Initial Study/
Mitigated Negative Declaration
Champion Property – Subdivision 9167

County Files: SD079167
and RZ073195

Prepared for
Contra Costa County
Department of Conservation and Development

Prepared by
Mills Associates
Lafayette, California

January 28, 2011

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1.0 INTRODUCTION

PURPOSE OF DOCUMENT

This Initial Study has been prepared in accordance with the provisions of the California Environmental Quality Act (CEQA) and the state guidelines for the implementation of CEQA (2009 Revised). The purpose of this analysis is to determine whether the proposed project may have a significant effect on the environment and to identify applicable mitigation measures.

The project site is located in the central portion of Contra Costa County, California, at 1125 North Gate Road, southeast of the city limits of Walnut Creek, CA. The entrance to the project site is located approximately 1100 feet north of the North Gate Road entrance to Mt. Diablo State Park. The project site is located within the City of Walnut Creek Sphere of Influence. Site access is via Ygnacio Valley Boulevard, Walnut Avenue, and North Gate Road. The parcel is identified as APN: 138-180-002.

The application before the County includes a rezoning (RZ073195), a Major Subdivision (SD079167) and a tree permit. The proposed project consists of subdividing the 9.98-acre property into eight lots, of which seven new lots would be created.

Included in this document are a project description, Initial Study checklist, and Mitigation Monitoring and Reporting Program (Appendix A). Contra Costa County Department of Conservation and Development is the lead agency.

CEQA PROCESS

As the first step of the Initial Study process, a CEQA checklist (included as Chapter 3) was prepared to determine the significant effect on the environment from the proposed subdivision. For each environmental issue (soils, water quality, utilities, traffic, etc.), it was determined whether or not the proposed project could cause a significant environmental impact. The discussion, which follows each component in the checklist, supports the determination made for the following categories: "potentially significant impact," "potentially significant unless mitigation incorporated," "less than significant impact," or "no impact." It was determined that the project could create impacts on aesthetics, air quality, biological resources and geology/soils. Appropriate mitigation measures have been recommended (refer to Chapter 3). If approved, these mitigation measures become conditions of project approval.

A summary table (Table 1-1) of significant impacts and mitigation measures as a result of this analysis is found at the end of this chapter.

A mitigation monitoring and reporting program is included as Appendix A. The monitoring and reporting program identifies each mitigation measure, the person/agency who will be responsible for implementation of the measure, how it will be monitored, and timing of the monitoring. Contra Costa County will use this monitoring and reporting program prior to and during construction activities on the project site.

REPORT PREPARATION

This document was prepared by Mills Associates for the Contra Costa County Department of Conservation and Development. In conformance with Sections 15050 and 15367 of the CEQA Guidelines, the County is the "lead agency" for this project. Lead agency is defined as the "public agency, which has the principal responsibility for carrying out or approving the project."

Lead Agency

Department of Conservation and Development
Contra Costa County
651 Pine Street
Martinez, CA 94553

Contact: Rose Marie Pietras, Senior Planner
(925) 335-1216

Applicant

Aliquot Associates, Inc.
1390 South Main Street, #310
Walnut Creek, CA 94598

Contact: Vince D'Alo
(925) 476-2300

Consultant

Mills Associates
3744 Mt. Diablo Boulevard, Suite 303
Lafayette, California 94549

Contact: Carolyn Mills, Principal

Subconsultants to Mills Associates

CADP – Photo simulations
Contact: Adam Noble

Environmental Collaborative – Biological Resources
Contact: Jim Martin

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Contact: Mills Associates

Tom Camara/Margaret Copeland, Graphics

Lynne LeRoy, Production

Persons Consulted

Tim Argenti, Allied Waste Services

Bill Bailey, Traffic Engineer, Public Works Department, Contra Costa County

Cindy Brittain, Ygnacio Valley Branch Library

Vince D'Alo, Aliquot Associates, Inc.

Ben Duclos, Contra Costa County Fire Protection District

Jim Haggerty, Traffic Engineer, Department of Public Services, City of Walnut Creek

Ted Leach, Contra Costa County Fire Protection District

Joe Marsich, Mount Diablo Unified School District

Kevin Vanisco, Bowman Water Treatment Plant, Contra Costa Water District

Terry Wagner, Contra Costa Sheriff's Department, Valley Station

Robert Wong, Aliquot Associates, Inc.

Table 1-1
SUMMARY OF SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Significant Impact	Mitigation Measures	Does Implementation of all Mitigation Measure(s) Reduce the Impact to a Less-Than-Significant Level?
AESTHETICS		
I-1: The existing visual character of the site would be altered for users of the existing and proposed trails that are located north and west of the project site.	**I-1A**: To block views of the new residences for users of the existing and proposed trails, a dense landscape screen, consisting of native trees, shall be planted within the 60-foot setback along the western/southwestern property line (Lots 3–7) upon completion of site improvements. Planting shall be as recommended by the applicant's arborist (McNeil, January 2011). **I-1B**: Tree size shall be no smaller than 15-gallon and consist of native evergreen species; e.g., coast live oak, etc. Landscaping shall be irrigated for up to five years, protected from deer, and maintained during this period. The applicant shall submit a landscaping plan for review and approval by the County and City of Walnut Creek. **I-1C**: The applicant shall post a security bond to ensure protection of existing and newly planted landscaping. The term of the bond shall extend at least five years beyond completion of the subdivision improvements. **I-1D**: The landscaping shall be monitored for a period of five years from the date of installation. Any trees lost during this period shall be replaced and monitored by the developer and/or property owner. Future owners of Lots 3–6 and the owner of the existing house (Lot 7) shall be responsible for the maintenance of the landscaping as well as replacing any shrubs/trees that are lost. This requirement shall be recorded on the individual property deeds to run with the land.	Yes

Significant Impact	Mitigation Measures	Does Implementation of all Mitigation Measure(s) Reduce the Impact to a Less-Than-Significant Level?
AIR QUALITY		
III-1: Construction of the proposed project could create potentially significant dust impacts that could affect nearby residents.	**III-1:** During construction, the applicant shall take the following measures to control dust: • Water all active construction areas at least twice daily. • Cover all trucks hauling soil, sand, and other loose materials, or require trucks to maintain at least two feet of freeboard. • Sweep off-site streets leading to the project site daily if visible soil, sand, or other loose materials are deposited on these streets.	Yes
BIOLOGICAL RESOURCES		
IV-1: The proposed project could have an adverse effect on special-status species.	**IV-1A.** If vegetation removal and grading commences between February 15 and August 31, a qualified wildlife biologist shall conduct a preconstruction survey for nesting birds. If nests of either migratory birds or birds of prey are detected on or adjacent to the site, a no-disturbance buffer (generally 50 feet for passerines and 300 feet for raptors) in which no new site disturbance is permitted shall be observed until August 15, or the qualified biologist determines that the young are foraging independently. The size of the no-disturbance buffer shall be determined by a qualified wildlife biologist, and shall take in to account local site features and existing sources of potential disturbance. If more than 15 days elapses between the survey and site disturbance, the survey shall be repeated.	Yes

Significant Impact	Mitigation Measures	Does Implementation of all Mitigation Measure(s) Reduce the Impact to a Less-Than-Significant Level?
	IV-1B. A preconstruction survey for burrowing owls shall be conducted by a qualified biologist not more than 30 days prior to the start of construction. If no owls or sign are detected during this survey, no further burrowing owl mitigation would be necessary. If burrowing owls or sign of burrowing owls is detected, mitigation consistent with the CDFG Staff Report (CDFG unpublished report: *Staff Report on Burrowing Owl Mitigation*, 1995) shall be provided. **IV-1C.** Measures shall be taken to prevent possible inadvertent loss of western pond turtles during construction. These shall consist of the following: • A preconstruction survey for western pond turtles shall be conducted by a qualified biologist not more than 48 hours prior to the commencement of construction. If western pond turtles are detected which could be disturbed during construction, they shall be relocated to a suitable reach of Walker Creek upstream or downstream of the project site. • Prior to construction and after completion of the preconstruction survey above, silt fencing or equivalent shall be installed along the top of bank to prevent the movement of western pond turtles from the riparian corridor into the construction zone. This fencing shall be in addition to any fencing installed as part of best management practices for erosion control purposes. The location of the fencing shall be determined by the qualified biologist, shall be inspected weekly by the construction foreman and maintained intact at all times during construction, and shall be removed once grading and heavy off-road equipment operation is complete.	

Significant Impact	Mitigation Measures	Does Implementation of all Mitigation Measure(s) Reduce the Impact to a Less-Than-Significant Level?
IV-2: The proposed project may be in conflict with the Walnut Creek Tree Preservation Ordinance.	**IV-2**: The project shall comply with the City of Walnut Creek Tree Preservation Ordinance (Section 3.8 Preservation of Trees on Private Property), consistent with the North Gate Specific Plan. This shall include preparation of a Tree Replacement Program and Tree Preservation Guidelines as defined below: • Tree Preservation Guidelines shall be prepared and implemented during construction activities to avoid injury of trees to be preserved during construction. This shall include establishment of tree protection zones at the drip line, or as modified under the direction of a certified arborist. Excavation, grading, construction, and storage of materials shall be avoided within this zone. Exclusion fencing shall be established around the tree protection zone. Tree protection methods during construction and any modifications to tree protection zones shall be overseen by a qualified arborist. • A Tree Replacement Program shall be prepared by the applicant, and implemented as part of the mitigation program for the project. Replacement trees shall be provided at a minimum 3:1 ratio, shall be installed along the edge of the riparian corridor as part of the CPEP where feasible, and shall be maintained for a minimum of five years to ensure their successful establishment. Replacement tree plantings shall be irrigated for a minimum of two years following initial planting to ensure their survival, and shall be replaced on an annual basis to meet success criteria specified in the Tree Replacement Program.	

Significant Impact	Mitigation Measures	Does Implementation of all Mitigation Measure(s) Reduce the Impact to a Less-Than-Significant Level?
CULTURAL RESOURCES		
V-1: The potential exists during site preparation that prehistoric, historic, cultural resources or human remains could be uncovered.	**V-1A:** If historic or prehistoric artifacts, features, or cultural resources are encountered during construction of the proposed project, all work shall be halted in the immediate vicinity of the find for purposes of evaluation by a qualified professional archaeologist approved by the Contra Costa County Department of Conservation and Development. **V-1B:** The County Coroner shall be notified if human remains are uncovered during construction. If it is determined that the remains are Native American, a representative of the NAHC shall be consulted.	Yes
GEOLOGY AND SOILS		
VI-1: Expansive soils could cause damage to foundations and the roadways/driveways if not properly engineered.	**VI-1**: Construction of house foundations, streets and driveways, and other structures shall comply with the recommendations of the applicant's geotechnical engineering consultants (Jensen-Van Lienden Associates, Inc. December 29, 2006 report). These recommendations include the following: • Houses with crawl spaces shall be supported with drilled piers and grade beams designed to resist uplift pressure. • Houses with slabs-on-grade shall be supported on mats of non-expansive engineered fill.	Yes

Significant Impact	Mitigation Measures	Does Implementation of all Mitigation Measure(s) Reduce the Impact to a Less-Than-Significant Level?
	• Garage floor slabs, sidewalks and outdoor slabs (e.g., patios) where some cracking can be accepted could be designed to be stronger (e.g., with more steel reinforcing bars) and must be isolated from house foundations. If cracking is unacceptable, these slabs shall be supported on mats of non-expansive engineered fill. • Applicant shall provide recommendations by a registered geotechnical engineering consultant for proper foundation and support of asphalt-concrete streets.	

2.0 PROJECT DESCRIPTION

PHYSICAL LOCATION

The project site is located in Contra Costa County, California, at 1125 North Gate Road, in the unincorporated area of Walnut Creek, CA. It is located approximately 1.75 miles from Ygnacio Valley Boulevard. The entrance to the property is located approximately 1100 feet north of the North Gate Road entrance to Mt. Diablo State Park. It is located within the City of Walnut Creek Sphere of Influence. Site access is via Ygnacio Valley Boulevard, Walnut Avenue, and North Gate Road. (Refer to Figure 2-1, Project Site Location, and Figure 2-2, Aerial Photo.)

The property is accessed from North Gate Road via a narrow 50-foot strip of land located between an equestrian facility and a single-family subdivision. The 9.98-acre parcel currently has two residences. The remainder of the parcel is vacant and contains non-native annual grassland and domestic landscaping. Walker Canyon Creek, an intermittent tributary to Pine Creek, forms the northern boundary of the project site. The creek corridor is wooded throughout with a mature mixed riparian woodland canopy as well as a dense vegetative understory. The property slopes up from Walker Creek seven percent to the existing houses. Elevations on the project site range from 250 feet at the creek bank to 310 feet at the developed pad located in the southern portion of the property.

As shown on Figure 2-2, the project site is located in a neighborhood of large-lot residential and equestrian-use properties. Open space owned by the Contra Costa County Flood Control District abuts the property to the south and west.

The assessor's parcel number for the property is 138-180-002.

PROJECT DETAILS

The application before the County includes a Rezoning (RZ073195), a Major Subdivision (SD079167) and a tree permit.

Land Use

The proposed project consists of subdividing the property into eight lots (including the existing development area). Seven additional lots would be created. Lot sizes would range between 41,210 square feet to 62,782 square feet. Lot 7, identified on the Vesting Tentative Map as the remainder parcel, is 43,232 square feet and contains the two houses. (Refer to the Proposed Development Plan in Figure 2-3.)

As required by County ordinance, a creek structure setback will be required for Lots 2 and 3 that abut Walker Canyon Creek. A 60-foot structure setback is designated along the western and southern property line where the project site abuts the open space.

Access and Circulation

Access to the project site will be from North Gate Road via a private road that will follow the existing driveway alignment. The roadway will be widened to 24 feet with 6-inch curbs. The new roadway will end in a cul-de-sac at the north end of the property. (Refer to the Proposed Rough Grading and Utility Plan in Figure 2-4.) As a part of the approval process, the applicant will be required to widen North Gate Road along the property frontage. Project plans reflect a 12-foot travel way, a 4-foot bike trail, a 5-foot pedestrian path, and a 9-foot landscape strip. These roadway improvements along North Gate Road will be aligned with the improvements required of Subdivision 7647 (Vesting Tentative Map, December 2010).

Infrastructure

The proposed project would be served by the Contra Costa Water District and Central Contra Costa Sanitary District for water and sewer service, respectively. The storm drain system would discharge through an existing storm drain that is located at the easterly property line of the project site.

Other Services

The development would be served by the Contra Costa County Fire Protection District, Allied Waste Services and Valley Waste Management, Pacific Gas and Electric Company, SBC, and Comcast. Students would attend schools in the Mt. Diablo Unified School District.

GENERAL PLAN AND ZONING

The property is designated on the General Plan map as SV (Single-Family Residential, Very Low Density) and zoned A-2 (General Agriculture). Refer to the General Plan and Zoning Maps on Figures 2-5 and 2-6. The applicant is requesting a rezoning of the entire property to R-40 (Single Family Residential, Very Low Density).

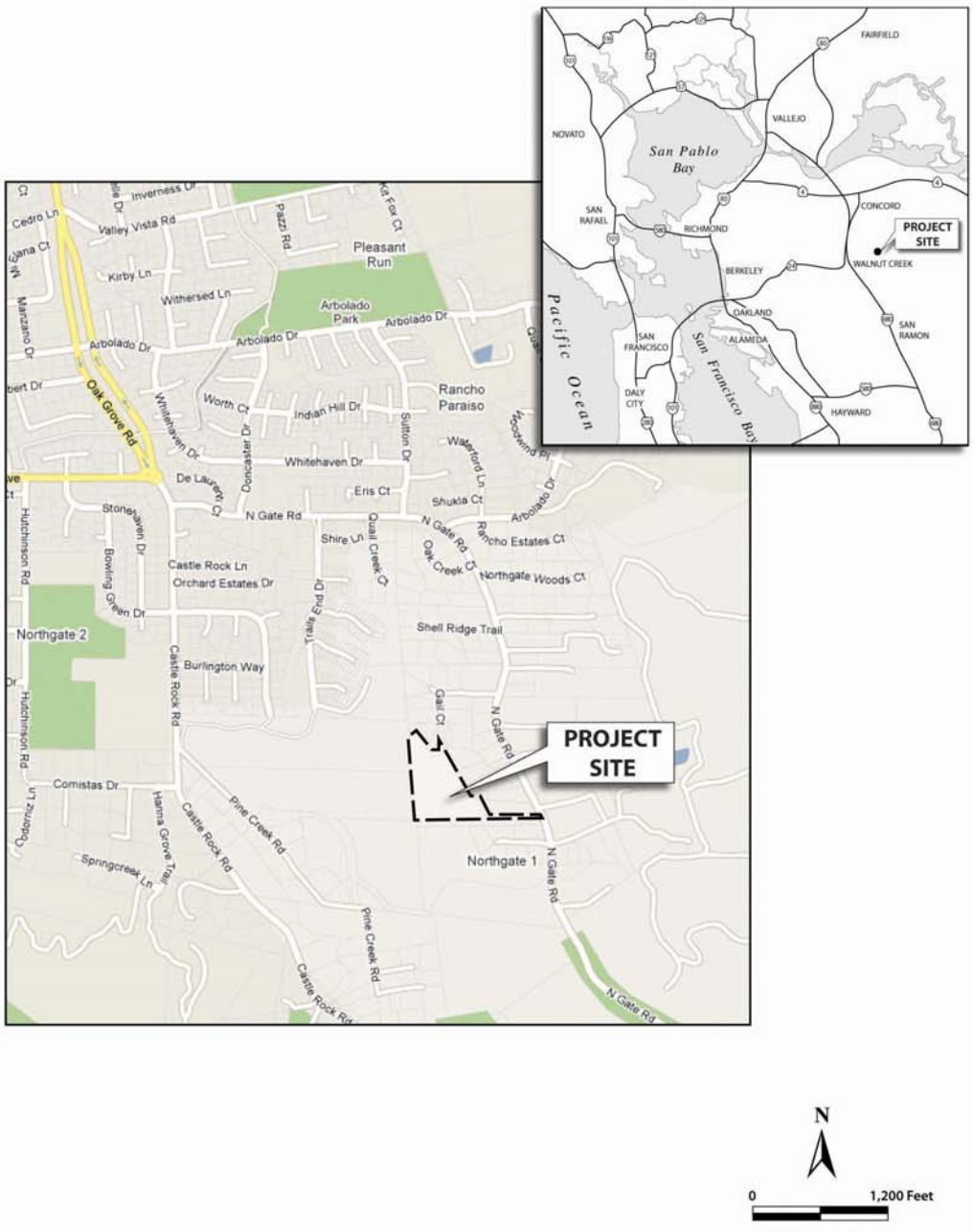
PROJECT APPROVALS

The proposed project will require approval of the major subdivision, rezoning and tree permit. The Planning Commission will hear the application and make a recommendation to the County Board of Supervisors, who will make a decision on the rezoning application.

Sources

Aliquot Associates, Inc., 2010, Vesting Tentative Map, Subdivision 9167, October 6.

D'Alo, Vince, 2010, Aliquot Associates, Inc., personal communication with Carolyn Mills, September.

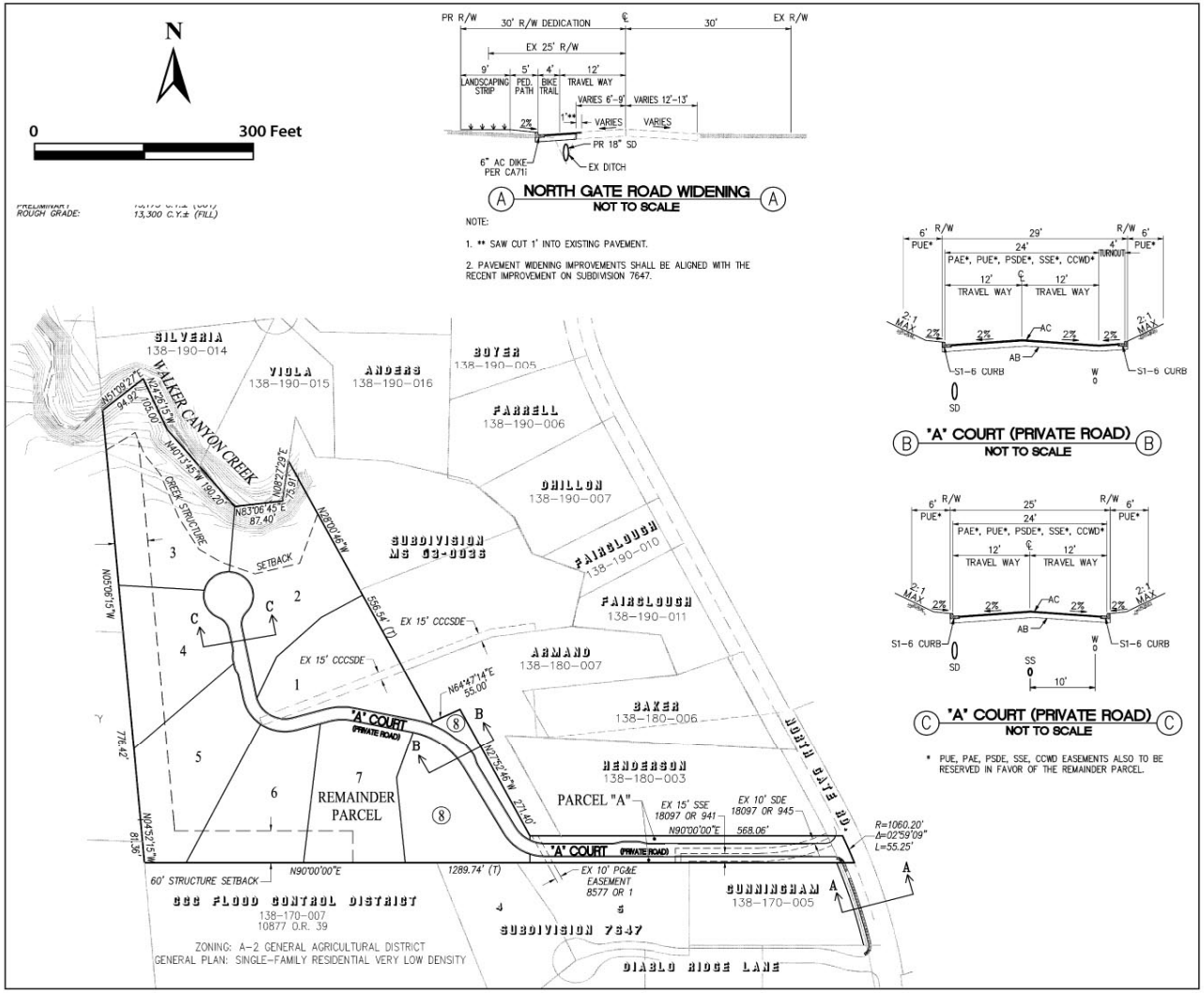


Source: Google, 2010

Figure 2-1 Site Map

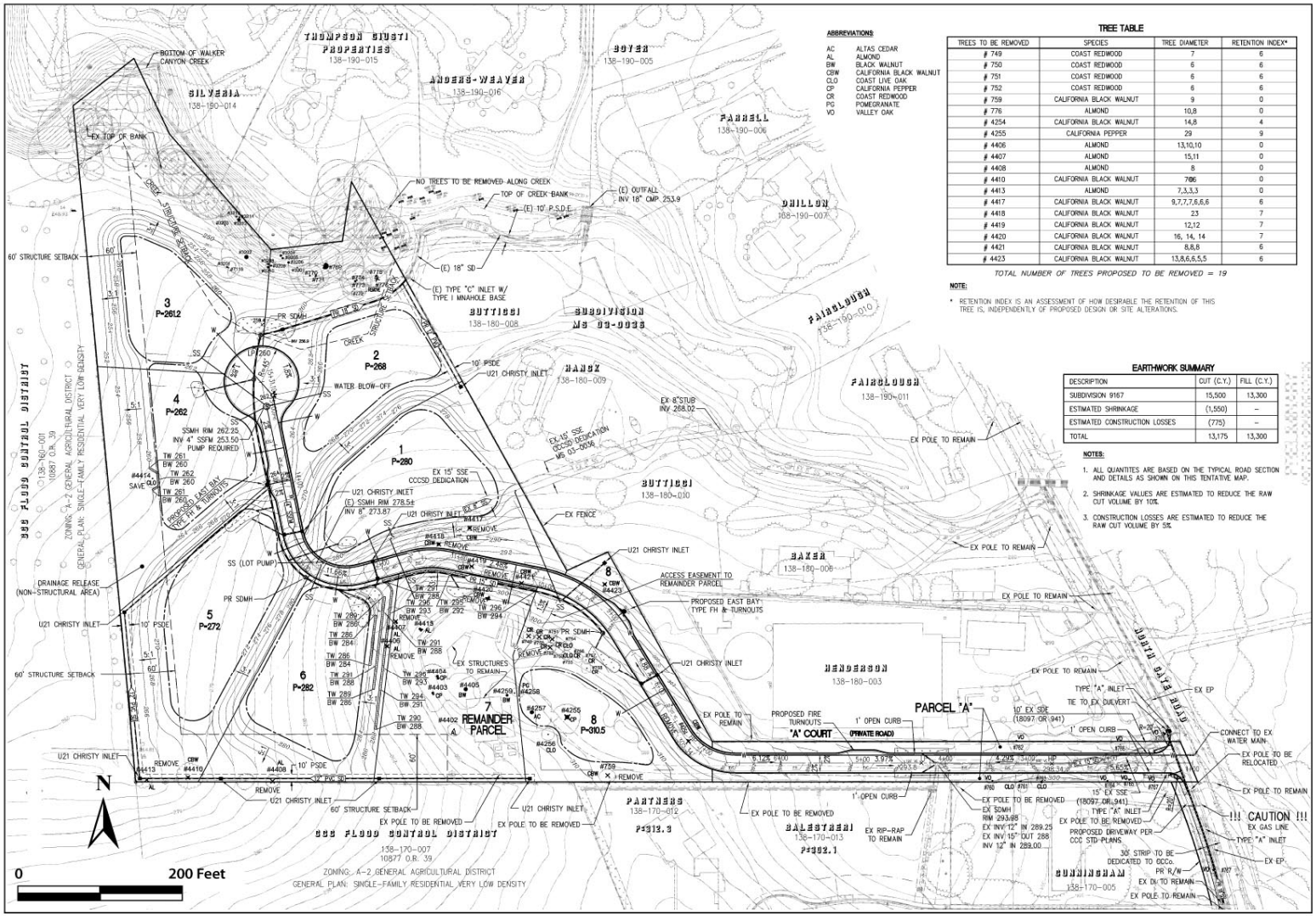
Source: Google, 2010

Figure 2-2 Aerial Photo of Project Site



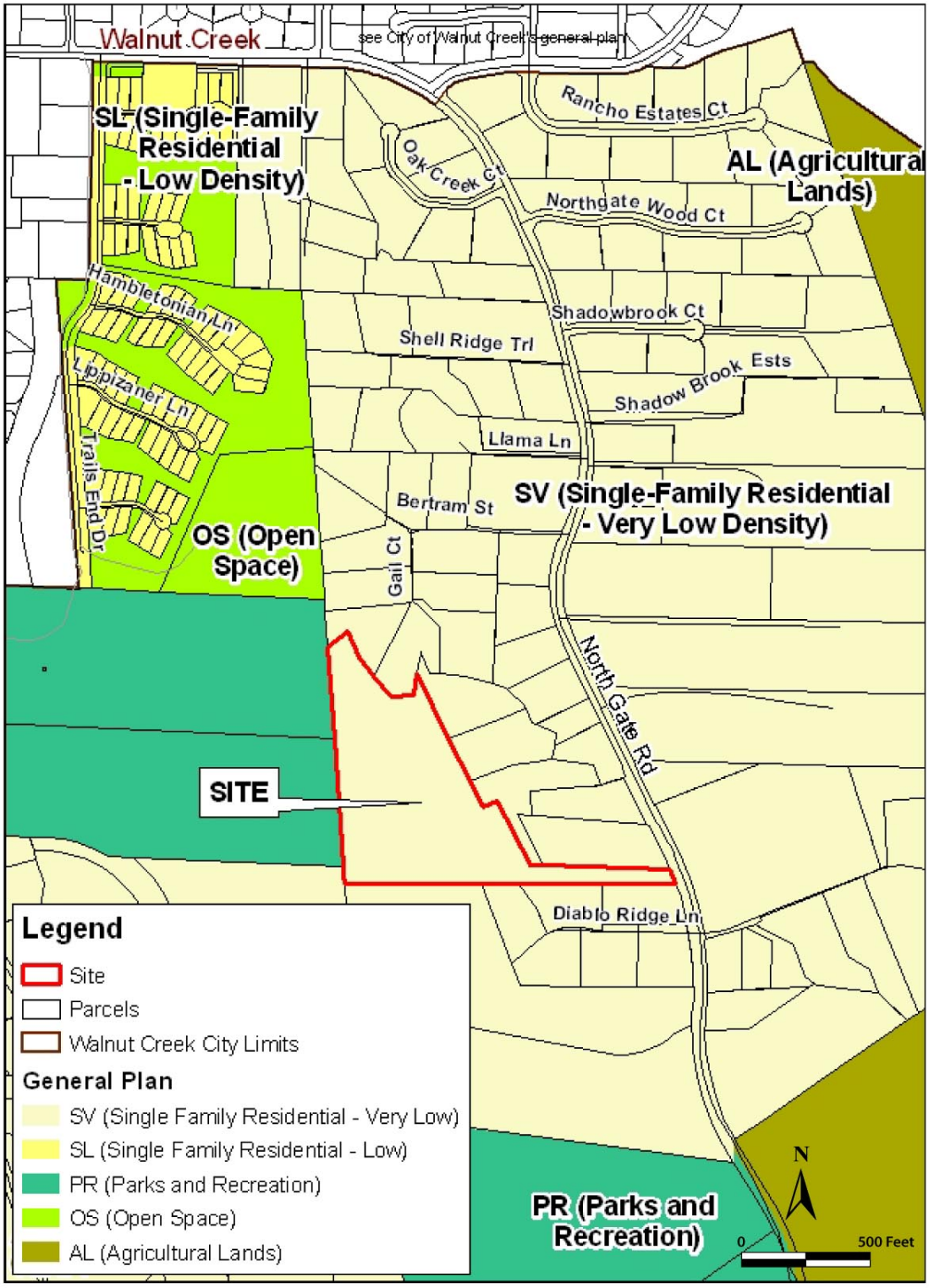
Source: Aliquot Planners, Civil Engineers and Surveyors

Figure 2-3 Proposed Development Plan



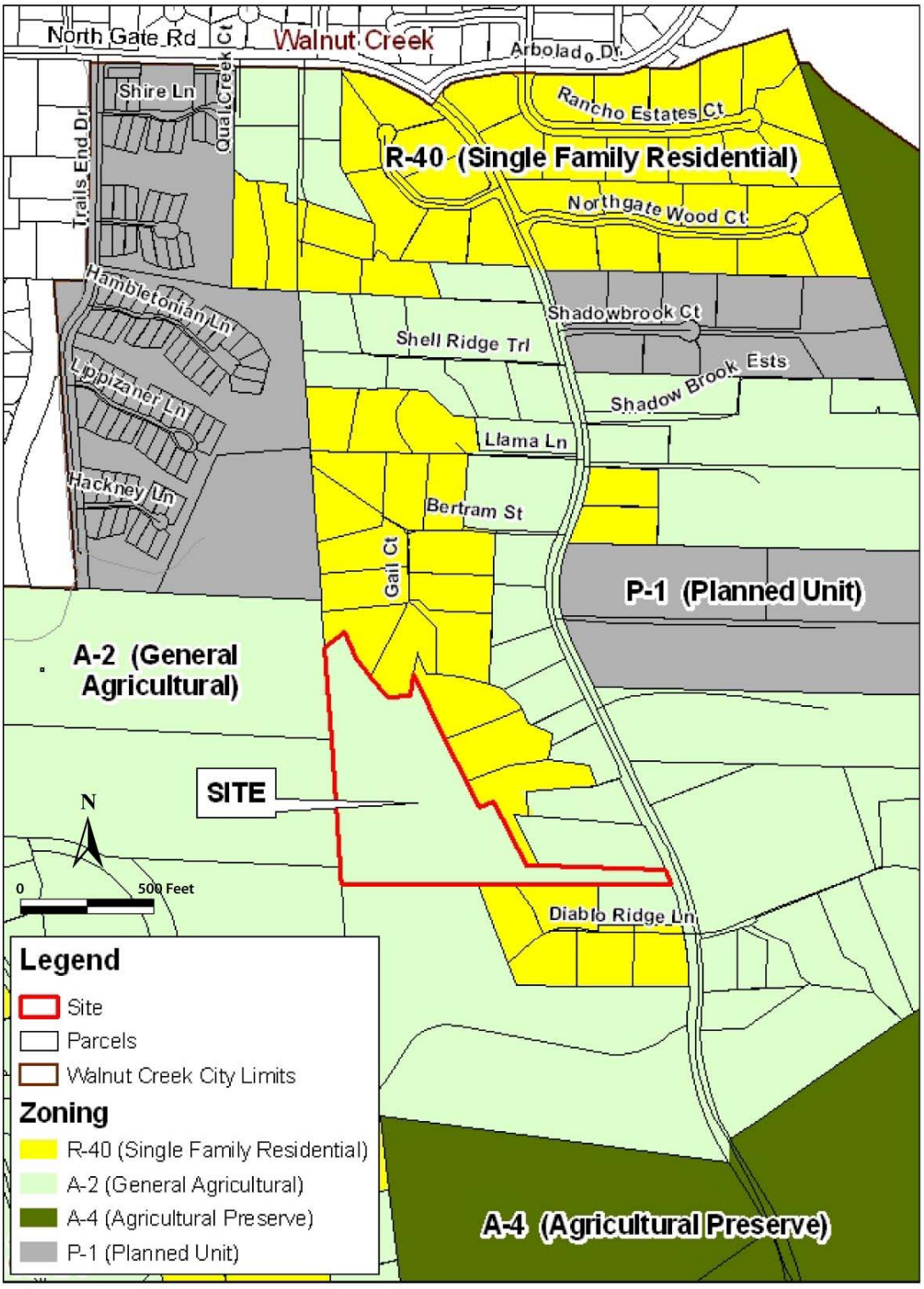
Source: Aliquot Planners, Civil Engineers and Surveyors

Figure 2-4 Proposed Rough Grading and Utility Plan



Source: Contra Costa County Department of Conservation and Development

Figure 2-5 General Plan Map of Project Site and Vicinity



Source: Contra Costa County Department of Conservation and Development

Figure 2-6 Zoning Map of Project Site and Vicinity

3.0 ENVIRONMENTAL CHECKLIST

1.	Project title:	Champion Property – Subdivision 9167
2.	Lead agency name and address:	Contra Costa County Department of Conservation and Development 651 Pine Street Martinez, CA 94553-0095
3.	Contact person and phone number:	Rose Marie Pietras, Senior Planner, (925) 335-1216
4.	Project location:	1125 North Gate Road, Walnut Creek, CA
5.	Project sponsor's name and address:	Vince D'Alo – Aliquot Associates, Inc. 1390 South Main Street Walnut Creek, CA
6.	General plan designation:	SV (Single Family – Very Low Density)
7.	Zoning:	A-2 (General Agriculture)

8. Description of project: The application before the County includes a rezoning (RZ073195) a Major Subdivision (SD079167) and a tree permit. The proposed project consists of subdividing the 9.98-acre property into seven additional lots. The existing two houses would be located on the remaining lot (#7).

9. Surrounding land uses and setting: The project site is bordered by Walker Canyon Creek and single-family residences beyond to the north; single-family development and equestrian facilities located to the east; open space owned by the Contra Costa Flood Control District located to the west and southwest; and single-family residences located along the driveway's south property line. Shell Ridge open space and Mt. Diablo State Park land extends beyond the property to the south and east. (Refer to Aerial Photo in Figure 2-2.)

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement). City of Walnut Creek.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

√	Aesthetics		Agriculture & Forest Resources	√	Air Quality
√	Biological Resources	√	Cultural Resources	√	Geology / Soils
	Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality
	Land Use / Planning		Mineral Resources		Noise
	Population / Housing		Public Services		Recreation
	Transportation / Traffic		Utilities / Service Systems		Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

____ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

√ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

____ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

____ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

____ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Rose Marie Pietras — January 28, 2011

Signature Rose Marie Pietras — Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS				
a) Have a substantial adverse effect on a scenic vista?			√	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				√
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		√		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			√	

Setting:

The project site is located in the southeast area of Walnut Creek where the terrain begins to rise; forming the Diablo foothills and Mt. Diablo beyond. The property rises from Walker Canyon Creek at an elevation of 250 feet at the creek bank to 310 feet at the southern edge of the property. The existing Tudor style house is located on the highest point of the property.

The property is considered a flag lot with the pole of the flag serving as the driveway. The driveway extends between a newer subdivision to the south and the North Gate Equestrian Center directly to the north. Along the eastern boundary of the property is a new subdivision and to the north, across Walker Canyon Creek, are single-family homes. Approaching the project site along the west side of North Gate Road are single-family houses on large lots. On the east side of the roadway are primarily rural ranchettes, many of which accommodate equestrian facilities. Directly adjacent to the western/southwestern boundary of the site is the Contra Costa County Flood Control District detention basin. This area is designated open space and a trail extends along the northern boundary of the basin. The site is located near the Shell Ridge Open Space and the Diablo Foothills Regional Park, which are accessed by trails from Castle Rock Road and North Gate Road. The entrance to Mt. Diablo State Park is located approximately 1100 feet south of the entrance to the proposed project site. (Refer to the aerial photo in Figure 2-2.)

As shown in **Photos 1 through 3**, Mt. Diablo and the foothills to the east and west of the property provide a backdrop to the project site. **Photo 1** shows the existing main house and secondary residence on the project site as well as the house on the adjoining property.

Photo 1 – Looking east/southeast at surrounding hills.

Photo 2 – Looking west/southwest from existing homesite; Flood Control property located in the middle of the photo.

Photo 3 – Looking west/northwest of near and far hills; Flood Control property located in middle of photo.

Photo 4 shows the view from the existing primary residence looking north to the Walker Canyon Creek corridor and beyond.

Photo 4 – Viewing north/northwest from the deck of the primary residence.

Discussion:

a) Have a substantial adverse effect on a scenic vista?

The scenic vista within the project vicinity is Mt. Diablo, which can be seen throughout the County as well as neighboring counties. The mountain peak elevation is 3,849 feet. The highest point on the project site is elevation 310, which is 3,539 feet lower than the peak of the mountain. The two existing houses are located on the highest part of the property. The proposed house pads, with the exception of Lot 8, would be located at lower elevations, which range from 261 feet at the north end of the property to an elevation of 282 at the south end of the property. The Lot 8 house pad would be the same as the existing house pad. Distant views of the property, in the context of Mt. Diablo, are from the northerly/ northwesterly direction.

Photo 5 illustrates a long-distance view of the project area. This photo was taken from Dinosaur Hill on Pleasant Hill Road in Pleasant Hill, CA. As shown in this photo, the lower hills of Mt. Diablo can be seen, but structures are not visible. The high-rise commercial buildings located near I-680 in Pleasant Hill are seen in the middle of the photo.

Photo 5 – Long distance view from Pleasant Hill Road.

Photo 6 is the same view as Photo 5 but with the use of a telephoto lens. The Rancho Paraiso residential development is identified due to the circular landscaped area on the lower flank of the Lime Ridge Open Space. The proposed project is located at a lower elevation than Rancho Paraiso. An intervening ridge blocks the site from this viewpoint.

The proposed residential subdivision would not affect the mountain's scenic vista when viewed from afar.

Photo 6 – Southeasterly view (with telephoto lens) from Pleasant Hill Road.

Photo 7 - Viewing southeasterly across Flood Control Detention Basin to project site.

Photo 7 illustrates a mid-view of the project site as seen from the entrance to the Trails End Drive near the intersection with Pine Creek Road. The existing house and neighboring houses to the south are visible in the photo.

The new development would occur primarily below the existing house. One new lot (#8) is located at the same elevation as the existing house pad. The North Gate Specific Plan states that the maximum height for residential structures shall be no higher than 25 feet. With the exception of Lot 8, all of the new structures would be lower than the existing house, due to the lower elevations. Most of the house on Lot 8 would not be visible from this location shown in Photo 7 as it would be shielded by the existing house on Lot 7 (the remainder parcel). While the proposed structures could be seen from mid-viewpoints, such as that shown, the new structures would not block the view of the mountain, a scenic vista. This is considered a less-than-significant impact.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The proposed project is not located within a state scenic highway. Therefore, no impact would occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The proposed project would alter the view of the site as seen from the existing Trails End Drive trail along the northern boundary of the detention basin as well as the proposed trail designated in the North Gate Specific Plan to abut the project site's western boundary. Photo simulations were prepared to illustrate the view as seen from the proposed trail and the existing trail. Figures 3-1 and 3-2 illustrate existing and proposed conditions as seen from the proposed trail, located west of the project site and from the existing trail north of the project site. Figures 3-3 and 3-4 illustrate the proposed development with landscaping.

As called for in the North Gate Specific Plan, a 60-foot setback is required along the westerly/southwesterly boundary where the property abuts open space. No structures are permitted within this setback, however landscaping is permitted. The applicant proposes to plant 40 feet of the 60-foot setback with a dense grove of oaks. Furthermore, the Specific Plan also requires that new lots created adjacent to open space areas shall be larger than 40,000 square feet. The tentative map reflects the 60-foot setback and all of the residential lots within the proposed subdivision exceed 40,000 square feet. The Specific Plan also calls for new home designs to blend in with the semi-rural character of the area. House designs must comply with the following points:

- Buildings on hillsides should complement the topography of the site;
- Exterior building materials of wood, wood shingles, and brick are preferred; and
- Exterior colors should be in earth tones and bright colors should be avoided.

The Specific Plan also emphasizes drought resistant landscaping and native plant materials. Landscape plans, as well as building plans, will be reviewed by the County and City of Walnut Creek for compliance with the Specific Plan requirements prior to the issuance of building permits.

Although the new residences would be visible from the existing and proposed trails that are located west/northwest and southeast of the project site, the use of a landscape screen along the western/southwestern property boundary would reduce the visual impact to a less-than-significant level.

The proposed project may be seen by users of the various trails within Mt. Diablo State Park and Shell Ridge, who would have a northwesterly and or southeasterly view that could overlook the project site and development within the North Gate Specific Plan area. The proposed project would be a continuation of existing development and would not block views for trail users. Due to the distance of the proposed development from the trail user, as well as

the elevation of the future residential structures in relation to the higher trails, this is considered a less-than-significant impact.

IMPACT I-1: The existing visual character of the site would be altered for users of the existing and proposed trails that are located north and west of the project site.

Mitigation Measure I-1A: To block views of the new residences for users of the existing and proposed trails, a dense landscape screen, consisting of native trees, shall be planted within the 60-foot setback along the western/southwestern property line (Lots 3–7) upon completion of site improvements. Planting shall be as recommended by the applicant's arborist (McNeil, January 2011).

Mitigation Measure I-1B: Tree size shall be no smaller than 15-gallon and consist of native evergreen species; e.g., coast live oak, etc. Landscaping shall be irrigated for up to five years, protected from deer, and maintained during this period. The applicant shall submit a landscaping plan for review and approval by the County and City of Walnut Creek.

Mitigation Measure I-1C: The applicant shall post a security bond to ensure protection of existing and newly planted landscaping. The term of the bond shall extend at least five years beyond completion of the subdivision improvements.

Mitigation Measure I-1D: The landscaping shall be monitored for a period of five years from the date of installation. Any trees lost during this period shall be replaced and monitored by the developer and/or property owner. Future owners of Lots 3–6 and the owner of the existing house (Lot 7) shall be responsible for the maintenance of the landscaping as well as replacing any shrubs/trees that are lost. This requirement shall be recorded on the individual property deeds to run with the land.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

A new source of light would be created by the proposed seven residences; however, the light/glare of these houses would be comparable to the existing lighting in the North Gate neighborhood. This is considered a less-than-significant impact.

SOURCES OF INFORMATION

City of Walnut Creek and Contra Costa County, 1991, *North Gate Specific Plan*, June 25.

Aliquot Associates, 2010, Vesting Tentative Map, October 6.

Erickson's Maps, Mt. Diablo State Park and Other Recreational Lands, Sponsored and Distributed by Mt. Diablo Interpretive Association, Diablo, CA.

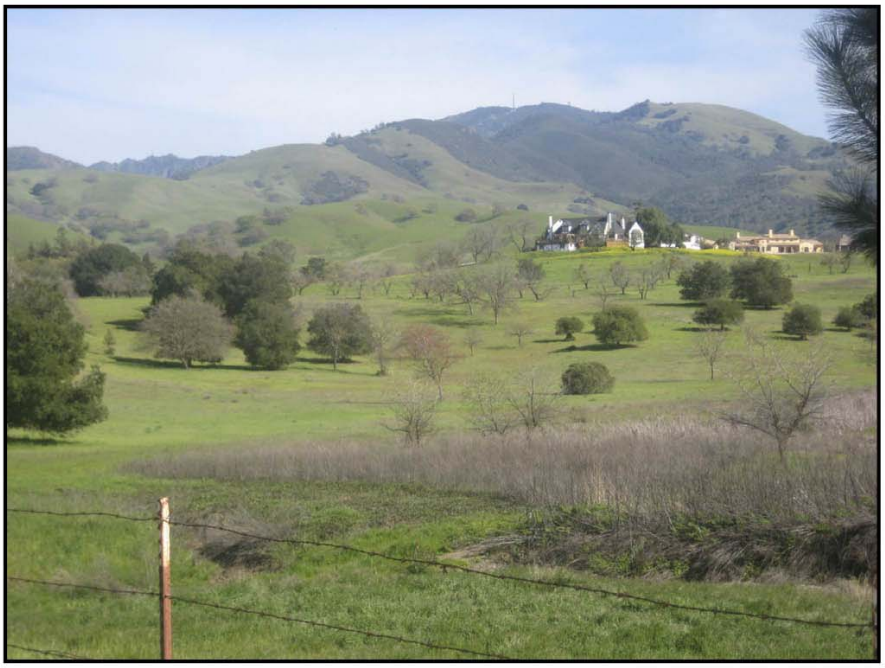
McNeil, Joseph, Consulting Arborist, 2011, Letter Report to Nelda Champion, January 7.

Existing Conditions

Future Conditions

Source: CADP

Figure 3-1 Existing and Future Conditions - Northeasterly View of Proposed Lots 3-6



Existing Conditions

Future Conditions

Source: CADP

Figure 3-2 Existing and Future Conditions - Southeasterly View

Existing Conditions

Future Conditions

Source: CADP

Figure 3-3 Existing and Future Conditions with Tree Screen - Northeasterly View

Existing Conditions

Future Conditions

Source: CADP

Figure 3-4 Existing and Future Conditions with Tree Screen - Southeasterly View

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
II. **AGRICULTURE AND FOREST RESOURCES**: Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				√
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			√	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?				√
d) Result in the loss of forest land or conversion of forest land to non-forest use?				√
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				√

Setting:

The project site is undeveloped except for two residences on the remainder parcel (Lot 7) located on the south side of the site. The site is covered with wild grasses and weeds and may have been used for cattle grazing in the past when it was part of a larger tract of land. Cattle have been grazed on the Mt. Diablo Gateway Preserve located south of the project site (Bristol, 2007) as well as on the land directly west of the project site. The adjoining land to the north and east is used for single-family residential development or equestrian facilities.

Discussion:

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The California Department of Conservation Farmland Mapping and Monitoring Program shows that the project site is in an area categorized as Urban and Built-up Land. The Contra Costa County General Plan does not consider the project site to be an Important Agricultural Area (Contra Costa County Community Development Department, 1996, Figure 8-2). The North Gate Specific Plan

designates the project site as Single Family Residential, Very Low Density (City of Walnut Creek & Contra Costa County, 1991, Figure 3). The proposed project would not impact the equestrian facility land uses that exist east of the project site, nor would the proposed development have an impact on adjacent agricultural resources.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The project site is currently zoned A-2 (5-acre minimum parcel size), but designated in the Specific Plan/General Plan as Single Family, Very Low Density (40,000 s.f. minimum lot size). The applicant is requesting a rezoning to R-40 to accommodate seven additional lots for a total of eight. The proposed project does not conflict with the land use designation, but does conflict with the A-2 zoning, thus the request to rezone the property. The project site is not under a Williamson Act contract. The nearest agricultural land under Williamson Act contract is located approximately 1200 feet southeast of the project site entrance. This is considered a less-than-significant impact, and no mitigation is necessary.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?

The property does not contain a forest, nor is there forested land in close proximity to the project site. No impact is anticipated.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Refer to c) above.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The proposed project site is surrounded by single-family residences, an equestrian center and open space owned by the Contra Costa County Flood Control District. The proposed project would not result in the conversion of the existing open space as this land is set aside for flood control purposes. The adjoining equestrian center could potentially develop in the future as it is designated in the North Gate Specific Plan as Single Family, Very Low Density. This property could convert to residential use whether or not the proposed project proceeds. Therefore, the proposed project does not result in the conversion of agricultural use to non-agricultural use. No impact is anticipated.

SOURCES OF INFORMATION

Bristol, Troy, Land Conservation Associate, Save Mount Diablo. 2007. Letter to Rose Marie Pietras, Project Planner, Community Development Department, County of Contra Costa, November 21.

City of Walnut Creek & Contra Costa County. 1991. *North Gate Specific Plan,* June 25.

Contra Costa County Community Development Department. 1996. *Contra Costa County General Plan, 1995-2010*, July.

State of California Department of Conservation, Farmland Mapping and Monitoring Program. 2007. *Contra Costa County Important Farmland 2006*, June.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
III.	**AIR QUALITY** — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
	a) Conflict with or obstruct implementation of the applicable air quality plan?			√	
	b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			√	
	c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			√	
	d) Expose sensitive receptors to substantial pollutant concentrations?		√		
	e) Create objectionable odors affecting a substantial number of people?				√

Setting:

The proposed project site is located in the unincorporated area of Walnut Creek in the eastern portion of the nine-county San Francisco Bay Area Air Basin. Walnut Creek has a relatively low potential for air pollution given the predominance of westerly winds. These winds dilute pollutants and transport them away from the area. There are, however, several major stationary sources in upwind cities that can adversely influence local air quality.

Both the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. Ambient standards include criteria pollutants and toxic air contaminants. These ambient air quality standards are levels of contaminants that represent safe levels that avoid specific adverse health effects associated with each pollutant. The federal and California standards differ in some cases. In general, the California standards are more stringent, particularly for ozone and particulate matter (PM_{10} and $PM_{2.5}$). Pursuant to the California Clean Air Act, the CARB designates areas of the state as attainment, non-attainment, or unclassified with respect to applicable standards.

The San Francisco Bay Area is currently designated as a non-attainment area for the 1-hour ozone standard. However, in April 2004, USEPA made a final finding that the Bay Area has attained the federal 1-hour ozone standard. The finding of attainment does not mean the Bay Area has been reclassified as an attainment area for the 1-hour standard. The region must submit a re-designation request to EPA in order to be reclassified as an attainment area. The USEPA has classified the Bay Area as a non-attainment area for the federal 8-hour ozone standard and unclassified for the 24-hour federal $PM_{2.5}$ standards.

Under the California Clean Air Act, Contra Costa County is a non-attainment area for ozone and particulate matter (PM_{10} and $PM_{2.5}$). Contra Costa County is either an attainment or unclassified area for other pollutants. The California Clean Air Act requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or provide for adoption of "all feasible measures on an expeditious schedule."

The project site is located within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD) whose various plans, guidelines and regulations would apply to the project. The BAAQMD has a multi-pollutant monitoring site on Treat Boulevard in Concord. Table 3-1 shows historical occurrences of pollutant levels exceeding the California and federal ambient air quality standards for the three-year period 2005-2007. The number of days that each standard was exceeded is shown. As shown in the table, all federal ambient air quality standards are met in the area with the exception of ozone. Additionally, the California ambient standards for ozone and PM_{10} are regularly exceeded.

Table 3-1

AIR QUALITY DATA SUMMARY FOR CONCORD, 2005–2007

Pollutant	Standard	Days Exceeding Standard In:		
		2005	2006	2007
Ozone	State 8-Hour	2	14	4
Ozone	Federal 8-Hour	2	9	1
PM_{10}	Federal 24-Hour	0	0	0
PM_{10}	State 24-Hour	0	3	2
$PM_{2.5}$	Federal 24-Hour	5	5	7
Carbon Monoxide	State/Federal 8-Hour	0	0	0
Nitrogen Dioxide	State 1-Hour	0	0	0
Sulfur Dioxide	State 1-Hour	0	0	0

Source: Air Resources Board, Aerometric Data Analysis and Management (ADAM), 2009 (http://www.arb.ca.gov./adam/cgi-bin/adamtop/d2wstart).

Discussion:

a) Conflict with or obstruct implementation of the applicable air quality plan?

A project would be judged to conflict with or obstruct implementation of the regional air quality plan if it would be inconsistent with the growth assumptions, in terms of population, employment or regional growth in Vehicle Miles Traveled. This could occur if a project required a general plan amendment or rezoning, and the proposed new zoning would result in greater vehicle traffic than would occur with the current zoning. The proposed project does require a rezoning from A-2 (General Agricultural) to R-40 (Single-family Residential). However, these lots would have been considered buildable residential sites in the growth and traffic forecasts that were incorporated into the current Bay Area Clean Air Plan (CAP) based upon the land use designations identified in the Specific Plan and County General Plan. Furthermore, the BAAQMD considers a daily auto vehicle trip generation of 2,000 to be the threshold of significance requiring project review for air quality mitigation (BAAQMD CEQA Guidelines, 1996). The project would generate approximately 70 additional vehicle trips per day and would not increase pollutants to levels exceeding BAAQMD air quality standards. Therefore, the impact is considered less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Refer to discussion for Item c) below. In addition, the project would generate construction, motor vehicle, and other air emissions (from fireplaces, barbecues, 2-cycle engine leaf blowers, etc.) similar to existing residential neighborhoods in the North Gate area. Since only seven houses would be constructed, the long-term emission of air pollutants would be less than significant.

A long-term increase in air pollutants from project-related traffic would occur, but the small number of vehicle trips (approximately 70 per day) would not increase pollutants to levels exceeding BAAQMD air quality standards. The BAAQMD considers a daily auto vehicle trip generation of 2,000 to be the threshold of significance requiring project review for air quality mitigation (BAAQMD CEQA Guidelines, 1996). The impact would be less than significant.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

The San Francisco Bay Area is a non-attainment area for 8-hour ozone levels (Richardson, 2007). However, since the proposed project consists of seven new houses that would generate approximately 70 additional vehicle trips per day, the contribution to Bay Area ozone levels is considered less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

During construction of the proposed project, the closest sensitive receptors are the residents located directly adjacent to the project site. Diesel fuel emissions from trucks and equipment are unavoidable, but temporary. Temporary construction dust can be mitigated through appropriate dust control practices.

IMPACT III-1: Construction of the proposed project could create potentially significant dust impacts that could affect nearby residents.

Mitigation Measure III-1: During construction, the applicant shall take the following measures to control dust:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials, or require trucks to maintain at least two feet of freeboard.
- Sweep off-site streets leading to the project site daily if visible soil, sand, or other loose materials are deposited on these streets.

e) Create objectionable odors affecting a substantial number of people?

The proposed subdivision would create odors associated with residential living such as fireplaces, barbecues, etc. These odors are considered typical of suburban living and would not create an impact on adjoining residences.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IV. **BIOLOGICAL RESOURCES** — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		√		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			√	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			√	

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			√	
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		√		
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				√

Setting:

Biological resources associated with the project site were identified through a review of available background information and field reconnaissance surveys. Available documentation was reviewed to provide information on general resources in the Walnut Creek area, presence of sensitive natural communities, and the distribution and habitat requirements of special-status species which have been recorded from or are suspected to occur in the project vicinity. These included review of the records on special-status species and sensitive natural communities maintained by the California Natural Diversity Database (CNDDB), as well as detailed studies conducted for the applicant. Available studies prepared by consultants retained by the applicant consist of:

- Biological Resources Report (BRR)[1] prepared by Mosaic Associates describing existing biological and wetland resources on the site, assessing the potential impacts of the proposed project, and recommending measures to mitigate anticipated significant or potentially significance impacts. Focused botanical surveys were conducted on April 27 and August 3, 2006.
- Habitat Assessment (HA1) for special-status amphibians and reptiles on the site[2] prepared by Rana Resources. A survey of the site was conducted on April 27, 2006.
- Habitat Assessment (HA2) on the survey results for the federally-threatened California red-legged frog[3] prepared by Rana Resources and conducted consistent with protocols defined by the U.S. Fish and Wildlife Service. Field surveys were conducted during the day on March 22, May 23, and August 15, 2009, and at night on March 3, April 18 and 23, May 30, and August 22, 2009.

1 Mosaic Associates, 2007, revised 2011, *Biological Resources Report*, 1125 North Gate Road, prepared for Nelda Champion, December, revised January.

2 Rana Resources, 2006, letter report to Ms. Judy A. Bendix, Mosaic Associates, from Mark R. Jennings, July 4.

3 Rana Resources, 2006, revised 2009, letter report to Ms. Judy A. Bendix, Mosaic Associates, from Mark R. Jennings, November 21, revised August 30.

- Tree report (TR)[4] providing an inventory of existing trees on the site and an assessment of the potential impacts of the project on trees.
- Creek Preservation and Enhancement Plan (CPEP)[5] describing protection and enhancement provisions of the project to be installed along Walker Canyon Creek.

(The above five reports are on file at the Contra Costa County Department of Conservation and Development.)

Field reconnaissance surveys of the site were conducted on January 7, 2009 and October 2, 2010 by the Initial Study/MND biologist to confirm information presented in the applicant's reports and determine the potential impacts of the project on sensitive resources. The following provides a summary of biological resources on the site, followed by an assessment of potential impacts. Where significant or potentially significant impacts have been identified, mitigation measures have been recommended. The adequacy of mitigation recommended in the BRR has been evaluated, and where appropriate, these have been identified as such under the respective checklist item.

Vegetation and Wildlife Habitat

Vegetation on the site is dominated by non-native grasslands, ornamental landscaping, and mixed riparian woodland along the banks of Walker Canyon Creek. Landscape vegetation is present surrounding both existing houses. Waters of the U.S. and state are present in the creek, and non-native annual grassland is present on the western portion of the site. The aerial photo in Figure 2-2 reflects the tree and grassland in the project vicinity. Plant communities and associated wildlife species are summarized below.

Coast Live Oak Woodland

Coast live oak woodland habitat is found along the banks of Walker Canyon Creek. The woodland varies from dense canopy to more open areas and is primarily comprised of native riparian species. Characteristic species include: valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), elderberry (*Sambucus mexicana*), and willow (*Salix spp.*). The understory on the creek bank is dominated by several mature stands of poison oak (*Toxicodendron diversilobum*) interspersed with native and non-native grasses and forbs such as slender wild oats (*Avena barbata*), hedgeparsley (*Torilis arvensis*) and snakeroot (*Sanicula crassicalus*).

The woodlands provide nesting and foraging habitat for a number of bird species, including bushtit (*Psaltriparus minimus*), western scrub jay (*Aphelocomo californica)*, wild turkey (*Meleagris gallopavo*), black phoebe (*Sayornis nigricans*), and Swainson's thrush (*Catharus ustulatus*), among others. Deer (*Odocoileus hemionus*), skunks (*Mephitis mephitis*), and raccoons (*Procyon lotor*) are expected to forage on site, and most likely use the protective cover of the woodlands for resting, and surface water for drinking when present. Pacific treefrogs (*Hyla regilla*) and California toads (*Bufo boreas halophilus*) were observed along the creek during the protocol surveys for California red-legged frog (*Rana draytonii*), which was not detected on the site.

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4 Joseph McNeil, Consulting Arborist, 2008 revised 2011, letter report to Nelda Champion addressing trees on the proposed subdivision site, from Joseph McNeil, January 17, revised January 7.

5 Mosaic Associates, 2008, revised 2011, *Creek Preservation and Enhancement Plan*, prepared for Nelda Champion, January, revised January.

Non-Native Annual Grassland

The open grassy fields in the western portion of the site are dominated by various non-native grasses, including slender wild oats and soft chess (*Bromus hordeaceous*), and non-native herbaceous species such as bristly ox-tongue (*Picris echiodes*), field bindweed (*Convolvulus arvensis*) and hedgeparsley. The non-native grasslands also extend into the understory of the riparian woodland where dense duff and limited light levels do not preclude their establishment.

The grasslands provides foraging habitat for a number of bird species including black phoebe, western kingbird (*Tyrannus verticalis*), and western bluebird (*Sialia mexicana*). Red-winged blackbirds (*Agelaius phoeniceus*) may nest in patches of taller vegetation. California ground squirrel burrows (*Spermophilus beecheyi*) are present in small numbers in this field. The ground squirrel burrows provide suitable habitat for California burrowing owls (*Athene cunicularia*), although the height and density of vegetation in this field, and proximity to the riparian canopy reduce the suitability of the site for this owl species, which tends to nest in ground squirrel burrows.

Ornamental Landscaping

Landscape trees, shrubs, and groundcovers have been planted around the existing buildings on the site. These include: California pepper tree (*Schinus molle*), coast redwood (*Sequoia sempervirens*), almond (*Prunus dulcis*), pomegranate (*Punica granatum*), flowering shrubs and perennials, and turf composed of Kentucky bluegrass (*Poa pratensis*) surrounding the homes. Wildlife species utilizing the ornamental landscaping are common in suburban habitat and highly adapted to human activity.

Special-Status Species

Special-status species are plants and animals that are legally protected under the State and/or federal Endangered Species Acts[6] or other regulations, as well as other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts and other essential habitat. Species with legal protection under the Endangered Species Acts often represent major constraints to development, particularly when they are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a "take"[7] of these species.

Thirty special-status plant species were evaluated for their potential to occur on site in the BRR. No special-status plant species initially suspected to occur on the site were encountered during systematic surveys conducted in spring and summer of 2006. Individual California black walnut (*Juglans hindsii*) trees were detected on site. However, these trees grew from grafted rootstock, and are therefore not considered to be a natural occurrence or of special-status.

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6 The federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

7 "Take" as defined by the FESA means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect" a threatened or endangered species. "Harm" is further defined by the U.S. Fish and Wildlife Service to include the killing or harming of wildlife due to significant obstruction of essential behavior patterns (i.e., breeding, feeding, or sheltering) through significant habitat modification or degradation. The CDFG also considers the loss of listed species habitat as take, although this policy lacks statutory authority and case law support under the CESA.

Forty-four special-status animals and invertebrates were considered for their potential to occur in the vicinity of the Champion project vicinity as part of the BRR. Of these, 37 species were eliminated from further consideration because suitable habitat is not present at the site. California red-legged frog (*Rana aurora draytonii*) was not detected during protocol surveys and was therefore considered to be absent from the site. One species, white-tailed kite (*Elanus leucurus*) has a moderate potential to nest on site in the trees along the creek. Five species have a low potential to occur on site, including golden eagle (*Aquila chrysaetos*), western pond turtle (*Actinemys marmorata*), burrowing owl (*Athene cunicularia*), Cooper's hawk (*Accipiter cooperi*), and northern harrier (*Circus cyaneus*). This is primarily due to low foraging habitat and a low to moderate potential for nesting by burrowing owl, Cooper's hawk, and northern harrier. The HA1 assessed the suitability of the site and surrounding area for special-status amphibians and reptiles, and HA2 described the results of protocol surveys conducted for California red-legged frog, as summarized below.

California red-legged frog (*Rana aurora draytonii*)
This species was historically found in the Walnut Creek region, but there are no recent records of frogs from within one mile of the site. The CNDDB reports three occurrences of this species within approximately 2 miles of the site, in Little Pine Creek and a tributary of San Ramon Creek, and an occurrence along Pine Creek approximately 2.8 miles from the site. The current habitat on the site is unsuitable for breeding and long-term occupation by California red-legged frogs because of the lack of deep water (>3 feet) pools in the immediate area, including Walker Canyon Creek.

The nearest potential frog habitat is the Pine Creek Detention Basin and two pools along Pine Creek to the west. However, the center pool in the detention basin supports only shallow water (6-8 inches during the spring survey conducted as part of HA2 in 2009). All of these aquatic habitats were completely dry, as well as Pine Creek upstream of the detention basin, by August 15, 2009, and Walker Creek was dry by May 23, 2009. Thus, there was no available aquatic habitat for ranid frogs by mid-summer. The complete drying of all these aquatic habitats in the vicinity on a regular basis by late summer was considered to be the probably reason why there are no California red-legged frogs in the area. Unless there are permanent aquatic habitats close by that can harbor individual, California red legged frogs will be unable to colonize the vicinity from more distant suitable habitat due to the presence of development (e.g. roads, fences, houses, domestic cats, and raccoons in the area surrounding the detention basin.

The HA1 concluded that California red-legged frogs do not inhabit the site or surrounding riparian areas and thus would not utilize Walker Canyon Creek as a movement corridor. No California red-legged frogs were observed during the protocol surveys conducted in 2009 for the site as described in HA2, the Walker Canyon Creek corridor, and the Pine Creek Detention Basin, confirming the conclusion in the HA1 that this species is not present on the site or vicinity.

California Tiger Salamander (*Ambystoma californiense*)
This species requires ephemeral pools in grassland habitats for breeding, but spends the majority of the year in underground refuges, primarily small mammal burrows, in grassland or oak woodland habitat. Pools used by California tiger salamander have to hold water for a minimum of three months to allow for successful larval development. The grassland on site is regularly disked for fire abatement. As concluded in HA1, there is no suitable aquatic habitat on site and the detention basin to the west is not suitable for this species as it was designed to drain within a few days of rainfall.

Alameda Whipsnake (*Masticophis lateralis euryxanthus*)
This species is typically found in dense, chaparral habitats or along riparian areas with lots of trees in Alameda and Contra Costa counties. The general area of the site is unsuitable for this species. There are no rock outcrops for snakes to use for aestivation and hibernation and the riparian corridor along the northern edge of the site is too narrow, sparse, and isolated to support a population of snakes here. It is therefore concluded that the species does not occur on site or in the immediate vicinity.

California horned lizard (*Phrynosoma coronatum frontale*)
This species is typically found in chaparral or grassland habitats with friable soils that contain large native ant colonies. This lizard is not expected to occur on site or in the surrounding area due to the lack of suitable friable soils, the lack of large native ant colonies, and the presence of many potential predators such as domestic cats and raccoons.

Western pond turtle (*Actinemys marmorata*)
This species typically is found in ponds or along streams that contain ponds. The detention basin west of the site is approximately 0.25 mile to the west. Western pond turtles could occur in the vicinity (especially the silted in detention basin) and might forage along the riparian corridor of Walker Canyon Creek, although no suitable nesting or aestivation habitat for this turtle was detected on-site.

Wetlands

Although definitions vary to some degree, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration and purification functions.

The CDFG, U. S. Army Corps of Engineers (Corps), and Regional Water Quality Control Board (RWQCB) have jurisdiction over modifications to wetlands and other "waters of the United States." Jurisdiction of the Corps is established through provisions of Section 404 of the Clean Water Act, which prohibits the discharge of dredged or fill material without a permit. The RWQCB jurisdiction is established through Section 401 of the Clean Water Act, which requires certification or waiver to control discharges in water quality. Jurisdictional authority of the CDFG over wetland areas is established under Sections 1600-1607 of the State Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed or bank of any lake, river or stream.

Walker Canyon Creek runs along the northern border of the site, and forms the only jurisdictional waters on the property. The creek appears to convey water seasonally, drying out during the summer and fall. The creek flows in an open channel throughout the site, and discharges into Pine Creek and the Contra Costa County Flood Control District Pine Creek Detention Basin approximately 0.25 mile to the west of the site. Wetland vegetation is absent along the creek channel on the site, which is regulated by the Corps and RWQCB as an “other waters of the U.S.” and by CDFG as a natural stream.

Regulatory Setting

Special-Status Species

State and federal "endangered species" legislation has provided the California Department of Fish and Game (CDFG) and US. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the CDFG and USFWS if activities associated with a proposed project will result in the "take" of a listed species. "Take" is defined by the state of California as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFG and the USFWS are responsible agencies under the California Environmental Quality Act (CEQA). Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

Migratory Birds

State and federal law also protect most bird species. The Migratory Bird Treaty Act (MBTA: 16 U.S.C., sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, their occupied nests, and eggs.

Birds of Prey

Birds of prey are also protected in California under provisions of the State Fish and Game Code, Section 3503.5, (1992), which states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFG.

Waters of the U.S. and State

Section 404 of the Clean Water Act (CWA) of 1972 regulates activities that result in the discharge of dredged or fill material into waters of the U.S., including wetlands. The primary intent of the CWA is to authorize the U.S. Environmental Protection Agency (EPA) to regulate water quality through the restriction of pollution discharges. The Corps has the principal authority to regulate discharges of dredged or fill material into waters of the U.S.

Pursuant to Section 401 of the Clean Water Act, an applicant for a federal permit to conduct any activity which may result in discharge into navigable waters must provide a certification from the Regional Water Quality Control Board (RWQCB) that such discharge will comply with the state water quality standards (Cal. Code Regs. Tit. 23, §§3830 et seq.).

Under the Porter-Cologne Water Quality Control Act (Cal. Water Code §§13000-14920), the RWQCB is authorized to regulate the discharge of waste that could affect the quality of the State's waters. "Waste" is broadly defined by the Porter-Cologne Act to include "sewage and any and all

other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation of whatever nature…" (Cal. Water Code §13050).

The CDFG exercises jurisdiction over wetland and riparian resources associated with rivers, streams, and lakes under California Fish and Game Code Sections 1600 to 1607. The CDFG has the authority to regulate work that will substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. Areas subject to CDFG's jurisdiction over rivers, streams, creeks or lakes are usually bounded by the top-of-bank or the outermost edges of riparian vegetation.

Local Policies

The Contra Costa County General Plan has identified certain goals and policies relating to the protection of natural resources. Vegetation and Wildlife Policies from the Conservation Element of the General Plan that are relevant to the proposed project are listed below. The proposed project lies within the North Gate Specific Plan area, and thus, goals, policies and development regulations provided in that plan, which was adopted on June 25, 1991, are described below. Additionally, a Tree Ordinance is in effect which requires a tree removal permit if heritage trees, significant groupings of trees (groves of four or more trees), or protected trees (native trees greater than 6.5 inches in diameter at 4.5 feet) are to be removed in unincorporated areas of the County. However, the North Gate Specific Plan includes a policy which states that projects within the plan area must preserve healthy trees and maintain significant tree masses consistent with the requirements of the Walnut Creek Tree Preservation Ordinance (see North Gate Specific Plan, Policy 3, below). The City of Walnut Creek Tree Preservation Ordinance (Section 3.8.03) requires a tree removal permit when any tree with a single trunk of 28 inches or more in circumference (9 inches in diameter), or a multitrunk tree having an aggregate circumference of 40 inches or more at 4.5 feet. Under the Walnut Creek Ordinance, a highly protected tree includes any tree of the following species: valley oak (*Quercus lobata*), blue oak (*Q. douglasii*), coast live oak (*Q. agrifolia*), California black oak (*Q. kelloggii*), canyon live oak (*Q. chrysolepsis*), interior live oak (*Q. wizliseni* var. *wizlizeni*), madrone (*Arbutus menziesii*), California buckeye (*Aesculus californica*), California black walnut (*Juglans hindsii*), and grey pine (*Pinus sabiniana*).

Contra Costa County General Plan

Vegetation and Wildlife Policies

8-6 Significant trees, natural vegetation, and wildlife populations generally shall be preserved.

8-10 Any development located or proposed within significant ecological resource areas shall ensure that the resource is protected.

8-13 The critical ecological and scenic characteristics of rangelands, woodlands, and wildlands shall be recognized and protected.

8-14 Existing vegetation, both native and non-native, and wildlife habitat areas shall be retained in the major open space areas sufficient for the maintenance of a healthy balance of wildlife populations.

8-28 All efforts shall be made to identify and protect the County's mature native oak, bay, and buckeye trees.

Policies to Protect and Maintain Riparian Zones

8-78 Where feasible, existing natural waterways shall be protected and preserved in their natural state, and channels which already are modified shall be restored. A natural waterway is defined as a waterway which can support its own environment of vegetation, fowl, fish and reptiles, and which appears natural.

8-79 Creeks and streams determined to be important and irreplaceable natural resources shall be retained in their natural state whenever possible to maintain water quality, wildlife diversity, aesthetic values and recreation opportunities.

8-80 Wherever possible, remaining natural watercourses and their riparian zones shall be restored to improve their function as habitats.

Policies for New Development Along Natural Watercourses

8-86 Existing native riparian habitat shall be preserved and enhanced by new development unless public safety concerns require removal or habitat for flood control or other public purposes.

8-89 Setback areas shall be provided along natural creeks and streams in areas planned for urbanization. The setback areas shall be of a width adequate to allow maintenance and to prevent damage to adjacent structures and the loss of private property.

8-90 Deeded development rights for lands within established setback areas along creeks or streams shall be sought to assure creek preservation and to protect adjacent structures and the loss of private property.

8-91.1 Grading, filling and construction activity near watercourses shall be conducted in such a manner as to minimize impacts from increased runoff, erosion, sedimentation, biochemical degradation, or thermal pollution.

8-91.2 Revegetation of a watercourse shall employ native vegetation, providing the type of vegetation is compatible with the watercourse's maintenance program and does not adversely alter channel capacity.

North Gate Specific Plan

Goal: Protect natural features such as heritage quality trees, creeks, knolls, ridgelines and rock outcroppings.

Policies

1. Preserve to the extent feasible, creeks and riparian vegetation in the area. Enhance creeks and riparian corridors by revegetating creeks with native riparian vegetation from local seed stock.

3. Preserve healthy trees and maintain significant tree masses consistent with the requirements of the Walnut Creek Tree Preservation Ordinance.

The North Gate Specific Plan also specifies development regulations, including one that requires that applications for residential development "shall be required to provide, as part of the application submittal, a creek preservation and enhancement plan, which outlines the methods of protecting and enhancing this resource. This plan shall include, at a minimum, re-vegetation of the creeks with

native riparian vegetation from local seed stock." As noted above, any proposed tree removal must be consistent with the Walnut Creek Tree Preservation Ordinance.

Discussion:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

It is unlikely that the site provides habitat for any special-status species. No special-status plant species were detected during systematic surveys conducted in 2006, and none suspected to occur on the site. Although no nests were observed during past surveys of the site, there is a possibility that one or more bird species could establish nests in the future before construction begins, particularly along the Walker Canyon Creek corridor. Construction activities could result in a "take" of tree- or ground-nesting migratory birds and/or birds of prey, including but not restricted to Cooper's hawk, burrowing owl, and white-tailed kite, if new nests are established in the future, which would be a potentially significant impact.

Foraging opportunities for some of these special-status bird species would change with elimination of most of the non-native grasslands on the site, but abundant habitat remains in the surrounding area and this loss would be considered a less-than-significant impact.

There remains a remote possibility that western pond turtle individuals could disperse along Walker Canyon Creek. However, no in-channel activities are proposed as part of the project, with surface drainage to be accomplished by tying into an existing off-site drainage system. The BRR included two recommendations related to western pond turtle, calling for a preconstruction survey prior to installation of the previously proposed outfall and installation of silt fencing around the top of bank to prevent turtles from moving into the construction zone. Although the likelihood of turtles dispersing into the construction zone is considered remote, these measures would still be necessary to prevent inadvertent take.

IMPACT IV-1: The proposed project could have an adverse effect on special-status species.

The following measures were recommended in the BRR by the applicant's consulting biologist, and would serve to mitigate potentially significant impacts on special-status bird species to a level of less-than-significant. Mitigation to prevent possible inadvertent loss of western pond turtles during construction is also recommended below based on two measures the BRR by the applicant's consulting biologist, which would mitigate potentially significant impacts to a less-than-significant level.

Mitigation Measure IV-1A. If vegetation removal and grading commences between February 15 and August 31, a qualified wildlife biologist shall conduct a preconstruction survey for nesting birds. If nests of either migratory birds or birds of prey are detected on or adjacent to the site, a no-disturbance buffer (generally 50 feet for passerines and 300 feet for raptors) in which no new site disturbance is permitted shall be observed until August 15, or the qualified biologist determines that the young are foraging independently. The size of the

no-disturbance buffer shall be determined by a qualified wildlife biologist, and shall take in to account local site features and existing sources of potential disturbance. If more than 15 days elapses between the survey and site disturbance, the survey shall be repeated.

Mitigation Measure IV-1B. A preconstruction survey for burrowing owls shall be conducted by a qualified biologist not more than 30 days prior to the start of construction. If no owls or sign are detected during this survey, no further burrowing owl mitigation would be necessary. If burrowing owls or sign of burrowing owls is detected, mitigation consistent with the CDFG Staff Report[8] shall be provided.

Mitigation Measure IV-1C. Measures shall be taken to prevent possible inadvertent loss of western pond turtles during construction. These shall consist of the following:

- A preconstruction survey for western pond turtles shall be conducted by a qualified biologist not more than 48 hours prior to the commencement of construction. If western pond turtles are detected which could be disturbed during construction, they shall be relocated to a suitable reach of Walker Creek upstream or downstream of the project site.
- Prior to construction and after completion of the preconstruction survey above, silt fencing or equivalent shall be installed along the top of bank to prevent the movement of western pond turtles from the riparian corridor into the construction zone. This fencing shall be in addition to any fencing installed as part of best management practices for erosion control purposes. The location of the fencing shall be determined by the qualified biologist, shall be inspected weekly by the construction foreman and maintained intact at all times during construction, and shall be removed once grading and heavy off-road equipment operation is complete.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

No sensitive natural community types occur on the site, which is dominated by a cover of non-native grasslands and ornamental landscaping. The mixed riparian woodland along Walker Canyon Creek does contain sensitive habitat regulated under Section 1602 of the State Fish and Game Code. Major grading and construction related to the project would be restricted away from the riparian habitat. Implementation of the Creek Preservation and Enhancement Plan (CPEP) prepared by the applicant's consulting biologist would result in temporary disturbance along the southern edge of the riparian corridor during installation of plantings and seeding, but this would be relatively minor with no heavy equipment operation anticipated, and ultimately would serve to expand and enhance the existing habitat along the Walker Canyon Creek corridor. The BRR included mitigation recommending protection of riparian trees and shrubs. With implementation of the proposed CPEP and Best Management Practices to avoid possible indirect impacts on aquatic habitat, as provided under Section IX, Hydrology and Water Quality, potential impacts on sensitive natural communities would be considered less than significant. No additional mitigation measures are required.

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[8] California Department of Fish and Game, 1995, *Staff Report on Burrowing Owl Mitigation*, Unpublished report. 8 pp.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No direct impacts on jurisdictional waters are anticipated as part of the project. Potential indirect effects could degrade the existing habit functions and values of jurisdictional waters, resulting from accidental spills, contamination from fertilizers and other urban pollutants, and increased runoff volumes and possible erosion in waters of the U.S. and state. Creation of impervious surfaces tends to magnify the volume of runoff and potential for urban pollutants, with perhaps the greatest potential damage resulting from sedimentation during the construction phase of a project and from new non-point discharge of automobile by-products, fertilizers, and herbicides. However, implementation of adequate erosion control measures, and incorporation of the numerous storm water runoff treatment methods would serve to address potential indirect impacts on wetlands and water quality. Additional discussion of the potential indirect impacts on wetlands and water quality are provided under Section IX. Hydrology and Water Quality. No additional mitigation measures are required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The site provides suitable habitat for common wildlife species associated with grasslands, landscaped yards, and riparian corridors in the vicinity. Due to the extent of residential development to the north of the site, proposed development would not substantially interfere with the movement of wildlife species or impede use of native wildlife nurseries, as the Walker Canyon Creek corridor would be preserved and enhanced as part of the proposed CPEP and undeveloped land to the south and west would remain available for wildlife movement. Some species which utilize the non-native grasslands and ornamental landscaping on the site could be displaced or eliminated from the site, but suitable habitat remains in the surrounding area and no significant impacts on special-status species or essential habitat for these species is anticipated. Equipment operation, construction-generated noise, and increased human activity on the site, both during construction and after, could result in disturbance to species using the adjacent undeveloped lands. But preconstruction surveys recommended in Mitigation Measure IV-1A and IV-1B would serve to identify and avoid any sensitive nesting habitat in the immediate vicinity until young have fledged. And implementation of Mitigation Measure IV-1C would ensure no inadvertent take of western pond turtles during construction. Wildlife are used to some level of human activity in the vicinity, given the extent of existing development to the north and east, and eventually wildlife would become acclimated to the developed condition of the site as well. Potential impacts on wildlife habitat and movement opportunities is considered less-than-significant. No mitigation measures are required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Project implementation would not significantly conflict with any local policies or ordinances protecting biological resource, such as the County's tree preservation or creek protection ordinance. Wetlands and riparian habitat along Walker Canyon Creek would not be adversely affected, and would be enhanced as part of the proposed CPEP. As indicated on the tentative map in Figure 2-3, a 50-foot creek structure setback is required to protect the creek corridor. The BRR included mitigation measures calling for preparation of a creek preservation and enhancement plan to provide

consistency with the North Gate Specific Plan, and securing a tree permit for the proposed tree removal. Measures recommended to mitigate potential impacts on special-status species would serve to address potential conflicts with County policies related to protection of sensitive biological resources.

As described in the arborist evaluation for the project, a total of 66 trees occur on the site. An estimated 19 trees are to be removed as part of the proposed project. Of the 19 to be removed, nine are remnant black walnut stump sprouts, five are almond trees in poor or very poor condition (tree #776 along the creek corridor is actually dead), four are young redwoods with trunk diameters of from 6 to 7 inches, and one is a planted California pepper tree.

Although most of the trees on the site are to be retained as part of the project, it appears that a tree removal permit would be required pursuant to Section 3-8.03 of the Walnut Creek Tree Preservation Ordinance and Policy 3 of the North Gate Specific Plan. Of the 19 trees to be removed, a total of nine have trunk diameters of nine inches or greater meeting the definition of "tree" under the Walnut Creek Tree Preservation Ordinance. These consist of seven black walnut stump sprouts, three almonds (one of which is dead), and one California pepper. Because of the potential conflict with the City's Tree Preservation Ordinance, this would be considered a potentially significant impact, which would be mitigated to a level of less-than-significant when compliance is met through the permit application process.

IMPACT IV-2: The proposed project may be in conflict with the Walnut Creek Tree Preservation Ordinance.

The following measure would serve to mitigate potentially significant impacts on tree resources and need for compliance with the Walnut Creek Tree Preservation Ordinance to a level of less-than-significant.

Mitigation Measure IV-2: The project shall comply with the City of Walnut Creek Tree Preservation Ordinance (Section 3.8 Preservation of Trees on Private Property), consistent with the North Gate Specific Plan. This shall include preparation of a Tree Replacement Program and Tree Preservation Guidelines as defined below:

- Tree Preservation Guidelines shall be prepared and implemented during construction activities to avoid injury of trees to be preserved during construction. This shall include establishment of tree protection zones at the drip line, or as modified under the direction of a certified arborist. Excavation, grading, construction, and storage of materials shall be avoided within this zone. Exclusion fencing shall be established around the tree protection zone. Tree protection methods during construction and any modifications to tree protection zones shall be overseen by a qualified arborist.
- A Tree Replacement Program shall be prepared by the applicant, and implemented as part of the mitigation program for the project. Replacement trees shall be provided at a minimum 3:1 ratio, shall be installed along the edge of the riparian corridor as part of the CPEP where feasible, and shall be maintained for a minimum of five years to ensure their successful establishment. Replacement tree plantings shall be irrigated for a minimum of two years following initial planting to ensure their survival, and shall be replaced on an annual basis to meet success criteria specified in the Tree Replacement Program.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans encompassing the site and vicinity, so no impacts are anticipated. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
V. **CULTURAL RESOURCES** — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		√		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		√		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				√
d) Disturb any human remains, including those interred outside of formal cemeteries?		√		

Setting:

A Phase I Cultural Resources Evaluation of the proposed project site was conducted in early 2006 (Archeo-Tec, 2006). This evaluation included a formal request to the Native American Heritage Commission to search its "Sacred Lands" file. Based on the results of the archival review and surface reconnaissance, there is no clear evidence that prehistoric or historic cultural materials of significance exist within the project site. The record search of the "Sacred Lands" file failed to indicate the presence of Native American cultural resources in the immediate project area. In addition, eleven previous studies performed in the vicinity of the project site were reviewed and did not reveal any prehistoric remains within one-half mile of the site. However, no subsurface investigations have been performed at the project site, and the project site is in an environment that would have been hospitable for aboriginal occupation (Archeo-Tec, 2006).

Discussion:

a & b) Cause a substantial adverse change in the significance of a historical or archeological resource as defined in §15064.5?

As stated in the Setting section above, there are no known historical or archeological resources on the project site. However, because no subsurface studies were undertaken, the potential exists to encounter historic or prehistoric artifacts, features or cultural resources during site preparation and improvement activities; e.g., grading, trenching, etc.

This is a standard condition of approval that is placed upon the application. Therefore, the impact on cultural resources is considered a less-than-significant impact.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

There are no known unique paleontological or geologic features at the proposed project site. (Refer to Section VI. Geology and Soils, for more information.) There would be no impact.

d) Disturb any human remains, including those interred outside of formal cemeteries?

The 2006 Phase I Cultural Resources Evaluation did not reveal that human remains exist at the project site. However, California Health and Safety Code 7050.5 states that if human remains are discovered during construction, no further disturbance shall occur until the county coroner has made findings as to the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98. If the coroner determines that the remains may be Native American, a representative of the Native American Heritage Commission (NAHC) would be consulted as to which tribe has jurisdiction and what the disposition of the remains should be.

IMPACT: V-1: The potential exists during site preparation that prehistoric, historic, cultural resources or human remains could be uncovered.

Implementation of the following mitigation measures would reduce the impact to less than significant.

Mitigation Measure V-1A: If historic or prehistoric artifacts, features, or cultural resources are encountered during construction of the proposed project, all work shall be halted in the immediate vicinity of the find for purposes of evaluation by a qualified professional archaeologist approved by the Contra Costa County Department of Conservation and Development.

Mitigation Measure V-1B: The County Coroner shall be notified if human remains are uncovered during construction. If it is determined that the remains are Native American, a representative of the NAHC shall be consulted.

SOURCE OF INFORMATION

Archeo-Tec. 2006. Report on Findings of the Phase I Cultural Resources Evaluation of a 9.77-acre parcel of land (APN # 138-180-0022) located at 1125 North Gate Road, Walnut Creek, Contra Costa County, California, March 31.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VI. **GEOLOGY AND SOILS** — Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			√	
ii) Strong seismic ground shaking?			√	
iii) Seismic-related ground failure, including liquefaction?				√
iv) Landslides?			√	
b) Result in substantial soil erosion or the loss of topsoil?			√	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			√	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?		√		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				√

Setting:

The project site is located approximately 1300 feet southwest of the active, north/south-trending Concord fault. A fault is considered active if it has experienced earthquakes during Holocene time (about the last 11,000 years). The Maximum Moment Earthquake along the Concord fault is magnitude 6.9. The western boundary of the Alquist-Priolo zone associated with the Concord fault passes through the remainder parcel (Lot 7) of the proposed project (Joyce Associates, 2007).

Several geotechnical investigations have been conducted at the project site. The reports of these investigations include the following:

- Fault Hazard Report prepared by Joyce Associates, dated December 12, 2007.
- Geotechnical Study prepared by Jensen-Van Lienden Associates, dated December 29, 2006.
- Supplemental Geotechnical Recommendations prepared by Jensen-Van Lienden Associates, dated January 8, 2008.
- Geologic Peer Review prepared by Darwin Myers Associates, dated September 24, 2007.
- Geologic Peer Review, Alquist-Priolo Report & CEQA Section prepared by Darwin Myers Associates, dated December 24, 2007.

Discussion:

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Ground rupture is most likely to occur along previously active fault traces. The risk of ground rupture in areas where previous faulting has not occurred is considered to be very low. The Joyce Associates investigation concluded that in-situ traces of active faults are not present within the project site, and, therefore, the risk of fault-related ground rupture within the site is very low (Joyce Associates, 2007).

A peer review or the Joyce Associates investigation found it to be adequate, and that no further evaluation of the hazard posed by the Concord fault is required (Darwin Myers Associates, 2007). The impact of fault rupture is considered less than significant.

ii) Strong seismic ground shaking?

The project site is located in a Seismic Zone 4. The Concord fault has a Maximum Moment Earthquake magnitude of 6.9. An earthquake of this magnitude along this fault would create strong seismic ground shaking at the project site. Ground shaking would also occur from lesser-magnitude earthquakes along the Concord fault or earthquakes along other faults in the Bay Area (e.g., the San Andreas or Hayward faults). The project site is in an area rated as moderate damage susceptibility in the Contra Costa County General Plan (Contra Costa County Community Development Department, 1996, Figure 10-4).

The risk of structural damage from ground shaking is controlled through building codes and Contra Costa County ordinances. The applicant's geotechnical engineering consultant presents current Uniform Building Code seismic design parameters (Jensen-Van Lienden Associates, 2006). In addition, the California Building Code (CBC) requires use of seismic parameters for structural engineering analysis for buildings that are based on seismic zones and soil profile types (CBC 2007, Section 1613). The residences in the proposed project would probably be constructed with wood frames that perform relatively well during seismic ground shaking when properly designed.

Compliance with building codes would keep risks within generally accepted limits, and the impacts of strong seismic ground shaking are considered less than significant.

iii) Seismic-related ground failure, including liquefaction?

The project site is located near the boundary between areas rated as generally low and generally moderate to low liquefaction potential in the Contra Costa County General Plan (Contra Costa County Community Development Department, 1996, Figure 10-5). The project site is underlain by very stiff to hard silty clay soil and bedrock. Liquefaction occurs in loose sandy soils that lie below the water table. No loose sandy soils were encountered during the geotechnical investigation of the site. The chances of liquefaction at the project site are extremely remote (Jensen-Van Lienden Associates, 2006). Seismic-related landslides would be prevented through construction of cuts and fills with proper slide slopes. There would be no impact resulting from seismic-related ground failure, including liquefaction.

iv) Landslides?

The project site slopes down from elevation 310 at the existing development pads along the southern site-boundary to elevation 250 at the top of the Walker Canyon Creek bank. The average slope is approximately seven percent, and there are no localized steep slopes. No landslides were observed on the project site during a site reconnaissance in late 2007 (Joyce Associates, 2007) or during the geotechnical test borings drilled in December 2006 (Jensen-Van Lienden Associates, 2006). The applicant's geotechnical engineering consultant recommends cut and fill slopes that become flatter with increasing height (Jensen-Van Lienden Associates, 2006). The consultant also recommends sub-drains under some of the deeper fills. The Vesting Tentative Map for the proposed project shows that the steepest slopes would be 3:1 (horizontal to vertical) with flatter slopes around the perimeter of the project site (Aliquot Associates, 2008).

The Walker Canyon Creek channel on the north side of the project site is incised. The channel banks are approximately 15 deep with 2:1 (horizontal to vertical) bank slopes. Existing erosion and sloughing is relatively minor and appears to be confined to shallow sloughing of the steeper, eroded channel banks (Joyce Associates, 2007). The creek structure setback shown on the Vesting Tentative Map for the proposed project would protect houses and other infrastructure from creek bank erosion (Aliquot Associates, 2008). The potential impact from landslides is considered less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Construction of the proposed project would result in loss of topsoil because grading would be required to form building pads for the new houses. The geotechnical report for the proposed project recommends removing the native grasses and weeds before proceeding with grading. These shallow-rooted plants would require removal of no more than 6 inches of soil. This mixture of soil, grasses and weeds would be useless and would be disposed of off site. There would be no loss of valuable topsoil.

A Storm Water Pollution Prevention Plan (SWPPP) and an Erosion Control Plan are requirements for projects requiring grading permits in Contra Costa County. The SWPPP identifies the Best Management Practices that are most appropriate for the site, and the Erosion Control Plan provides details of the erosion control measures to prevent soil erosion and off-site migration of sediment-

laden runoff during construction. With these control measures in place, the impacts from soil erosion and loss of topsoil are considered less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Refer to discussion of Item a) above. The project site is underlain by very stiff to hard silty clay soil and bedrock. With these soil and rock conditions, combined with properly engineered building pads and cut and fills, on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse should not occur. The impact from these risks is considered less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Due to the high clay content, all of the soils and some of the bedrock at the project site are moderately to highly expansive. The applicant's geotechnical engineering consultant has made preliminary recommendations for structural foundations for houses and retaining walls to control the effects of expansive soil. These recommendations include using drilled piers and grade beams or constructing slabs-on-grade on mats of non-expansive engineered fill. Similar recommendations should be developed to avoid heaving of roadway pavements and driveways. If these recommendations are followed, the impact of expansive soils is considered less than significant.

IMPACT VI-1: Expansive soils could cause damage to foundations and the roadways/ driveways if not properly engineered.

Mitigation Measure VI-1: Construction of house foundations, streets and driveways, and other structures shall comply with the recommendations of the applicant's geotechnical engineering consultants (Jensen-Van Lienden Associates, Inc. December 29, 2006 report). These recommendations include the following:

- Houses with crawl spaces shall be supported with drilled piers and grade beams designed to resist uplift pressure.
- Houses with slabs-on-grade shall be supported on mats of non-expansive engineered fill.
- Garage floor slabs, sidewalks and outdoor slabs (e.g., patios) where some cracking can be accepted could be designed to be stronger (e.g., with more steel reinforcing bars) and must be isolated from house foundations. If cracking is unacceptable, these slabs shall be supported on mats of non-expansive engineered fill.
- Applicant shall provide recommendations by a registered geotechnical engineering consultant for proper foundation and support of asphalt-concrete streets.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed project would be served by a sanitary sewer system that would convey wastewater to a municipal wastewater treatment plant for treatment and disposal. There would be no septic tanks or alternative wastewater disposal systems at the proposed project, so there would be no impact.

SOURCES OF INFORMATION

Aliquot Associates. 2010. *Vesting Tenting Map, Subdivision 9167 – 1125 North Gate Road,* October 6.

Contra Costa County Community Development Department. 1996. *Contra Costa County General Plan, 1995-2010,* July.

Darwin Myers Associates. 2007. *Geologic Peer Review, SD079167/RZ073195, APN 138-180-002/1125 North Gate Road, Walnut Creek area, Contra Costa County,* September 24.

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		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VII.	**GREENHOUSE GAS EMISSIONS** — Would the project:				
	a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			√	
	b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				√

Setting:

On June 2, 2010, the Bay Area Air Quality Management District (BAAQMD) Board approved thresholds of significance for land development projects and plans; e.g., General Plans and Climate Action Plans. The BAAQMD thresholds are a response to the California statewide mandate (AB 32) to reduce GHG emissions in year 2020 to the 1990 level. The analysis of Greenhouse Gas Emissions is now a required topic to be addressed in all CEQA documents.

Discussion:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Future land use development to create single-family houses or buildable lots with infrastructure entails energy for grading, paving, building construction, finish work, and painting. The operation of houses entails using electricity for lighting, cooling, and appliances; natural gas for space heating; and fuel for transportation for home/work commute, home-based shopping, and other travel. Other general characteristics of land use development include uses of water, and generation of wastewater and solid waste. Greenhouse gases (GHGs) emitted from these activities are termed land use-driven GHG emissions. The proposed project creates seven additional lots for single-family residences. Based upon traffic projections (10 trips/household/day), approximately 70 additional vehicle trips would be generated by the subdivision.

As a part of the GHG threshold criteria and based upon BAAQMD modeling, it was determined that various land uses which may exceed a "screening size level" would likely have GHG emissions that the BAAQMD deems significant. For single-family residential development projects, the threshold level is 56 dwelling units, therefore the potential development of seven dwelling units as a result of the proposed subdivision is considered a less-than-significant impact based upon BAAQMD's threshold criteria (BAAQMD, 2010).

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

The proposed project would not conflict or interfere with other plans for climate action of the state, regional, and local planning agencies; e.g., the BAAQMD or California Air Resources Board. Contra Costa County's Municipal Climate Action Plan addresses GHG emissions from municipal operations, but not land use-driven GHG emissions (Contra Costa County, 2008).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. **HAZARDS AND HAZARDOUS MATERIALS** — Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			√	
b) 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?			√	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				√

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				√
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				√
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				√
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				√
h) 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?			√	

Setting:

The 9.98-acre project site is undeveloped except for two residences on the remainder lot (#7) located on the south side of the site. The undeveloped portion of the property is covered with wild grasses and weeds and scattered remnants of orchard trees. The site is not located near a hazardous land use as shown on Figure 10-9a of the Contra Costa County General Plan (CCCCDD, 1996). There are no known underground storage tanks on the site. There are no known petroleum or natural gas pipelines on or near the site, and no pipelines appear near the site on Figure 10-9b of the Contra Costa County General Plan (CCCCDD, 1996). There is a low-pressure Pacific Gas and Electric gas main along North Gate Road at the entrance to the project site.

Crops requiring use of herbicides and/or pesticides have never been grown on the site. Cattle grazing may have occurred in the past when the property was part of a larger land tract. A Phase I Environmental Assessment for hazardous materials has not been prepared for the site.

Discussion:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No hazardous materials would be routinely used at the proposed project other than common household hazardous wastes (aerosol sprays, paint, oil, solvents, pesticides, weed killers, etc.). The Central Contra Costa Solid Waste Authority has established a Household Hazardous Waste Collection Facility in Martinez where residents can dispose of their household hazardous wastes. Drop inlets for the storm drain system would be labeled with "Do Not Dump – Drains to Creek" signs to discourage people from dumping household hazardous wastes into the drop inlets. Assuming the public behaves responsibly, the proposed project would not create a significant hazard to the public or the environment, and the impacts would be less than significant.

During construction of the houses, hazardous materials would be transported to the project site. Construction activities typically involve the use of potentially toxic substances such as paints, fuels, and solvents. People living in neighborhoods near the project site could be exposed to these materials as trucks move through their neighborhoods during construction at the project site. Construction activities would be subject to federal, state, and local laws and requirements designed to minimize and avoid the potential health and safety risks associated with hazardous materials. Furthermore, a Storm Water Pollution Prevention Plan (SWPPP) would be required that would describe methods to protect against the accidental release of construction-related chemicals into runoff from the site (refer to Section VIII: Hydrology and Water Quality). Given these controls, impacts related to the transport, use, or storage of hazardous materials are considered to be less than significant.

b) 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?

Refer to the discussion of Item a) above. Proper transfer and storage should prevent accidents that would release any hazardous materials. If such materials are accidentally released, corrective actions would be conducted in accordance with requirements of the Contra Costa County Environmental Health Department. Implementation of these measures would reduce impacts to a less-than-significant level.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The front of Northgate High School, the nearest school to the project site, is located approximately 2300 feet, or 0.4 mile, west of the western boundary of the project site. There would be no impact.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The proposed project site is not included on lists of hazardous materials sites compiled pursuant to any government code. There would be no impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The project site is not located within the boundaries of an airport land use plan. The nearest airport is Buchanan Field, which is located approximately 6.5 miles north of the project site (CCCCDD, 1996, Figure 5-5). There would be no hazard to people residing in the project area. There would be no impact.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The proposed project is not located within the vicinity of a private airstrip. There would be no impact.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project would not impair or interfere with an adopted emergency response or evacuation plan. There would be no impact.

h) 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?

The project site is in a semi-rural residential area with equestrian facilities to the east and residential subdivisions on the north and southeast sides of the site. The Pine Creek detention basin to the west of the site is an open area with patches of grass and weeds. Grass covered grazing land exists on the south side of the site. The Lime Ridge and Shell Ridge open spaces, Foothill Regional Park and Castle Rock Recreational Area are all located in the vicinity. There is ample fuel for wildfires to occur in the area.

However, vegetation clearances would be required at the proposed project site in accordance with the International Wildland-Urban Interface Code (Leach, 2010). The houses in the proposed project should be constructed with Class A roofs; chimneys equipped with spark arresters; eave and vent openings protected with fire-resistant screening; and decks with ignition-resistant materials. All future house plans will be reviewed by the Fire District to comply with the fire code requirements. In addition, CCCFD's fire station on Walnut Avenue near Comanche Court has a Type III engine—which is designed for fighting wild fires and can travel cross-country—as well as a Type I engine to help in fighting wildland fires. (Also refer to Section XIV. Public Services.) With these defense measures, the chance of wildfires in the vicinity of the project site would be reduced and the impact is considered less than significant.

SOURCES OF INFORMATION

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Leach, Ted, Fire Inspector, 2010. Contra Costa County Fire Protection District. Personal communication with Robert Mills, Mills Associates, November 4.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. **HYDROLOGY AND WATER QUALITY** — Would the project:				
a) Violate any water quality standards or waste discharge requirements?				√
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			√	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			√	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			√	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			√	
f) Otherwise substantially degrade water quality?			√	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				√
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				√

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				√
j) Inundation by seiche, tsunami, or mudflow?			√	

Setting:

The 9.98-acre project site slopes down from elevation 310 at the existing house pads along the southern boundary to elevation 244 at the top of the bank of Walker Canyon Creek at the far northwestern point of the site. The average slope of the property is approximately 7 percent, and there are no localized steep slopes. The site is undeveloped except for two residences. There is a pond to the east of the two existing houses. The average annual rainfall is approximately 17 inches. Existing site drainage primarily consists of sheet flow across the vacant land northward to Walker Canyon Creek.

The Pine Creek detention basin, owned and maintained by the Contra Costa County Flood Control and Water Conservation District (CCCFC&WCD), abuts the western boundary of the project site. Federal Emergency Management Agency Flood Insurance Rate Map Panel Number 06013C0315F shows that the project site is not located within a 100-year flood plain (Zone A) or Special Flood Hazard Area. There is no 100-year flood plain shown along Walker Canyon Creek. A Zone A flood plain is shown along Arroyo Del Cerro Creek located approximately 1,000 feet south of the southern boundary of the project site. A Zone A flood plain also exists at the Pine Creek detention basin. Neither of these Zone A flood plains affect the project site.

Discussion:

a) Violate any water quality standards or waste discharge requirements?

The wastewater (i.e., sewage) from the proposed project would be collected in sanitary sewers and conveyed to the Central Contra Costa Sanitary District for proper treatment and disposal (refer to Section XVII. Utilities and Service Systems of this checklist). Storm water runoff from the project would be collected and treated in conformance with a Storm Water Control Plan (SWCP) prepared by the applicant's civil engineer (Aliquot Associates, 2010). This plan was prepared to comply with the C.3 requirements of the Contra Costa Clean Water Program using the fourth edition of the Stormwater C.3 Guidebook. The C.3 requirements were developed to comply with the mandates of the San Francisco Bay Regional Water Quality Control Board. Storm water runoff from impervious areas would be collected and treated to remove pollutants in either bio-retention planters or roadside grassy swales. The bio-retention planters would discharge to Walker Canyon Creek. The plants and temporary storage in these facilities would retain the runoff so that the rate of discharge to Walker Canyon Creek would be no greater than the rate from the existing undeveloped site. Pervious areas would be considered self-retaining areas. Since the SWCP satisfies the C.3 requirements there would be no violations of water quality standards or waste discharge requirements; thus, no impact would occur.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Since the proposed project would increase the impervious surfaces on site, recharge of the local groundwater table from the site itself may be reduced. However, the geotechnical engineering investigation for the proposed project (Jensen-Van Lienden Associates, Inc. 2006) revealed that the native soils at the site have fairly high clay content that makes them relatively impervious and limits the existing recharge capacity. In addition, the storm drain system for the proposed project that collects runoff from the impervious surfaces would convey runoff to bio-retention planters prior to discharge to Walker Canyon Creek that flows along the north side of the project site. The planters are designed to provide limited infiltration to the ground. The creek is a concentrated, natural recharge feature as water percolates down through the creek banks and bottom. Therefore, it is unlikely that the reduced recharge created by the proposed project would significantly deplete local groundwater supplies so that production of existing nearby wells (if any) would be adversely impacted. The impact is considered less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

The proposed project would not substantially alter the existing drainage pattern of the site or area. Most of the existing project site drains via sheet flow over the ground to Walker Canyon Creek that flows along the north side of the site. The storm drain system for the proposed project would also discharge to Walker Canyon Creek, but the discharge would be at a single location. The discharge would be through an existing outlet that is lined with rock rip-rap. The rip-rap would dissipate energy, which should prevent increased erosion of the creek banks at the outlet. Since this outfall is an existing structure, the proposed project would not result in any disturbance within the banks of Walker Canyon Creek, and a Streambed Alteration Agreement pursuant to Section 1600 et seq. of the Fish and Game Code would not be required. The course of the creek would not be altered.

The applicant's SWCP is designed to limit the rate of surface runoff to the rate that exists from the undeveloped property. In addition, a Storm Water Pollution Prevention Plan (SWPPP) and an Erosion Control Plan will be prepared and approved prior to issuance of a grading permit. The SWPPP identifies the best management practices that are most appropriate for the site, and the Erosion Control Plan provides details of the erosion control measures to be applied during construction and maintained throughout the first winter rainy season. There should be no substantial erosion or siltation during or following construction, and the impact would be less than significant.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Refer to discussion of Item c) above. The proposed project would create impervious surfaces including roofs, driveways, and the access road. The storm drain system designed for the proposed project would be sized to prevent on-site flooding from a 10-year storm (i.e., a storm that has a 10 percent of occurring each year). Storm runoff from the project would drain to Walker Canyon Creek.

The applicant's SWCP is designed to limit the rate of storm runoff from the proposed project to no more than the rate from the undeveloped property. However, due to the increase of impervious surfaces, the volume of surface runoff would increase and would be spread out over time.

Walker Canyon Creek flows into Pine Creek approximately 1,200 feet downstream from the northwest corner of the project site. The Pine Creek detention basin, located immediately west of the project site and just upstream from the creek juncture, controls the flow in Pine Creek downstream from that point so the rate of flow in the creek will not exceed the creek's capacity. Even though the proposed project would increase the volume of runoff reaching Walker Canyon Creek, the discharge to the creek would extend over a longer period of time such that the rate of flow in the creek would not increase above pre-project conditions. Since the capacity of the downstream storm water drainage system is based on rates of flow not volumes, the capacity would not be exceeded as a result of implementing the proposed project. Therefore, downstream flooding would not be increased, and the impact of the proposed project is considered less than significant.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Refer to discussion in Items a), c) and d) above. The eastern portion of the site access road would drain into an existing storm drain that currently drains the road. Although the proposed road would be paved, the small increase in flow would not exceed the capacity of the existing storm drain. The impact of the proposed project is considered less than significant. For further discussion on water quality impacts, refer to Item f).

f) Otherwise substantially degrade water quality?

The SWCP for the proposed project is based on the Contra Costa Clean Water Program Stormwater C.3 Guidebook, Fourth Edition. The SWCP proposes Integrated Management Practices (IMPs) consisting of bio-swales and bio-retention planters. These IMPs are sized according to the C.3 Guidebook and would provide for pollutant removal as the storm water runoff flows through the grasses, soil and rock and percolates into the ground. When the ground under the IMPs becomes saturated and cannot accept any more percolation, the runoff would flow through outlet pipes to Walker Canyon Creek. Since the IMPs are sized according to the *C.3 Guidebook*, the proposed project would not substantially degrade water quality, and the impact is considered less than significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Federal Emergency Management Agency Flood Insurance Rate Map Panel Number 06013C0315F shows that the project site is not located within a 100-year flood plain (Zone A) or Special Flood Hazard Area. No impact would occur.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Refer to discussion in Item g) above. No impact would occur.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Refer to the discussion in Item g) above. The project site is not located behind a levee or below a dam. There would be no impact.

j) Inundation by seiche, tsunami, or mudflow?

The project site is not located near a large body of water, and it is over 200 feet above sea level. Suisun Bay is more than 10 miles north of the site. The proposed project would not be impacted by tsunamis generated by earthquakes.

A seiche is the occasional oscillation of water above and below the mean surface level of a lake or land-locked sea. The project site is not on the shores of a lake or sea.

The land at the project site slopes down to the north at approximately 7 percent. The site would be graded to form building pads for the new houses. With proper construction of the cuts and fills (including keys and sub-drains in some locations) to form the pads, and the installation of the storm drain system to convey runoff to Walker Canyon Creek, there would be very little chance of mudflows occurring either on or off the project site. The impacts from a seiche, tsunami, or mudflow are considered less than significant.

SOURCES OF INFORMATION

Aliquot Associates, Inc. 2010. Vesting Tenting Map, Subdivision 9167 – 1125 North Gate Road, October 6.

Aliquot Associates, Inc. 2010. Stormwater Control Plan, revised October 8.

California Department of Fish and Game. 2006. Letter to Mr. Will Nelson, Contra Costa County Community Development Department, February 21.

Contra Costa County Public Works Department. 2007. Interoffice Memo to Rose Marie Pietras, Contra Costa County Community Development Department, September 13.

Jensen-Van Lienden Associates, Inc. 2006. Geotechnical Study, Proposed 8-Lot Subdivision, 1125 North Gate Road, Contra Costa County, CA, December 29.

Wong, Robert, Aliquot Associates, Inc. 2010. Personal communication with Robert Mills, Mills Associates, September 9.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X. **LAND USE AND PLANNING** — Would the project:				
a) Physically divide an established community?				√
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				√
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				√

Setting:

The property is currently designated in the North Gate Specific Plan and County General Plan as Single Family – Very Low Density, and zoned General Agriculture A-2 Zoning District. The applicant is requesting a rezoning from the A-2 Zoning District to R-40 (Single-family Residential) Zoning District. At the present time two existing houses are located on the property at the southern end of the project site. The remaining acreage is undeveloped. The property is essentially a "flag" lot with a long driveway extending from North Gate Road westward/northwestward where it culminates at the two existing houses. Implementation of the proposed project would improve the existing driveway to comply with County private road standards.

Discussion:

a) Physically divide an established community?

Residential development occurs to the north, east and southeast of the project site. Open space occurs to the west/southwest of the project site. The proposed project is contained within the existing property and does not divide adjacent residential communities. The proposed development would essentially "fill in" the remaining undeveloped portion of the property.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The project site is designated in the North Gate Specific Plan/General Plan as Single Family Very Low density. This designation requires that slopes not exceed 15 percent; the project site has a slope of 7 percent. As called for in the Specific Plan, the Very Low-density designation requires a minimum lot size of 40,000 square feet. The applicant is requesting a rezoning from A-2 to the R-40 zoning district, with a minimum 40,000 square foot lot size. The Very Low-density designation

allows for a maximum of .09 du/net acre. Based upon a net acreage of 8.9 acres, the overall density of the project is consistent with the land use designation's density requirement.

The proposed project is consistent with the Specific Plan regarding 60-foot setbacks for dwellings when the development abuts open space lands. The tentative map depicts this setback along the west and southwest property line, as well as the 50-foot minimum creek setback that is also required of the Specific Plan and County ordinance (Title 914-14.012). The County ordinance requires varied setbacks to creeks based upon creek depth. The 50-foot setback is shown on Figure 2-4 and is based upon the depth of Walker Canyon Creek. Project plans also reflect the widening of North Gate Road along the project frontage as required of new projects in the Specific Plan.

The project application is for the subdivision of the property and does not include building plans. At such time house plans are submitted, these, as well as landscape and fencing plans, would be reviewed for compliance with the Development Regulations contained in the North Gate Specific Plan.

The proposed project is consistent with the North Gate Specific Plan; therefore, no impacts are anticipated.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans encompassing the site and vicinity. No impacts are anticipated.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XI.	**MINERAL RESOURCES** — Would the project:				
	a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				√
	b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				√

Setting:

There are no known mineral resources on or under the proposed project site. According to the Contra Costa County General Plan, the nearest mineral resource of value is a diabase aggregate deposit located approximately 1.3 miles to the east of the project site (Contra Costa County, 1996, Figure 8-4).

Discussion:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The proposed project would not result in loss of a valued mineral resource, thus no impact would occur.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The availability of the locally important mineral recovery site would not be lost. Therefore, the proposed project would have no impact.

SOURCE OF INFORMATION

Contra Costa County Community Development Department. 1996. *Contra Costa County General Plan, 1995-2010,* July.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XII.	**NOISE** — Would the project:				
	a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			√	
	b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			√	
	c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			√	
	d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			√	
	e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			√	

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				√

Setting:

Existing land uses surrounding the project site include residential housing, equestrian facilities, and the Pine Creek detention basin. Existing noise levels are common to residential neighborhoods. Noise is currently generated by vehicular traffic, primarily from North Gate Road, the main thoroughfare in the area. Figure 11-5J of the Contra Costa County General Plan (2005) shows that the proposed project is located outside a 60 dBA noise contour.

Discussion:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Activities at the new houses in the proposed development are not expected to expose persons to, or generate, noise levels in excess of the Community Noise Exposure Levels shown on Figure 11-6 of the Contra Costa General Plan (2005). Figure 11-6 shows that levels of 60 dB or less are normally acceptable and 70 dB or less are conditionally acceptable. Types and levels of noise generated from the houses in the proposed project would be similar to noise levels from the existing residential developments in the area. Sources would include vehicular traffic, barking dogs, landscape-maintenance equipment, electronic amplification systems, and parties. The proposed project would be subject to the guidelines contained in the Noise Element of the County General Plan. The Plan calls for outdoor noise levels in new residential development to not exceed a DNL of 60dB and an indoor noise level not to exceed a DNL (day/night sound level) of 45 dB. The noise impacts generated by the proposed project are considered less than significant.

b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

The proposed project would not generate any ground-borne vibration or noise. There would be ground-borne vibrations from earthquakes that are not project-related (refer to Section VI. Geology and Soils). Refer to discussion of Item d) regarding noise impacts caused by ground-borne vibrations from mechanical equipment during construction of the project. The ground-borne vibration or noise generated by the proposed project is considered less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The increase in traffic generated by the proposed project, as well as normal residential activities other than vehicular traffic, would increase noise levels in the vicinity of the project site above existing ambient noise levels without the project. However, these increases would not generate noise levels that would exceed the levels allowed by the Contra Costa County General Plan. The increase in ambient noise levels is considered less than significant.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

A temporary increase in ambient noise levels would occur during construction of the proposed project. Trucks and grading equipment, air compressors, use of hammers and drills, etc., would generate noise that would be audible at nearby residences. Equipment typically used during construction generates noise levels above 60 dB. Contra Costa County does not consider construction noise to be a significant impact if:

1. Construction would not require major noise-producing equipment such as pile drivers or major noise-producing processes such as blasting.

2. The duration of the construction period would be relatively short.

3. There are no sensitive receptors (such as schools or libraries) in close proximity.

4. There are no biological resources in the area that would be especially sensitive to noise, such as the nesting sites of listed raptors.

The County's standard practice regarding small-scale construction projects that meet the four conditions listed above is to implement conditions of approval designed to reduce construction noise. These conditions include:

1. Limiting the hours of construction and delivery of materials and equipment to the hours of 8:00 a.m. to 5:00 p.m. Monday to Friday and prohibiting work on weekends and State and federal holidays.

2. Prohibiting pile driving. (Drilled pier construction could be used for pier and grade-beam foundations of the houses.)

3. Requiring stationary noise-generating equipment to be located as far from particularly sensitive land uses as practicable.

4. Requiring construction equipment to use mufflers that are in good working order.

5. Prohibiting unnecessary idling of construction equipment.

6. Requiring posting, in a publicly visible location on-site, the contact information of the person responsible for noise control.

The County has determined that, with these conditions in place, noise generated by the proposed construction would not be substantial and would have a less-than-significant temporary impact on ambient noise levels.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Buchanan Field is 6.5 miles north of the project site. The site is not located within an airport land use plan (CCCCDD, 2005, Figure 5-5). People residing in the project area would not be exposed to excessive noise levels. The noise impacts of aircraft over-flights is considered less than significant.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project site is not located near any private airstrip. There would be no impact.

SOURCE OF INFORMATION

Contra Costa County Community Development Department. 2005. *Contra Costa County General Plan, 2005-2020,* January.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII.	**POPULATION AND HOUSING** — Would the project:				
	a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			√	
	b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				√
	c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				√

Setting:

The proposed project would subdivide the 9.98-acre parcel into eight lots. Currently, two houses occupy new Lot 7 (the remainder parcel) which will remain when the property is subdivided. The remainder of the property is currently vacant.

Discussion:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Based upon a population rate of 2.5 persons/dwelling unit, the proposed project would generate a population of 17.5 additional persons. This is considered a less-than-significant impact.

b & c) Displace substantial numbers of existing housing and population, necessitating the construction of replacement housing elsewhere?

The existing houses will remain, therefore, no houses or persons will be displaced. There is no impact associated with the proposed project.

SOURCE OF INFORMATION

Contra Costa County Community Development Department, 2005. *Contra Costa County General Plan 2005-2020,* January.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. **PUBLIC SERVICES —**				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				√
Police protection?				√
Schools?				√
Parks?				√
Other public facilities?				√

Setting:

The proposed project would be served by the following public service agencies:

Fire protection:	Contra Costa County Consolidated Fire Protection District
Police protection:	Contra Costa County Sheriff's Department
Schools:	Elementary school (grades K-5) – Walnut Acres Elementary School
	Middle school (grades 6-8) – Foothill Middle School
	High school (grades 9-12) – Northgate High School
Regional parks:	East Bay Regional Park District
Local parks:	City of Walnut Creek
Libraries:	Contra Costa County Library

Discussion:

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire Protection

Fire protection would be provided by the Contra Costa County Fire Protection District (CCCFPD) from its station on Walnut Avenue near Comanche Court. This station is equipped with one Type I engine and one Type III wildfire engine. The station is manned with a crew of three firefighters, one of whom is a paramedic. The other two are emergency medical technicians (Duclos, 2009). The travel distance from the fire station to the proposed project site is 1.67 miles, and the response time is estimated to be approximately 5 minutes. The acceptable response time standard is 5 minutes 90 percent of the time. The CCCFPD could serve the proposed project without increasing staffing, equipment, or facilities. The impact of the proposed project on existing fire protection services is considered less than significant.

The CCCFPD reviewed the proposed project application and issued a letter defining roadway dimension and design standards, the need for a water supply that provides at least 1,500 gallons per minute, and other requirements necessary for CCCFPD approval of the project. The access road would be 24-feet wide from curb to curb, except at three 4-foot-wide turnouts where the width increases to 28 feet. The CCCFD would require that this road have red curbs on both sides and be posted with *NO PARKING – FIRE* LANE signs (CCCFD, 2007). The cul-de-sac at the northern end of the access road has a radius of 45 feet, which is satisfactory for the CCCFD. Improvement plans will require approval from the Fire District prior to the start of grading activities. Additionally, development of any parcel will be subject to review and approval of the Fire District prior to the issuance of building permits.

Police Protection

The Contra Costa County Sheriff's Department would provide police protection out of its Valley Station located in Alamo. Three 24-hour beats are dispatched from the Valley Station, with one deputy patrolling per beat. Response time depends on where any of the deputies are located when a dispatch order is received, and how far they have to travel to respond. A duty sergeant supervises the Valley Station operation 24 hours per day. In case of emergencies, mutual aid can be provided by the City of Walnut Creek and the California Highway Patrol (Wagner, 2009). Due to Contra Costa County budget constraints, only three two-deputy patrol cars will serve the entire unincorporated area of the county from dusk to dawn on weekday nights starting in Fiscal Year 2009/2010. Four two-deputy cars will serve on weekend nights (Contra Costa Times, 2009). The Sheriff's Department could serve the proposed project without increasing staffing, equipment, or facilities. Therefore, the impact on existing police services is considered less than significant.

Schools

The Mount Diablo Unified School District (MDUSD) would provide school services for the proposed project. Elementary school students would attend Walnut Acres Elementary School on Cerezo Drive in Walnut Creek that has capacity for 692 students. The 2009-2010 enrollment was 620 students. Middle school students would attend Foothill Middle School on Cedro Lane in Walnut Creek that has capacity for 1,067 students. The 2009-2010 enrollment was 1,037 students. High school students would attend Northgate High School on Castle Rock Road in Walnut Creek that has capacity for 1,594 students. The 2009-2010 enrollment was 1,475 students. A recent MDUSD study determined that the district-wide student generation rate is 0.403 students per single-family separated dwelling unit for grades kindergarten through 12 (Marsich, 2010). Using this student generation rate, the seven additional lots would generate a total of three students.

The applicant for the proposed project would be required to pay the state-mandated school impact fees. State law dictates that payment of these fees constitutes full mitigation of school capacity impacts. Therefore, with payment of the impact fees, no impact would occur.

Parks

Refer to Section XV. Recreation for a discussion on impacts of the proposed project on parks.

Libraries

The closest library to the proposed project site is Contra Costa County's Ygnacio Valley branch library located at 2661 Oak Grove Road. Parking is a problem at this branch. The branch has sufficient seating, although at times all the seats are filled. Attendance at libraries has increased over the past five years, particularly during the recent economic recession (Brittain, 2009). Although service in the future may be less than ideal, the impact of the additional use by the anticipated 19 residents of the proposed project would be less than significant.

SOURCES OF INFORMATION

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Marsich, Joe, Mount Diablo Unified School District. 2010. Personal communication with Robert Mills, Mills Associates, September 13.

Wagner, Terry, Contra Costa Sheriff's Department, Valley Station. 2009. Personal communication with Robert Mills, Mills Associates, April 22.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XV.	**RECREATION —**				
	a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			√	
	b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				√

Setting:

The proposed project site is surrounded by an abundance of recreational opportunities. The North Gate entrance to Mt. Diablo State Park is located 1100 feet south of the project site entrance, as is the northern boundary of Diablo Foothills Regional Park. The boundary of the Shell Ridge Open Space is approximately 0.5 mile southwest of the site, and the boundary of the Lime Ridge Open Space is approximately 0.6 mile north of the site. These facilities are equipped with many trail systems. Local parks in the vicinity of the project site include Northgate Park and Arbolado Park.

Discussion:

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Using Contra Costa General Plan planning data, the proposed project would house 19 people (Contra Costa General Plan, Table 6-11, Central County). This small number of residents would have a negligible effect on parks and other recreational facilities, thus substantial physical deterioration would not occur or be accelerated. The proposed project would be subject to Park Dedication Fees prior to the issuance of building permits for each house. This impact is considered less than significant.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The proposed project does not include any recreational facilities, thus there would be no impact.

SOURCE OF INFORMATION

Contra Costa County Community Development Department. 2005. *Contra Costa County General Plan, 2005-2020*, January.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI.	**TRANSPORTATION/TRAFFIC** — Would the project:	•	•	•	•
	a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			√	
	b) 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?				√
	c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				√
	d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				√
	e) Result in inadequate emergency access?				√
	f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				√

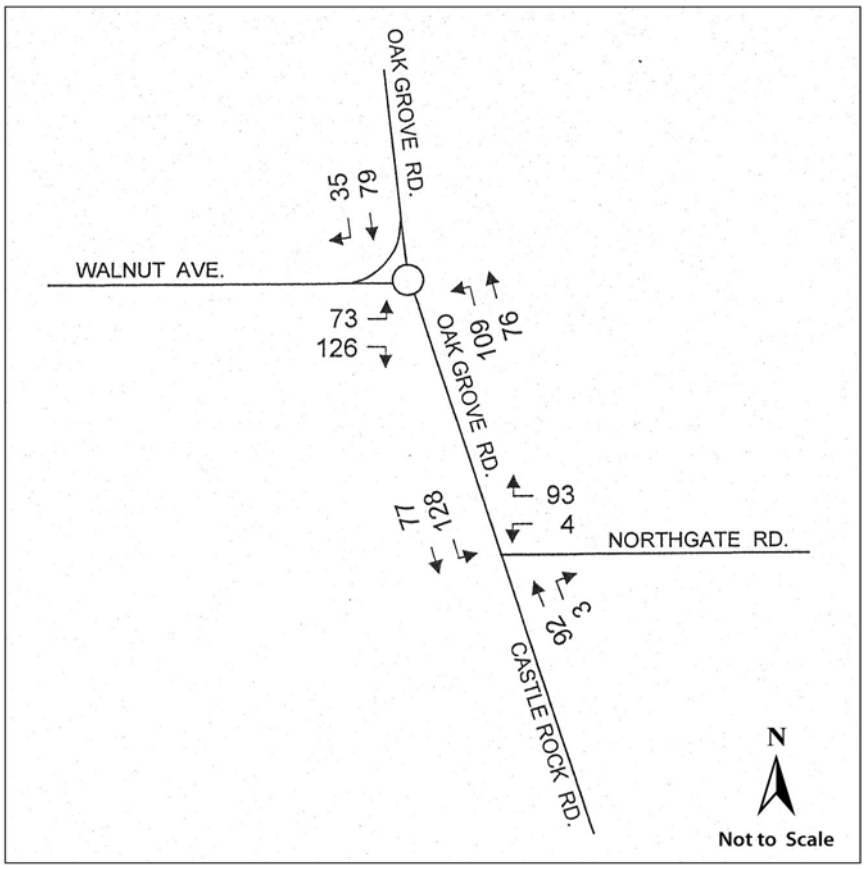
Setting:

The site is accessed via an existing private road that extends west from North Gate Road approximately 1.2 miles southeast of the three-way intersection of North Gate Road, Walnut Avenue and Oak Grove Road. Walnut Avenue is a two-lane arterial street that extends southeasterly from Ygnacio Valley Road. Oak Grove Road is a four-lane arterial street that extends throughout the eastern portion of the City of Walnut Creek. North Gate Road is a two-lane residential street that narrows 0.6 mile east of the three-way intersection before extending south to Mount Diablo State Park. Presently two residences occupy the site, which will remain as a part of the proposed subdivision.

Traffic counts between 6:00 to 7:00 p.m. were conducted on November 7, 2008, at the Walnut/Oak Grove and Oak Grove/Castle Rock/North Gate intersections for preparation of the proposed Northgate High School Stadium Lighting Project Environmental Impact Report (Mount Diablo Unified School

District, 2010). The conditions during this time period are considered representative of peak PM hour conditions. These counts are shown on Figure 3-5.

FIGURE 3-5
EXISTING EVENING PEAK HOUR VOLUMES (6:00-7:00 PM)
AT THE WALNUT AVENUE, OAK GROVE ROAD,
NORTH GATE ROAD INTERSECTION



Source: Northgate High School Stadium Lighting Project EIR, 2010.

The counts were used in Level of Service (LOS) calculations of the intersections' operation. As shown in Table 3-2, both intersections currently operate at LOS "A" with minimal delays during 6:00 to 7:00 p.m. LOS "A" has very slight or no delay. LOS "F" has excessive delay.

Table 3-2

Levels of Service

Intersection	LOS and Other Data 6–7 PM
	Existing
Walnut Avenue/ Oak Grove Road[1]	LOS "A" Volume/capacity: 0.20
Oak Grove Road/ Castle Rock Road/North Gate Road[2]	LOS "A" Delay: 9.5 seconds

Notes:

[1] The LOS and volume-capacity ratio refer to the overall operation of this "roundabout" intersection.

[2] The LOS and seconds of delay refer to traffic entering the intersection from the stop sign-controlled North Gate Road approach.

Contra Costa County Public Works Department (CCCPWD) conducted traffic counts 200 feet south of Arbolado Drive on Tuesday and Wednesday, March 31 and April 1, 2009. The peak AM hour count was 72 vehicles northbound, and the PM peak hour count was 75 vehicles southbound. The peak periods occurred between 7:30 and 8:30 a.m. and 2:45 and 3:45 p.m., respectively. These hours tend to coincide with nearby school schedules.

Discussion:

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

The seven new houses proposed for the project would generate approximately 84 daily vehicle trips based upon a conservative trip generation rate of 12 vehicle trips/household. Peak hour trips are determined using a factor of 8-10 percent of the morning and evening commute hours (Institute of Transportation Engineers, 2008). The AM peak commute hour would be about 8 percent of the daily total (7 trips) with 2 trips inbound and 5 trips outbound. The PM peak commute hours would be about 10 percent of the daily total (8 trips) with 5 trips inbound and 3 trips outbound. The increase from the proposed project would not significantly impact existing traffic flows.

In addition, traffic from the proposed project would not significantly impact conditions at the intersections at Walnut Avenue, Oak Grove Road, Castle Rock Road, and North Gate Road. For example, an addition of five vehicles during the evening peak hour traffic would amount to an increase of 6 percent. Therefore, North Gate Road would have adequate capacity for the increased traffic associated with the proposed project, and the impact is considered less than significant.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Contra Costa County no longer establishes levels of service standards (Bailey, 2010). There would be no impact.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The project site is not located within the boundaries of an airport land use plan. The nearest airport is Buchanan Field that is located approximately 6.5 miles north of the project site (CCCCDD, 2005, Figure 5-5). The proposed project is not located within the vicinity of a private airstrip. There would be no impact on air traffic patterns.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Contra Costa County Fire Protection District (CCCFPD) and the Contra Costa County Public Works Department (CCCPWD) have reviewed the Vesting Tentative Map for proposed project. The CCCFPD has prescribed required minimum width, maximum grade, minimum turning radius, and parking restriction requirements for the private access road (CCCFPD, 2007). The CCCPWD has stated that the access road must comply with the County's Policy on Private Rural Road and Driveway Design Standards (CCCPWD, 2007). The access road for the proposed project is designed to satisfy the requirements of both agencies with the exception of road length (refer to discussion of emergency access in Item e below). There are no incompatible uses at the project site. Therefore, there would be no impacts involving hazardous design features.

e) Result in inadequate emergency access?

The access road for the proposed project is longer than allowed by Contra Costa County's Policy on Private Rural Road Design Standards that were primarily promulgated to "provide adequate emergency access for medical and fire vehicles." However, the CCCFPD did not comment about the length of the road in its review comment letter (CCCFPD, 2007), and the access road complies with all other design requirements of the CCCFPD. The District did not require an emergency vehicle access. The access road has three turnouts to allow automobiles to pull out of the way to let fire engines and EMT trucks pass. The CCCFPD requires an all-weather access road, and the road must be paved with asphaltic concrete to provide an all-weather road. Therefore, the proposed project will not result in inadequate emergency access, and there will be no impact.

f) Result in inadequate parking capacity?

The Contra Costa County Zoning Code establishes requirements for off-street parking (Contra Costa County, 1999). The proposed project would be rezoned to R-40 with a minimum lot size of 40,000 square feet. The minimum number of spaces required is two covered off-street parking places per house. The County can impose additional off-street parking spaces as a condition of approval. The Contra Costa County Fire Protection District requires no parking on both sides of the access road. Therefore, additional automobiles and guest parking would have to be accommodated within the individual lots. There would be no adverse impact regarding parking capacity.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

The proposed project would not conflict with any policies, etc., supporting alternative transportation. Buses would not enter the project site; therefore, no impact would occur.

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		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII.	**UTILITIES AND SERVICE SYSTEMS** — Would the project:				
	a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				√
	b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				√
	c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			√	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			√	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			√	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			√	
g) Comply with federal, state, and local statutes and regulations related to solid waste?				√

Setting:

The public/private utilities that could serve the proposed project include the following:

Water: Contra Costa Water District
Wastewater (i.e., sewerage): Central Contra Costa Sanitary District
Storm Drainage: Contra Costa County Flood Control and Water Conservation District
Solid Waste-Recycling and Disposal: Allied Waste Services and Valley Waste Management
Electrical power: Pacific Gas and Electric Company
Telephone: SBC
Cable television: Comcast

Discussion:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Wastewater (i.e., sewage) from the proposed project would be conveyed through sanitary sewers to the CCCSD Wastewater Treatment Plant (WWTP) in Martinez for treatment and disposal into Suisun Bay. The CCCSD plant operates under a National Pollutant Discharge Elimination System (NPDES) permit issued by the San Francisco Bay Regional Water Quality Control Board (RWQCB) that establishes discharge requirements that reduce pollutants in the plant's effluent to acceptable levels. The RWQCB has the authority to levy penalties, impose cease and desist orders, and issue moratoriums for new sewer service connections if waste discharge requirements are violated. CCCSD must satisfy these requirements. The proposed project would not cause CCCSD to exceed wastewater treatment requirements, thus no impact would occur.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Contra Costa Water District (CCWD) owns and operates the Bollman Water Treatment Plant that has a current capacity of 75 million gallons per day (mgd). The current maximum day demand on the treatment plant is between 60 and 65 mgd during the peak summer months (Vanisco, 2010). The proposed project, which has a maximum-day water demand of 0.0034 mgd, (7 du × 2.71 persons/du × 120 gallons/person/day × 1.5 maximum day demand/average day demand). This small demand would not require expansion of water treatment plant facilities.

CCWD stated that potable water service for the proposed project would be made available upon completion of financial arrangements and installation of all necessary water facilities to meet the requirement of domestic use and fire protection according to current CCWD standards. The water district performed a preliminary hydraulic analysis for the proposed project and determined that all parcels are within their zone III service area and can receive standard water pressure between 40 and 79 pounds/square/inch (psi) during normal operating conditions. The water delivery system is capable of supplying 1500 gallons/minute (gpm) to the proposed fire hydrants (CCWD, 2011). A new water main would be installed along the access road from the existing water main along North Gate Road.

The CCCSD WWTP has an average dry weather flow (ADWF) treatment capacity of 55 million gallons per day (mgd) and a peak wet weather flow hydraulic capacity of 240 mgd. The WWTP currently treats an ADWF of approximately 45 mgd (CCCSD, 2008). The proposed project would generate only 0.0017 mgd ADWF (7 du × 2.71 persons/du × 90 gallons/person/day). This small demand would not require expansion of wastewater treatment facilities.

CCCSD completed a limited analysis for the sewer system downstream of the proposed project site. The existing main sewer is adequate for the additional wastewater that would generated by the project. However, CCCSD facilities farther downstream do not have adequate flow-carrying capacity under CCCSD's current design criteria for ultimate conditions. Improvements to correct deficiencies are or will be included in CCCSD's Capital Improvement Plan. Such improvement projects are subject to separate environmental review performed by CCCSD. Improvements to CCCSD's existing facilities that are required as a result of new development would be funded from applicable CCCSD fees and charges. The applicant would be required to pay these fees and charges at the time of connection to the sewer system (CCCSD, 2010).

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

New storm water drainage facilities, consisting of drop inlets and storm drains (i.e., storm water pipelines under the roadways) would be installed to serve the proposed project. Storm water runoff would be directed to grassy swales or in-ground infiltration planters that would treat the storm water to reduce pollutants in conformance the Contra Costa County Clean Water Program C.3 requirements. Treated water from these swales and planters would flow through an existing storm drain into Walker Canyon Creek that flows along the north side of the project site.

Therefore, the impacts of construction of new or expanded storm drainage facilities is considered less than significant.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

CCWD prepares an Urban Water Management Plan every five years that documents planning activities to ensure adequate water supplies will be available to meet exiting and future demands for water in normal precipitation years and dry years. The 2005 plan determined that CCWD has sufficient water supplies to meet demands through 2030 through a combination of allocations from the federal Central Valley Project, conservation, use of recycled water, and water transfers. During multi-year droughts, spot purchases and short-term demand management would also be used. The proposed project would have a less-than-significant impact on available water supplies.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Refer to discussion of Item b) above. The CCCSD WWTP has sufficient capacity to serve both the proposed project and other planned developments in the CCCSD service for the next several decades. The impact would be less than significant.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Each resident at the proposed project is expected to generate approximately 0.42 tons of solid waste per year, of which 52 percent is garbage sent to a landfill. Therefore, the 19 residents of the proposed project together would generate 4.1 tons of garbage per year. Over 50 years, 80 tons would be generated.

Garbage from the proposed project would be collected by Allied Waste Services. Valley Waste Management would collect recyclable materials (Argenti, 2010). Garbage is taken to the Contra Costa Transfer and Recovery Station in Martinez where certain recyclable materials (e.g., construction waste materials) are extracted and sent to the nearby Acme Landfill. The remaining garbage is transported to the Keller Canyon Landfill in Pittsburg for disposal. The Keller Canyon Landfill has sufficient remaining capacity to receive garbage from the collection services it serves (e.g., Allied Waste Services) for at least the next 50 years. Increases in recycling may extend the service life of Keller Canyon Landfill. Therefore, the proposed project would have a less-than-significant impact on landfill capacity.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

The Acme Landfill is licensed and operated in compliance with applicable federal, state and local statutes and regulations. The landfill must continuously satisfy the requirements of this license to comply with federal, state, and local statutes and regulations related to solid waste. Therefore, the proposed project would have no impact regarding compliance with these statutes.

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		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVIII.	**MANDATORY FINDINGS OF SIGNIFICANCE —**				
	a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			√	
	b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			√	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			√	

Discussion:

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The development is contained to the 9.98-acre site. Development would be set back a minimum of 50 feet from the top of the creek bank and storm drainage would be conveyed through an existing storm drain on an adjoining property where it empties upstream of the project site. Therefore, the proposed development would not interfere with wildlife movement nor impact the riparian habitat. (Refer to discussion in IV. Biological Resources.)

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

The project does not create substantial cumulative impacts. Development of the project site is designated in the planning documents for the area. This is considered an in-fill project in a semi-rural area and the proposed seven new lots is consistent with the designated land use and density.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The project would create environmental impacts for which mitigation measures have been recommended.

Appendix A

MITIGATION MONITORING AND REPORTING PROGRAM

APPENDIX A
MITIGATION MONITORING AND REPORTING PROGRAM
(For Significant Impacts Only)

Mitigation Measure	Person/Agency Responsible for Implementation	Monitoring Requirements	Person/Agency Responsible for Monitoring	Timing or Frequency of Monitoring
AESTHETICS				
I-1A: To block views of the new residences for users of the existing and proposed trails, a dense landscape screen, consisting of native trees, shall be planted within the 60-foot setback along the western/southwestern property line (Lots 3-7) upon completion of site improvements. Planting shall be as recommended by the applicant's arborist (McNeil, January 2011).	Applicant/Developer	Tree planting plans shall be submitted to the County and City of Walnut Creek prior to issuance of a grading permit. Notify County and City when trees have been planted. Conduct on-site inspection of new trees.	County Community Development Division and City of Walnut Creek Planning Dept. Same as above	Pre-construction. Upon completion of planting.
I-1B: Tree size shall be no smaller than 15-gallon and consist of native evergreen species; e.g., coast live oak, etc. Landscaping shall be irrigated for up to five years, protected from deer, and maintained during this period. The applicant shall submit a landscaping plan for review and approval by the County and City of Walnut Creek.	Applicant/Developer	Tree planting plans shall be submitted to the County and City of Walnut Creek prior to issuance of a grading permit. Annual status report shall be submitted to County and City for review and approval.	County Community Development Division and City of Walnut Creek Planning Dept. Reports reviewed by jurisdictions.	Pre-construction. Yearly after first year of installation.
I-1C: The applicant shall post a security bond to ensure protection of existing and newly planted landscaping. The term of the bond shall extend at least five years beyond completion of the subdivision improvements.	Applicant/Developer	Bond shall be posted prior to start of site preparation and grading.	Contra Costa County Department of Conservation and Development	Prior to issuance of grading permit.

APPENDIX A
MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Mitigation Measure	Person/Agency Responsible for Implementation	Monitoring Requirements	Person/Agency Responsible for Monitoring	Timing or Frequency of Monitoring
I-1D: The landscaping shall be monitored for a period of five years from the date of installation. Any trees lost during this period shall be replaced and monitored by the developer and/or property owner. Future owners of Lots 3–6 and the owner of the existing house (Lot 7) shall be responsible for the maintenance of the landscaping as well as replacing any shrubs/trees that are lost. This requirement shall be recorded on the individual property deeds to run with the land.	Applicant/Developer	The applicant shall submit annual monitoring reports to the County and City of Walnut Creek for review and approval.	County Community Development Division and City of Walnut Creek Planning Dept.	Reports filed yearly after first year of installation.
AIR QUALITY				
III-1: During construction, the applicant shall take the following measures to control dust: • Water all active construction areas at least twice daily. • Cover all trucks hauling soil, sand, and other loose materials, or require trucks to maintain at least two feet of freeboard. • Sweep off-site streets leading to the project site daily if visible soil, sand, or other loose materials are deposited on these streets.	Applicant/Developer	Grading plans shall include dust control measures approved by the County Grading Section.	Contra Costa County Grading Section	On-site inspection during grading activities.

APPENDIX A
MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Mitigation Measure	Person/Agency Responsible for Implementation	Monitoring Requirements	Person/Agency Responsible for Monitoring	Timing or Frequency of Monitoring
BIOLOGICAL RESOURCES				
IV-1A. If vegetation removal and grading commences between February 15 and August 31, a qualified wildlife biologist shall conduct a preconstruction survey for nesting birds. If nests of either migratory birds or birds of prey are detected on or adjacent to the site, a no-disturbance buffer (generally 50 feet for passerines and 300 feet for raptors) in which no new site disturbance is permitted shall be observed until August 15, or the qualified biologist determines that the young are foraging independently. The size of the no-disturbance buffer shall be determined by a qualified wildlife biologist, and shall take in to account local site features and existing sources of potential disturbance. If more than 15 days elapses between the survey and site disturbance, the survey shall be repeated.	Applicant's consulting biologist.	Conduct preconstruction survey if vegetation and grading commences between February 15 and August 31. Follow-up surveys conducted if more than 15 days elapse between initial preconstruction survey and site disturbance. A report of findings prepared by the consulting biologist shall be provided to DCCD prior to initiation of vegetation removal and grading, and authorization to proceed provided in writing by DCCD before vegetation removal and/or grading proceeds. A report of findings shall be provided to DCCD for any required followup surveys or construction restrictions, if necessary, with authorization provided in writing by DCCD before vegetation removal and/or grading proceeds within the no-disturbance buffer zone.	DCCD	Preconstruc-tion survey initiated no more than 15 days prior to commence-ment of vegetation removal and grading from February 15 to August 31. Followup surveys and submittal of reports of findings as specified under Monitoring Requirements.
IV-1B. A preconstruction survey for burrowing owls shall be conducted by a qualified biologist not more than 30 days prior to the start of construction. If no owls or sign are detected during this survey, no further burrowing owl mitigation would be necessary. If burrowing owls or sign of burrowing owls is detected, mitigation consistent with the CDFG Staff Report (CDFG unpublished report: *Staff Report on Burrowing Owl Mitigation*, 1995) shall be provided.	Applicant's consulting biologist.	Conduct preconstruction survey no more than 30 days prior to start of construction, including vegetation removal. A report of findings prepared by the consulting biologist shall be provided to DCCD prior to initiation of vegetation removal and/or grading, and authorization to proceed provided in writing by DCCD before construction proceeds.	DCCD	Preconstruction survey initiated no more than 30 days prior to start of construction. Submittal of report of findings as specified under Monitoring Requirements.

APPENDIX A
MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Mitigation Measure	Person/Agency Responsible for Implementation	Monitoring Requirements	Person/Agency Responsible for Monitoring	Timing or Frequency of Monitoring
IV-1C. Measures shall be taken to prevent possible inadvertent loss of western pond turtles during construction. These shall consist of the following:				
• A preconstruction survey for western pond turtles shall be conducted by a qualified biologist not more than 48 hours prior to the commencement of construction. If western pond turtles are detected which could be disturbed during construction, they shall be relocated to a suitable reach of Walker Creek upstream or downstream of the project site.	Applicant's consulting biologist, construction foreman.	Conduct preconstruction survey no more than 48 hours prior to start of construction. A report of findings prepared by the consulting biologist shall be provided to DCCD prior to initiation of vegetation removal and/or grading, and authorization to proceed provided in writing by DCCD before construction proceeds.	DCCD	Preconstruction survey conducted no more than 48 hours prior to start of construction. Submittal of report of findings as specified under Monitoring Requirements.
• Prior to construction and after completion of the preconstruction survey above, silt fencing or equivalent shall be installed along the top of bank to prevent the movement of western pond turtles from the riparian corridor into the construction zone. This fencing shall be in addition to any fencing installed as part of best management practices for erosion control purposes. The location of the fencing shall be determined by the qualified biologist, shall be inspected weekly by the construction foreman and maintained intact at all times during construction, and shall be removed once grading and heavy off-road equipment operation is complete.		Protective silt fence installed under supervision of consulting biologist immediately after conduct of the preconstruction survey. Construction foreman shall inspect and direct repairs of the protective silt fence on a weekly basis. Protective silt fence removed following completion of grading and heavy off-road equipment operation.		

APPENDIX A
MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Mitigation Measure	Person/Agency Responsible for Implementation	Monitoring Requirements	Person/Agency Responsible for Monitoring	Timing or Frequency of Monitoring
IV-2: The project shall comply with the City of Walnut Creek Tree Preservation Ordinance (Section 3.8 Preservation of Trees on Private Property), consistent with the North Gate Specific Plan. This shall include preparation of a Tree Replacement Program and Tree Preservation Guidelines as defined below: • Tree Preservation Guidelines shall be prepared and implemented during construction activities to avoid injury of trees to be preserved during construction. This shall include establishment of tree protection zones at the drip line, or as modified under the direction of a certified arborist. Excavation, grading, construction, and storage of materials shall be avoided within this zone. Exclusion fencing shall be established around the tree protection zone. Tree protection methods during construction and any modifications to tree protection zones shall be overseen by a qualified arborist. • A Tree Replacement Program shall be prepared by the applicant, and implemented as part of the mitigation program for the project. Replacement trees shall be provided at a minimum 3:1 ratio, shall be installed along the edge of the riparian corridor as part of the CPEP where feasible, and shall be maintained for a minimum of five years to ensure their successful establishment. Replacement tree plantings	Applicant's consulting arborist, biologist, civil engineer, and contractor.	Secure a tree removal permit for all "protected trees" to be removed, comply with Tree Preservation Guidelines, and implement the Tree Replacement Program as part of the Creek Preservation and Enhancement Plan (CPEP). DCCD and Walnut Creek shall ensure that tree removal permit is secured, and that the CPEP is revised to provide adequate replacement of "protected trees." Applicant's arborist and civil engineer shall revise grading plans accordingly to identify Tree Protection Zones. Applicant's biologist shall revise the CPEP to provide minimum replacement plantings along the creek corridor, which shall be monitored and maintained for a minimum of 5 years as called for in the CPEP. Annual monitoring reports prepared by the applicant's biologist in accordance with the CPEP shall be provided to DCCD and Walnut Creek.	DCCD	Secure tree removal permit as part of Final Development Plan approval. Revise CPEP and grading plans prior to Final Development Plan approval. Submit annual monitoring reports for a minimum of 5 years by December 31 of each monitoring year.

APPENDIX A
MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Mitigation Measure	Person/Agency Responsible for Implementation	Monitoring Requirements	Person/Agency Responsible for Monitoring	Timing or Frequency of Monitoring
shall be irrigated for a minimum of two years following initial planting to ensure their survival, and shall be replaced on an annual basis to meet success criteria specified in the Tree Replacement Program.				
CULTURAL RESOURCES				
V-1A: If historic or prehistoric artifacts, features, or cultural resources are encountered during construction of the proposed project, all work shall be halted in the immediate vicinity of the find for purposes of evaluation by a qualified professional archaeologist approved by the Contra Costa County Department of Conservation and Development.	Builder/Developer	Notify County Department of Conservation and Community Development if cultural resources are encountered.	Builder/Developer and County	During site preparation.
V-1B: The County Coroner shall be notified if human remains are uncovered during construction. If it is determined that the remains are Native American, a representative of the NAHC shall be consulted.	Builder/Developer	Notify County Coroner and County Department of Conservation and Community Development.	Builder/Developer and County	During site preparation.
GEOLOGY AND SOILS				
VI-1: Construction of house foundations, streets and driveways, and other structures shall comply with the recommendations of the applicant's geotechnical engineering consultants (Jensen-Van Lienden Associates, Inc. December 29, 2006 report). These recommendations include the following:	Builder/Developer	Grading and foundation measures shall be reviewed by Grading Section and Building Inspection Division prior to issuance of grading permits and building permits. On site inspection to verify as-built conditions are consistent with the geotechnical recommendations.	Grading Section and Building Inspection	Prior to issuance of grading and building permits. During grading and construction.

APPENDIX A
MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Mitigation Measure	Person/Agency Responsible for Implementation	Monitoring Requirements	Person/Agency Responsible for Monitoring	Timing or Frequency of Monitoring
• Houses with crawl spaces shall be supported with drilled piers and grade beams designed to resist uplift pressure. • Houses with slabs-on-grade shall be supported on mats of non-expansive engineered fill. • Garage floor slabs, sidewalks and outdoor slabs (e.g., patios) where some cracking can be accepted could be designed to be stronger (e.g., with more steel reinforcing bars) and must be isolated from house foundations. If cracking is unacceptable, these slabs shall be supported on mats of non-expansive engineered fill. • Applicant shall provide recommendations by a registered geotechnical engineering consultant for proper foundation and support of asphalt-concrete streets.				