading, tree trimming or removal).	Project proponent and consulting biologist.	Field verification and report by project biologist to be submitted to DCD prior to the start of construction-related activity.
	BIO-4: All construction personnel shall attend an informational training session conducted by a qualified biologist prior to the start of any site disturbance activities, including demolition. This session will cover identification of the species and procedures to be followed if an individual is found on site, as well as biology and habitat needs of this species. Handouts shall be provided and extra copies will be retained on site. Construction workers shall sign a form stating that they attended the program and understand all protection measures for the AWS.	COA	Following the completion of the preconstruction survey and the removal of potentially suitable habitat, and prior to the start of construction-related activity (i.e., staging, clearing, demolition, grading, tree trimming or removal).	Project proponent and consulting biologist.	Field verification and report by project biologist to be submitted to DCD prior to the start of construction-related activity.

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	Additional training sessions shall be provided to new construction personnel during the course of construction.				
The trees on the site are used by nesting birds. Birds could initiate nesting in the trees at any time during the nesting season (February 1-July 31). Development activities on the property could destroy active bird nests or cause birds to abandon eggs or young.	BIO-5: A preconstruction survey for nesting birds shall be conducted if construction begins between February 1 and July 31. The preconstruction survey will be conducted by a qualified biologist no more than 14 days prior to the initiation of construction related activity (i.e., staging, clearing, demolition, grading, tree trimming or removal).	COA	No more than 14 days prior to the initiation of construction-related activity (i.e., staging, clearing, demolition, grading, tree trimming or removal).	Project proponent, and consulting biologist.	Field verification and report by project biologist to be submitted to DCD prior to the start of construction-related activity.
	BIO-6: <i>If an active bird nest(s) are found on the site</i> , a buffer zone shall be established around the nest as specified by the qualified biologist. The size of the buffer will be dependent on the location of the nest and the nesting species. All buffer zones shall be monitored periodically (e.g., weekly) to determine the status of the nesting effort. The buffer zones shall remain in place until the young have fledged and are foraging independently as determined by a qualified biologist.	COA	Buffer zone to be established prior to the initiation of construction-related activity, and monitored weekly until a time determined by the project biologist.	Project proponent, and consulting biologist.	Field verification and report by project biologist to be submitted to DCD upon completion of all biology monitoring.

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The trees on the site that will be removed, or that will be impacted by project-related construction are protected by the County Tree Protection and Preservation Ordinance, and require preservation and restitution measures to mitigate the project impact on this resource.	<p>BIO-7: The following measures are intended to provide restitution for the removal of (48) code-protected trees:</p> <p>a. <u>Planting and Irrigation Plan:</u> Prior to the issuance of a building or grading permit (whichever occurs first) for the development of each resultant parcel, the parcel developer shall submit a tree planting and irrigation plan for that parcel, prepared by a licensed arborist or landscape architect for the review and approval of the Department of Conservation and Development, Community Development Division (CDD). The plan shall provide for the planting of (21) TWENTY-ONE trees for one parcel, minimum 15 gallons in size – 25% of the (83) EIGHTY-THREE trees total for the subdivision. The plan shall comply with the State’s Model Water Efficient Landscape Ordinance or the County’s Water Efficient Landscape Ordinance, if the County’s ordinance has been adopted, and verification of such shall</p>	COA	Prior to DCD approval of construction documents. Security to be held 12 to 24 months after installation of planting and irrigation.	Project proponent, project arborist, and DCD.	DCD review and approval of construction documents. DCD review of arborist report prior to release of security.

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	<p>accompany the plan. The plan shall also include an estimate prepared by a licensed landscape architect, arborist, or landscape contractor for the materials and labor costs to complete the improvements (accounting for supply, delivery, and installation of trees and irrigation) <i>for the 21 trees on the parcel to be developed.</i></p> <p>b. <u>Required Security to Assure Completion of Plan Improvements</u>: A security shall be provided to ensure that the approved planting and irrigation plan is implemented. Prior to the issuance of a building or grading permit, whichever occurs first, the applicant shall submit a security that is acceptable to the CDD. The security shall be the amount of the approved cost estimate described in Section a above, <i>plus</i> a 20% inflation surcharge.</p> <p>c. <u>Initial Deposit for Processing of Security</u>: The County ordinance requires that the applicant pay</p>				

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	<p>fees to cover all staff time and material costs for processing the required security. At the time of submittal of the security, <i>each parcel developer</i> shall pay a deposit of \$100.00.</p> <p>d. <u>Duration of Security</u>: When the replacement trees and irrigation have been installed, the parcel developer shall submit a letter to the CDD, composed by a licensed landscape architect, landscape contractor, or arborist, verifying that the installation has been done in accordance with the approved planting and irrigation plan. The CDD will retain the security for a minimum of 12 months up to 24 months beyond the date of receipt of this letter. As a prerequisite of releasing the bond between 12 and 24 months, following completion of the installation, the parcel developer shall arrange for the consulting arborist to inspect the replacement trees and to prepare a report on the trees' health. The report shall be submitted for the review of the CDD and shall include any</p>				

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	<p>additional measures necessary for preserving the health of the trees. These measures shall be implemented by the parcel developer.</p> <p>Any replacement tree that dies within the first year of being planted shall be replaced by another tree of the same species and size. If the CDD determines that the parcel developer has not been diligent in ensuring the replacement trees' health, then all or part of the security may be used by the County to ensure that the approved restitution plan is successfully implemented.</p>				
	<p>BIO-8: <u>Security for Possible Damage to Trees Intended for Preservation</u>: Pursuant to the requirements of Section 816-6.1204 of the Tree Protection and Preservation Ordinance, to address the possibility that construction activity damages trees that are to be preserved, the applicant shall provide the County with a security to allow for replacement of trees that are significantly damaged or destroyed by construction activity.</p>	COA	Prior to DCD approval of construction documents. Security to be held 12 to 24 months after final building inspection.	Project proponent, project arborist, and DCD.	DCD review and approval of construction documents. DCD review of arborist report prior to release of security.

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	<p>Prior to issuance of grading permits or building permits for subdivision improvements, whichever occurs first, the applicant shall provide a security that is acceptable to the Department of Conservation and Development, Community Development Division (DCD).</p> <p>a. <u>Amount of Security</u>: The security shall be an amount sufficient to cover:</p> <p>i. Preparation of a tree planting and irrigation plan by a licensed landscape architect, arborist, or landscape contractor. The plan shall provide for the planting and irrigation of (48) FORTY-EIGHT trees, minimum 15 gallons in size, or an equivalent planting contribution as determined appropriate by the DCD. The plan shall comply with the State's Model Water Efficient Landscape Ordinance or the County's Water Efficient Landscape Ordinance, if the County's ordinance has been</p>				

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	<p>adopted, and verification of such shall accompany the plan. If deemed necessary by the DCD, the plan shall be implemented prior to the release of Public Works subdivision improvement bonds.</p> <p>ii. The estimated materials and labor costs to complete the improvements shown on the approved planting and irrigation plan (accounting for supply, delivery, and installation of trees and irrigation).</p> <p>iii. An <i>additional</i> 20% above the costs described in Sections a.i and a.ii above to account for inflation potential.</p> <p>b. <u>Initial Deposit for Processing of Security</u>: The County ordinance requires that the applicant pay fees to cover all staff time and material costs for processing the required security. At the time of submittal of the security, the applicant shall pay an initial deposit of \$100.</p>				

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	<p>c. <u>Duration of Security</u>: After the subdivision improvements have been completed, the applicant shall submit a letter to the DCD, composed by a consulting arborist, describing any construction impacts to trees intended for preservation. The security shall be retained by the County for a minimum of 12 months up to 24 months beyond the date of receipt of this letter. As a prerequisite of releasing the bond between 12 and 24 months, the applicant shall arrange for the consulting arborist to inspect the trees and to prepare a report on the trees' health. The report shall be submitted to the DCD for review, and it shall include any additional measures necessary for preserving the health of the trees. These measures shall be implemented by the applicant. In the event that the DCD determines that trees intended for preservation have been damaged by development activity, and that the applicant has not been diligent in providing reasonable restitution</p>				

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	of the damaged trees, then the DCD may require that all or part of the security be used to provide for mitigation of the trees damaged, including replacement of any trees that have died.				
	<p>BIO-9: The Tree Preservation Guidelines provided by the project arborist, Ed Brennan, in the Tree Preservation Report dated received August 26, 2015 shall be implemented:</p> <ul style="list-style-type: none"> a. A Tree Protection Plan consistent with the Tree Preservation Report shall be submitted by the project proponent prior to submittal for building or grading permits. Tree protection fencing shall be 6-foot high chain link, shall be installed prior to all construction-related activities and shall remain in place until all demolition, grading and construction is completed. b. The Tree Preservation Guidelines shall be shown on the Tree Protection Plan. 	COA	Prior to DCD approval of construction documents and throughout construction-related activity.	Project proponent and DCD.	DCD review and approval of construction documents. Verification in field by DCD inspectors.

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	BIO-10: Any proposed tree alteration, removal, or encroachment within a drip line of code-protected trees that are not identified with this permit approval will require submittal of another Tree Permit application for review and consideration by the DCD.	COA	Prior to issuance of building permits to develop each individual parcel.	Project proponent and DCD.	Submittal to DCD of necessary tree permits.
5. CULTURAL RESOURCES					
The proposed development will cause ground disturbance which may impact heretofore undocumented cultural resources	<p>CUL-1: The following mitigation measures shall be implemented during project construction-related ground disturbance, and shall be included on all construction plans:</p> <p>a. If deposits of prehistoric or historical archaeological materials are encountered during ground disturbance activities, all work within 50 feet of the discovery should be redirected and a qualified archaeologist contacted to evaluate the finds and make recommendations. It is recommended that such deposits be avoided by further ground disturbance activities. If such deposits cannot be avoided, they should be evaluated for their significance in accordance with the</p>	COA	Prior to DCD approval of construction documents and throughout construction-related activity.	Project proponent and DCD.	DCD review and approval of construction documents.

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	<p>California Register of Historical resources.</p> <p>If the deposits are not eligible, avoidance is not necessary. If eligible, deposits will need to be avoided by impacts or such impacts must be mitigated. Upon completion of the archaeological assessment, a report should be prepared documenting the methods, results, and recommendations. The report should be submitted to the Northwest Information Center and appropriate Contra Costa County agencies.</p> <p>b. Prehistoric materials can include flake-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite tool-making debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials can include wood, stone, concrete, or adobe footings, walls and other</p>				

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	<p>structural remains; debris-filled wells or privies; and deposits of wood, glass ceramics, and other refuse.</p> <p>c. If human remains are encountered, work within 50 feet of the discovery should be redirected and the County Coroner notified immediately. At the same time, an archaeologist should be contacted to assess the situation. If the human remains are of a Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the property and provide recommendations for the proper treatment of the remains and associated grave goods.</p> <p>Upon completion of the assessment, the archaeologist should prepare a report documenting the methods and results, and provide</p>				

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	recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report should be submitted to the Northwest Information Center and appropriate Contra Costa agencies.				
6. GEOLOGY AND SOILS					
<p>The project site is located in a hillside area with slopes up to 50 percent. Soil conditions on the site cause concerns for erosion, sloughing, or earthflows, and slope creep. Additionally, the soils are known to be expansive, and may be corrosive. Soil conditions on the site also cause concern for geotechnical hazards from cut/ fill transitions or differentials in fill thicknesses.</p> <p>Additionally, geotechnical concerns related to five</p>	<p>GEO-1: Prior to filing the Parcel Map, the applicant shall submit a proposed deed disclosure statement, to be recorded with the deed for each parcel, for the review and approval of the CDD. The deed disclosure statement shall acknowledge the geotechnical report (see GEO-2) by title, author (firm), and date, call attention to conclusions, including the long-term maintenance requirements, and note that the report is available to prospective buyers from seller of the parcel.</p>	COA	Concurrently with recordation of the Parcel Map.	Project proponent.	Draft document submitted to DCD with the condition of approval compliance review for the recording of the Parcel Map.
	<p>GEO-2: Prior to filing the Parcel Map, the applicant shall submit a wet-signed and stamped, updated geology, soil, and foundation report meeting the requirements of</p>	COA	At least 45 days prior to requesting recordation of the Parcel Map.	Project proponent and project geotechnical engineer.	Document submitted to DCD with the condition of approval compliance review

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<p>proposed water quality basins include:</p> <p>a) providing suitable support for roads, driveways and curbs constructed near the water quality basins, and</p> <p>b) potential for subsurface water from a water quality basin to migrate (and possibly build up) beneath pavements and graded slopes.</p>	<p>Subdivision Ordinance Section 94-4.420 (Soil Report) for review and approval of the Peer Review Geologist. Improvement, grading, and building plans shall carry out the recommendations of the approved report. This report shall include the following: a) California Building Code seismic parameters that are based on the prevailing code, b) site specific data on the orientation of bedding, c) evaluation of the design of water quality basins and their locations with respect to planned improvements, d) evaluation of the potential for slope creep to adversely affect planned improvements, e) recommendations that address monitoring clearing and backfilling depressions created by removal of tree trunks and their major roots, f) evaluation of the grading plan with respect for the potential for seismic settlement and seismically-induced ground failure by recognized methods appropriate to soil conditions discovered during subsurface investigation, g) characterization of the expansivity of the soils and bedrock on the site and h) the specification of measures to avoid/control damage to</p>				<p>for the recording of the Parcel Map. The geotechnical report may be subject to a peer review by the County Geologist prior to approval.</p>

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	minimize expansive soil effects on structures. (Potential foundation systems include pier and grade beam; use of structural concrete mats and post-tensioned slabs; pad overcutting to provide uniform swell potential; and soil subgrade moisture treatment.) The report should also identify recommended geotechnical monitoring services during grading and foundation-related work.				
	GEO-3: During grading, the project geotechnical engineer shall observe and approve: keyway excavations deemed necessary; the removal of any existing fill materials down to stable bedrock or in-place material; and the installation of all subdrains including their connections. All fill slope construction shall be observed and tested by the project geotechnical engineer, and the density test results and reports submitted to the Department of Conservation and Development (DCD) to be kept on file. Cut slopes and keyways shall be periodically observed and mapped by the project geotechnical engineer/ engineering geologist who will provide any required slope modification	COA	During grading.	Project geotechnical engineer.	Document submitted to DCD with the condition of approval compliance review prior to the development of each individual parcel. The geotechnical report may be subject to a peer review by the County Geologist prior to approval.

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	recommendations based on the actual geologic conditions encountered during grading. Written approval from the County Building Inspection Division shall be obtained prior to any modification.				
	GEO-4: Prior to the issuance of residential building permits, the applicant shall submit a geotechnical monitoring and testing report. That report shall include evidence of testing and observation services performed during grading, including: a) a map showing the as graded cut/ fill contact, along with geologic mapping of all bedrock cut slopes and cut pad areas, b) results of chemical testing of each building pad (performed after rough grading), to determine the level of corrosion protection required for steel and concrete materials used for construction, and c) results of all compaction test data gathered during grading.	COA	Prior to the issuance of residential building permits.	Project proponent and project geotechnical engineer.	Document submitted to DCD with the condition of approval compliance review prior to the development of each individual parcel. The geotechnical report may be subject to a peer review by the County Geologist prior to approval.
	GEO-5: Prior to requesting a final building inspection for each residence, the applicant shall submit a geotechnical letter/report documenting inspections made by the project geotechnical engineer	COA	Prior to requesting a final building inspection for each residence.	Project proponent and project geotechnical engineer.	Document submitted to DCD for review. The geotechnical report may be subject to a peer review by the

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	during foundation-related work and final grading, and provide the geotechnical engineer's opinion of the consistency of the as-built improvements with recommendations in the approved geotechnical report. This can be submitted as individual reports on a lot-by-lot basis or one report for all four parcels.				County Geologist prior to approval.
	GEO-6: Grading, improvement, erosion control and building plans shall employ, as appropriate, the following surface drainage measures: a) positive grading of building pads for removal of surface water from foundation areas, b) individual pad drainage, c) collection of downspout water from roof gutters, d) avoidance of planted areas adjacent to structures, e) avoidance of sprinkler systems (as opposed to drip irrigation systems) in the immediate vicinity of foundations, f) grading of slopes to control erosion from "over-the-bank" runoff, and g) re-vegetation of permanent slopes. Interim protective measures for runoff shall be followed during the construction phases when slopes are most susceptible to erosion. The final	COA	Prior to the issuance of residential building permits.	Project proponent and project geotechnical engineer.	Document submitted to DCD with the condition of approval compliance review prior to the development of each individual parcel. The geotechnical report may be subject to a peer review by the County Geologist prior to approval.

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	design shall incorporate subsurface drainage measures, including the installation of subsurface drains, where their use is recommended by the project geotechnical engineer.				

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