

APPENDIX A

NOTICE OF PREPARATION (NOP) AND INITIAL STUDY

Notice of Preparation

To: State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

From: City of Petaluma
11 English Street
Petaluma, CA 94952

Subject: Notice of Preparation of a Draft Environmental Impact Report

City of Petaluma will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study ([] is [X] is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Derek Farmer at the address shown above. We will need the name for a contact person in your agency.

Project Title: Deer Creek Village

Project Applicant, if any: Merlone Geier Management

Date March 5, 2010

Signature [Handwritten Signature]

Title Senior Planner

Telephone 707-778-4556

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Deer Creek Village

Lead Agency: City of Petaluma Contact Person: Derek Farmer
 Mailing Address: 11 English Street Phone: 707-778-4556
 City: Petaluma Zip: 94952 County: Sonoma

Project Location: County: Sonoma City/Nearest Community: Petaluma
 Cross Streets: N. McDowell Blvd.-Rainier Ave-US Highway 101-Lynch Creek Way Zip Code: 94954
 Longitude/Latitude (degrees, minutes and seconds): 38 ° 14 ' " N / ° 122 ' 38 " W Total Acres: 36.55
 Assessor's Parcel No.: 007-380-005, 007-380-027 Section: _____ Twp.: _____ Range: _____ Base: _____
 Within 2 Miles: State Hwy #: 116 Waterways: Petaluma River
 Airports: Petaluma Municipal Airport Railways: _____ Schools: all Petaluma schools

Document Type:

CEQA: NOP Draft EIR NEPA: NOI Other: Joint Document
 Early Cons Supplement/Subsequent EIR EA Final Document
 Neg Dec (Prior SCH No.) _____ Draft EIS Other: _____
 Mit Neg Dec Other: _____

Local Action Type:

General Plan Update Specific Plan Rezone Annexation
 General Plan Amendment Master Plan Prezone Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, etc.) Other: _____

Development Type:

Residential: Units _____ Acres _____
 Office: Sq.ft. 17,500 Acres _____ Employees _____ Transportation: Type _____
 Commercial: Sq.ft. 297,000 Acres _____ Employees _____ Mining: Mineral _____
 Industrial: Sq.ft. _____ Acres _____ Employees _____ Power: Type _____ MW _____
 Educational: _____ Waste Treatment: Type _____ MGD _____
 Recreational: _____ Hazardous Waste: Type _____
 Water Facilities: Type _____ MGD _____ Other: _____

Project Issues Discussed in Document:

Aesthetic/Visual Fiscal Recreation/Parks Vegetation
 Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality
 Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian
 Biological Resources Minerals Soil Erosion/Compaction/Grading Growth Inducement
 Coastal Zone Noise Solid Waste Land Use
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Cumulative Effects
 Economic/Jobs Public Services/Facilities Traffic/Circulation Other: _____

Present Land Use/Zoning/General Plan Designation:

Present land Use - vacant. GP - Mixed Use. Zoning - MU1B (Mixed Use, IB - larger parcels located along arterials.)

Project Description: (please use a separate page if necessary)

The Project is a proposed commercial retail and office development located on a 36.55-gross-acre site bordered by North McDowell Boulevard to the east, Rainier Avenue to the north, Highway 101 to the west, and a row of single-story offices lining Lynch Creek Way to the south. The site is planned for 314,983 square feet including approx. 297,000 of commercial/retail uses and 17,500 of office uses.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
 If you have already sent your document to the agency please denote that with an "S".

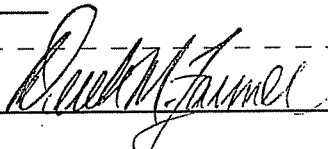
- | | |
|--|--|
| <input type="checkbox"/> Air Resources Board | <input type="checkbox"/> Office of Emergency Services |
| <input type="checkbox"/> Boating & Waterways, Department of | <input type="checkbox"/> Office of Historic Preservation |
| <input type="checkbox"/> California Highway Patrol | <input type="checkbox"/> Office of Public School Construction |
| <input checked="" type="checkbox"/> Caltrans District # <u>4</u> | <input type="checkbox"/> Parks & Recreation, Department of |
| <input type="checkbox"/> Caltrans Division of Aeronautics | <input type="checkbox"/> Pesticide Regulation, Department of |
| <input type="checkbox"/> Caltrans Planning | <input type="checkbox"/> Public Utilities Commission |
| <input type="checkbox"/> Central Valley Flood Protection Board | <input type="checkbox"/> Regional WQCB # _____ |
| <input type="checkbox"/> Coachella Valley Mtns. Conservancy | <input type="checkbox"/> Resources Agency |
| <input type="checkbox"/> Coastal Commission | <input type="checkbox"/> S.F. Bay Conservation & Development Comm. |
| <input type="checkbox"/> Colorado River Board | <input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns. Conservancy |
| <input type="checkbox"/> Conservation, Department of | <input type="checkbox"/> San Joaquin River Conservancy |
| <input type="checkbox"/> Corrections, Department of | <input type="checkbox"/> Santa Monica Mtns. Conservancy |
| <input type="checkbox"/> Delta Protection Commission | <input type="checkbox"/> State Lands Commission |
| <input type="checkbox"/> Education, Department of | <input type="checkbox"/> SWRCB: Clean Water Grants |
| <input type="checkbox"/> Energy Commission | <input type="checkbox"/> SWRCB: Water Quality |
| <input checked="" type="checkbox"/> Fish & Game Region # _____ | <input type="checkbox"/> SWRCB: Water Rights |
| <input type="checkbox"/> Food & Agriculture, Department of | <input type="checkbox"/> Tahoe Regional Planning Agency |
| <input type="checkbox"/> Forestry and Fire Protection, Department of | <input type="checkbox"/> Toxic Substances Control, Department of |
| <input type="checkbox"/> General Services, Department of | <input type="checkbox"/> Water Resources, Department of |
| <input type="checkbox"/> Health Services, Department of | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Housing & Community Development | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Integrated Waste Management Board | |
| <input type="checkbox"/> Native American Heritage Commission | |

Local Public Review Period (to be filled in by lead agency)

Starting Date March 9, 2010 Ending Date April 7, 2010

Lead Agency (Complete if applicable):

Consulting Firm: _____	Applicant: <u>Merlone Geier Management</u>
Address: _____	Address: <u>3580 Carmel Mountain Rd., Ste. 260</u>
City/State/Zip: _____	City/State/Zip: <u>San Diego, CA 92130</u>
Contact: _____	Phone: <u>858-350-1977</u>
Phone: _____	

Signature of Lead Agency Representative:  Date: 3-5-10

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

This notice was posted on MAR 09 2010
and will remain posted for a period of thirty days
until APR 09 2010

NOTICE OF PREPARATION

JANICE ATKINSON, Co. Clerk
BY: Julie Garcia
DEPUTY CLERK

To: All Interested Parties
Subject: Notice of Preparation of a Draft Environmental Impact Report
From: City of Petaluma
Address: 11 English Street, Petaluma, CA 94952-2610
Contact: Derek Farmer, Project Planner, (707) 778-4556

Notice of Preparation: The City of Petaluma is the Lead Agency and will prepare an Environmental Impact Report (EIR) for the proposed Deer Creek Village project, described below (the "Project"). This EIR is a second tier EIR, pursuant to CEQA Guidelines Sec. 15152, and will focus on potential Project traffic impacts not fully analyzed in the EIR for General Plan 2025, certified by the City of Petaluma on April 7, 2008. This EIR will also review the analysis in the General Plan EIR of other environmental effects relevant to the Project to ensure adequacy of the prior analysis for the present Project's effects. This Notice of Preparation has been sent to responsible and trustee agencies and involved federal agencies pursuant to Section 15082 of the CEQA Guidelines. Agencies should comment on the scope and content of the environmental information and analysis that is germane to the agency's statutory responsibilities in connection with the Project.

Please respond on or before April 8, 2010. Please send your written response to the Community Development Department, City of Petaluma, 11 English Street, Petaluma, California, 94952-2610, Attention: Derek Farmer, Project Planner. Please provide a contact name for your agency with your comments.

A. Background

Project Title: Deer Creek Village
Project Applicant: Merlone Geier Management
Project Location: 36.55-acre site on North McDowell Boulevard between Rainier Avenue and Lynch Creek Way (APNs 007-380-005 and 007-380-027)
General Plan: Mixed Use
Existing Zoning: Mixed-Use 1B: intended for larger parcels located primarily along arterial roadways.

Figure 1 Regional Map

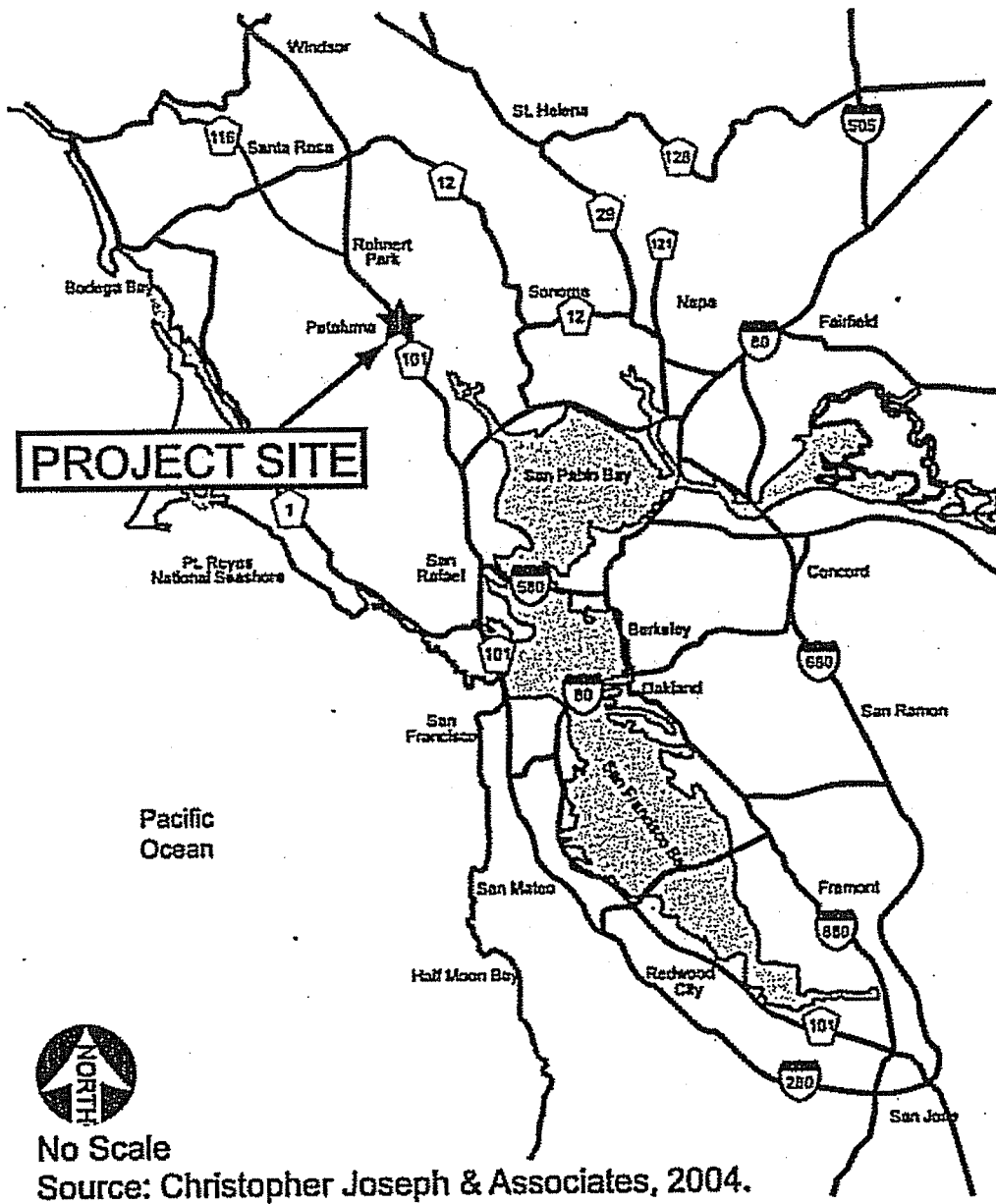


Figure 2 Project Location

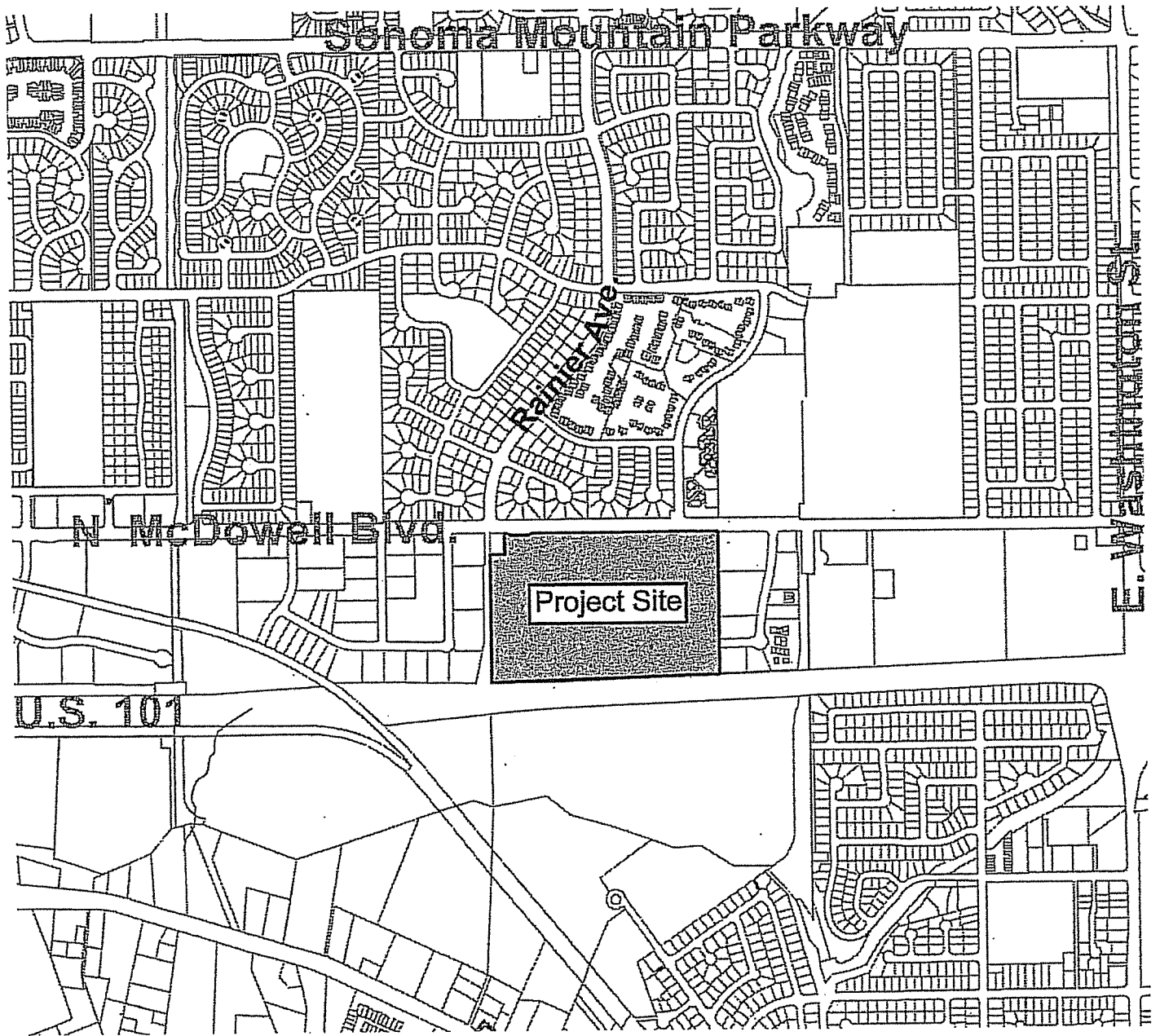
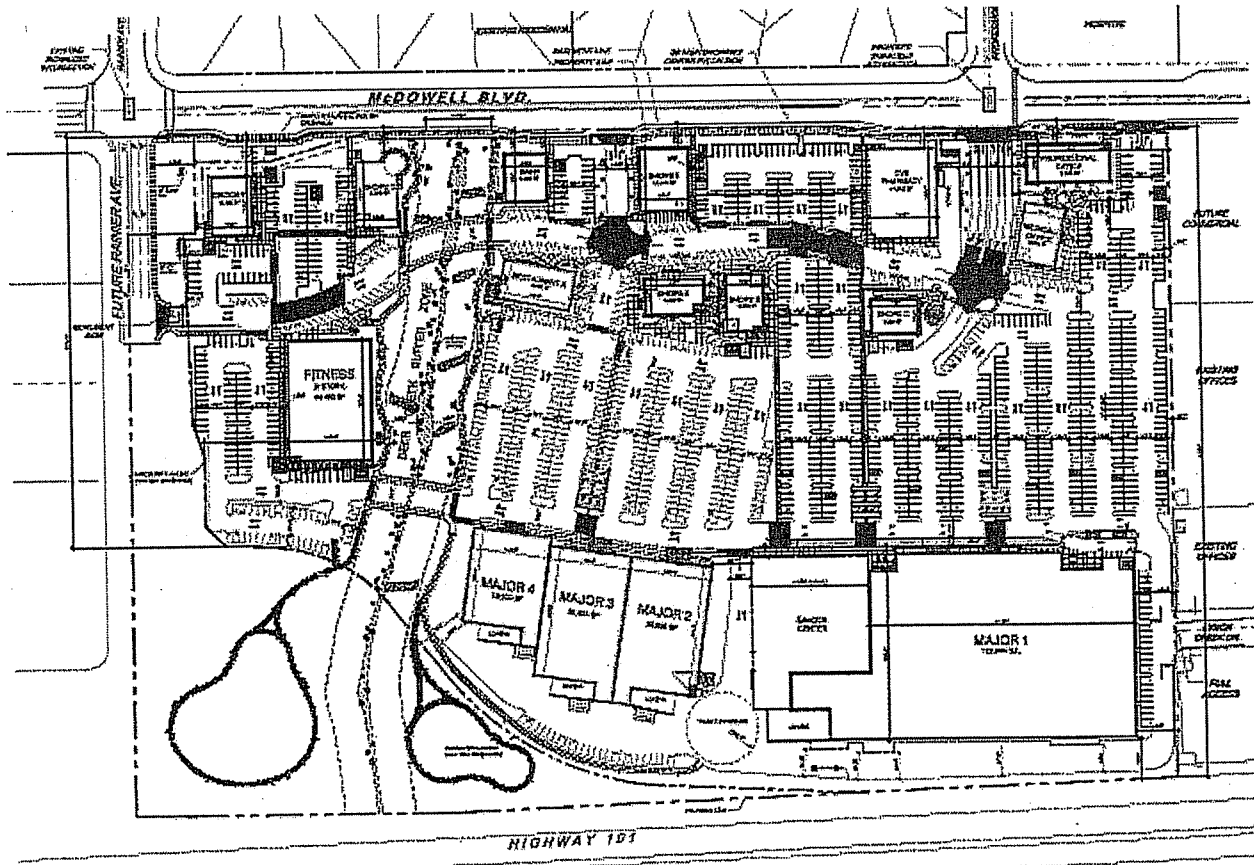


Figure 3: Proposed Site Plan



B. Project Description

The Project is a proposed commercial retail and office development located on a 36.55-gross-acre site bordered by North McDowell Boulevard to the east, Rainier Avenue to the north, Highway 101 to the west, and a row of single-story offices lining Lynch Creek Way to the south. The site is planned for 314,983 square feet of building area resulting in an overall floor area ratio of 0.19. The proposed square-footage for each use would be as follows:

Major Retail Stores	189,944 SF
Smaller Retail Stores	21,300 SF
Fitness Center	44,450 SF
Pharmacy	14,820 SF
Grocery	13,969 SF
Bank	5,000 SF
Restaurants	13,000 SF
Offices	12,500 SF

Among the major retail uses proposed is an approximately 120,000 square-foot home improvement center. Proposed neighborhood office uses include a bank, medical offices, and professional offices.

Deer Creek, a seasonal drainage corridor within the Petaluma River watershed, traverses the site from east to west and serves as seasonal drainage. The Project would enhance this corridor through reparative vegetation and related riparian features. Pedestrian and bicycle amenities would be featured along both sides of the corridor, but outside the proposed riparian areas. Two bridges for both vehicles and pedestrians/bicycles would cross the drainage.

Project vehicular access is provided from several locations along North McDowell Boulevard at both signalized intersections and right-in/right-out driveways. Transit access currently exists along the Project frontage; this access would be improved per City standards and modifications.

On-Site Land Uses and Conditions: The site is currently vacant. It contains a number of mature trees in addition to the Deer Creek drainage. The drainage has been greatly altered due to weed abatement measures and disking. Seasonal wetlands also occur in the lowest elevation areas. A transit stop is located on the Project frontage along North McDowell Boulevard.

Surrounding Land Uses: The Project site is surrounded by a variety of uses. The City of Petaluma has an administrative transit office to the northwest which adjoins the existing right-of-way for the planned southwesterly extension of Rainier Avenue. A variety of office uses, primarily medical-supporting, are located to the south/southeast along Lynch Creek Way. Across North McDowell Boulevard to the east is a single-family residential neighborhood. Highway 101 is adjacent to the site to the west.

Nearby land uses include the Petaluma Valley Hospital, located on North McDowell Boulevard just to the south of the site. Lucchesi Park and the Community Center are located just south of the hospital, also on North McDowell Boulevard.

C. Scope of Analysis:

This EIR is a second tier EIR, pursuant to CEQA Guidelines Section 15152, and will focus on potential Project traffic impacts not fully analyzed in the EIR for General Plan 2025, which was certified by the City of Petaluma on April 7, 2008. Other environmental effects relevant to the Project which have been previously reviewed in the General Plan 2025 EIR will be evaluated to ensure adequacy of the prior analysis and adopted mitigation measures.

D. Other public agencies whose approval may eventually be required.

- ◆ California Department of Transportation (Caltrans)
- ◆ San Francisco Bay Regional Water Quality Control Board
- ◆ United States Army Corps of Engineers
- ◆ Sonoma County Transit Agency
- ◆ Golden Gate Transit Agency
- ◆ Sonoma County Water Quality Board;
- ◆ Sonoma County Water Agency; and
- ◆ California Department of Fish and Game
- ◆ United States Fish and Wildlife service

Initial Study of Environmental Significance

■ Introduction

This Initial Study has been prepared pursuant to the California Environmental Quality Act (Public Resources Code, Section 21000 *et seq*) and the CEQA Guidelines. Additional information incorporated by reference herein includes: the project application, environmental information questionnaire, environmental review data sheet, project referrals, staff report, General Plan, EIR and Technical Appendices, and other applicable planning documents on file at the City of Petaluma Planning Division.

Project Name:	Deer Creek Village
File No:	09-SPC-0091
APN:	007-380-005, 007-380-027
Site Address:	Southwest Corner of Rainier Avenue and McDowell Boulevard, adjacent to U.S. Highway 101
General Plan:	Mixed Use
Zoning:	MU1B (Mixed Use 1B)

Lead Agency

City of Petaluma
11 English Street
Petaluma, CA 94952
Contact: Heather Hines, Deputy Planning Manager
Phone: 707-778-4316

Applicant

Merlone Geier Management, LLC
3580 Carmel Mountain Road, Suite 260
San Diego, CA 92130

Property Owner

Merlone Geier Partners
425 California Street, 11th Floor
San Francisco, CA 94104

Project Description

The vacant project site is approximately 36.55 acres in size. It is designated as Mixed Use in the Petaluma General Plan 2025 and zoned MU1B (Mixed Use 1B), which is applied to larger parcels located primarily along major arterial roadways for the purpose of improving existing auto-oriented commercial areas into pedestrian-oriented, mixed-use development (see Table 1). The applicant proposes to develop the site with a mixture of retail, restaurant, office and recreational uses. The proposed project includes the development of the following: 343,998 square feet (sf) of commercial land uses, a 1,268-space parking lot and on-site circulation. The proposed project would set aside approximately 5.44 acres for the future Rainier Avenue off-ramp, and approximately 2.66 acres for the Deer Creek swale enhancement area.

More specifically, the proposed project would include four major anchor retail stores, five smaller shops, along with restaurant, pharmacy, and grocery uses for a total of 282,048 square feet of retail uses. The proposed project would also include a fitness facility and 17,500 square feet of services, including a bank, medical office, and professional office space. Building heights would vary depending on the building and would extend from approximately 20 feet to 45 feet.

Access to the project site would be provided via five driveways, which include three at North McDowell Boulevard, one at Rainier Avenue and one at Lynch Creek Way. The access point along North McDowell Boulevard at Professional Drive would be signalized.

Parking on the project site would be accommodated in a large parking area in the central portion of the site and smaller parking areas provided closer to some of the shops and offices. In addition, bicycle parking would be provided locations throughout the development close to building entrances. Enhanced pavers, in-ground lighting, and related features would define pedestrian crosswalks. The Deer Creek drainage would be improved with naturalistic riparian planting with rocks and boulders in an informal arrangement.

In order to accommodate the future extension of Rainier Avenue and the Rainier interchange, approximately 5.44 acres would be dedicated to the City. Until the interchange project is implemented, the interchange portion of this area would be available for recreational opportunities.

Table-1
Uses Allowed Under Existing Zoning

Zoning	Allowed Uses
MU1-B	<ul style="list-style-type: none"> • Industry, Manufacturing, and Processing Uses • Hotel/Motel Lodging • Recreation, Education, and Public Assembly Uses • Residential Care Facilities • Work/Live Residential • Retail • Restaurant • Business, Financial, and Professional Office Uses • Child Care Center • Personal Services • Public Safety Services • Vehicle services – Minor maintenance/repair • Veterinary clinic, animal hospital • City water & sewer facility

Source: City of Petaluma Implementing Zoning Ordinance, May 2008

Environmental Setting

The project site is located in the central portion of the City of Petaluma, just northeast of Highway 101. The site is located on the southwest side of the North McDowell Boulevard/Rainier Avenue intersection. The 36.55-acre site is rectangular in shape and consists of two parcels, a 25.35-acre lot (Assessor's Parcel Number (APN 007-380-027) on the north end, and an 11.2-acre lot (APN 007-380-005) on the south.

The project site is immediately bounded by industrial uses and City offices to the northwest/west, North McDowell Boulevard to the northeast/east, Highway 101 to the southwest/west, and commercial uses (mostly medical offices) and Lynch Creek Way to the southeast/south. Other land uses across North McDowell Boulevard include a single-family residential neighborhood, office uses, Petaluma Valley Hospital and Luchessi Park. The Lynch Creek Trail and Plaza Shopping Center are also located to the southwest of the project site. For planning purposes, Highway 101 is considered west, North McDowell Boulevard is considered east, the Rainier Avenue extension is considered north and Lynch Creek Way is considered south of the subject site.

The topography of the project site is relatively flat, with an average elevation of 28 feet above mean sea level (msl). The site is currently vacant and sparsely vegetated with grasses and a few trees, which include three large oak trees measuring 50-, 30-, and 20-inches in diameter and several redwoods and other tree species at the site boundary. In addition, seasonal wetlands are located on the site in three separate locations. Approximately 0.37 acre of Army Corps of Engineers (ACOE) jurisdictional wetlands and 0.43 acre of Regional Water Quality Control Board (RWQCB) jurisdictional wetlands occur on the site. Deer Creek, a minor tributary of the Petaluma River, runs through the northern portion of the project site from east to west.

The Federal Emergency Management Agency's (FEMA) Flood Insurance Study shows that the project site is above the 100-year and 500-year floodplains, indicating that there is no flood hazard on the site. The General Plan land use designation for the project site is Mixed Use, and the zoning for the site is MU1B (Mixed Use 1B). The Mixed Use General Plan designation includes the mixture of a combination of uses, including retail, residential, service commercial, and/of offices.

Responsible/Trustee Agencies

The City of Petaluma is the Lead Agency for the proposed project. Responsible agencies may include, but not be limited to:

- Caltrans, District 4
- United States Army Corps of Engineers
- Bay Area Air Quality Management District
- Regional Water Quality Control Board, San Francisco Bay Region
- California Department of Fish and Game
- United States Fish and Wildlife Service
- Sonoma County Water Agency

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.

	1. Land Use/Planning		7. Biological Resources		13. Recreation
	2. Population/Housing	X	8. Noise		14. Utilities/Service Systems
	3. Geology/Soils		9. Aesthetics		15. Mineral Resources
X	4. Air Quality		10. Hazards & Hazardous Materials		16. Cultural Resources
X	5. Greenhouse Gas Emissions	X	11. Transportation/Traffic		17. Agricultural and Forestry Resources
	6. Hydrology/Water Quality		12. Public Services	X	18. Mandatory Findings of Significance

■ Determination

	I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION should 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 the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.
X	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.



Signature

February 28, 2011

Date

■ Evaluation of Environmental Impacts

1. Land Use/Planning

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Physically divide an established community?				X
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, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Discussion:

(a). The project site is surrounded by areas developed with urban land uses, including offices, single-family residential homes, Petaluma Valley Hospital, Highway 101 and North McDowell Boulevard. The proposed project would not physically divide an established community and no impacts are considered. No impact would occur and no further analysis is required.

(b). Regarding consistency with overall General Plan policies, CEQA requires an analysis of consistency with plans and policies as part of the environmental setting (see *CEQA Guidelines* Section 15125). The policy analysis is used as an indicator of the resources that might be affected by a project and considers the importance a policy gives a resource in determining the significance of the physical impact. Conversely, this analysis considers the potential significance of the related physical impacts when analyzing a particular policy. The General Plan Guidelines published by the State Office of Planning and Research defines consistency as, "An action, program, or project is consistent with the General Plan if, considering all its aspects, it will further the objectives and policies of the General Plan and not obstruct their attainment." Therefore, the standard for analysis used in the Initial Study is based on general agreement with the policy language and furtherance of the policy intent (as determined by a review of the policy context). Inconsistency with a policy may indicate a significant physical impact, but the inconsistency is not itself an impact. The determination that the proposed project is consistent or inconsistent with the General and Area Plan policies is ultimately the decision of the City of Petaluma. Using this approach, the following policy consistency discussion provides a detailed analysis of land use policies of the City of Petaluma's General Plan 2025. The physical impacts of the proposed project are analyzed in other sections of the Initial Study or Environmental Impact Report (EIR) prepared for the project.

The General Plan Land Use designation for the site is Mixed Use with a maximum Floor Area Ratio (FAR) of 2.5. The proposed project represents a FAR of 0.19. The project is generally consistent with the applicable policies related to land use and planning. Therefore, impacts related to a conflict between the project and any applicable land use plan, policy, or regulation related to land use and planning would be less than significant and no mitigation measures are required.

As stated in the General Plan, the North McDowell subarea lies between Highway 101, the Plaza and Plaza North Shopping Centers, North McDowell Boulevard, the railroad tracks, and Petaluma's Urban Growth Boundary at the northeast corner of the community. It provides two gateways into Petaluma – through Old Redwood Highway and Highway 101. Along with Sonoma Mountain Parkway/Ely

Boulevard South, McDowell Boulevard itself is a primary north-south connector for the eastern portion of Petaluma.

Commercial and industrial uses dominate the North McDowell Boulevard subarea. Highway-oriented commercial uses, such as hotels, restaurants, retail stores and auto service stations – are located adjacent to the Highway 101/OldRedwood Highway interchange. Business park complexes, featuring office and light industrial uses, are clustered along Old Redwood Highway and McDowell Boulevard. The North McDowell Boulevard subarea also contains a significant portion of the City's senior housing. South of Corona Road, four mobile home parks and one apartment complex are located along North McDowell Boulevard, providing affordable living for Petaluma's seniors and families.

Approximately 15 percent of the North McDowell Boulevard subarea is vacant (77 acres), most of it adjacent to the proposed new Rainier Avenue interchange/underpass. Vacant and under utilized lots provide opportunities for expansion and commercial, office, and light industrial uses along North McDowell Boulevard. Mixed Use designations offer an opportunity to intensify existing uses and provide more diversity and employment intensity along this arterial roadway.

A discussion of the project's consistency with applicable General Plan policies is provided below.

Chapter 1: Land Use, Growth Management, & the Built Environment:

Policy 1-P-1: Promote a range of land uses at densities and intensities to serve the community needs within the Urban Growth Boundary (UGB). The proposed project would be located within the Urban Growth Boundary on a long-vacant approximately 36-acre site located on North McDowell Boulevard. The site is zoned for mixed use and the project would include a mixture of three land use types, although the predominant use would be commercial retail. The site has been identified by the Leakage and Sustainable Retail Strategy Study as a site recommended for retail uses to address the impacts of retail leakage and provide more retail services and opportunities in the City. These policies are discussed in detail in the Economic Health and Sustainability chapter below. The proposed floor-area ratio (FAR) of the project is 0.19; this is noticeably less than the 2.5 FAR allowed in this zoning district, though environmental factors, such as traffic, noise, and surrounding uses are also considered when determining suitable density as well as intensity of uses.

Policy 1-P-2: Use land efficiently by promoting infill development, at equal or higher density and intensity than surrounding uses. The proposed project would be located on a site commonly defined as infill; this definition typically refers to a vacant site in an urban area surrounded substantially by developed sites. The development density proposed would be less than allowed in the current zoning designation and would not be of a higher density or intensity, but would be largely consistent with other predominantly commercial and retail sites in the vicinity.

Policy 1-P-6 Encourage mixed-use development, which include opportunities for increased transit access. The project site is zoned for mixed-use development, and the project proposes a mix of three land-use types as defined in the Implementing Zoning Ordinance; these uses include retail, recreation, and professional and medical service uses. The predominant uses would be retail, comprising approximately 80% of the square-footage of the project. The project site is served by an existing transit stop along the project frontage that is frequented by several transit lines serving the McDowell Boulevard corridor and connecting to other parts of the City; this stop would be enhanced per the requirements of the Transit Division Manager.

Policy 1-P-27 Encourage innovative site and building design to address parking solutions such as shared, structured, and/or underground facilities. The project site has been designed largely per the recommendations in the Leakage and Sustainable Retail Strategy Study, with the

primary home-improvement anchor tenant and several sub-anchor retail tenants toward the rear of the project, and smaller-scale retail, professional and medical office, and recreational uses toward the project frontage along or near North McDowell Boulevard. The project proposes vehicle parking stalls at grade, primarily in a central parking area situated between the smaller-scale retail and office frontages along North McDowell Boulevard, and the larger anchor tenants toward the rear along Highway 101. No structured or underground parking has been proposed and would not be required since the minimum parking requirements are already exceeded. In addition, no uses have been identified that would be serviced by on-site shared parking facilities; however, the provision for such facilities could be identified later in the planning process.

Chapter 2: Community Design, Character and Green Building

Planning Subareas: The parcel is within the Planning Sub-Area 11 – North McDowell Boulevard.

Policy 2-P-87 Where applicable, provide a transition in scale along North McDowell Boulevard between the industrial uses on the west side of the boulevard and the residential developments to the east, while allowing new development at intensities reflective of enhanced connections provided by the new cross-town connector and interchange at Rainier Avenue. The project site is adjacent to the proposed Rainier Avenue-Highway 101 interchange. The project has been designed to recognize the boundary and temporary bicycle and pedestrian uses have been proposed in the interchange area pending its construction. The proposed project uses would not be considered sensitive and therefore would not present future noise or air quality conflicts or concerns when the Rainier interchange is constructed. The project is situated in the commercial center of North McDowell Boulevard, with several existing shopping centers in the vicinity. This commercial cluster is well suited between the light industrial uses to the north along North McDowell Boulevard and the residential uses to the south and is roughly equidistant between them for a potential base of customers.

Policy 2-P-88 Provide enhanced pedestrian and bicycle network connections between the industrial, commercial and residential clusters. The proposed project is located in an area of North McDowell Boulevard in close proximity to other major retail centers, including Plaza North and Plaza South. The project would include facilities for both internal and external-connecting pedestrian and bicycle facilities connecting to both northerly and southerly North McDowell Boulevard facilities. The project has been reviewed by the Pedestrian and Bicycle Advisory Committee, which has issued recommended conditions of approval. These have been accepted by the applicant and would be included in the project conditions of approval.

Policy 2-P-89 Allow for a range of uses, including commercial, office and residential, in the mixed-use area on the southwest corner of North McDowell and Rainier Avenue. The project includes a mix of three use types as defined in the Petaluma Implementing Zoning Ordinance Table 4.3. These include retail, recreational, and services, with retail the predominant use. Service uses would include a bank and medical-related professional offices designed to serve the Petaluma Valley Hospital and related medical office uses in the area. Residential uses have not been proposed by the applicant, and if included in the project would not be consistent with Policy 10-P-3, as discussed below.

Policy 2-P-91 Promote walkability by clustering business parks and increasing pedestrian linkages between office structures and nearby commercial and restaurant uses.

- A. *Develop a program for modifying existing lawn areas fronting industrial development to provide sidewalks.*

Although not directly applicable, the project would include a continuous sidewalk along the North McDowell frontage.

Policy 2-P-92 Promote greater accessibility to the Petaluma River and neighboring areas, while enhancing the ecology and providing native planting through road extensions, bikeways, and trails, including: Extending Lynch Creek Way northwest through new developments, connecting with the Rainier Avenue extension. Extending Rainier Avenue westward to Petaluma Boulevard North, creating a new interchange with Highway 101. Lynch Creek Way would provide access to the project, although this access would not constitute an extension of Lynch Creek Way as a public street. This access would take the form of a driveway through the project then connecting to the Rainier Avenue extension, creating a secondary access point for project vehicular traffic as well as truck and delivery traffic. The extension would consist of project driveway both in front of and in the rear of the primary anchor tenant stores. Since this access would not constitute extension of Lynch Creek Way as a public street, this would be only partially consistent with this policy. The project has been designed per the delineation of land reserved for the future Rainier Avenue-Highway 101 interchange per the provisions of Ordinance No. 1991, adopted by the City Council in 1995. Therefore, the project would be consistent with this part of the policy.

Policy 2-P-93 Work with CalTrans and other agencies to establish a park-and-ride lot close to the new interchange. Include parking spaces with electric vehicle recharging facilities, secure bicycle parking, and reserved spaces for ride-sharing vehicles. The project site has not been identified as a possible location for a park-and-ride lot, however it's possible that a park-and-ride lot could be located near or within the interchange as space may be available within the interchange at the site and on the west side of Highway 101. Further discussion would be required during the application to explore the suitability of this potential location.

Policy 2-P-94 Encourage the development of landscape standards that reduce existing lawns and require tree planting. The project landscaping would be subject to review and approval by the Planning Commission as part of the Site Plan and Architectural Review process. As proposed, the project landscaping would minimize grassy areas, except as proposed for bio-swales, and would rely on primarily native and drought-tolerant landscaping. The project would include a wide variety of tree cover of differing varieties. Shade trees would be utilized throughout the parking area, and smaller ornamental trees would be featured along pedestrian and bicycle paths. Trees within the Deer Creek drainage would be situated for natural drainage capabilities and bio-retention of the swale.

2.3 Green Building

In 2006, the City of Petaluma adopted a voluntary green building program – “Petaluma Build it Green.” Petaluma Build it Green is a voluntary, points-based program designed to stimulate and support green building in Petaluma. Based on the nonprofit organization Build it Green, the program offers suggestions for conserving natural resources, using water and energy wisely, improving indoor air quality and planning for livable and vibrant communities. The purpose of a citywide policy on green building is to demonstrate the City’s commitment to environmental, economic, and social stewardship, and to contribute to the City’s goals of protecting, conserving, and enhancing the regions’ environmental resources.

Policy 2-P-121 Evaluate the success of the voluntary green program and develop and implement a mandatory program for new residential, commercial and municipal development and remodels. The applicant has submitted a Green Project Building Checklist, in accordance with the City of Petaluma Build It Green Information and Resource packet, and is based upon the LEED Green Building Rating System. The checklist assigns points per criteria such as sustainable sites, water efficiency, energy, materials, and innovation and design. The checklist is in draft format and is under review for compliance with applicable LEED standards. Although the City has not established a mandatory program, projects under review are considered for voluntary compliance; this project has met this level of compliance consistent with this policy.

Policy 2-P-122 Require development projects to prepare a Construction Phase Recycling Plan that would address the reuse and recycling of major waste materials (soil, vegetation, concrete, lumber, metal scraps, cardboard packaging, etc.) generated by any demolition activities and construction of the project. The project would be subject to a Condition of Approval consistent with this policy.

Chapter 3: Historic Preservation

Policy 3-P-1 Protect historic and archaeological resources for the aesthetic, cultural, educational, environmental, economic, and scientific contribution they make to maintaining and enhancing Petaluma's character, identity and quality of life.

K. In accordance with CEQA and the State Public Resources Code, require the preparation of a resource mitigation plan and monitoring program by a qualified archaeologist in the event that archaeological remains are discovered.

The project would be subject to a Condition of Approval consistent with this policy. Refer to Item 16a-d below for additional analysis of cultural resources impacts.

Chapter 4: The Natural Environment

Policy 4-P-1: Protect and enhance the Petaluma River and its tributaries through a comprehensive river management strategy of the following programs:

C. Require design review to address the relationship and stewardship of that project to the river or creek for any development on sites with frontage along the river and creeks.

The project would be subject to Site Plan and Architectural Review. The review of the site plan would include building layout and the relationship of project structures to natural features of the site and its surroundings. For this project, the primary natural feature is the Deer Creek drainage that flows into the Petaluma River. The SPAR process would include the landscaping along this feature as well as building setbacks to ensure continued unimpeded natural drainage.

D. Create setbacks for all tributaries to the Petaluma River extending a minimum of 50 feet outward from the top of each bank, with extended buffers where significant habitat areas, vernal pools, or wetlands exist. Development shall not occur within this setback, except as part of greenway enhancement (for example, trails and bikeways). Where there is degradation within the zone, restoration of the natural creek channels and riparian vegetation is mandatory at time of adjacent development.

All project buildings are at least 50 feet from the top bank of the Deer Creek swale, as measured in the wetlands delineation survey. In addition, the swale shall be planted with native vegetation per the recommendations of the project biologist to ensure that invasive species are not included. In

addition, the biologist shall review and approve the landscape design and proposed trails, bicycle paths, and related amenities, to ensure that they do not impede the natural biotic communities or drainage patterns and capacity of this swale.

- G. *Expand the planting and retention of trees along the upper banks of the river and creeks to reduce ambient water temperature and shade out invasive, non-native species.*

The Deer Creek swale area would be planted with a mix of native riparian-friendly species of trees and groundcover that would promote the natural biotic communities and unimpeded drainage of this swale. All plantings would be reviewed and approved by the project biologist and City staff to ensure that invasive, non-native species are not present.

Policy 4-P-3 Protect special status species and supporting habitats within Petaluma, including species that are State or Federal listed as endangered, threatened, or rare.

- A. *As part of the development review process, site-specific biological resource assessments may be required to consider the impacts on riparian and aquatic resources and the habitats they provide for invertebrates, fish, amphibians, reptiles, birds, mammals, and plants. If development is located outside these ecologically sensitive regions, no site-specific assessment of biological resources may be necessary. Appropriate mitigation measures to reduce impacts to sensitive habitats and special status species shall be imposed on a project-by-project basis according to Petaluma's environmental review process.*

The project site and proposed project has been subject to a biological assessment. The findings and recommended mitigation measures of this assessment are included in further below in Item 7 this Initial Study.

Policy 4-P-9 Require a percentage of parking spaces in large parking lots or garages to provide electrical vehicle charging facilities. Electric vehicle charging stations shall be provided in the parking areas per the recommendation of staff and approval of the Planning Commission as part of its Site Plan and Architectural Review.

Policy 4-P-12 Prohibit new drive-thru food and service facilities with the exception of vehicle serving businesses, such as car wash and oil/lube, and limit expansion of the drive-thru components of existing facilities which increase idling vehicles. Discretionary approvals for such facilities shall include provisions which decrease or eliminate idling vehicles, to the extent feasible and practical. No drive-through facilities are proposed as part of the project.

Policy 4-P-15 Improve air quality by reducing emissions from stationary point sources of air pollution (e.g. equipment at commercial and industrial facilities) and stationary area sources (e.g. wood-burning fireplaces & gas powered lawn mowers) which cumulatively emit large quantities of emissions.

- B. *Continue to use Petaluma's development review process and the California Environmental Quality Act (CEQA) regulations to evaluate and mitigate the local and cumulative effects of new development on air quality.*
- C. *Continue to require development projects to abide by the standard construction dust abatement measures included in BAAQMD's CEQA Guidelines.*

Please refer to the Air Quality section in Item 4 of this Initial Study.

- D. *Reduce emissions from residential and commercial uses by requiring the following:*

- *Use of high efficiency heating and other appliances, such as cooking equipment, refrigerators, and furnaces, and low NOx water heaters in new and existing residential units;*
- *Compliance with or exceed requirements of CCR Title 24 for new residential and commercial buildings;*
- *Incorporation of passive solar building design and landscaping conducive to passive solar energy use for both residential and commercial uses, i.e., building orientation in a south to southeast direction, encourage planting of deciduous trees on west sides of structures, landscaping with drought resistant species, and use of groundcovers rather than pavement to reduce heat reflection;*
- *Encourage the use of battery-powered, electric, or other similar equipment that does not impact local air quality for nonresidential maintenance activities.*

The proposed project would incorporate these measures as part of its overall design.

Policy 4-P-16 To reduce combustion emissions during construction and demolition phases, the contractor of future individual projects shall encourage the inclusion in construction contracts of the following requirements or measures shown to be equally effective:

- *Maintain construction equipment engines in good condition and in proper tune per manufacturer's specification for the duration of construction;*
- *Minimize idling time of construction related equipment, including heavy-duty equipment, motor vehicles, and portable equipment;*
- *Use alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline);*
- *Use add-on control devices such as diesel oxidation catalysts or particulate filters;*
- *Use diesel equipment that meets the ARB's 2000 or newer certification standard for off-road heavy-duty diesel engines;*
- *Phase construction of the project;*
- *Limit the hours of operation of heavy duty equipment.*

The proposed project would incorporate all these measures as part of the Mitigation Monitoring and Reporting Program. Refer to Item 4 (Air Quality) of this Initial Study.

Chapter 5: Mobility

Policy 5-P-19: All new and redesigned streets shall be bicycle and pedestrian friendly in design. The project has been reviewed by the Pedestrian and Bicycle Advisory Committee for compliance with Pedestrian and Bicycle Plan goals and policies for pedestrian and bicycle paths internal to the project and connecting to the City's pedestrian and bicycle networks and paths, as well as on-site provisions for bicycle lockers, showers, and related facilities.

Policy 5-P-43: Support efforts for transit oriented development around the Petaluma Depot and along the Washington Street, Petaluma Boulevard, McDowell Boulevard, Lakeville Street, and other transit corridors. The project would provide direct transit frontage, and would include paratransit stops at various locations within the project to be determined by the Transit Division Manager.

Chapter 6: The Arts

Policy 6-P-29: Integrate the arts into the planning process in the City and encourage the arts as an integral part of development proposals and capital improvement programs. The proposed project would abide by all the applicable provisions of the Implementing Zoning Ordinance for dedication of art or in-lieu payment of fees.

Chapter 7: Community Facilities, Services and Education:

Policy 7-P-41: Maintain communications with the various major health care facilities (Petaluma Valley Hospital, Kaiser) to ensure that adequate medical facilities and services are provided to meet the varying needs of the community.

B. Support expansion of health care facilities to match the growing population and changing demographics of the community.

The proposed project would include minor medical facilities, such as medical offices supplying non-ambulatory care and services, designed to supplement the existing medical services of Petaluma Valley Hospital across the street. This would represent an expansion of health care services consistent with this policy.

Policy 7-P-42: Recognize the health benefit of a “walkable” community with neighborhood access to parks and trails.

A. As development occurs, ensure that connectivity is established to recreational amenities and retail opportunities.

The project would provide pedestrian and bicycle connections to facilities along North McDowell Boulevard and Lynch Creek Way that would connect to the Lynch Creek Trail and other pedestrian and bicycle paths consistent with this policy.

Chapter 8: Water Resources

Policy 8-P-4: The City shall routinely assess its ability to meet demand for potable water.

A. The City shall continue to monitor the demand for water for projected growth against actual use, and ensure that adequate water supply is in place prior to, or in conjunction with, project entitlements.

B. The City planning staff will discuss water supply with the developer for each new development early in the planning process and inform Water Resources staff of upcoming demands as provided by the applicant.

C. The City shall maintain a tiered development record to monitor approved and pending project developments to allow a reasonable forecast of projected water demand.

Please refer to the Utilities Section (Item 14) of this Initial Study.

Policy 8-P-10: The City may require the use of recycled water through the City development review process

A. New development may be required to install a separate recycled water system as deemed necessary and appropriate by the City to offset potable demand.

- B. Evaluate where the most appropriate potable water offset improvements can be implemented.*
- C. Determine the appropriate means of potable offset. Individual project systems may be required in addition to City-required improvements and/or fees relating to the recycled water offset system.*

The proposed project would be conditioned to provide utility stubs to connect to the City's recycled water (purple-pipe) system to ensure the availability of recycled water to serve the project when it becomes available. See further discussion in the Utilities Section (Item 14) of this Initial Study.

Sustainable Site Planning

Chapter 8 of the General Plan includes a subsection entitled Sustainable Site Planning. Sustainable site planning practices, sometimes referred to as Low-Impact Design (LID), are designed to maintain or restore the natural hydrologic functions on a site with the goal of reducing the impact of development. The goal is to structure the development of a site to detain, filter, treat and reduce runoff, and reduce heat island impacts. By reducing pollution and increasing groundwater recharge, sustainable site design helps to improve the quality of receiving surface waters and to stabilize the flow rates of nearby streams, potentially minimizing flooding impacts and benefiting wildlife habitats.

Development utilizing sustainable site design principles shall address the following design features:

Reduce imperviousness by limiting building footprint, and using permeable paving or landscaping to break up expanses of impervious surfaces

The proposed project would utilize permeable pavers where deemed feasible as a way to address impervious surface runoff issues. Landscaping would be utilized throughout the project, most notably along the Deer Creek swale, to break up impervious surfaces.

Cluster development on site to minimize disturbance.

The proposed project would have two clusters of development: one along North McDowell Boulevard and one along Highway 101. These clusters would be divided by parking that would only partially address the purpose of minimizing disturbance since the amount of paving in this area would be extensive.

Use canopy trees to absorb rainwater and slow water flow.

Canopy trees, to be selected by the Planning Commission as part of its Site Plan and Architectural Review, would be utilized throughout the parking area and other areas of impervious cover to absorb rainwater and address water flow.

Direct runoff into or across vegetated areas to help filter runoff and encourage groundwater recharge.

Runoff would be directed into bio-swales placed throughout the project site for maximum retention capacity. Runoff would also be directed into the Deer Creek drainage swale through the vegetated channel.

Preserve, or design into the infrastructure, naturally vegetated areas that are in close proximity to parking areas, buildings, and other impervious expanses in order to slow runoff, filter out pollutants, and facilitate infiltration.

The proposed project would include the rehabilitation of the Deer Creek drainage swale to include naturally vegetated areas featuring native biotic communities under the consultation of the project biologist. The surface runoff would be directed through this swale and would be treated through natural vegetation and bio-swales prior to introduction into the swale. This swale bisects the project site and is within close proximity to major project buildings and active use areas.

Reduce street widths for internal circulation.

Internal project streets and driveways would be separated by bio-swales and other related landscape features wherever possible. Project streets are two-lane and of minimum width necessary to comply with City Site Plan and Architectural Review standards.

Remove curbs and gutters from streets, parking areas, and parking islands, where appropriate, to allow storm water sheet flow into vegetated areas.

The applicant shall submit final stormwater drainage plans and calculations to the City Engineer for review and approval that would feature these design elements where feasible.

Use devices such as bioretention cells, vegetative swales, infiltration trenches, and dry wells to increase storage volume and facilitate infiltration.

The project would include these stormwater retention elements.

Grade to encourage sheet flow and lengthen flow paths to increase runoff travel time in order to reduce the peak flow rate.

The site is relatively flat, with an overall gradient of less than 1 percent.

Disconnect impervious areas from the storm drain network and maintain natural drainage divides to keep flow paths dispersed.

The proposed project would include bio-swales and other natural drainage network devices, particularly within areas of potentially high runoff, such as parking areas.

Disconnect roof downspouts and direct storm water into vegetated areas or into water collection devices.

The stormwater runoff would be directed in vegetated bio-swales and water collection infiltration devices.

Install cisterns or sub-surface retention facilities to capture rainwater for use in irrigation and non-potable uses.

The project would include these retention facilities where feasible, particularly in areas with higher potential for surface runoff.

Use native plants (or adaptable species) to establish an adaptable and low maintenance landscape that requires less irrigation and are appropriate for the climactic conditions.

Native and drought-resistant plants would be incorporated into the project landscaping. Selection of plant species would be a component of the Site Plan and Architectural Review process and approved by the Planning Commission.

Use naturally occurring bio-chemical processes on plants located in tree-box filters, swales and planter boxes.

The project would be required to use bio-chemical processes as part of the landscape plans.

Divert water away and disconnect from the storm drain using correctional drainage techniques.

The project has employed these drainage measures and shown in the storm water mitigation plan.

Chapter 9: Economic Health and Sustainability

Chapter 9 of the General Plan focuses on goals and policies for continued and enhanced economic health and sustainability, including a focus on a strengthened retail sector (Chapter 9.3).

Retail Strategy: *This chapter includes a retail strategy that focuses on goals to address current retail gaps in the City's retail sector. These strategies include focuses on:*

- *Large format general merchandise, value apparel/footwear, or discount department store:*
- *Large format house and home retailer*
- *Large format electronic/home entertainment retailer*
- *National retailers with established brand names*
- *Certain complementary uses.*

In addition, the retail strategy defines what kind of retail outlets should be placed in certain areas of the City. For North McDowell Boulevard, the strategy is as follows:

- *The McDowell Boulevard centers and the northern gateway (along Old Redwood Highway) would continue as retail corridors but with an intensification of existing uses.*

The project addresses these retail strategy points. The anchor tenant is proposed to be a national-chain home improvement store, and other proposed tenants include a home electronics store, and other regional and national-name stores proposed for larger format project settings. This mix of national retailers in these large formats would address the City's retail strategy and address issues and strategies outlined in the City's Leakage and Sustainable Retail Strategy Study. In addition, the McDowell Boulevard corridor would continue as a retail corridor with the project, since the majority of the project uses would be retail-oriented uses.

Retail in Mixed Use Areas: The chapter also includes specific discussion of goals for retail uses in mixed-use areas, and discusses the following considerations:

- *Is the area already well-supplied with similar retail uses? If so, the new retail may founder, or may cannibalize on existing retail in the area, resulting in less-than optimal returns*

The proposed project would be located in an area with a wide variety of existing retail uses, some of them similar to those proposed. There is an existing home improvement center approximately two miles north on North McDowell Boulevard; however, the proposed home improvement center as part of the project would be approximately three times larger than the existing areas store, offering a much wider variety of choices. Other retail uses proposed would incorporate primarily regional and national chains potentially not represented in the City, providing area residents with more retail choices.

- *Is the type of retail proposed appropriate? Retail in mixed use projects should not be of a type that would constitute a significant draw Downtown or in a shopping center/area: such uses should be located in areas where retail use is the focus.*

The type of retail proposed is primarily the type of retail identified and recommended by the Leakage and Sustainable Retail Strategy Study, particularly the anchor home improvement center. The proposed retail centers would not constitute a significant draw from Downtown businesses since Downtown has no viable footprint either existing or proposed for the type and size of home improvement center proposed for the project. Also, currently there is no large home improvement center Downtown of the type or variety of the proposed center, so the market draw to the project in this retail type would not be duplicative of an existing Downtown use. In addition, other proposed retail tenants would reflect primarily regional and national chains; the Downtown features more of an eclectic mix of locally-owned retailers and restaurant options. The proposed retail would be located in an area where retail is the focus, as evidenced by the preponderance of existing retail outlets in the area. The EIR will analyze the project's potential to result in significant urban decay impacts.

- *Is the provision for ground floor retail premature in light of existing overall densities in the area? Few areas outside the centers of major cities are dense enough even at buildout to support continuous ground floor retail use. For a small-scale mixed use project, the scale of non-retail use may be too small to yield an adequate customer base for the retail proposed. In such a case, retail may not be a desirable project component. Alternatively, ground floor space may be designed and constructed for interim use as office or residential while awaiting the "ripening" of retail demand in the neighborhood.*

The type of retail proposed would not primarily consist of the type of neighborhood-serving retail typically found on the ground floor of mixed-use projects where the mixture of uses occurs within multi-story buildings with office and/or residential uses proposed for the upper floors. The proposed retail would be larger regional and national chain stores located within individual pad buildings on the project site. In addition, the project site is not within the "center" of the City (example: the Central Petaluma Specific Plan Area) but rather in an area with existing retail densities similar to those proposed as part of the project.

- *Will the project design avoid a sense of "sameness" among mixed-use projects? Many mixed use projects have a cookie-cutter appearance: same face to the street, same types of occupants, same structural arrangements. Project design shall provide the access that the retail component needs while avoiding an undesirable sameness in mixed-use projects (for example, the retail use could be oriented primarily to the majority residential and/or office uses in the project rather than to the street).*

The project would not employ many features found in typical mixed-use projects; i.e., retail on the ground floor and residential uses on the upper floors with an orientation toward the street. Instead, the project would employ features more often found in larger shopping centers with retail uses located in individual pad buildings; this by itself also could create a "cookie-cutter" appearance with similar centers. The unique feature as part of this project would be the orientation of the project along the enhanced "Deer Creek" active-use feature in addition to orientation of smaller retail and service-use buildings oriented toward the street and larger retail offerings to the rear of the project.

- *Will the expansion of retail opportunities to dispersed mixed use sites dilute the vitality of existing (or desired) retail focus points? Prevention of such an outcome could be addressed by restricting retail in some mixed-use projects.*

There is currently no provision to "restrict" retail uses in some mixed-use projects, nor are there alternative provisions mandating their use either. The project site was recommended for retail uses

as part of the Leakage and Sustainable Retail Strategy Study and it is within an area that is predominated with existing retail uses, so it can itself be considered a desired retail focus point. In addition, the types of retail tenants proposed would be those not present currently within the City in most cases, therefore not diluting the vitality of existing or desired retail focus points. The EIR will analyze the project's potential to result in significant urban decay impacts.

Economic Vitality and Opportunity: Policy 9-P-2: Ensure new commercial development will have a net positive impact on Petaluma's economy, existing businesses, city finances, and quality of life.

- A. *Consider the need when reviewing commercial development proposals over a specific size in building area per occupant to obtain a fiscal and economic analysis, as a component of the entitlement process, of the impacts on Petaluma's economy, existing businesses, local workforce, and city finances.*

A Fiscal and Economic Impact Analysis (FEIA)¹ for the project has been prepared by the economic consulting firm Bay Area Economics per the requirements of City Council Resolution No. 2008-189 N.C.S. The FEIA was considered by the City Council at a duly-noticed public hearing on May 4, 2009. The EIR will analyze the project's potential to result in significant urban decay impacts.

Economic and Social Sustainability: Policy 9-P-10: Encourage economic development that will enhance job opportunities for existing City residents by providing incentives for proposals that:

- *Provide jobs that match the skills (occupations) of unemployed or underemployed workers who live in Petaluma, and, or*

The project would provide for both full-time and part-time employment. Of these total permanent jobs, approximately two-thirds are expected to be full-time jobs. In addition, the project would generate temporary jobs in the construction sector.

- *Commit to first-source hiring for workers who live in Petaluma, and/or*

Conditions of approval would consider first-source hiring for both temporary construction and permanent project employment, consistent with applicable law.

- *Pay wages that enable workers to live in Petaluma.*

The project would include full (approximately two-thirds) and part-time positions. The proposed home improvement store would pay competitive wages that are set at or above the market average for similar jobs. Other uses within the project would pay wages and benefits consistent with market and industry standards. Not all jobs would guarantee compensation that would enable workers to live in Petaluma; however, the preponderance of full-time versus part-time employment would provide additional opportunity within the City's job base that are currently not present otherwise.

Retail Sector:

Policy 9-P-13: Expand and diversify Petaluma's retail base.

¹ The FEIA is available for review at the City of Petaluma Community Development Department, Planning Services desk.

A. *Adopt a strategy to consider, select, and attract retail uses. Such a strategy should address, for example, criteria for:*

- *Attracting desired new business that expand and enhance the diversity of retail options.*

The project proposes a large, national-brand home improvement center of a size that does not currently exist in the City. This would expand retail choices in the home improvement area that would expand the diversity of retail options in this market area. Other tenants proposed for the sub-anchor buildings would likewise represent regional and national retail store brands currently not available in Petaluma.

- Determining where to encourage new occupancies by local businesses vs. regional or national chains.

The Leakage and Sustainable Retail Strategy Study recommended primarily regional and national chain businesses for the project site. The primary anchor home improvement store, was recommended as a relocated Orchard Supply Hardware or Yardbirds store to address potential detrimental sales affects on these two existing home improvement centers. Since this analysis was conducted, Yardbirds went out of business, leaving Orchard Supply Hardware as the home improvement store serving this area of the City. However, the store type proposed for the home improvement center in the project is larger than the typical square-footage and offerings in an Orchard Supply Hardware center so this relocation assumption would not necessarily apply.

- *Placing appropriate kinds of retail uses in appropriate settings (as called for in the consultant's report, Leakage and Sustainable Retail Strategy Study).*

The Leakage and Sustainable Retail Strategy Study identified the project site as an opportunity for retail development to address the City's leakage of retail sales and related sales tax revenue. The site identified a home improvement store of approximately 100,000 to 110,000 square feet as the primary anchor, with a discount department store and food uses as sub-anchor and ancillary tenants. The size of the proposed home improvement center in the current project proposal is slightly above the leakage study analysis. The recommended site layout in the leakage study called for the home improvement store anchor to be located in the rear of the project site along the freeway to have regional exposure and to introduce circulation past other retail units and through the site. The study further recommended the restaurants be located along North McDowell Boulevard to exploit exposure and convenience. The current project layout largely conforms with these recommendations, particularly the siting of the home improvement center anchor tenant.

B. *Implementing the strategy of Program A by targeting types of retail stores and activities to attract to Petaluma that would expand local choice in types of retail enterprises.*

- *Identify targeted types of retail stores and activities to be attracted to Petaluma using the City's retail strategy as a guide.*
- *Identify the criteria used by major retailers to select new locations, the type of store format (size, etc.) they would use locally, and whether they would be interested in a Petaluma location.*
- *Determine site requirements of interested retailers and identify suitable sites.*

The Leakage and Sustainable Retail Strategy Study has identified targeted types of stores for the project site in its discussion of retail positioning and strategies. This strategy identified the home improvement store as the recommended primary anchor tenant, with a collection of sub-anchor tenants and restaurants as additional retail uses. The study also recommended their positioning on the project site for visibility and circulation, as well as the suggested size of the primary anchor

tenant and key sub-anchor tenant stores. The project complies overall with the recommendations and strategies in this study.

C. *Put in place mechanisms to assist in placing the desired kinds of retailers at locations suitable for them; for example, by:*

- *Prioritizing projects by location.*
- *Adjusting parking requirements (such as by allowing for shared parking arrangements, or facilitating construction of parking structures.)*

The project is being proposed by a private applicant; however, the City and the applicant have received numerous studies, including the retail leakage study that prioritized and/or analyzed a project of similar scope and use at the project location. Neither structured parking nor shared parking arrangements would be required since the site has adequate parking per the requirements of Chapter 11.060 of the Implementing Zoning Ordinance.

Policy 9-P-14: Plan and locate retail uses appropriately to their types and the sites available

A. *Target sites for new retail uses and activities.*

B. *Develop neighborhood centers at multiple locations to focus commercial activity close to residential uses.*

C. *Consider appropriate retail uses for key infill locations (including downtown) and new development sites, including:*

- *Arterial corridors, including North Petaluma Boulevard.*
- *As part of new mixed use developments (see “Retail in Mixed Use Areas”).*

As mentioned above, the Leakage and Sustainable Retail Strategy Study identified the project site as a retail center to address the City’s retail leakages, primarily in the home improvement sector. The project site is zoned for Mixed Use, and a discussion on the project’s compliance with the General Plan strategies for retail in mixed use areas is provided above.

Policy 9-B-17: Incorporate access and amenity features into retail rehabilitation and intensification projects’ including streetscape improvements, relocation of parking behind buildings to add visual appeal, and improved bicycle and pedestrian connections between existing and new retail areas and to adjoining neighborhoods to promote non-auto access.

Although the project is not an existing retail center slated for rehabilitation or intensification, it would feature a host of amenities consistent with this policy. These amenities would include a streetscape along North McDowell Boulevard featuring extensive landscaping, curb cutouts, and enhanced pavers as part of the sidewalk design. The primary parking area would be located behind smaller pad buildings to enhance the visual appeal of the project as viewed from North McDowell Boulevard. In addition, the project would feature bicycle and pedestrian connections both internally and connecting with bicycle paths and sidewalks along North McDowell Boulevard, Rainier Ave, and Lynch Creek Way that would connect with the City’s greater network and bicycle and pedestrian paths and connections.

Fiscal Health:

Policy 9-P-19: Insure the long-term fiscal health of Petaluma, as the City continues to develop, balancing fiscal concerns with economic, social, environmental, and cultural values.

- A. *Assemble data on the relationships between land use and City service costs and between land use and City revenues.*

The Fiscal and Economic Impact Analysis identified the estimated costs to the City of providing public services, including police and fire, to the project. It also identified the net revenues to the City from project-generated sales tax and other revenues against the cost of providing services to evaluate the net fiscal gain for the City. The EIR will analyze the project's potential to result in significant urban decay impacts.

- B. *Prepare periodic citywide and project-specific fiscal impact studies to provide information about pressures on the City's fiscal resources.*

As mentioned above, the Fiscal and Economic Impact Analysis studies the fiscal cost to the City of providing public services to the project against the estimated net revenue gain to the City from the project. The EIR will analyze the project's potential to result in significant urban decay impacts.

- C. *Formulate a strategy to guide the fiscal consideration of proposed development projects. Such a strategy should recognize that not every project would generate net revenues (that is, revenues exceeding costs) for the City, and should provide a framework for consideration of projects in the larger context of the full array of their economic, social, cultural, and environmental impacts on the City.*

The Fiscal and Economic Impact Analysis concluded that the project would generate net revenues to the City on a long-term basis, primarily from sales taxes generated from retail uses. The EIR will analyze the project's potential to result in significant urban decay impacts.

- D. *In expanding Petaluma's business base, seek economic activities that yield net fiscal benefits to the City.*

The Fiscal and Economic Impact Analysis concluded that the project would generate an estimated net fiscal surplus of approximately \$681,000 annually to the City's General Fund, primarily from the sales taxes generated. In addition, the project site is located within a redevelopment area; therefore, the project would also generate property tax increment revenues of approximately of \$311,000 annually which the redevelopment agency can use for improvements in the area and to provide affordable housing. The EIR will analyze the project's potential to result in significant urban decay impacts.

- F. *Encourage the use of local contractors and sub-contractors.*

A potential condition of approval would encourage the project applicant to employ local contractors and sub-contractors through local advertising and use good faith efforts to provide persons and businesses that reside or have offices in the City of Petaluma opportunities for employment on the project. The applicant would submit documentary proof of outreach and/or publication to staff.

Chapter 10: Health and Safety

Noise

Policy 10-P-3: Protect health and welfare by eliminating or minimizing the effects of existing noise problems, and by minimizing the increase of noise levels in the future.

B. Discourage location of new noise-sensitive uses, particularly homes, in areas with projected noise levels greater than 65 CNEL. Where such uses are permitted, require incorporation of mitigation measures to ensure that interior noise levels do not exceed 45db CNEL.

The entire project site lies within the 65 CNEL noise contour boundary, and nearly half the site lies within the 70 db CNEL noise contour. In addition, the site frontage is entirely along North McDowell Boulevard, which is within the 70 db CNEL as well; one of the few arterials in the City so designated. Since no residential development is proposed as part of the project, there would be no exposure of new noise-sensitive uses to these generally unacceptable noise levels, and the project would be consistent with this policy.

Implementing Zoning Ordinance

The project site is zone MU1-B (Mixed Use 1B) in the City of Petaluma Implementing Zoning Ordinance. This designation is intended for larger sites along arterial corridors. This classification requires a robust combination of uses, including retail, residential, service commercial, and/or offices. Development is oriented toward the pedestrian, with parking provided, to the extent possible, in larger common areas or garages. Maximum FAR including both residential and non-residential uses, is 2.5, and the maximum residential density is 30 DU/AC.

The project proposes the following mixture of uses:

1. Retail (80% of project uses):
 - Building and landscape materials sales – Indoor
 - General Retail
 - Groceries/specialty foods – 25,000 sf or less
 - Restaurant, café, coffee shop
2. Recreation, Education, and Public Assembly (15% of uses)
 - Fitness/health facility
3. Services – Business, Financial and Professional (5% of uses)
 - Office - Professional
 - Medical Services - Minor

All of the proposed uses are allowed in the MU1-B zoning district; one provision applies to Medical Office – Minor uses – these are allowed either on the upper floor or behind ground floor street fronting use. The proposed Medical Office – Minor uses in the project are to be located behind the proposed Professional Office building facing North McDowell, therefore, it would be consistent with this provision.

Development Standards

The proposed development Standards apply to MU1-B zoning districts:

Setbacks

Front – zero

Side – zero

Rear – zero

Maximum Site Coverage

2.5 Floor Area Ratio

Height Limit

30 ft. (when the building is more than 30 feet from an abutting property line, one additional foot of height is permitted with each additional foot of setback over 30 feet for a maximum building height of 45 feet).

The project conforms with all of these development standards.

Pedestrian and Bicycle Plan

Policies 1 and 3 through 6 concern bicycle facilities applicable to the project, and Policies 8 through 10 concern pedestrian facilities.

Policy 1: Implement the bikeway system as outlined in the Bicycle and Pedestrian Plan, and expand and improve the bikeway system wherever the opportunity arises.

Program B: Develop and update guidelines and standards for the design of bicycle facilities:

The project provides bicycle parking, storage and locker in accordance with the Implementing Zoning Ordinance, and the design and location of such facilities has been recommended for approval by the Pedestrian and Bicycle Advisory Committee.

Policy 3: The City shall discourage using sidewalks as designated bicycle routes.

The project includes frontage improvements to North McDowell Boulevard. The project would provide a 10-foot wide Class I multi-use bicycle and pedestrian path along the North McDowell Boulevard project frontage. Although the Pedestrian and Bicycle Plan calls for a Class II bike lane on North McDowell Boulevard, the proposed Class I is consistent with the existing Class I facility on the opposite side (east) of North McDowell as well as the existing and planned Class I facilities along the frontage of the Plaza Shopping Center.

Policy 4: The City shall require Class II bike lanes on all new arterial and collector streets.

There is currently a Class I bicycle path on the opposite side of North McDowell Boulevard.

Policy 5: All new and redesigned streets shall be bicycle and pedestrian friendly in design.

As mentioned above, the improved streets would have both dedicated bicycle lanes and pedestrian sidewalks constructed per City code specifications. Landscaping elements would be featured along these corridors for aesthetic effects, delineation of corridors, and eventual shading.

Policy 6: Ensure that new development provides connections to and does not interfere with existing and proposed bicycle facilities.

The project would include internal bicycle facilities and connections to bicycle lanes that would be constructed as part of the street improvements along North McDowell Boulevard and Lynch Creek Way.

Policy 8: Preserve and enhance pedestrian connectivity in existing neighborhoods and require a well connected pedestrian network linking new and existing developments to adjacent land uses.

The project would provide improved sidewalk facilities along North McDowell and pedestrian access to Lynch Creek Way connecting the project with adjacent land uses.

Policy 9: Require the provision of pedestrian site access for all new development.

The project would provide dedicated pathways and direct pedestrian access to both McDowell directions and at Lynch Creek Way.

Policy 10: Give priority to the pedestrian network and streetscape amenities near schools, transit, shopping, and mixed-use corridors emphasized in the General Plan.

The improvements for North McDowell Boulevard would include a 10-foot wide, multi-use bicycle and pedestrian path with accompanying landscaping and access to nearby areas including transit facilities, Lynch Creek Trail, and surrounding residential areas.

Consistency with other Plans and Programs:

The project site is not within the Central Petaluma Specific Plan Area (CPSP).

The project site is not within the Airport Influence Area (AIA) for Petaluma Municipal Airport.

There project site is not within a habitat conservation plan or natural community conservation plan.

The project site does not lie within an historic area.

The project site is within the Petaluma Community Development Commission Redevelopment Area; however, no redevelopment funds are being used to support and/or finance the project or any infrastructure directly supporting the project.

(c). There is no Habitat Conservation Plan, Natural Community Conservation Plan, or other local, regional, or state habitat conservation plan that exists for Petaluma that would regulate the proposed development on this parcel. Review of the Open Space Lands Map of the Petaluma General Plan Technical Appendix indicates that the site is not designated open space. The project is an in-fill site within an urbanized area. Therefore, the proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan. No impacts are expected and no further review is necessary.

2. Population/Housing

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
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)?			X	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?				X

Discussion:

(a). According to the Fiscal and Economic Impact Analysis completed by Bay Area Economics, the project is projected to generate 331 construction jobs and 510 permanent jobs, with a net gain of 361 retail jobs. Of the permanent jobs, slightly more than two-thirds are projected to be full-time jobs; an estimated 175 of the total permanent jobs are associated with the Lowe's anchor store. Retail employment in general is typified by a large component of part-time workers; most of the permanent jobs at Deer Creek Village would be in retail occupations, but there would also be additional jobs in other areas such as food preparation and serving, building and grounds cleaning and maintenance, and office and administrative support, as well as medical-related occupations if there are medical uses in the office portion of the project.

The opportunities for temporary and permanent jobs could result in increased permanent population and demand for housing in the vicinity of the project. However, a substantial increase in permanent population is unlikely because construction workers typically commute to job sites that change many times over the course of the year. Wage levels for general retail and restaurant establishments are typically not high enough to induce employees to relocate near the employment site. In addition, many of the jobs are likely to be filled from the existing local labor force available in or nearby Petaluma. Therefore, the proposed project would not induce a substantial population growth in the project area and impacts are less than significant.

(b-c). The project would be sited on an existing arterial road. The proposed project would neither displace existing housing or people, necessitating the construction of replacement housing elsewhere. Therefore, no impacts would occur and no further analysis is required.

3. Geology/Soils

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> 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? Strong seismic ground shaking? Seismic-related ground failure, including liquefaction? 		X		X
b. Result in substantial soil erosion or the loss of topsoil?		X		
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
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?		X		
e. Unstable earth conditions or changes in geologic substructures?		X		
f. Disruptions, displacements, compaction or overcovering of the soil?		X		
g. Change in topography or ground surface relief features?			X	
h. The destruction, covering or modification of any unique geologic or physical features?				X
i. Any increase in wind or water erosion of soils, either on or off site?		X		
j. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?		X		
k. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure or similar hazards?		X		

Discussion:

(a-k). The following discussion is based on a Preliminary Geotechnical Investigation Report by Kleinfelder, Inc. dated December 11, 2002, and a Third Party Geotechnical/Geological Review written by Treadwell & Rollo, Inc. dated June 20, 2005. These reports were prepared for a previous but highly

similar development proposal for the subject property. The mitigation measures outlined in the reports have been modified slightly to apply to the current project.

The project site is located in the Coast Ranges geomorphic province of California that is characterized by northwest/southeast trending valleys and ridges, a reflection of the dominant northwest structural trend of the bedrock in the region. The site has been mapped by Huffman and Armstrong showing the site as being blanketed by fluvial deposits at the outer edge of alluvial fans. These deposits generally consist of sand, silt, and silty clay. The project site is within Slope Stability Zone "A", which is defined as having the greatest stability due to low slope inclination.

Based on four test borings, the Kleinfelder report indicated that the site is generally covered by a 4 to 9 foot thick layer of dark gray and brown, very stiff, highly expansive sandy clay. Groundwater was encountered in the borings at depths of 10.5 to 18 feet below the ground surface.

Impact GEO-1: Strong Seismic Ground Shaking

The project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known active faults traverse the site. Therefore, the risk of ground rupture within the limits of the site is considered to be low. However, because the coastal areas of Northern California are seismically active, the project site can be expected to experience periodic minor earthquakes and possibly a major earthquake (magnitude 7.0 or greater) on one of the nearby active faults. The nearest major active fault is the Rodgers Creek fault located approximately 7.3 kilometers east of the site. Other major active faults are located between 25 and 49 kilometers from the site and include the San Andreas, West Napa, Maacama and Hayward faults. The site would be subject to strong to very strong shaking during a large event on one of the nearby faults.

The Treadwell and Rollo report concluded that there is a potential for soil liquefaction and seismically induced ground settlement at the site. They estimated that up to about $\frac{3}{4}$ inch of liquefaction induced settlement may occur near one boring during a seismic event; however, potentially liquefiable soil was not encountered at three other borings. These impacts would be considered less than significant with the incorporation of mitigation.

Mitigation Measures:

- GEO-1a All construction activities shall meet the California Building Code regulations for seismic safety (i.e. reinforcing perimeter and/or load bearing walls, bracing parapets, etc.).
- GEO-1b Prior to issuance of a grading permit, building permit or approval of an improvement plan or Final Map, the applicant shall provide a Final Soils Investigation and Geotechnical Report prepared by a registered professional civil engineer for review and approval of the City Engineer and Chief Building Official in accordance with the Subdivision Ordinance and Grading and Erosion Control Ordinance. The soils report shall address site-specific soil conditions (i.e. highly expansive soils) and include recommendations for: site preparation and grading; foundation and soil engineering design, pavement design, utilities, roads, bridges and structures.
- GEO-1c Prior to issuance of a grading or building permit, the applicant shall submit a detailed schedule for field inspection of work in progress to ensure that all applicable codes, conditions and mitigation measures are being properly implemented through construction of the project.
- GEO-1d The project applicant shall implement the recommendations in the Kleinfelder investigation and subsequent final reports related to site preparation, foundation support, site seismic

characterization, site preparation and grading, foundations, concrete slabs-on-grade, retaining walls, and surface and subsurface drainage control.

Impact GEO-2: Geologic and Soil Instability

Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces. As indicated in the Treadwell & Rollo Peer Review, the potential for lateral spreading is low because the potentially liquefiable soil layer is isolated and not continuous.

Expansive soils shrink or swell with changes in moisture content. Clay mineralogy, clay content and porosity of the soil influence the change in volume. The shrinking and swelling caused by expansive clay-rich soil can result in damage to overlying structures. The tests performed by Kleinfelder confirmed that the near-surface soil is highly expansive. Without proper soil conditioning, site preparation, subsurface drainage, and foundation design, the structures and infrastructure at the project site could sustain substantial damage. These impacts would be considered less than significant with the incorporation of mitigation.

Mitigation Measures:

- GEO-2a The design of all earthwork, cuts and fills, drainage, pavements, utilities, foundations and structural components shall conform with the specifications and criteria contained in the geotechnical report, as approved by the City Engineer. The geotechnical engineer shall sign the improvement plans and certify the design as conforming to the specifications. The geotechnical engineer shall also inspect the construction work and shall certify to the City, prior to acceptance of the improvements or issuance of a certificate of occupancy that the improvements have been constructed in accordance with the geotechnical specifications. Construction and improvement plans shall be reviewed for conformance with the geotechnical specifications by the City Engineer and Chief Building Official prior to issuance of grading or building permits and/or advertising for bids on public improvement projects. Additional soils information may be required by the Chief Building Inspector during the plan check of building plans in accordance with Title 17 and 20 of the Petaluma Municipal Code.
- GEO-2b Foundation and structural design for buildings shall conform to the requirements of the California Building Code, as well as state and local laws/ordinances. Construction plans shall be subject to review and approval by the Building Division prior to the issuance of a building permit. All work shall be subject to inspection by the Building Division and must conform to all applicable code requirements and approved improvement plans prior to issuance of a Certificate of Occupancy.
- GEO-2c The applicant shall follow the recommendations provided by Treadwell & Rollo:
1. Fill Placement and Compaction: Kleinfelder preliminarily recommends that the general and select engineered fill be placed in eight inch loose lifts and compacted to at least 90 percent relative compaction in accordance with ASTM D1557. Parking and driveway subgrade should be compacted to at least 95 percent relative compaction. Treadwell & Rollo concurs with Kleinfelder's preliminary recommendations, except that high-expansive, near-surface soil is sensitive to changes in moisture content; therefore, it should be moisture-conditioned to at least three to four percent above the optimum moisture content prior to compaction. The select fill need only be moisture-conditioned to near or slightly above the optimum moisture content prior to compaction.

2. Foundations: Kleinfelder preliminarily recommends the proposed buildings be supported on spread footings. The spread footings should be at least 12 inches wide, embedded at least 18 inches below the lowest adjacent compacted pad grade, and should rest on at least a 12 inch thick layer of properly compacted and approved fill. Spread footings should be designed based on allowable dead plus code live load and total load (including wind or seismic forces) bearing capacities of 2,500 and 3,500 pounds per square foot (psf), respectively. Resistance to lateral loads can be obtained using a passive pressure of 1,000 psf against the embedded face of the foundations, and a base friction of 0.30 times the net vertical dead load. Lateral resistance from the upper foot of soil should be neglected where the soil surface is not confined by slabs or pavements. Treadwell & Rollo concurs with Kleinfelder's preliminary foundation recommendations. However, a final geotechnical investigation should be performed to further evaluate the potential for soil liquefaction and liquefaction-induced ground settlement, and the affects of ground settlement on the proposed foundation system.
3. Concrete Slabs on Grade: Kleinfelder preliminarily recommends that interior slabs on grade be underlain by a water vapor retarder system consisting of at least a 4 inch thick layer of baserock (1 ½ inch gradation) overlain by water vapor retarder membrane that is at least 10 mils thick. Treadwell & Rollo concurs that water vapor retarder system should be placed beneath slab on grade floors to reduce the potential for moisture migration through the slab. However, Treadwell & Rollo suggests using a 4 inch thick layer of drain rock or crushed rock (1/2 to ¾ inch gradation) instead of "baserock" and using a vapor retarder membrane that meets the requirements for Class C vapor retarders as stated in ASTM E1745-97. Also, the vapor retarders should be placed in accordance with the requirements of ASTM E1643-98.
4. Retaining Walls: Kleinfelder preliminary recommends that retaining walls that are free to rotate be designed to resist lateral pressures resulting from active earth pressures, be designed to resist added surcharge loads, such as from building footings or vehicular traffic, and be properly backdrained. Treadwell & Rollo concurs with Kleinfelder's preliminary recommendations, with the exception that walls used to retain highly expansive soil may be subjected to high lateral pressures associated with the swelling of expansive soil. Typically, walls that retain expansive soil are designed to resist at-rest soil pressures or even higher lateral forces. Treadwell & Rollo suggests that Kleinfelder re-evaluate the wall design pressures or use an alternative backfill material that is not expansive.
5. Kleinfelder's preliminary geotechnical investigation is based on four borings that are more than 800 feet apart. Treadwell & Rollo recommends that a final geotechnical investigation be performed for this project to provide subsurface data and recommendations that are specific to each of the proposed building sites. Also, Kleinfelder's final investigation should further evaluate the potential for soil liquefaction and liquefaction-induced ground settlement at the proposed building locations, and re-evaluate the adequacy of the proposed foundation system to mitigate potential seismic hazards.
6. Due to the highly expansive nature of the on-site, near-surface soil, it is important to properly moisture-condition the highly expansive near-surface soil prior to compaction. Kleinfelder should provide recommendations for moisture-conditioning and compacting on-site and imported fill.
7. Treadwell & Rollo suggests that Kleinfelder clarify the terminology used for specifying the granular material beneath the interior floor slabs. Treadwell & Roll suggests using "drain rock" or poorly graded crushed rock" to describe the granular layer used as a capillary moisture break beneath the concrete slab-on-grade floors. Also, Treadwell & Rollo suggests Kleinfelder consider using the requirements and specifications provided in ASTM E1745-97 and ASTM E1643-98 for vapor retarders.

8. Treadwell & Rollo suggests that Kleinfelder re-evaluate the retaining wall design pressures or provide alternate backfilling specification for walls that would retain highly expansive soil.
9. Parking areas and driveways would comprise a significant portion of the proposed project site. As part of the final geotechnical investigation, Treadwell & Rollo suggests that Kleinfelder provide recommendations for new pavements for the proposed parking areas, driveways, and bicycle and pedestrian pathways.
10. As part of the final geotechnical investigation, Treadwell & Rollo suggests that Kleinfelder provide geotechnical recommendations for bridge foundations and abutments.
11. The proposed use of select fill to mitigate the adverse impacts associated with highly expansive fill could result in the need for imported fill. Alternatively, lime-treatment of the highly expansive fill can be used to modify the expansive characteristics of the soil without the need for importing select fill. Typically, lime treatment equipment can only mix lime into the upper approximately 18 to 24 inches of the soil. Therefore, Kleinfelder should describe a procedure for adequately lime-treating a 30 inch thick layer of soil beneath proposed building and concrete slab areas, if this option is to be used.

Impact GEO-3: Soil Erosion/ Loss of Topsoil

The grading required to permit development of the project has the potential to cause water erosion if construction is carried out during the rainy season (October 15 through April 15). The grading also has the potential to cause wind erosion if the soil conditions are dry. These impacts would be considered less than significant with the incorporation of mitigation.

Mitigation Measures:

- GEO-3a All earthwork, grading, trenching, backfilling and compaction operations shall be conducted in accordance with the City of Petaluma's Subdivision Ordinance (#1046, Title 20, chapter 20-04 of the Petaluma Municipal Code) and Grading and Erosion Control Ordinance #1576, Title 17, Chapter 17.31 of the Petaluma Municipal Code.
- GEO-3b The applicant shall submit an Erosion and Sediment Control Plan prepared by a registered professional engineer as an integral part of the grading plan. The Erosion and Sediment Control Plan shall be subject to review and approval of the City Engineering and Community Development Department, prior to issuance of a grading permit. The Plan shall include temporary erosion control measures to be used during construction of cut and fill slopes, excavation for foundations, and other grading operations at the site to prevent discharge of sediment and contaminants into the drainage system. The Erosion and Sediment Control Plan shall include the following measures as applicable.
1. Throughout the construction process, disturbance of groundcover shall be minimized and the existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short term needs (equipment staging areas, storage areas, and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.
 2. All drainage ways, wetland areas and creek channels shall be protected from silt and sediment in storm runoff through the use of silt fences, diversion berms, and check dams. All exposed surface areas shall be mulched and reseeded and all cut and fill slopes shall be protected with hay mulch and/or erosion control blankets as appropriate.

3. Material and equipment for implementation of erosion control measures shall be on-site by October 1st. All grading activity shall be completed by October 15th, prior to the on-set of the rainy season, with all disturbed areas stabilized and revegetated by October 31st. Upon approval by the Petaluma City Engineer, extensions for short-term grading may be allowed. Special erosion control measures may be required by the City Engineer in conjunction with any specially permitted rainy season grading.
4. If required to prevent scour and erosion of channel banks, biotechnical erosion control and bank stabilization measures shall be incorporated into the grading and landscape plans as described in the "Restoration Design and Management Guidelines for the Petaluma River Watershed, Vol. II". Channel modifications shall be limited to specific problem areas.

Impact GEO-4: Exposure to Geologic Hazards

The proposed project has the potential to expose people or structures to certain geologic hazards including ground shaking and expansive soils (see responses above). However, the proposed project would not substantially alter unique geologic substructures. Additionally, the project site and surrounding area are relatively flat, and as such, not subject to landslides. No rivers, streams, oceans, bays, inlets, or lakes are located on or abutting the project site. Therefore, the proposed project would have no impact on the deposition or erosion of beach sands, or changes in siltation, deposition, or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet, or lake. The existing drainage channel, locally known as "Deer Creek" would be enhanced. This impact would be considered less than significant with the implementation of Mitigation Measures GEO-1 – GEO-3.

4. Air Quality

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	X			
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	X			
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)?	X			
d. Expose sensitive receptors to substantial pollutant concentrations?	X			
e. Create objectionable odors affecting a substantial number of people?			X	

Petaluma has a Mediterranean climate with cool wet winters and hot dry summers. The Petaluma Valley is bordered to the east by the Sonoma Mountains. To the west is a series of low hills, followed by the Estero Lowlands, which open to the Pacific Ocean. The region from the Estero Lowlands to the San Pablo Bay in the east is known as the Petaluma Gap. Winds move eastward through the Petaluma Gap, along the trough occupied by the Bodega Bay Highway. During winter storms, winds

shift about 180 degrees, and come from the south-southeast. The Petaluma Municipal Airport reports light prevailing winds from the west-northwest about 90 percent of the time, where the average measured wind speed is seven miles per hour (City of Petaluma, 2006).

Petaluma is located in the Bay Area Air Basin and is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The air quality within the Bay Area Air Basin is influenced by a wide range of emissions sources such as dense population centers, heavy vehicular traffic and industry. Emissions are generated by a wide variety of sources including fireplaces, woodstoves, space and water heaters, landscape maintenance equipment, consumer products, industrial processes and mobile sources – primarily automobile and truck traffic. The Bay Area is considered in attainment for all of the national standards with the exception of ozone throughout the Basin.

Petaluma generally experiences good air quality. Mobile sources are the major impact on air quality. Wood burning and other outdoor burning during late fall and winter is another source of air pollutants. However, the prevailing wind in Petaluma helps provide the City with good air quality, because there are no significant pollution sources upwind of Petaluma and pollutants tend to be carried to the southeast away from the most developed areas.

Discussion:

(a). The BAAQMD is the regional agency responsible for overseeing compliance with State and Federal laws, regulations, and programs within the San Francisco Bay Area Air Basin. The BAAQMD, with assistance from the Association of Bay Area Governments and the Metropolitan Transportation Commission has prepared and implements specific plans to meet the applicable laws, regulations, and programs. Among them are the Carbon Monoxide Maintenance Plan (1994), the 2001 Ozone Attainment Plan, and the Bay Area 2010 Clean Air Plan. The BAAQMD has also developed CEQA guidelines to assist lead agencies in evaluating the significance of air quality impacts. In formulating compliance strategies, the BAAQMD relies on planned land uses established by local general plans. Although the proposed project would not result in substantial permanent population growth, the impact would be potentially significant and will be further addressed in the EIR.

(b-d). Construction and operation of the proposed project may contribute to an existing air quality violation. Foreseeable construction activities would occur during site preparation, grading, placement of utilities and other infrastructure, placement of foundations for structures, and fabrication of structures at the project site. Construction activities would require the use of heavy trucks, excavating and grading equipment, concrete breakers, concrete mixers, and other mobile and stationary construction equipment. Emissions during construction would be caused by material handling, traffic on unpaved or unimproved surfaces, use of paving materials and architectural coatings, exhaust from construction worker vehicle trips, and exhaust from diesel-powered construction equipment.

Heavy construction activity on dry soil exposed during construction phases could cause emissions of dust (usually monitored as PM₁₀). ROGs, NO_x, CO, and additional particulate matter emissions also would be created from the combustion of diesel fuel by heavy equipment and construction worker vehicles. Throughout the construction phases, construction-related emissions would vary day to day depending on the specific phase at the time. When considered in the context of long-term project operations, construction and demolition-related emissions would be considered short-term and temporary, but these activities still could cause significant effects on local air quality.

Construction-related activities associated with the project would result in dust and equipment exhaust emissions that could, at times, contribute to effects at adjacent residential uses including the single-family residential homes to the northeast/east on McDowell Boulevard and/or the Petaluma

Valley Hospital to the east on Professional Drive, and could contribute to the general deterioration of local air quality. Construction projects using typical construction equipment such as dump trucks, scrapers, bulldozers, compactors, and front-end loaders that temporarily emit precursors of ozone (e.g., ROGs or NO_x) are already included in the emission inventories of State- and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone ambient air quality standards. However, unless PM₁₀ emissions are reduced by implementation of feasible control measures, impacts caused by these emissions would be potentially significant. When considered in the context of long-term project operations, construction and demolition-related emissions would be considered short-term and temporary, but these activities still could cause significant effects on local air quality. Implementation of the mitigation measures below would reduce construction air quality impacts. However, impacts to air quality standards would be potentially significant and will be further addressed in the EIR.

Section 15183(a) of the CEQA Guidelines mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The General Plan Land Use designation for the site is Mixed Use with a maximum Floor Area Ratio (FAR) of 2.5. The proposed project represents a FAR of 0.19. The project is generally consistent with the applicable policies related to land use and planning.

Operation of the proposed project is not expected to cause any localized emissions that could expose sensitive receptors to unhealthy air pollutant levels. The retail uses would be a source of occasional truck traffic for deliveries; however, sensitive receptors are not located adjacent to the project to warrant concern regarding emissions from these trucks. Implementation of the mitigation measures below would reduce local community risk and hazard impacts. However, impacts to sensitive receptors would be potentially significant and will be further addressed in the EIR.

The General Plan EIR also concluded that implementation of the General Plan, which included a project of larger size than the proposed project at the project site, would not expose existing or future sensitive uses within the City to substantial carbon monoxide (CO) concentrations. Based on CO modeling using the simplified CALINE4 methodology at the 19 intersections expected to operate at LOS D or worse, CO concentrations would be substantially below the national 35.0 parts per million (ppm) and State 20.0 ppm 1-hour ambient air quality standards, and the national and State 9.0 ppm 8-hour ambient air quality standards when growth envisioned under the proposed General Plan occurs. Therefore, sensitive receptors within the City would not be exposed to substantial pollutant concentrations, and the potential impacts of the proposed project would be less than significant and no mitigation measures are required.

(e). None of the project activities are anticipated to create objectionable odors. During the project construction period, some objectionable odors may be generated from the operation of diesel-powered construction equipment and/or asphalt paving. However, these odors would be short term in nature and would not result in permanent impacts to surrounding land uses, including sensitive receptors. Therefore, impacts related to objectionable odors would be less than significant.

5. Greenhouse Gas Emissions

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	X			
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	X			

Discussion:

(a-b). *Climate Change and Greenhouse Gas Emissions*

Assembly Bill 32 – The California Global Warming Solutions Act of 2006 commits the State of California to reducing greenhouse gas emissions to 1990 levels by 2020. The statute requires the California Air Resources Board (CARB) to track emissions through mandatory reporting, determine what 1990 emissions were, set annual emissions limits that would result in meeting the target, and identify a list of discrete early actions that directly address greenhouse gas emissions, are regulatory, and can be enforced by January 1, 2010.

The initial report of the Climate Action Team was published in March 2006. This report identifies measures that account for a reduction of approximately 68 million metric tons of CO₂-equivalents (MMT_{CO₂E}). In June 2007, the CARB approved the Proposed Early Actions to Mitigate Climate Change in California (April 20, 2007). In September 2007 CARB published the Draft Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California. The two ARB reports combined include 44 measures that are estimated to reduce greenhouse gas emissions by 42 MMT_{CO₂E}. Of the 44 measures, nine are identified as “discrete early actions” that are regulated and enforceable by January 1, 2010. A Scoping Plan adopted December 11, 2008 by CARB identifies the remaining measures, which would be more fully developed over the next two years and would be in place by 2012. To achieve the 2020 target, California must reduce its emissions by 177 MMT_{CO₂E} (CEC, 2006).

Climate Change

Climate change is a shift in the average weather patterns observed on earth, which can be measured by such variables as temperature, wind patterns, storms and precipitation. The temperature on earth is regulated by what is commonly known as the “greenhouse effect.” Naturally occurring greenhouse gases in the atmosphere, including carbon dioxide, methane, nitrous oxides, and water vapor, absorb heat from the earth’s surface and radiate it back to the surface.

Human activities result in emissions of four principal greenhouse gases: carbon dioxide, methane, nitrous oxide, and halocarbons (fluorine, chlorine and bromine). Of all human activities, the burning of fossil fuels is the largest contributor in overall greenhouse gas emissions, releasing carbon dioxide gas into the atmosphere.

The resulting increases in greenhouse gas emissions from human activities are leading to higher concentrations and a change in composition of the atmosphere. For instance, the concentration of CO₂ in the atmosphere has risen about 30 percent since the late 1800s (National Assessment Synthesis Team [NAST], 2001). Many sources and models indicate that temperatures on earth are

currently warming and will continue to warm at unprecedented levels. The global mean surface temperature has increased by 1.1° F since the 19th century (IPCC Synthesis report, 2001), and the 10 warmest years of the last century all occurred within the last 15 years.

The many effects of greenhouse gas emissions are still being researched and are not fully known, but are expected to include increased temperatures which would: reduce snow pack, a primary source of drinking water; exacerbate air quality problems and adversely impact human health by increasing heat stress and related deaths; increase the incidence of infectious disease, asthma and respiratory health problems; cause sea levels to rise, threatening urban and natural coastlands; increase pests and pathogens; and cause variations in crop quality and yields.

Specific CEQA guidelines for analysis of a project's greenhouse gases were adopted in March 2010. These guidelines require local agencies to quantify or describe GHG emissions of proposed projects and to mitigate GHG emissions where feasible. Mitigation methods identified in the new guidelines include local climate action plans, incorporation of project design features and/or off-site reduction measures, sequestration of GHG and specific measures identified by programmatic documents such as general plans. Petaluma's General Plan 2025 contains an extensive series of policies, programs and implementation measures designed to reduce GHG emissions. In June 2010, the BAAQMD created new CEQA Guidelines with the purpose to assist lead agencies in evaluating air quality impacts of projects and plans proposed in the San Francisco Bay Area Air Basin (SFBAAB). The Guidelines provides BAAQMD-recommended procedures for evaluating potential air quality impacts during the environmental review process consistent with CEQA requirements. These revised Guidelines supersede the BAAQMD's previous CEQA guidance titled BAAQMD CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans (BAAQMD 1999). These guidelines have established screening criteria for greenhouse gas emissions.

CEQA Guidelines Sec. 15183.5 states that lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in a general plan, long-range development plan, or a separate plan to reduce greenhouse gas emissions. Later project-specific environmental documents may tier from and incorporate by reference that existing programmatic review. Projects which are consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The General Plan Land Use designation for the site is Mixed Use with a maximum Floor Area Ratio (FAR) of 2.5. The proposed project represents a FAR of 0.19. The project is generally consistent with the applicable policies related to land use and planning.

Although this impact has been analyzed based on the Petaluma General Plan, the BAAQMD recently adopted thresholds for evaluating GHG emissions from projects and plans and developed guidelines for assessing these impacts. The thresholds include a bright line emissions threshold of 1,100 metric tons of CO₂ equivalent (CO₂e) per year or an emission efficiency metric of 4.6 tons of CO₂e per year per service population. This is considered a potentially significant impact and will be further addressed in the EIR.

6. Hydrology/Water Quality

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Violate any water quality standards or waste discharge requirements?		X		
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?		X		
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?		X		
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?		X		
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?			X	
f. Otherwise substantially degrade water quality?		X		
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?				X
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
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?				X
j. Inundation by seiche, tsunami or mudflow?				X

The project site is generally flat, with slopes ranging from 0% to 5%, and is surrounded by developed properties, roads and Highway 101. The site has been altered over the years due to disking and related weed abatement measures; however, this has not significantly altered the overall drainage pattern of the site. The primary on-site hydrological feature is the drainage commonly referred to as Deer Creek. This is a seasonal ephemeral drainage channel, and has maximum flow during and immediately after peak storm events. This swale collects stormwater runoff from the site and eventually flows into the Petaluma River by way of a 54" culvert under Highway 101 and is therefore a tributary to the Petaluma River. This swale cuts from east to west through the project site and receives flow from the northern residential areas across North McDowell Boulevard as well as a portion of North McDowell Boulevard itself. The Petaluma River is on the Clean Water Act's 303(d) list of impaired water bodies for nutrients, pathogens, and sediment.

Discussion:

(a-f). The project site has been subject to several hydrology studies and analysis, both at the site level and as part of the General Plan EIR. The site-specific hydrology studies, dating from Wood Rodgers Hydrologic Constraints Memorandum from May 2001, followed the various development proposals for the site, and incorporated methodologies to analyze site flow and runoff patterns and determine peak volume flows. The most recent report, for the current project, included calculations for flow-based treatment, vegetated swale treatment, and volume-based treatment. See Appendix F to the EIR for the Hydrology Reports prepared for the project site and proposed project.

A portion of the project site is served by a 30" culvert located near the southerly property corner at Lynch Creek Way. This culvert had previously been allocated to receive runoff from 11.2 acres at a 0.90 runoff coefficient in anticipation of future expansion. Based on data presented in the Preliminary Hydrology Report (CSW|ST2, July 2004) and the Preliminary Stormwater Mitigation Plan (CSW|ST2, November 12, 2008), the proposed project would direct 6.23 acres of runoff (portion of the project site) at a 0.90 runoff coefficient into the Lynch Creek Way system which results in 8.9 and 12.7 cubic feet per sec (cfs) during 10- and 100-year storm events, respectively. This 30" culvert is located upstream of a larger 54" culvert that runs under Highway 101. The proposed project would result in net increases to the existing 54" culvert of 10.1 cfs during a 10-year storm event and 18.7 cfs during a 100-year storm event. Rock rip rap would be placed at the terminus of the outlet to dissipate flows and reduce the potential for erosion. Stormwater quality treatment would be provided by biological and mechanical filtration systems prior to discharge to the Deer Creek swale and the Lynch Creek outfall culverts.

The reports concluded that the downstream 54" culvert has ample capacity to convey post-development runoff rates. Comparatively, the "normal depth" in the 54" culvert was calculated to be 1.10-feet for the 10-year predevelopment flow rates and 1.51-feet for 10-year post-development flow rates and 1.33-feet for the 100-year pre-development flow rates and 1.85-feet for 100-year post-development flow rates. Therefore, the existing 54" culvert would sufficiently handle peak volume runoff, and the project would not present a potential source of flooding.

The analysis also concluded that because of the timing of the on-site runoff hydrograph and the Petaluma River hydrograph, the peak flow rate in the Petaluma River would most likely not be increased and may be slightly decreased. It was also concluded that on-site detention should probably be avoided because detention may slow down the on-site peak enough to actually increase the peak flow rate to the Petaluma River. Detailed storm water runoff calculations, based on final construction level drawings, would be required to be reviewed and approved by the City of Petaluma and Sonoma County Water Agency. Per Policy 8-P-36 of the General Plan 2025, the project is required to detail project related increases in storm water runoff, where deemed practical and feasible. However, it was concluded, as previously noted, that on-site detention should probably be avoided because detention may slow down the on-site peak enough to actually increase the peak flow rate to the Petaluma River. Compliance with Policy 8-P-36 of the General Plan 2025 would ensure impacts related to storm water runoff would be less than significant.

In addition, the project would not significantly alter the existing drainage pattern of the site, since flows would be directed in the same general direction as currently exist, and the existing drainage swale would be preserved and enhanced through the placement of riparian biotic corridors along both sides of the drainage to maximize on-site retention of runoff and the restriction of buildings within 50 feet of either side of the swale as determined by the wetlands delineations performed for the site.

The site is not within a groundwater recharge area. An existing well site along the northeasterly portion of the project would be preserved and an easement granted to the City for maintenance and access as part of the City's long-term water delivery needs. Further, there does not appear to be any

significant sources of on-site surface water pollution. Contaminants are likely introduced to the site, though, from runoff picked up by catch basins along North McDowell Boulevard, which is then discharged through the Deer Creek culvert. Those materials that do not seep into the bottom of the channel are carried downstream to the Petaluma River and eventually the north end of San Pablo Bay. It is expected the site itself has virtually no adverse impact on either ground or surface water quality, and impacts resulting from the transport of contaminants originating upstream through the site is relatively minor.

Clearing and grading activities required to prepare the project site for development would increase the potential for on-site soil erosion, which could lead to increased turbidity and sedimentation in Deer Creek downstream of the highway, in the Petaluma River and, ultimately, San Francisco Bay. Higher turbidity in the Bay and in stream and river channels can degrade the aquatic environment, while the accumulation of sediment can reduce flow capacities in both culverts and open channels, creating a need for increased maintenance. In addition, construction activities would introduce the potential for fuel or hazardous material spills on the project site. The potential degradation of surface or groundwater quality through erosion or through fuel/hazardous material spills during project construction would represent a potentially significant impact.

The project applicant would be required to obtain a NPDES general construction permit from the State Water Resources Control Board. The terms of this permit require applicants to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) to ensure that project development would not cause any increase in sedimentation, turbidity, or hazardous material concentrations within downstream receiving waters. Monitoring would be required for the implementation of the project's approved SWPPP, with a particular focus on construction period erosion control.

Design requirements and implementation measures for minimizing project-generated erosion and for controlling fuel/hazardous material spills would be set forth in the applicant's SWPPP, in accordance with State and RWQCB design standards. It is recommended that the plan, at a minimum, include the following or similar provisions:

- Leave existing vegetated areas undisturbed until construction of improvements on each portion of the development site is ready to begin;
- Immediately revegetate or otherwise protect all disturbed areas from both wind and water erosion upon the completion of grading;
- Collect storm water runoff into stable drainage channels, from small drainage basins, to prevent the buildup of large, potentially erosive storm water flows;
- Direct runoff away from all areas disturbed by construction;
- Use sediment ponds or siltation basins to trap eroded soils before runoff is discharged into on-site or off-site drainage culverts and channels;
- To the extent possible, schedule major site development work involving excavation and earthmoving for construction during the dry season;
- Develop and implement a program for the handling, storage, use, and disposal of fuels and hazardous materials. The program should also include a contingency plan covering accidental hazardous material spills;
- Avoid cleaning, fueling, or maintaining vehicles on-site, except in an area designated to contain and treat runoff; and
- After construction is completed, inspect all drainage facilities immediately downstream of the grading site for accumulated sediment, and clear these facilities of debris and sediment as necessary.

It has been demonstrated that these measures, when properly designed and implemented, can reduce effects on the quality of storm water runoff from construction sites to less-than-significant levels.

Additional design and implementation recommendations are included in the Construction Handbook of Best Management Practices.

The quality of storm water runoff from the developed project site could be expected to decline in comparison to current runoff conditions at the site, due to the introduction of non-point source urban pollutants. This could result in a long-term, incremental increase in water quality degradation, sedimentation and turbidity within the downstream receiving waters, representing a potentially significant impact.

Impact HYDRO-1: Storm Water Quality

In commercial areas, potential non-point source pollutants include litter, landscaping fertilizers and pesticides, packaging materials, and the heavy metals, oil and gas residues, tire fragments, and debris normally deposited by vehicular traffic. Storm water runoff from developed areas could carry these pollutants into surface waters, where they would cause a small but cumulative degradation of water quality. Stormwater quality treatment would be provided by biological and mechanical filtration systems prior to discharge to the Deer Creek swale and the Lynch Creek outfall culverts. Impacts associated with the proposed project would be less than significant with the incorporation of the mitigation measures listed below.

Mitigation Measure HYDRO-1:

- HYDRO-1a The project applicant shall prepare and submit an erosion control plan. The plan shall be reviewed and approved by the City of Petaluma prior to issuance of a grading permit for the proposed development. The erosion control plan shall include phasing of grading, limiting areas of disturbance, designation of restricted-entry zones, diversion of runoff away from disturbed areas, protective measures for sensitive areas, outlet protection and provision for revegetation or mulching. The plan shall also prescribe treatment measures to trap sediment, such as inlet protection, straw bale barriers, straw mulching, straw wattles, silt fencing, check dams, terracing, and siltation or sediment ponds.
- HYDRO-1b In accordance with National Pollution Discharge Elimination System (NPDES) regulations, the applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) for implementation throughout project construction to control erosion on the project site and to provide guidelines for the storage, use and clean-up of fuels and hazardous materials. To help reduce the long-term accumulation of non-point source pollutants from the project within downstream surface waters, the applicant shall incorporate long-term source control and pre-discharge treatment measures into the SWPPP, subject to approval by the City Engineer and in conformance with all applicable RWQCB design standards.
- HYDRO-1c The project shall comply with the City of Petaluma Phase II Storm Water Management Plan including attachment four post construction requirements.
- HYDRO-1d The storm drain system design shall be reviewed and approved by the Sonoma County Water Agency.

(g-h). The project is not located in a Flood Zone. According to FEMA Flood Panel Map 06079C0982E, Panel 0895E (effective date December 2, 2008), the project site is not located within a 100-year flood hazard area. The project site is located in Zone X – these are areas determined to be outside the 0.2% annual chance floodplain and no impacts would occur.

(i). The project site is not located within an inundation area associated with a levee or dam. Thus, no impacts would occur and no mitigation is required.

(j). The project site is not located within an area that could be affected by seiche, tsunami, or mudflow. Thus, no impacts would occur and no mitigation is required.

7. Biological Resources

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
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?		X		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
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?		X		
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?			X	
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
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?			X	

Discussion:

(a-f). A site survey was conducted by R. Villasenor & Associates (RVA) on September 9, 2004 and a Biotic Assessment report was prepared by Zentner and Zentner on July 9, 2003 (see Appendix H to the EIR for the Biological Resources reports). Information from those documents was used in this section.

A small ephemeral drainage (locally known as "Deer Creek") runs from east to west through the project site near the site's northern boundary. This drainage enters the project site from a 24-inch reinforced concrete pipe under North McDowell Boulevard then runs southwest to a 54-inch headwall

and concrete culvert under Highway 101 and eventually merges with the Petaluma River farther to the west. There are a number of small depressions along the northern and western portions of the project site that support wet meadow habitats.

The soils on the site are characterized as Clear Lake clays, common on the east side of the Petaluma River floodplain. These soils are dark gray to black in color, sticky and plastic, and have slow permeability; due to relatively flat gradients, site runoff is slow. Clear Lake soils are listed by the U.S. Department of Agriculture as a Hydric Soil, a soil type typically associated with wetlands.

The site is regularly plowed for weed abatement and fire control. The ongoing plowing has significantly altered the vegetation communities and habitat types on the site. However, based on past experience by RVA (who surveyed a portion of the site for previous studies for the proposed Rainier Avenue extension) the habitat characterization presented in the Zentner and Zentner report is accurate as described. The site contains four vegetation communities as follows:

Annual Grassland: The vegetation community with the greatest extent on the site is annual grasslands dominated by non-native grasses and forbs. A wide variety of non-native annual grasses and forbs were introduced to California by Spanish explorers and eastern immigrants and have become a common and naturalized plant community throughout California.

Wet Meadow: Zentner and Zentner mapped seven shallow basins on the site as “wet meadows” or “vernal pools”. The seasonal inundation and saturation of water in the winter and spring months followed by dry conditions in the summer and fall months sustains a plant community comprised of both upland and wetland plants. Vernal pools are often dominated by native plant species that have become specially adapted to the seasonal inundation followed by dry months. The repeated plowing over the years has encouraged non-native and weedy plant species and, therefore, the shallow basin areas have probably lost many of the representative native vernal pool species.

The soils of the Clear Lake series on the site lack cemented hardpans typical of the northern claypan vernal pools in this region, although the temporary ponding of water in shallow basins within the Clear Lake soils is recognized. The vegetation community within Northern Claypan Vernal pools is considered rare and thus inventoried by the California Department of Fish and Game (CDFG). However, the lack of a cemented claypan in the soils and the repeated plowing suggest these shallow basins are not classic Northern Claypan Vernal Pools and, thus not worthy of inclusion in the inventory. In addition, five of the basins are located in proximity to altered landforms and could be the result of man-made alterations to the native topography. Zentner & Zentner biologists consulted with the U. S. Army Corps of Engineers (ACOE) on October 15, 2002, and it was determined that two of the “wet meadow” areas met the native wetland functions and values criteria and are within the jurisdiction of the ACOE under Section 404 of the Clean Water Act. These seasonal wetlands encompass an area of 0.17 acre with the largest area being 0.16 acre (north of Deer Creek) and the smaller area (next to Highway 101) being 0.01 acre. The remaining five isolated wetlands encompass a total area of 0.43 acre ranging from 0.02 to 0.12 acre.

The Corps of Engineers conducted a site visit at the project site on October 7, 2008 for the purpose of re-verifying jurisdictional area. In a letter dated June 9, 2009 the Corps made a final jurisdictional determination with no changes to the original determination based on the Zentner and Zentner 2002 delineation.

The RWQCB received a copy of the Corps’ 2009 final jurisdictional determination letter and stamped map. RWQCB has not indicated that the state would make any changes to the Corps’ final determination. In fact, in an email message from RWQCB (Abigail Smith) on August 18, 2010, RWQCB made a statement that a final determination of wetland impacts was made for purposes of

calculating the 401 application processing fee. Based on this statement it is apparent that RWQCB has accepted the Corps' final jurisdictional determination.

Ephemeral Drainage: The ephemeral drainage (Deer Creek) on the site has weakly defined bed and banks, partially due to the frequent plowing. The dominate plant species found in this drainage and its hydrologic regime would suggest that the plant community within and associated with this drainage is typical of a vernal marsh. The repeated plowing has hindered the development of the native vegetation within the drainage to some extent as evidenced by the reported sighting of cattails in one year and their absence the following year.

Although vernal marshes are not considered rare enough to be inventoried by the CDFG, like the two shallow basins noted above, the vernal marsh along Deer Creek was determined to be within the jurisdiction of the USACE under Section 404 of the Clean Water Act. Loss of these jurisdictional wetland areas due to project development would constitute a potentially significant impact.

Oak Tree Cluster: There are three mature valley oak trees at the west end of Deer Creek and approximately 15 valley oak saplings. The mature trees range in size from a trunk diameter of 4 feet for the largest tree to 1.7 feet for the smallest tree and are approximately 30 feet tall.

Due to the disturbed nature of the site, very few wildlife species were observed on site. The species that were observed are common to open spaces within developed areas. The frequent plowing for weed and fire control limits the wildlife habitat values of the site to species that can tolerate such disturbances. In addition, the site is somewhat isolated by surrounding urban development and Highway 101, which limit wildlife movement to and from the site. The large oak trees may provide nesting habitats for bird species, including raptors. The temporary flow within Deer Creek precludes the provision of suitable habitats for fish species, and the frequent plowing also limits the breeding habitat values of these wetlands for aquatic invertebrates and amphibian species, such as frogs.

There were no special-status plant or wildlife species observed on the site during the site surveys. Due to either a complete lack of suitable habitat, degradation of the habitat from the regular plowing, or the relative isolation and limited extent of certain habitats from higher quality habitats to the west, the site has limited potential to support special-status species. No special-status plants are considered likely to occur on-site, and only four special-status species known to occur in the area have moderate potential to occur on-site: Loggerhead Shrike (*Lanius ludovicianus*), White-tailed Kite (*Elanus leucurus*), Bryant's Savannah Sparrow (*Passerculus sandwichensis alaudinus*) and Long-billed Curlew (*Numenius americanus*). Although none of these birds were sighted on the site, they are known to use similar habitats in the region.

Impact BIO-1: Special-Status Species

The loss of foraging habitat for these and other bird species is not expected to represent a significant adverse impact because the habitat on the site is of marginal quality, and there are extensive foraging habitats of higher quality to the south. However, if project construction were to be initiated while special-status or other migratory birds are nesting in trees, shrubs or grasses on or adjoining the site, construction activities could disrupt nesting and thus create a significant impact to these birds.

If construction were initiated in the winter wet months without control of on-site soil erosion, potential sediment deposition could affect the Sacramento splittail in this reach of the Petaluma River. Such impacts would be reduced by the erosion and sediment control plan required by the City's Storm Water/Grading and Erosion Control Ordinance.

Chapter 17 of the City's Zoning Ordinance addresses tree preservation. The three mature oaks at the west side of the site are considered protected trees in the ordinance. Although the trees may have to

be removed in the future for the Rainier Avenue off-ramp, they are not proposed for removal as a part of the proposed Deer Creek Village project.

There is no Habitat Conservation Plan, Natural Community Conservation Plan, or other local, regional, or state habitat conservation plan that exists for Petaluma that would regulate the proposed development on this parcel. Review of the Open Space Lands Map of the Petaluma General Plan Technical Appendix indicates that the site is not designated open space. The project is an in-fill site within an urbanized area. Impacts to species identified as a candidate, sensitive, or special status species would be less than significant with the incorporation of mitigation measures.

Mitigation Measures:

- BIO-1a Site grading shall be conducted in accordance with the City's Storm Water/Grading and Erosion Control Ordinance.
- BIO-1b All construction activities in and immediately adjacent to trees or shrubs providing potential nesting habitat for raptors or other birds should be conducted outside the normal nesting season (generally February 15 to August 15). If project work would occur during nesting season, a qualified biologist shall survey the site no more than 14 days prior to construction. If active nests are found, exclusion zones of a distance appropriate for the species (typically 50 to 100 feet) shall be established. No work would occur within the exclusion zones until all young have become independent of the nest. If no active nests are found, no work restrictions would apply.

Impact BIO-2: Jurisdictional Waters

Certain areas of the site are identified as jurisdictional under either the Army Corps of Engineers or the Regional Water Quality Control Board. Impacts to protected wetlands would be less than significant with the incorporation of mitigation measures.

Mitigation Measures:

- BIO-2 The applicant shall avoid impacts to wetlands to the maximum extent practicable. Where impacts are unavoidable, the applicant shall apply to the Army Corps for a Clean Water Act Section 404 permit and comply with all mitigation measures contained therein. Evidence of ACOE and RWQCB permits shall be submitted to the City of Petaluma for review prior to issuance of building permits.

8. Noise

Would the project result in:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
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?		X		
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
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?				X
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?				X

Discussion:

(a-d). A project-level noise analysis was prepared by Charles Salter & Associates and was used to described applicable noise criteria, the existing noise environment at the site, and the calculated project traffic noise (see Appendix G to the EIR).

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. Possible causes of this objectionable nature are the pitch and/or loudness of a given sound. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals are perceived as louder to humans than signals with a lower pitch. Loudness is the intensity of sound waves combined with the reception characteristics of the ear. The intensity of sound may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level or dB(A). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level

that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called Leq. The most common averaging period is hourly, but Leq can describe any series of noise events of arbitrary duration.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Community Noise Equivalent Level (CNEL) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 PM - 10:00 PM) and a 10 dB addition to nocturnal (10:00 PM - 7:00 AM) noise levels. The Day/Night Average Sound Level, Ldn, is essentially the same as CNEL, with the exception that the evening time period is dropped, and all occurrences during this three-hour period are grouped into the daytime period.

The project site is currently undeveloped and contains no sources of noise. The most significant source of noise in the project area is from traffic traveling along Highway 101, which borders the western side of the site, and North McDowell Boulevard, which borders the site on the east. The project site lies entirely within the 65 CNEL dB contour, and sections of the site, including near Highway 101 and along North McDowell Boulevard, are within the 70 CNEL dB contour. According to the General Plan, commercial and related service uses within the 65-75 contour range from Normally Acceptable to Conditionally Acceptable. Normally Acceptable is based on the assumption that any building involved is of conventional construction, without any noise insulation requirements. Conditionally Acceptable requires that noise reduction and insulation features be taken into account during design and construction.

Impact NOISE-1: Temporary Increases in Noise Levels

The construction phase of the project is anticipated to occur over a 12 to 15 month period. The construction activities associated with the project typically involve the use of heavy equipment such as tractors, loaders, pavers, and concrete mixers. Trucks would be used to deliver equipment and building materials and to haul away waste materials. Smaller equipment, such as jack hammers, pneumatic tools, saws, and hammers, would also be used throughout the site during the construction phase. This equipment would generate both temporary steady-state and episodic noise that would be heard both on and off the project site.

The EPA has compiled data related to the noise-generating characteristics of specific types of construction equipment and noise levels that can be achieved with implementation of feasible control measures. Noise levels generated by heavy equipment can range from approximately 76 dB(A) to 89 dB(A) when measured at 50 feet and 70 dB(A) to 83 dB(A) when measured at 100 feet, without implementation of noise reduction measures. The noisiest pieces of equipment that would be used during the project's construction phase would include jackhammers and pavers, which produce noise levels of approximately 75 and 80 dB(A) at 50 feet with implementation of the required feasible noise reduction control measures. As with all construction equipment, these noise levels would diminish rapidly with distance from the construction site at a rate of approximately six dB(A) per doubling of distance. The residential land uses located across North McDowell Boulevard are separated from the roadway by a fence. This fence would attenuate noise levels experienced by those in the backyards of the homes that face the project site. However, some of these homes have balconies/outdoor areas on the upper levels of the homes that face the project site. Some of these residents would experience temporary, periodic, noticeable increases in noise levels during the project's construction period, even with implementation of the noise control measures. Therefore, project impacts related to temporary noise increases associated with project construction would be significant but can be reduced to a less-than-significant level via implementation of the mitigation measures listed below.

Although construction of the project may involve the use of typical construction equipment such as jackhammers, pneumatic tools, saws and hammers, which do generate some groundborne vibration

and groundborne noise, the project would not involve the use of pile drivers, which are known to have the potential to generate substantial vibration. Therefore, the project would not expose people to or generate excessive groundborne vibration or groundborne noise levels.

Mitigation Measures:

- NOISE-1a All construction activities shall comply with applicable Performance Standards in the Petaluma Zoning Ordinance and Municipal Code.
- NOISE-1b All construction activities shall be limited to 7:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. on Saturdays. Construction shall be prohibited on Sundays and all holidays recognized by the City of Petaluma. There would be no start up of machines nor equipment prior to 8:00 a.m., Monday through Friday; no delivery of materials nor equipment prior to 7:30 a.m. nor past 5:00 p.m., Monday through Friday; no cleaning of machines nor equipment past 6:00 p.m., Monday through Friday; and no servicing of equipment past 6:45, Monday through Friday. The developer's phone number shall be conspicuously posted at the project site for noise complaints.
- NOISE-1c The construction contractor shall locate stationary noise sources as far from existing sensitive receptors as possible. If stationary sources must be located near existing receptors, they shall be muffled and enclosed within temporary sheds or other structures.
- NOISE-1d The construction contractor shall implement feasible noise controls to minimize equipment noise impacts on nearby sensitive receptors. Feasible noise controls include improved mufflers, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds.
- NOISE-1e Equipment used for project construction shall be hydraulically or electrically powered impact tools (e.g. Jack hammers) wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. Where use of pneumatically-powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. A muffler could lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of five dBA. Quieter procedures shall be used (such as drilling rather than impact equipment) wherever feasible.
- NOISE-1f The construction contractor shall implement appropriate additional noise reduction measures that include shutting off idling equipment and notifying adjacent residences (at least one time) in advance of construction work.
- NOISE-1g The construction contractor shall stage equipment no less than 150 feet away from North McDowell Boulevard.

Impact NOISE-2: Exposure of Persons to Excessive Noise Levels

The noise report found that noise from project traffic would not significantly increase the noise level for surrounding land uses. Along Professional Drive, east of North McDowell Boulevard, the noise level would increase by one decibel, which is considered a less-than-significant impact. Delivery truck noise levels would be more than 10 dB below the existing Highway 101 level of 65 dB; therefore, noise from delivery trucks would not significantly increase existing noise levels. Although deliveries would occur to the smaller buildings proposed along North McDowell Boulevard, these deliveries would occur in smaller trucks and would not require the use of a forklift. As such, the noise levels associated with

these deliveries would likely be audible within proximity to the site but would not be substantial and impacts would be less than significant.

The proposed project would introduce several new sources of noise to the project site and area. These noises include, but are not limited to car doors closing, car engines starting, people talking, car radios playing, shopping carts moving around the site, deliveries, etc. These types of noises are temporary in nature, occur intermittently and randomly, and although they affect overall noise levels, these activities would not significantly affect the overall ambient noise levels of the project site or surrounding area.

Additional sources of permanent noise at the project site associated with the proposed project include the heating, ventilation, and air conditioning (HVAC) units on the rooftops of some of the buildings. Maximum noise levels associated with these units is 90 Leq measured at three feet. The building closest to residential land uses across from the project site that could potentially have an HVAC system is approximately 100 feet from these residential uses. The project mechanical equipment is required to be installed per Section 22-301 of the City's Municipal Code which stipulates a property line noise limit of 60 db for fixed mechanical equipment (i.e. HVAC). With compliance with the City's Municipal Code, the HVAC system would not result in a significant increase in noise levels.

The noise report also analyzed possible noise impacts from the proposed project to the residential neighborhoods across North McDowell Boulevard. The analysis found that due to the shielding provided by the project buildings, Highway 101 noise levels in the residential areas would be reduced by 2 to 3 dB. While operational noise impacts were found to be less than significant, the following mitigation measure is recommended to further reduce noise levels associated with delivery trucks.

Mitigation Measure:

NOISE-2 Delivery trucks shall not idle while waiting to access the loading docks.

Impact NOISE-3: Cumulative Exposure of Persons to Excessive Noise Levels

The evaluation of the project's contribution to cumulative effects relies on the evaluation of noise effects in the EIR for General Plan 2025, which determined that at General Plan buildout, significant and unavoidable impacts would result from traffic-related noise and future rail service. In adopting the General Plan, the City accepted these significant and unavoidable impacts by approving a statement of overriding considerations. Based on the General Plan EIR analysis, these significant noise impacts apply to the project, but are not further analyzed in the project EIR.

(e). The project site is located approximately 0.75 miles west of the Petaluma Municipal Airport. However, based on the small-sized aircraft that use this airport, the project would not expose persons to excessive noise levels associated with a public airport. In addition, the site is not located within the Airport Influence Area (AIA) of this airport; thus, the provisions of AB 2776 would not apply.

(f). The project site is not located within the vicinity of a private airstrip. Therefore, the project would not expose persons to excessive noise levels associated with a private airstrip.

9. Aesthetics

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Have a substantial adverse effect on a scenic vista?				X
b. Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c. Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Discussion:

(a-d). Views of the project site are available from a variety of surrounding locations, including short-range views from adjacent roadways and land uses, medium-range views from roadways and uses located further away from the site, and long-range views from distant ridgelines and hillsides. In the immediate project site vicinity, short-range views of the project site are available from Highway 101 and North McDowell Boulevard as well from portions of Lynch Creek Way, Professional Drive and Rainier Avenue. The offices to the south of the site contain several windows that face the project site which provide intermittent views of the site through trees and bushes. Views of the site from the light industrial uses to the northwest of the site are very limited due to a dense row of trees and landscaping and a limited number of windows that face the site. Portions of the project site are visible from the second stories of homes situated along the north/northeast side of North McDowell Boulevard near the site. Project site views from these homes, especially from the first floors and back yards, are largely obstructed by landscaping and the back yard fences that front North McDowell Boulevard as well as the street trees within the North McDowell Boulevard median.

There are no street trees along this north/northeastern side of the project site. Middleground views from North McDowell Boulevard are dominated by the south/southwestern portion of the site, including three oak trees and several redwood trees along the frontage of Highway 101. The flat topography of the site allows for unrestricted views of Highway 101 as it runs parallel to the south/southwestern side of the site, with large buildings of the central business district visible in the distance (e.g., the twin towers of St. Vincent's Church and the two "working towers"). Middleground views towards the site from North McDowell Boulevard also include trees and residential uses on the lower hillsides of west Petaluma. Distant views towards the site from North McDowell Boulevard are characterized by the oak-studded rolling hills of west Petaluma and unincorporated portions of Sonoma County. The project site is one of few locations along North McDowell Boulevard from which views of Highway 101 and west Petaluma are available. Most views of Highway 101 and beyond from North McDowell Boulevard are partially or completely obstructed by existing development, trees and landscaping.

Looking towards the north/northeast from either northbound or southbound Highway 101 along the site's frontage, the project site is seen intermittently in the foreground, while Sonoma Mountain forms a panoramic background for the site and surrounding development. Glimpses of residential development can be seen to the east of the project site along North McDowell Boulevard. Existing

oak and redwood trees along the Highway 101 frontage screen some of these views from Highway 101.

The project site is also partially visible from southwest of the site along Highway 101 (northbound lanes) in the vicinity of Lynch Creek Way. However, the existing trees and offices in this area obstruct most all views of the north/northeast portion of the site as well as of Sonoma Mountain. To the north/northwest of the site along Highway 101 where the highway is elevated above the railroad tracks, relatively expansive views of the site and surrounding uses, as well as Sonoma Mountain are available to southbound motorists. These views for southbound motorists become partially obstructed by trees and industrial buildings as the highway bridge levels out to the south/southeast. The project site is not visible from Highway 101 further to the north/northeast and south/southeast from the areas described above due to intervening trees and development.

The speed limit on Highway 101 near the project site is 65 miles per hour. Views of the site and beyond from Highway 101 are brief when motorists are driving near or at the permitted speed limit. The duration of these views is increased during more congested traffic conditions on Highway 101, such as southbound traffic levels during the AM peak hour period and northbound traffic levels during the PM peak hour period.

Due to the relatively flat topography of the project area combined with existing development, trees and landscaping, the project site is not visible from many off-site locations that are of similar elevations as the site. For example, the site is not visible from local neighborhoods further east of North McDowell Boulevard, and only a portion of the project site's frontage along North McDowell Boulevard is visible from the North McDowell Boulevard side of the Lynch Creek trail and Lucchesi Park. However, the site is visible from various off-site locations with higher elevations than the site, and several areas with similar elevations as the site but with less intervening topography, landscaping and buildings. Examples include some roadways and homes immediately west of Highway 101 (e.g., Oak Creek Apartments), hillsides of west Petaluma, including Helen Putnam Regional Park, and from Sonoma Mountain. The rectangular-shaped project site is rather conspicuous from some of these distant hillsides due to the size of the site, its undeveloped nature, and that it is entirely surrounded by existing development.

There are currently no sources of light and glare on the project site as the project site is undeveloped. Daytime sources of glare in the vicinity of the site include reflections off of light-colored surfaces, windows, and metal details on cars traveling on North McDowell Boulevard and Highway 101. Light sources in the vicinity of the site include streetlights along North McDowell Boulevard, headlights of cars traveling nearby, and outdoor and indoor lighting from the adjacent land uses.

The project site is not located within a scenic vista nor is it located in an area designated as a scenic resource. Therefore, no impacts would occur related to the project having a substantial adverse effect on a scenic vista.

There are no scenic highways in the vicinity of the project site from which the site is visible. Also, no rock outcroppings or historic buildings are located on-site. While the site includes several oak trees, one of which is 50" in diameter, the proposed project would not remove this tree. Therefore, project impacts on scenic resources from a scenic highway would be less than significant.

The project site is located in a highly urbanized area characterized by a variety of land uses, including single-family residential homes, mobile-homes, offices, light industrial uses, hospital, park and community center, and several shopping centers. Many of these uses are located near each other, such as single-family homes along North McDowell Boulevard situated near office uses, light industrial uses and shopping centers. The project site is surrounded by existing roadways and

existing buildings (e.g., single-family residential, offices, and light industrial uses). Implementation of the proposed project would result in the development of a new shopping center on the project site which would be generally consistent with the overall mix of land uses in the project area. The massing and height of the proposed shopping center would be similar to nearby industrial and office uses, as well as the shopping centers in the area, although the project would not be located immediately adjacent to such existing shopping centers. Also, the project would include several open space areas and plazas, as well as extensive landscaping which would help buffer the project from off-site land uses.

The proposed project is subject to the provisions of Chapter 24.010 - Site Plan and Architectural Review (SPAR), of the Implementing Zoning Ordinance, including the standards in Section 24.010.G; which govern the scope of Planning Commission review, as follows:

1. Controls should be exercised to achieve a satisfactory quality of design in the individual building and its site, appropriateness of the building to its intended use and the harmony of the development with its surroundings. Satisfactory design quality and harmony would involve among other things:
 - a. The appropriate use of quality materials and harmony and proportion of the overall design.
 - b. The architectural style which should be appropriate for the project in question, and compatible with the overall character of the neighborhood.
 - c. The siting of the structure on the property as compared to the siting of other structures in the immediate neighborhood.
 - d. The size, location, design, color, number, lighting, and materials of all signs and outdoor advertising structures.
 - e. The bulk, height and color of the proposed structure as compared to the bulk, height and color of other structures in the immediate neighborhood.
2. Landscaping to approved City standards shall be required on the site and shall be in keeping with the character or design of the site. Existing trees shall be preserved wherever possible, and shall not be removed unless approved by the Committee.
3. Ingress, egress, internal traffic circulation, off-street parking facilities and pedestrian ways shall be so designed as to promote safety and convenience, and shall conform to approved City standards.
4. It is recognized that good design character may require participation by a recognized professional designer, such as an architect, landscape architect or other practicing urban designer and the reviewing body shall have the authority to require that an applicant hire such a professional, when deemed necessary to achieve good design character.

Although a new shopping center would alter the visual character of the area, the alteration would not constitute a substantial degradation. Therefore, project impacts on the visual character of the surrounding area would be less than significant.

Implementation of the proposed project would include new sources of light and glare, including night lighting for parking areas, walkways, storefronts and plazas, and vehicle headlights, as well as reflective surfaces, such as windows and light colored exterior paint. The introduction of additional light and glare from the new development would be noticeable to viewers in the surrounding area, particularly by residents in the homes along North McDowell Boulevard, adjacent light industrial and offices uses, people driving along McDowell Boulevard, Highway 101 and portions of Lynch Creek Way. However, as described above, parking lot lights would cast downward and would be shrouded and walkways and pathways would have low level lighting. Also, the project applicant would be required to comply with Article 22, Section 22-304, of the City's Zoning Ordinance. Conformance with the Zoning Ordinance would minimize light and glare associated with the project such that day or nighttime views would not be substantially affected in the area. Therefore, project impacts related to light and glare would be less than significant.

10. Hazards & Hazardous Materials

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
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?				X
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?				X
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?				X
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	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?				X

Discussion:

(a-c). The proposed project includes development of commercial retail, recreational, and professional office uses. The types of hazardous materials associated with the project could include well-packaged household substances such as cleaning supplies and degreasers that could be sold in small quantities at some of the stores on the site and cleaning and landscaping chemicals that would be used in quantities typical for landscaped commercial developments. The transport, use and disposal of these materials would not pose a significant hazard to the public or the environment. Impacts would be less than significant and no mitigation measures are required.

Although several schools are located within a two-mile radius of the project site, as discussed above, the types of hazardous materials associated with the project would be limited to typical household chemicals such as cleaners, degreasers, and fertilizers that are commonly found and used at commercial developments. The proposed project would not create significant hazards to the public or the environment and impacts would be less than significant.

(d). The California Department of Toxic Substances Control does not identify the project site or surrounding areas as being hazardous materials sites pursuant to Government Code 65962.5. Therefore, the project site would not create a significant hazard to the public or the environment and no further analysis is required.

(e-f). The project site is located approximately 0.75 miles west of the Petaluma Municipal Airport. However, based on the flight patterns and small sized aircraft that use the airport, the project would not expose persons to a safety hazard related to airports. The project is not located within the vicinity of a private airstrip, and is not located within the Airport Influence Area of Petaluma Municipal Airport; therefore, the project is not subject to the provisions of AB 2776. The proposed project would not result in a safety hazard for people residing or working in the project area and no further analysis is required.

(g). None of the proposed site improvements are expected to impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. While the project would add vehicle trips to area roadways and a new traffic signal at the intersection of Professional Drive and North McDowell Boulevard, signal pre-emption would be provided for emergency vehicles. Impacts would be less than significant and no mitigation measures are required.

(h). A significant impact may occur if a project is located in proximity to wildland areas and would pose a potential fire hazard, which could affect persons or structures in the area in the event of a fire. The project site is in a built environment and is not subject to wildland fires. Therefore, the project site is not located in proximity to wildland areas that would pose a potential fire hazard, which could affect persons or structures in the area in the event of a fire and there would be no impact. No further analysis is required.

11. Transportation/Traffic

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit?	X			
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?	X			
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?				X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e. Result in inadequate emergency access?		X		
f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	X			

Discussion:

(a-b). The traffic impact analysis prepared by Wood Rogers identified a significant and unavoidable project-level impact to the intersection of North McDowell Boulevard and Corona Road. This intersection was one of six that was analyzed in the General Plan 2025 Program EIR that included a Statement of Overriding Considerations for build-out conditions. The impact identified in the Traffic Impact Analysis for the proposed Deer Creek Village project has found that project-generated traffic would result in a baseline+project Significant and Unavoidable impact for the short term, ahead of planned traffic improvements anticipated during the General Plan build-out period. In addition, the Analysis has found that the baseline+project traffic would result in an unacceptable level of service (LOS) at this intersection for the PM Peak weekday hour, whereas the General Plan analysis found an unacceptable LOS at the AM peak hour. This is a potentially significant impact. These issues will be analyzed in detail in the EIR which includes the preparation of an updated traffic report for the proposed project.

(c). The project would not 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. Due to the nature and scope of the proposed project, implementation of the project would not have the potential to result in a

change in air traffic patterns at the Petaluma Municipal Airport or any other airport in the area. No impacts would occur and no further analysis is required.

(d-e). The project frontage is along North McDowell Boulevard. This is a major arterial street with heavy traffic volumes throughout the day but it has good visibility. In addition, the project has been designed with multiple points of ingress/egress including right in/out driveways with ample turning widths. There is emergency access to all locations of the project site and multiple entry points for emergency vehicles. The proposed project would not substantially increase hazards due to a design feature. Therefore, impacts would be less than significant but the new traffic report and EIR will address emergency access in greater detail.

(f). The new traffic report prepared for the proposed project will address whether the project would conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. This analysis will be included in the EIR.

Mitigation Measures: Mitigation measures addressing potentially significant traffic impacts will be provided in the EIR for the proposed project.

12. Public Services

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:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Fire protection?		X		
b. Police protection?			X	
c. Schools?			X	
d. Parks?			X	
e. Other public facilities?		X		

Discussion:

(a). The Petaluma Fire Department (PFD) provides fire, rescue, and emergency medical services for the citizens of the City of Petaluma and southern Sonoma County. The PFD serves a population of approximately 70,000 people and covers approximately 160 square miles. Serving and protecting the community of Petaluma is the department's primary goal through public education, through fire prevention and code enforcement, and through emergency response.²

The proposed structures and activities on the project site could result in additional calls for fire protection services in and around the project site. Further, well over 70 percent of emergency responses by the PFD are non-fire related rescue and emergency medical responses. However, the PFD has stated that the additional demand for fire protection and/or non-fire related rescue and emergency medical response services associated with the proposed project would not, by itself, create

² City of Petaluma Fire Department, website: <http://cityofpetaluma.net/firedept/home.html>, August 19, 2010

the need for the physical expansion of existing facilities or the need for construction of new facilities.³ In addition, new retail development is required to pay a Fire Suppression Facilities Impact Fee in accordance with Chapter 17.14, of the Municipal Code, to offset the impacts to public facilities. The site would also be served by a water system that meets the City of Petaluma's fire flow requirements for the proposed commercial structures.⁴ Additionally, the proposed project would incorporate a number of fire safety features in accordance with applicable fire-safety code regulations for construction, access, fire flows built in fire protection, and fire hydrants. The site plan would also be subject to review by the PFD prior to issuance of certificates of occupancy.

The "response routes" for fire and emergency service vehicles most likely to be impacted by project-generated trips are North McDowell Boulevard and East Washington Street. Given the location of three fire stations, two on McDowell Boulevard and one within the Downtown, four minute travel time response boundaries from each of the stations converge near East Washington Street/North McDowell Boulevard, in the vicinity of the project site. The addition of project-generated trips is not expected to cause a reduction in travel speeds along this route sufficient to cause significant delays for emergency vehicles, when the redundancy of access and the ability of emergency response vehicles to override traffic controls with lights, sirens, signal pre-emption and travel in opposing travel lanes in congested conditions are considered.

Because police emergency response does not routinely come from a fixed location, the location of responding patrol cars and officers varies. With the ability of police vehicles to override traffic controls with lights, sirens, signal pre-emption and travel in opposing travel lanes in congested conditions, police response times would not be significantly delayed because of additional traffic from the proposed project. However, without emergency vehicle pre-emption provided at the proposed signal at Professional Drive/North McDowell Boulevard, emergency access impacts would be significant.

Implementation of the following mitigation measure would reduce this impact to a less-than-significant level:

Mitigation Measures:

PS-1 With the proposed project's addition of a traffic signal at the intersection of Professional Drive/North McDowell Boulevard, emergency vehicle pre-emption shall be provided to mitigate this additional delay experienced by emergency responders along this corridor.

(b). The City of Petaluma's Police Department, located at 969 Petaluma Boulevard North, provides law enforcement services to the project site. The Petaluma Police Department's service area covers approximately 14 square miles in and around Petaluma, and serves approximately 60,000 people. The Police Department employs full-time employees, including the Chief, two Captains, and three Lieutenants. There are approximately 32 officers assigned to the Patrol Division to provide law enforcement and crime prevention coverage to the City of Petaluma. Other Officers and include Parking Enforcement and support staff. Additionally, the Petaluma Police department Specialty Units consist of Canine, Code Enforcement, SWAT, Detectives, Traffic, Street Crimes, and the Hostage Negotiation Team.⁵

As the proposed project would result in an increase of site visitors and employees, there is a potential for increase in police service calls from the project site. Responses to thefts, vehicle burglaries, and damage to vehicles, traffic-related incidents, and crimes against persons would be anticipated to

³ Prior e-mail correspondence between Christopher A. Joseph & Associates Staff and Michael Ginn, Fire Marshal, Petaluma Fire Department, September 24, 2004.

⁴ Prior e-mail correspondence between Christopher A. Joseph & Associates Staff and Michael Ginn, Fire Marshal, Petaluma Fire Department, February 9, 2005.

⁵ City of Petaluma Police Department, website: <http://cityofpetaluma.net/police/index.html>, August 18, 2010.

escalate, to some degree, as a result of the increase in on-site activity and increased traffic on adjacent streets and arterials. If not adequately monitored and/or illuminated at night, portions of the proposed project could be subject to loitering, crime, etc.

The crime rate, which represents the number of crimes reported, affects the “needs” projection for staff and equipment for the Petaluma Police Department. To some extent, it is logical to anticipate that the crime rate in a given area would increase as the level of activity or population, along with the opportunities for crime, increases. However, because a number of other factors also contribute to the resultant crime rate such as police presence, crime prevention measures, and on-going legislation/funding, the potential for increased crime rates is not necessarily directly proportional to increases in land use activity.

Unlike fire protection services, police units are often in a mobile state. Hence, actual distance between the police station and the project site does not necessarily have an effect on response time or level of service. Instead, the number of officers out on the street is more directly related to the realized response time. Response time is defined as the total time from when a call requesting assistance is placed until the time that a police unit responds to the scene. Calls for police assistance are prioritized based on the nature of the call. High priority calls for service like violence or in progress crimes get immediate attention. Response times on those types of calls are very short and measured in seconds or low minutes. Low priority calls for service like police reports or parking complaints are held until officers are available. Low priority calls for service can sometimes be handled right away, or may pend for hours depending on staffing levels and shift activity.

To account for increases in population, new retail developments are required to pay a Law Enforcement Facilities Impact Fee. The purpose of the Law Enforcement Facilities Impact Fee is to provide funds for the construction and implementation of improvements to key elements of the City-wide police service system sufficient to accommodate the necessity generated by new development. Previous correspondences with the Petaluma Police Department suggest that the increase in activity on the project site would result in an increased need for police services.⁶ However, according to the Petaluma Police Department, the demand for police services associated with the proposed project would not require the physical need for expansion of existing facilities or require the department to build new facilities.⁷ Impacts would be less than significant and no additional mitigation beyond the payment of Community Facilities fees, in accordance with Chapter 17.14, of the Municipal Code, to offset the impacts to public facilities would be required.

(c). The project would not introduce new housing, and would not result in an increase in population in the area that would have an impact on schools in the form of need for new schools services and facilities. Additionally, the General Plan 2025 indicates that the population growth that is expected under the proposed General Plan would include a small increase in enrollment within the Old Adobe School District (OASD) and the Petaluma City Unified School District (PCUSD). While the increased enrollment would exceed existing capacity within these school districts, this would not result in the need for new school facilities because enrollment projections for the other elementary school districts within Petaluma’s Urban Growth Boundary would decline, and elementary students could be redistributed to alleviate enrollment limitations within the OASD and PCUSD. Enrollment projections for Petaluma’s secondary school system, the Petaluma Joint Unified High School District, are expected to decline substantially during the years covered by the proposed General Plan. The applicant would be required by Section 65996 of the California Government Code to pay developer fees to the local school districts serving the project area. Therefore, impacts to schools would be less than significant.

⁶ Prior e-mail correspondence between Christopher A. Joseph & Associates Staff and Danny L. Fish, Lieutenant, Special Operations, Petaluma Police Department, October 12, 2004.

⁷ Ibid.

(d). The proposed project would set aside approximately 5.44 acres for the future Rainier Avenue off-ramp, and approximately 2.66 acres for the Deer Creek swale enhancement area.⁸ The 5.44 acres set aside would include open space, wetlands, exercise stations and bike and jogging trails. The proposed development would be designed to interlink the commercial uses with the parking lot, plazas, and passive recreation areas and would contain bicycle/pedestrian paths. The proposed project would be required to pay Parkland Acquisition, Parkland Development and Open Space Acquisition fees. Therefore, project impacts on parks and recreational facilities would be less than significant, and no further analysis of this issue is necessary.

(e) During construction and operation, trucks and automobiles traveling to and from the project site would use the roadways in the vicinity of the project site. The existing signalized intersection at North McDowell Boulevard/Lynch Creek Way would be expected to serve only a limited amount of project-generated traffic, primarily truck access to the project site. Roadway configuration and sight distances appear sufficient to accommodate the addition of project-generated truck trips. However, project-generated truck trips could potentially damage Lynch Creek Way if the roadway has not been designed to accommodate such truck trips on a daily basis. This is a potentially significant impact.

Implementation of the following mitigation measure would reduce this impact to a less-than-significant level:

Mitigation Measures:

PS-2 The project applicant shall be responsible for investigating and providing a full roadway width structural section able to accommodate project-generated truck trips. The total costs of investigation and construction, if required based on the investigation, shall be borne upon the project.

The project would have impacts on other city public facilities, which would be mitigated by payment of impact fees specific to affected public facilities. These fees, updated in 2008, are applied to commercial, office and industrial projects based on use ratios, and are lower than for residential projects. Therefore, project impacts to other public facilities would be less than significant.

13. Recreation

	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
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?			X	
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?			X	

⁸ The Rainier Avenue Cross-Town Connector and Highway Interchange is not part of the proposed Deer Creek Village project. However, these projects are included in Table III-1, Related Projects, and are addressed in the Cumulative Impacts Analysis provided in the EIR.

Discussion:

(a). The employees from the proposed project may result in an increase in use of existing neighborhood or regional parks. The closest park is Lucchesi Park, just east of the project site; however, the proposed project is not a residential development that would include a large population of residents which would utilize such parks. While it is feasible that project employees or some persons who have relocated to Petaluma specifically to work for the proposed project could use the park, but that use does not represent a significant demand where physical deterioration of the facility would occur. The proposed project also provides open space and recreational opportunities. The proposed project would be required to pay Parkland Acquisition, Parkland Development and Open Space Acquisition fees. Therefore, no impacts are expected and no further analysis is required.

(b). The project includes a proposed private fitness center that would include a wide range of fitness equipment and facilities. This fitness center is defined as a recreational use in the Implementing Zoning Ordinance, and would comprise approximately 15% of the project's square-footage. In addition, the fitness center would be located adjacent to active recreational uses of the project, including bicycle and pedestrian paths. The construction of these recreational facilities would not have an adverse physical affect on the environment since the fitness center would be located at least 50 feet from the top bank of the Deer Creek swale, per Policy 4-P-1.D, as discussed above. The proposed active recreation uses along both sides of the Deer Creek swale would be designed in coordination with a wetlands biologist to ensure that there are no adverse impacts to the drainage and biotic communities within the Deer Creek swale. Impacts would be less than significant and no mitigation measures are required.

14. Utilities/Service Systems

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b. Require or result in the construction of a new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
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?			X	
d. Have insufficient water supplies available to serve the project from existing entitlements needed?			X	
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g. Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Discussion:

(a). The project is not expected to generate wastewater that would require special treatment. The proposed project would be required to comply with all applicable wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board (SFBRWCB). The proposed project is not anticipated to result in a significant impact on the ability of the existing City of Petaluma wastewater treatment facility to maintain compliance with all existing SFRWCB orders. Therefore, impacts would be less than significant and no further analysis of this issue is required.

(b). The City of Petaluma's wastewater collection system consists of over 200 miles of sewer collection lines. The project site is located in the southeast corner of Petaluma's North Sanitary Sewer Service Basin (North Basin). This basin encompasses most of the City's sewer service area located north of Lynch Creek and east of the Petaluma River, as well as an approximately 2,000 foot wide strip of land on the west side of the river, extending out past Rainsville Road. The North Basin also includes the community of Penngrove, which pumps its wastewater south into Petaluma's sewer system through a 6-inch force main. The entire North Basin drains to the Wilmington Street pump station, adjacent to Lynch Creek, where an 18-inch force main carries the wastewater underneath the creek to a 33-inch trunk sewer on Madison Street. This sewer gradually increases in size to 48 inches as it runs south on Madison and then east on Lakeville Street to the WWTP. The Madison Street sewer serves the North Basin and approximately one quarter of the Northeast Basin, while the downstream end of the Lakeville Street trunk sewer serves all of the North, West and Southwest basins, in addition to almost one half of the Northeast Basin.⁹

The project site is situated at the downstream end of three sewer subareas that extend north and east away from the river to the City's northerly boundary. Wastewater from the mostly residential neighborhoods east of North McDowell Boulevard is collected in a 12-inch diameter sewer main that follows Rainier Avenue to McDowell, then continues south along the west side of the site through the future Rainier Avenue right of way to Highway 101. From this point, the sewer runs west along the north side of the freeway, south under the freeway along the Northwest Pacific Railroad right of way, then east along the north side of the Petaluma River to the Wilmington Street pumping station at Lynch Creek, gradually increasing in size to 24 inches as it picks up additional flows from the Commerce Street/Transport Way industrial area, residential neighborhoods located north of McDowell Blvd, and the Petaluma Village Marketplace.

According to the City's 1985 Sanitary Sewer Capacity Study (Sewer Master Plan), the sewer that runs between North McDowell Boulevard and the highway along the Rainier Avenue extension has a peak flow capacity of 1.4 mgd, and the next downstream segment (paralleling the highway) has a capacity of 1.96 mgd. The 24-inch trunk sewer connection to the Wilmington Street pump station has a capacity of 6.38 mgd, while the Madison Street sewer and the downstream reach of the Lakeville Street trunk sewer have capacities of 19.02 mgd and 29.35 mgd, respectively. In 1996 the Wilmington Street pump station was upgraded and accommodates peak flows of 10.8 mgd, although its 18-inch force main has a maximum capacity of 4.19 mgd.¹⁰ Additional upgrades to this pump station are necessary.

The Master Plan estimated the subbasins located upstream of the project site, which all drain to the Rainier Avenue extension sewer, would have an average dry weather flow (ADWF) in 2010 of approximately 0.45 mgd, and a peak wet weather flow (PWWF) of 1.6 mgd. This exceeds the capacity of the existing sewer, but the capacity shortfall is primarily caused by a high peak flow factor in the

⁹ Brown and Caldwell Engineers, "City of Petaluma Sanitary Sewer System Capacity Study," October, 1985.

¹⁰ Personal communication between Rem Scherzinger, City of Petaluma Water Resources & Conservation Department, and Tyler Barns of WRA. October, 26, 2010.

subbasin that includes the project site.¹¹ It is not clear why such a high factor was used, since this area encompasses relatively new subdivisions that should not have especially high rates of infiltration and inflow (I&I).¹² At the end of the Rainier Avenue extension, where the sewer main increases to 14-inch diameter, projected ADWF in 2010 is 0.49 mgd, and PWWF is 1.86 mgd, which is 0.1 mgd less than its rated capacity.

An updated Sewer Master Plan for the City has not yet been completed. The General Plan EIR concluded that wastewater treatment facilities would be sufficient to serve General Plan buildout, and that new development would have a less than significant impact because it would not result in the need to expand or construct new wastewater treatment facilities. General Plan Policy 8-P-16 relates to the City's sanitary sewer collection system and provides part of the basis for this conclusion:

General Plan 2025 Policy 8-P-16: Comply with the current Statewide General Waste Discharge Requirements concerning the operation and maintenance of the City's sanitary sewer collection system.

- a. Perform condition assessment of existing facilities.
- b. Survey facilities and maintain current system maps.
- c. Perform regular cleaning and inspection to help eliminate sanitary sewer overflows.
- d. Fund collection system infrastructure replacement on a 100-year life cycle.
- e. Regularly update the sanitary sewer flow model and make improvements necessary to support development.

The project will pay the City's Wastewater Capacity Fees as the Project's fair share of the cost of programs and improvements necessary to provide wastewater facility needs as projected in the EIR for General Plan 2025 and described in General Plan 2025 Policy 8-P-16.e. With the City's implementation of these policies, project impacts are less than significant.

(c). The proposed project would not 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. According to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps, no portion of the project site is located within a 100 year flood zone. Mapped flood zones are extensive in the project vicinity, but they are confined to areas alongside the Petaluma River, on the other side of the highway. The exception is along Lynch Creek, where the flood zone extends almost two miles upstream of the river, confined within the banks of the open stream channel.

Flow from impervious surfaces would be discharged into the Petaluma River and a portion of the site would discharge runoff into Deer Creek and into the existing public storm drain system at Lynch Creek Way. According to the Preliminary Hydrology Study for the project site, the existing 54-inch culvert would sufficiently handle peak volume runoff, and the project would not present a potential source of flooding. In addition, the project would not significantly alter the existing drainage pattern of the site,

¹¹ *Op.Cit., Sewer Master Plan, Figure 5-1 and Table 5-2. The 1.6 mgd peak flow rate was extrapolated from data presented in Table 5-2, and that at least 70 percent of the subbasin that includes the project site is located upstream of North McDowell Boulevard. Flows generated by the full subbasin, to the point at which it hits the freeway, are taken directly from Table 5-2.*

¹² *Dry season peak flows are caused by variations in wastewater production over the course of a day, while wet weather peak flows (PWWF) also include inflow and infiltration (I&I). Inflow consists of storm water runoff from private storm drain lines that were connected to sanitary sewers when they carried both wastewater and storm water, while infiltration is caused by groundwater seepage through leaking pipe joints and broken sewer mains. Both problems mainly occur in older collection systems, which is why the Sewer Master Plan estimated that peaking factors in the areas around the junior college, which were largely undeveloped at the time of the study, would be between 2.5 and 3.*

since flows would be directed in the same general direction as currently exist, and the existing drainage swale would be preserved and enhanced through the placement of riparian biotic corridors along both sides of the drainage to maximize on-site retention of runoff and the restriction of buildings within 50 feet of either side of the swale as determined by the wetlands delineations performed for the site. Discharge from the proposed project into the Petaluma River either directly or indirectly is not expected to result in the construction of new storm water drainage facilities or expansion of existing facilities. Therefore, impacts are less than significant.

(d). The EIR certified for the City of Petaluma General Plan 2025 in May, 2008 relied on the General Plan 2025 Water Demand and Supply Analysis (Dodson, July 2006, Technical Appendix, Vol. 2) and other referenced information to conclude that sufficient water supplies will be available to serve the City through general plan buildout in 2025. The General Plan 2025 water demand and supply analysis showed that sufficient water would be available for long range development through 2025, given the total of estimated parcel-by-parcel land uses allowed by the General Plan, the City's existing water supply contract with the Sonoma County Water Agency (SCWA), and planned City water recycling and water conservation programs.

At the time of evaluation of water supply for development projects, it is necessary to identify and evaluate whether water to serve the project and future demand is reasonably likely to be available, pursuant to the opinion of the California Supreme Court in *Vineyard Area Citizens for Responsible Growth et al. v. City of Rancho Cordova et al.* (2007) 40 Cal.4th 412 ("*Vineyard*") and subsequent cases interpreting *Vineyard*, such as *Santa Clarita Organization for Planning the Environment, et al., v. County of Los Angeles, et al.* (2007) 156 Cal.App.4th 149. *Vineyard* requires that an environmental evaluation for a land use project must address the prospects of *likely* future water sources, and its discussion must include a reasoned analysis of the circumstances affecting the likelihood of the water's availability. Speculative sources and unrealistic allocations ("paper water") are insufficient. However, *Vineyard* does not require guaranteed sources, or even the existence of signed and enforceable agreements from water suppliers or already built or approved treatment and delivery facilities, at least for future phases of long range development.

The General Plan 2025 water demand and supply analysis showed that sufficient water would be available for long range development through 2025, given the total estimated future population, land use, and estimated water demand, the City's existing water supply contract with the Sonoma County Water Agency (SCWA), and planned City water recycling and water conservation programs.

In evaluating the reasonable likelihood that sufficient water supply is available for the proposed project, the City has compared General Plan 2025 projected demand to actual use through September, 2009. The results of that comparison are discussed below.

In addition, it would be relevant to re-evaluate water supply for this project if, since certification of the General Plan EIR, there has been (1) substantial evidence of a change in the project which involves new significant effects on water demand/supply or a substantial increase in severity of previously identified effects; (2) substantial changes in the circumstances under which the project is undertaken which will lead to new significant effects on water demand/supply or a substantial increase in the severity of previously identified effects; or (3) new information of substantial importance which was not known and could not have been known at the time of the General Plan EIR and which shows one or more significant effects not previously discussed or substantially more severe significant effects than previously examined. Public Resources Code 21166; CEQA Guidelines, Section 15162.

Since the adoption of General Plan 2025 and certification of its EIR, several events have occurred relating to the portion of the General Plan water supply that comes from SCWA.

In 2008, the National Marine Fisheries Service (NMFS) released its "Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of

Engineers, the Sonoma County Water Agency and the Mendocino County Russian River Flood Control and Water Conservation Improvement District in the Russian River Watershed" (Biological Opinion).

On May 12, 2009, SCWA adopted Resolution No. 09-074, declaring that the water production capacity of SCWA's system was temporarily impaired, ostensibly because SCWA did not have sufficient budget funding to operate the existing transmission system. The resolution limited SCWA's capacity to deliver water to its contractors to 53 million gallons per day (average day peak month) for the Fiscal Year 2009-2010. SCWA also adopted a temporary allocation of water in approximately this amount for the period June 15 to October 2, 2009 in response to the Temporary Impairment. That temporary allocation expired on October 2, 2009. On May 29, 2009, the State Water Resources Control Board issued Order WR 2009 0034 which required SCWA to reduce Russian River diversions 25% between June 15 and October 2, 2009, compared to 2004 diversions. In September, 2009, SCWA decided to no longer pursue a water project which sought additional diversion rights and transmission system expansion, but to continue to develop new water supply projects, plans and strategies.

Each of these circumstances is evaluated below. Based on the evaluation, none of them creates a new significant direct or cumulative impact related to water supply for the proposed project or provides substantial evidence of changed circumstances sufficient under CEQA to require different conclusions than those reached in the General Plan 2025 EIR and water demand and supply analysis.

General Plan 2025 Demand Monitoring

General Plan 2025 Policy 8-P-4 provides in part as follows:

The City shall routinely assess its ability to meet demand for potable water.

- A. The City shall continue to monitor the demand for water for projected growth against actual use, and ensure that adequate water supply is in place prior to, or in conjunction with, project entitlements.
- B. The City planning staff will discuss water supply with the developer for each new development early in the planning process and inform Water Resources staff of upcoming demands as provided by the applicant.
- C. The City shall maintain a tiered development record to monitor approved and pending project developments to allow a reasonable forecast of projected water demand.

The Water Supply and Demand Analysis Report (June 2006) developed a water supply program that relies upon water from SCWA, recycled water (potable offset), conservation, and an increment of groundwater at buildout to meet projected demand. As noted in General Plan 2025 Policies 8-P-5-C and 8-P-19, the City also anticipated continuing use of groundwater to meet emergency needs and to offset peak demands. Per Policy 8-P-4 of the Petaluma General Plan 2025, city staff is required to monitor actual demand for potable water in comparison to the supply and demand projections in the Water Supply and Demand Analysis Report. Staff has compared actual demand for potable water to an annual SCWA supply limit for Petaluma of 4,366 million gallons per year (13,400 acre-feet) and a peak supply limit of 17.1 million gallons per day. In both instances, potable demand is well within available SCWA supply capacity. Tiered water rates, conservation efforts, and the conversion of Rooster Run Golf Course to recycled water have kept annual and peak demands within the available SCWA supply at approximately 3,200 million gallons per year and an average day maximum month peak demand of 12.3 million gallons per day, respectively, in 2008. Use through September, 2009, was even lower, reflecting significantly increased water conservation during the peak summer months of 2009. The present water demand monitoring does not use the

2009 demand numbers because it is not clear if the 2009 level of conservation will be sustained in future years.

Staff has also reviewed the projected demand of entitled projects and proposed projects compared to available supply as of October 1, 2009. Entitled projects are defined as approved projects that are either under construction or yet to be constructed. Proposed projects are those projects which are undergoing discretionary review as of October 1, 2009, and include the proposed project. When all proposed projects are added to the actual demands for 2008, resulting aggregate demand of 3,449 million gallons per year and average day maximum month peak demand of 13.4 million gallons per day remains well within the available SCWA supply of 4,366 million gallons per year and peak supply of 17.1 million gallons per day evaluated in General Plan 2025.

Long term supply for buildout relies on the continued implementation of various phases of the City's recycled water program and water conservation programs to offset potable water use. Those programs are analyzed in General Plan 2025 with estimated dates for implementation. The General Plan 2025 monitoring policies outlined above will continue to track the contribution of these programs to the supply and demand balance. General Plan Policy 8-P-4.A is a further limitation on approval of development to ensure that an adequate water supply is in place at the time of any future project entitlement.

NMFS Biological Opinion – September 24, 2008

The 2008 Biological Opinion analyzes the continued operation of the Russian River Water Supply and Flood Control Project for a 15-year period on endangered salmonid species. As it relates to Petaluma's water supply, the project includes Warm Springs Dam and SCWA's activities related to flood control, water diversion and storage and regulation of flows in the Russian River and Dry Creek, as well as SCWA activities related to Lake Mendocino. Because the Biological Opinion found that continued operation of the system as historically operated could jeopardize the continued existence of some salmonid species and adversely modify their critical habitats, it provided what is called a "Reasonable and Prudent Alternative" ("RPA") with actions designed to avoid negative impacts on salmonid habitat. The RPA will be implemented over a period of 15 years. Required actions affecting SCWA include management of stream flow below Warm Springs Dam, including Dry Creek, habitat restoration, monitoring, enhancement and protection programs and other modifications to management of the flood control and water supply systems during the summer months.

Although the Biological Opinion places some constraints on minimum instream summertime flows in the Russian River and also limits the amount of water that SCWA can release from Lake Sonoma into Dry Creek, SCWA has determined that, "[C]ompliance with the terms of the NMFS Russian River Biological Opinion will allow the Agency to protect its right to divert and redivert up to 75,000 acre feet per year under these rights." See SCWA Resolution No. 09-0871, adopted September 17, 2009.

Because the Biological Opinion affects summertime flows in the Russian River and Dry Creek, it could potentially have an impact on water provided to meet summer month peak demands of SCWA's water contractors. However, it is not known at this time what actions SCWA may propose or implement in response to the Biological Opinion. SCWA also has other sources of potential supply that are not affected by the Biological Opinion, such as groundwater pumping. Until such time as specific SCWA measures in response to the Biological Opinion are proposed and receive required regulatory approval, it is not possible to determine what effect, if any, future actions may have on SCWA's ability to deliver water to meet City summer peak demands. Therefore, any impact of the Biological Opinion on water supply available to the proposed project is too speculative for evaluation at this time.

SCWA Actions, May-September, 2009

The City's existing water contract is the Restructured Agreement for Water Supply dated June 23, 2006, between SCWA and 9 water contractors, including Petaluma (Restructured Agreement). The Restructured Agreement envisions a future expansion of SCWA water supply and facilities. Section 3.1 of the Restructured Agreement provides that Petaluma's maximum delivery of SCWA water is 21.8 mgd and 13,400 AF per year. In September, 2009, SCWA's board of directors adopted Resolution 09-0871, which directed SCWA to no longer pursue development and implementation of a proposed Water Supply and Transmission System Project (WSTSP) but to continue to develop new water supply projects, plans and strategies. However, General Plan 2025 did not base its water analysis on delivery of 21.8 mgd, or on availability of water from a future WSTSP or expanded SCWA facilities, but instead used the existing capacity of the SCWA system. Therefore, even if SCWA abandons its application for additional water rights and/or projects intended to provide increased supply and transmission capacity, the General Plan water supply analysis remains valid.

On May 12, 2009, SCWA adopted Resolution No. 09-074, declaring that the water production capacity of SCWA's system was temporarily impaired, ostensibly because SCWA did not have sufficient budget funding to operate the existing transmission system. The resolution unilaterally limits SCWA's capacity to deliver water to its contractors to 53 million gallons per day (average day peak month) during the Fiscal Year 2009-2010 by shutting down existing SCWA facilities at three collector wells, the Russian River well field and the Ely, Kastania Road and Wilfred Road booster pump stations, thus resulting in reduced production. The staff report accompanying this resolution stated that SCWA estimates its transmission system deliveries will be approximately 54,500 AF for Fiscal Year 2009-2010 because of the shut down.

On June 16, 2009, SCWA's board of directors approved a "Temporary Allocation of Water Supplies" to SCWA customers, including the City of Petaluma, for the period June 15 to October 2, 2009, in response to its Resolution No. 09-074. On May 29, 2009 the State Water Resources Control Board issued Order WR2009-0034-EXEC (Order) in response to SCWA's petition to reduce required instream Russian River flows to prevent the depletion of storage in Lake Mendocino. The Order required SCWA to reduce Russian River diversions 25% between June 15 and October 2, 2009, compared to 2004 diversions. The Temporary Allocation adopted by SCWA on June 16, 2009, provided Petaluma with 9.3 million gallons per day, or approximately 886 acre feet per month between June 15 and October 2, 2009, but has now expired. The City met the amount of peak demand not provided by SCWA between June 15 and October 2, 2009, with conservation and pumping of groundwater for the duration of the reduced allocation. Use of the city's groundwater wells to meet emergencies and peak demand is provided for in General Plan 2025 Policies 8-P-5-C and 8-P-19.

Under the Restructured Agreement, Part 4, SCWA sets its annual charges to the water contractors. Its budget is based in part on assumptions about quantity of water to be delivered under the Restructured Agreement. For purposes of rate-setting, modification of that quantity when prior year's supplies are not predictive of future usage, requires the prior approval of the Water Advisory Committee, made up of representatives of each water contractor. See Restructured Agreement, Section 4.1(c). Petaluma and the eight other water contractors will thus have input into SCWA charges, rates and the resulting budget and production goals for FY 2010-2011 and subsequent years. The City thus has the ability, through its membership in the Water Advisory Committee, to help ensure that SCWA budgets and production goals are consistent with water supply requirements relied upon by the General Plan 2025.

Conclusion

None of the circumstances discussed above constitutes (1) substantial evidence of a change in the project which involves new significant effects on water demand/supply or a substantial increase in severity of previously identified effects; (2) substantial changes in circumstances under which the

project is undertaken which will lead to new significant effects on water demand/supply or a substantial increase in the severity of previously identified effects relative to that supply; or (3) new information of substantial importance which was not known and could not have been known at the time of the General Plan EIR and which shows one or more significant effects not previously discussed or substantially more severe significant effects than previously examined relating to water supply for the Project than as evaluated in the General Plan 2025 EIR.

Additionally, a standard condition from the Department of Water Resources and Conservation requires that the project comply with the City's Water Conservation Ordinance for interior and exterior water usage. Additionally, the project will pay the City's Water Capacity Fees to provide its share of funding for the programs and improvements required to provide adequate water supply through buildout as projected by General Plan 2025 and evaluated in the General Plan 2025 EIR. Thus, no significant impact to water supply can be expected.

(e-f). The amount of wastewater expected to be generated by the project is consistent with the service needs anticipated by the Petaluma General Plan and will not require the construction of new treatment facilities or the expansion of existing facilities. Therefore, impacts would be less than significant.

Development of the project site was anticipated by the General Plan. The new wastewater treatment plant has adequate capacity to serve the project's expected demand in addition to that of existing commitments. Therefore, impacts are less than significant and no further analysis is required.

(g). The amount of solid waste expected to be generated by the project is consistent with the service needs anticipated by the Petaluma General Plan. The project is also subject to General Plan Policy 4-P-21.B, which requires new or remodeled residential and all non-residential developments to incorporate sufficient, attractive, and convenient interior and exterior storage areas for recyclables and green waste. The proposed project would be consistent with this policy and impacts would be less than significant.

15. Mineral Resources

	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Result in the loss or availability of a known mineral resource that would be of value to the region and the residents or the state?				X
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?				X

Discussion:

(a-b). Soil studies conducted as part of the geotechnical investigation did not reveal any valuable mineral resources. Therefore, the project would not result in the loss or availability of a known mineral resource that would be of value to the region and the residents or the state and no further analysis of this issue is required. Furthermore, the project would not result in the loss of availability of a locally-important mineral resource recovery size as delineated on a local general plan, specific plan or other land use plan including either the City's General Plan or the Sonoma County General Plan. Thus, no impact would occur.

16. Cultural Resources

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?				X
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?		X		
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d. Disturb any human remains, including those interred outside of formal cemeteries?		X		

Discussion:

(a-d). This section is primarily based on the conclusions of the Cultural Resources Evaluation of the Friedman-Gray Property completed in February 2004 by Archaeological Resource Service (see Appendix I of the EIR). This study did not identify any known archaeological, historical, or cultural resources on-site.

Cultural studies previously conducted in the project area and surroundings have identified no prehistoric archaeological remains, known human burials, historic artifacts, or significant architectural resources on the project site. The closest recorded historic site to the project area is located a quarter-mile to the west on the far side of the Petaluma River. The surrounding area has an extensive history of Native American use. The closest prehistoric sites to the Project Area consist of middens and fragments of ground stone tools and other implements.

Soils at the project site consist of relatively young Quaternary alluvial soils, which are not known to contain paleontological resources. Although paleontological resources are not expected, incorporation of mitigation would ensure impacts of the proposed project would be less than significant. The project site is relatively flat and does not contain any unique geologic features; therefore, impacts to unique geologic features would be less than significant.

Impact CULT-1: Archaeological Resources

Because there is no evidence of any structures having been located on the project site, it is highly unlikely that there would be any historic era deposits on the project site. However, given the archaeological sensitivity of the project area, it is possible that unknown prehistoric archaeological resources and/or human burials could be found on the site. Disturbance of these artifacts or remains during construction would constitute a significant impact.

Mitigation Measures:

CULT-1a Prior to excavation and construction on the proposed project site, the prime construction contractor and any subcontractor(s) shall be cautioned at the preconstruction meeting with the City on the legal and/or regulatory implications of knowingly destroying cultural

resources or removing artifacts, human remains, bottles, and other cultural materials from the project site.

CULT-1b If during any phase of project construction, any paleontological resources are encountered, construction activities within a fifty-meter radius shall be halted immediately, and the project applicant shall notify the City. A qualified paleontologist (or persons approved by the City) shall be retained by the project applicant and shall be allowed to conduct a more detailed inspection and examination of the exposed resources. During this time, excavation and construction would not be allowed in the immediate vicinity of the find. If any find were determined to be significant by the paleontologist, the City and the paleontologist would meet to determine the appropriate course of action. All paleontological resources recovered from the site would be subject to scientific analysis, professional museum curation, and a report prepared according to current professional standards.

CULT-1c If during any phase of project construction, any cultural materials are encountered, construction activities within a fifty-meter radius shall be halted immediately, and the project applicant shall notify the City. A qualified prehistoric archaeologist (as approved by the City) shall be retained by the project applicant and shall be allowed to conduct a more detailed inspection and examination of the exposed cultural materials. During this time, excavation and construction would not be allowed in the immediate vicinity of the find. If any find were determined to be significant by the archaeologist, the City and the archaeologist would meet to determine the appropriate course of action. All cultural materials recovered from the site would be subject to scientific analysis, professional museum curation, and a report prepared according to current professional standards.

CULT-1d If human remains are discovered at the project site during construction, work at the specific construction site at which the remains have been uncovered shall be suspended, and the City of Petaluma and County coroner shall be immediately notified. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the treatment and disposition of the remains shall adhere to the guidelines of the NAHC.

17. Agricultural and Forestry Resources

Would the project:	Potentially significant impact	Less than significant w/ mitigation measures	Less than significant impact	No impact
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?				X
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?				X
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X

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

Discussion:

(a). The project would not 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 Farmland of Statewide Importance map for Sonoma County designates the site as Urban & Built-Up Land. Thus, the project would not convert to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use and no further analysis of this issue is required.

(b). The project would not conflict with existing zoning for agricultural use or a Williamson Act contract. The project site is not zoned for agricultural use and is not under Williamson Act contract. Thus, no impact would occur.

(c). A significant impact may occur if a project were to conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. The proposed project would not convert farmland or forest land to non-agricultural use. The proposed project is located in a developed area. Therefore, no impacts are considered and no further analysis is required.

(d). A significant impact may occur if a project were to result in the loss of forest land or conversion of forest land to non-forest use. The project site is located in a developed urban area and does not include forest land or timberland. No impacts would occur and no further analysis is required.

(e). The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use. The project site is an urban infill property and is not contiguous to any other agricultural land. Therefore, the proposed project would not convert farmland to non-agricultural use and no further analysis of this issue is required.

18. Mandatory Findings of Significance

Yes No

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of 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?	X	
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)?	X	
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X	

(a). As noted in the responses to Question 1 through 16 above, the proposed project could degrade the quality of the environment.

(b). A significant impact may occur if a project, in conjunction with other related projects in the area of the project site, would result in impacts which are less than significant when viewed separately, but would be significant when viewed together. The preliminary traffic analysis concluded that during the Cumulative plus Project Conditions scenario, project traffic would cause the LOS at study intersections operating at LOS D to deteriorate to LOS E, or intersections operating at LOS E without the project to deteriorate one letter grade to LOS F, or would contribute traffic to intersections already operating at LOS F at the following locations:

- Rainier Avenue/Maria Drive
- Rainier Avenue/North McDowell Boulevard
- Rainier Avenue/Project Access

Cumulative plus Project conditions at the intersection of Rainier Avenue and North McDowell Boulevard exceed the thresholds of significance representing a significant LOS impact. No feasible mitigation measures were identified that would reduce the impact to less-than-significant levels. Although Cumulative plus Project conditions at the intersection of Rainier Avenue and the Project Access exceed the thresholds of significance, delay would only impact the right-turn egress movements from the proposed project and not vehicle delays on Rainier Avenue. A traffic signal at this intersection may be warranted, however, the construction of the Rainier Avenue Cross-town connector and U.S. 101/Rainier Avenue Interchange would limit access along the project frontage. Therefore, a traffic signal is not recommended at this location.

(c). As noted in the responses to Question 1 through 16 above, the proposed project could cause substantial adverse effects on human beings, either directly or indirectly. .

Sources

The following sources of information are available for review at the City of Petaluma Community Development Department, 11 English Street, Petaluma, CA 94952.

- 1) City of Petaluma, CA, *General Plan 2025*, adopted May 19, 2008, includes all Appendices by reference
- 2) City of Petaluma, *Implementing Zoning Ordinance*, adopted May 19, 2008
- 3) City of Petaluma, *Bicycle and Pedestrian Plan, an Appendix to the General Plan 2025*, adopted May 2008
- 4) City of Petaluma, *Phase II NPDES Storm Water Management Plan*, November 2003.
- 5) Wood Rodgers, *Deer Creek Village Shopping Center Traffic Impact Study, City of Petaluma, CA*, November 2009
- 6) Bay Area Economics, *Fiscal and Economic Impact Analysis*, January 2009
- 7) Thomas Consultants, Inc., *Leakage and Sustainable Retail Strategy Study, prepared for the City of Petaluma*, June 2004.
- 8) Charles M. Salter Associates, Inc., *Deer Creek Village Shopping Center Noise Study, Petaluma, California*, December 8, 2009.
- 9) State of California, California Environmental Protection Agency, California Air Resources Board (CARB), *Air Quality and Land Use Handbook: A Community Health Perspective*, April 2005.
- 10) California Regional Water Quality Control Board, *San Francisco Bay Basin Water Quality Control Plan*, 1995.
- 11) Federal Emergency Management Agency, *Flood Insurance Rate Map, Map Number 06097C0894E, Panel 0894E, Sonoma County, California*, December 2, 2008.

- 12) Kleinfelder, Inc., Preliminary Geotechnical Investigation Report, Friedman-Gray Property, Petaluma, CA, December 11, 2002.
- 13) Treadwell & Rollo, Inc., Third Party Geotechnical Review, Deer Creek Plaza Project, Petaluma, California, June 20, 2005.
- 14) CSW/Stuber-Stroeh Engineering Group, Inc., *Deer Creek Plaza Preliminary Hydrology Study*, July 2004.
- 15) Zentner and Zentner, *Neighborhood at Deer Creek Biotic Assessment*, July 9, 2003
- 16) Sonoma County Water Agency; Petaluma River Watershed Master Drainage Plan, June 2003.
- 17) Archaeological Resource Service, *A Cultural Resource Evaluation of the Friedman-Gray Property, APN 007-380-08 & 007-380-027, Petaluma, Sonoma County, California*, February 2004
- 18) CSW/Stuber-Stroeh Engineering Group, Inc., *Deer Creek Plaza*, memorandum, November 19, 2008.
- 19) CSW/Stuber-Stroeh Engineering Group, Inc., *Deer Creek Plaza, Petaluma, Standard Storm Water Mitigation Plan*, November 12, 2008.
- 20) CSW/Stuber-Stroeh Engineering Group, Inc., *Preliminary Hydrology Study, Deer Creek Plaza*, July, 2004.
- 21) Wood Rodgers, Inc., *Hydrologic Constraints Memorandum for Gray-Friedman Property*, May 7, 2001.
- 22) Origer and Associates, Peer Review of Petaluma Valley Plaza Cultural Resources report. July 12, 2004.