

MITIGATED NEGATIVE DECLARATION/
INITIAL STUDY

6877 SEBASTOPOL AVENUE
ALCOHOL USE PERMIT, STREET ABANDONMENT, DESIGN
REVIEW

CITY OF SEBASTOPOL PLANNING DEPARTMENT
714 JOHNSON STREET
SEBASTOPOL CALIFORNIA 95472
APRIL 12, 2011

City of Sebastopol

Notice of Intent to Adopt and Notice of Availability of Initial Study and Mitigated Negative Declaration On Proposed 6877 Sebastopol Avenue CVS-Chase Project

Notice is hereby given that an Initial Study/Mitigated Negative Declaration under the California Environmental Quality Act has been prepared and is available for public review on the project described below. The Initial Study reviews a range of potential environmental impact issues including air quality, traffic, land use, aesthetics, biological resources, hazards, public services, cultural resources, hydrology, noise and other topics. Potentially significant traffic impacts at two intersections and significant greenhouse gas air quality impacts are identified; however the study finds that with mitigation measures incorporated, these effects are reduced below a level of significance.

Document Type: Initial Study/Mitigated Negative Declaration

Date: April 12, 2011

Project Title: 6877 Sebastopol Avenue CVS-Chase Project

Project Location - City of Sebastopol, 6877 Sebastopol Avenue, Assessor's Parcel Numbers 004-063-002, 13, 14, 15, 24, 25, 26, 27

Project Location - City: Sebastopol **Project Location - County:** Sonoma

Description of Project: The project includes the redevelopment of a 2.45 acre property with two new single-story buildings for a retail pharmacy and a bank. The pharmacy building would be 14,327 sq. ft.; the bank would be 4,120 sq. ft., for a total of 18,903 sq. ft. The pharmacy would have a 'drive-through' component and the bank would have an ATM accessible by vehicle. The existing buildings on the site comprising 32,237 sq. ft. which were utilized for a former car dealership, are currently vacant and would be demolished. Thus there would be a net square footage reduction on the site of 13,541 sq. ft. The pharmacy wishes to obtain a Use Permit to allow an 'off-sale' type alcohol license. The project also requires Design Review. In addition, the project proposes abandonment of Barnes Avenue, an alley-like street that current separates parcels on the site.

Lead Agency: City of Sebastopol **Lead Agency Contact Person:** Kenyon Webster, Planning Director
Area Code/Telephone/Extension: (707) 823-6167

Address where document may be obtained: City of Sebastopol Planning Department, 714 Johnson Street, Sebastopol, California 95472

Public Review Period: The Initial Study and Mitigated Negative Declaration are subject to a public review period that will begin on Tuesday, April 13, 2011 and end at **5:00 p.m. on Monday May 16, 2011**. Any comments on the environmental review document must be delivered in writing prior to the close of the review period and sent to: Kenyon Webster, Planning Department, 714 Johnson Street, Sebastopol, California 95472, or email to kplan@sonic.net

Public Hearing: The Planning Commission is scheduled to conduct a Public Hearing on the CEQA documentation as well as the project on May 24, 2011 at 7:00 p.m. at the Sebastopol Youth Annex, 425 Morris Street. The City Council will also conduct a hearing on the request to abandon Barnes Avenue at a date to be determined. Copies of the Initial Study and Negative Declaration are available for review at the Planning Department and at the Sebastopol Branch Library at 7140 Bodega Avenue, Sebastopol, and may also be purchased at the Planning Department for \$5.00. Please contact the Planning Department at (707) 823-6167 for more information.

If you challenge this project in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City of Sebastopol at the hearing, or prior to the close of the above-referenced comment period.

I. Environmental Checklist Form – Mitigated Negative Declaration

1. Project title	6877 Sebastopol Avenue Alcohol Use Permit, Street Abandonment, Design Review
2. Lead agency name and address	City of Sebastopol Planning Department 714 Johnson Street Sebastopol, CA 95472-9998 http://ci.sebastopol.ca.us
3. Contact person and phone number	Kenyon Webster Planning Director (707) 823-6167 kplan@sonic.net
4. Project location	A.P.N. 004-063-002, 13, 14, 15, 24, 25, 26, 27; 6877 Sebastopol Avenue
5. Project sponsor's name and address	William McDermott, Armstrong Development, 1375 Exposition Blvd. Ste. 101, Sacramento, CA 95815 916-643-9610 ext. 1102 wmcdermott@agoc.com
6. General plan designation	Downtown Core
7. Zoning	CD: Downtown Core
8. Description of project	The project includes the redevelopment of a 2.45 acre property with two new single-story buildings for a retail pharmacy and a bank. The pharmacy building would be 14,576 sq. ft.; the bank would be 4,327 sq. ft., for a total of 18,903 sq. ft. The pharmacy would have a 'drive-through' component and the bank would have an ATM accessible by vehicle. The existing buildings on the site comprising 32,237 sq. ft. which were utilized for a former car dealership, are currently vacant and would be demolished. Thus there would be a net square footage reduction on the site of 13,541 sq. ft. The pharmacy wishes to obtain a Use Permit to allow an 'off-sale' type alcohol license. The project also requires Design Review. In addition, the project proposes abandonment of Barnes Avenue, an alley-like street that current separates parcels on the site.

<p>9. Surrounding land uses and setting:</p>	<p>The subject property is located in downtown Sebastopol at the intersection of two heavily-traveled streets (Sebastopol Avenue/Petaluma Avenue). Existing on-site buildings are in fair to poor condition and the site has extensive asphalt areas with virtually no vegetation on the site. Surrounding uses include a variety of commercial uses including retail establishments, offices and auto-related businesses. In addition there are industrial uses near the site to the southeast, and the 'Railroad Forest' portion of the Laguna Wetlands Preserve park is nearby but not abutting the site. The site does not abut any residential uses.</p>
<p>10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)</p>	<p>Caltrans encroachment permit for highway frontage and related improvements; Regional Board Construction General storm water Permit; BAAQMD demolition-related permit.</p>

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.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology /Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use / Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | |

DETERMINATION:

On the basis of this initial evaluation:

	<p>I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.</p>
<p>X</p>	<p>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.</p>
	<p>I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.</p>
	<p>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.</p>



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.

A handwritten signature in blue ink, appearing to read "Kenyon Webster".

A handwritten date in blue ink, "4/12/11".

Signature

Date

Kenyon Webster, CEQA Coordinator

II. Project Description

The project includes the redevelopment of a 2.45 acre property with two new single-story buildings for a retail pharmacy and a bank. The acreage figure includes Barnes Avenue, a narrow street proposed for abandonment. The pharmacy building (a CVS/pharmacy) would be 14,576 sq. ft.; the bank (Chase Bank) would be 4,327 sq. ft., for a total of 18,903 sq. ft. The drugstore pharmacy would have a 'drive-through' component and the bank has a remote ATM accessible to vehicles.

CVS presently operates a pharmacy at 788 Gravenstein Highway North, Sebastopol in the 'Redwood Marketplace' shopping center. If the proposed project is approved and constructed, the applicant has indicated that this store will be closed with all services transferred to the new location, and the vacated space will be utilized for other permitted uses. The applicant has initiated identification of suitable potential replacement tenants and has consulted with the Chamber of Commerce, the City's Economic Development Coordinator and others to help identify such tenants.

The existing unoccupied buildings on the proposed project site comprising 32,237 sq. ft., which were utilized for a former car dealership, would be demolished. Thus, there would be a net square footage reduction on the site of 13,334 sq. ft.

The pharmacy wishes to obtain a Use Permit to allow an 'off-sale' type alcohol license. The Planning Commission will conduct a public hearing and make a determination on the Use Permit request. The project also requires Design Review which will be considered by the Design Review Board. In addition, the project proposes abandonment of Barnes Avenue, a narrow alley-like street that currently separates parcels on the site. Abandonment will require review by the Planning Commission and approval by the City Council. In that both Sebastopol Avenue and Petaluma Avenue are State highways, frontage improvements will require Encroachment Permits from both Caltrans and the City of Sebastopol. Demolition of the existing structures will require a permit from the Bay Area Air Quality Management District (BAAQMD); a Construction General storm water permit will be required from the North Coast Regional Water Quality Control Board; and Building Permits will be required for the planned buildings.

There is virtually no vegetation on the site at present. The single tree currently on the site would be preserved, and over 60 new trees as well as a variety of shrubs and ground cover would be planted. The proposed project would substantially increase on-site trees and landscaping by provision of parking lot and sidewalk landscaping and trees.

Curb, gutter and sidewalks on the project perimeter are currently in fair to poor condition and would be reconstructed as part of the project. The project would result in a net reduction in driveways onto the public streets from the current condition (from the current eight driveways to four driveways) which will reduce points of potential vehicle conflict from current conditions.

Parking for the proposed project would substantially exceed code requirements. Approximately 105 spaces are proposed; approximately 47 are required by the Sebastopol Zoning Ordinance. The applicant indicates their intent is to ensure adequate parking for the proposed uses; in addition part of the Abbott Avenue area is presently used for parking by a neighboring business (Frizelle-Enos) and that the applicant's intent is that Frizelle and the public generally could use parking on the proposed project site, increasing the need for site parking. Further, they indicate that area businesses have indicated that there are parking deficiencies in the area.

III. Evaluation of Potential Environmental Impacts

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

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Discussion:				
<p>a); b) Evaluation of impacts to significant visual elements of the land is required by the City of Sebastopol General Plan.</p> <p>The General Plan does not identify the site as a scenic resource. Existing buildings are unoccupied, appear abandoned, are in fair to poor condition with some boarded-up broken windows, and the site has unattractive and unimproved expanses of asphalt. In these regards, the site presently creates a blighting effect on the area. Other than a single tree, there is no on-site landscaping, and sidewalks are in fair to poor condition and lack street trees.</p> <p>Due to existing surrounding urban development, there are no scenic views from the site to other scenic resources such as the Laguna de Santa Rosa, or the mountains east of Santa Rosa except those available from the site frontage on Sebastopol Avenue.</p> <p>A portion of Highway 116 from the south Sebastopol City limits to Highway 1 on the coast is a designated State Scenic Highway. The scenic resources discussed on the Caltrans web site include redwoods, historic resorts and logging areas along the Russian River, all locations outside of the City limits and not occurring on the project site. The current project site does not contribute to scenic highway resources.</p> <p>General Plan Map 2: Scenic View Corridors does indicate a 'scenic view corridor' to the east of the project site on Sebastopol Avenue in a southeast direction, although existing buildings such as Benedetti Tire, Blue Sky Center, Gravenstein Station and the bicycle and hobby store building impede such views and there does not appear to be a meaningful scenic resource visible from Sebastopol Avenue in the area generally indicated by the General Plan map.</p> <p>The General Plan Community Identity Chapter Program 40.2 requires an analysis of "...proposed structures within 1,250 feet of the Laguna de Santa Rosa for their effect on the views of and from the Laguna de Santa Rosa." The subject site is within 1,250 feet of the 'Railroad Forest' portion of the Laguna de Santa Rosa Wetlands Preserve park of the City of Sebastopol. However, there are intervening private properties between the subject site and the Railroad Forest. At the southeast corner of the subject site, some views of native trees and non-native Acacia trees in the Railroad Forest are visible through a private property that is presently vacant. If this property were developed, a building on it would substantially block the current view either from the subject site, or to the subject site from the Railroad Forest property. The subject development would somewhat positively impact views from the site to the south east by removing an existing building at that corner and replacing it with surface parking. In addition, the proposed CVS building would be one story high with height of 24' to 28' and would not create an unusual skyline effect in the area. The CD District permits buildings of up to 40' and three stories. No damage to scenic vistas or scenic resources would occur as a result of the proposed project.</p> <p>c). The project site is surrounded by commercial and industrial development, is currently developed with more buildings and more square footage than the proposed project, will introduce many more trees and landscaping to the site than are currently existing, and will be subject to the Design Review process to ensure acceptable visual quality. No substantial degradation of visual character or quality will occur.</p> <p>d). Some site lighting currently exists and is operated, however the site has been generally inactive for several years. The site is located in downtown Sebastopol with street lights and building lights in the area. All exterior lighting for the proposed project will be reviewed by the Design Review Board to ensure that there is no substantial increase in light levels on adjacent properties and to minimize overspill and night sky impacts. No substantial light or glare would result. No significant impact would occur.</p>				
<p>II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:</p>				

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

- a). The project site is not identified as Prime Farmland, Unique Farmland, or Farmland, or Farmland of Statewide Importance by the California Resource Agency. No significant impact would occur.
- b). The project is not agriculturally zoned, nor is it under a Williamson Act contract. No significant impact would occur.
- c). The project is surrounded by urban uses and is not adjacent to farmland. No significant impact would occur.

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Discussion:				
<p>a). A detailed air quality study was prepared by City consultant AECOM (attached and incorporated into this Initial Study, see Exhibits). The study finds that with one exception, the proposed project would not exceed significance thresholds of the Bay Area Quality Management District and would not obstruct air quality plans. A potential significant impact on greenhouse gas is discussed in f) below.</p> <p>b). Pursuant to the AECOM air quality study (attached, see Exhibits), except for the potential significant impact related to greenhouse gas discussed in f) below, no BAAQMD standard would be violated by the proposed project and the project would not contribute substantially to an existing or projected air quality violation.</p> <p>c). Pursuant to the AECOM air quality study (attached, see Exhibits), the project would not 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). A potential impact on greenhouse gas is discussed in f) below.</p> <p>d). Pursuant to the AECOM air quality study (attached, see Exhibits), the project will not expose sensitive receptors to substantial pollutant concentrations. No significant impact would occur.</p> <p>e). The odors associated with retail and bank development are not generally considered to be “objectionable”, particularly when they are adjacent to similar commercial uses. No significant impact would occur.</p> <p>f) The air quality study identifies a potentially significant impact on greenhouse gas. The study indicates that the project would generate 1,269.80 metric tons (MT) of greenhouse gases (CO₂e). This would exceed the BAAQMD significance threshold of 1,100 tons, resulting in a significant environmental impact. The project exceeds the adopted threshold by 169.80 tons per year. A mitigation measure is available to reduce this impact below the significance level as follows:</p> <p>A GHG emission reduction of 170 MT CO₂e/yr. for a calculated 40-year period shall be achieved by either or a combination of the following:</p> <ol style="list-style-type: none"> 1. Subject to City review and approval, the applicant shall purchase CO₂e emission offsets (or “carbon credits”) from a recognized organization with registered GHG reduction projects whose CO₂e emission reduction values have been verified through a protocol acceptable to the City of Sebastopol. Payment shall be required prior to issuance of a Building Permit for the first building in the project. 2. Subject to City review and approval, the applicant shall perform an improvement in Sonoma County resulting in a reduction in GHG emissions. Examples of such potential improvements include, but are not limited to: replacement of aging water or sewer pumps with more efficient pumps; installation of alternative energy systems; energy conservation improvements; alternative transportation improvements; lighting efficiency projects; or other measures providing the required offset mitigation. The Applicant shall be responsible for providing verification of proposed measures acceptable to the City of Sebastopol. City approval of a Building Permit for the Project shall not be granted unless the City has approved the measure, with any such measure required to be funded prior to issuance of a Certificate of Occupancy for the first building in the project. The funding for this measure will be provided through a contract that requires the improvement will be implemented within 5 years and if not, the funding will revert to the City of Sebastopol which will use the funding to implement another GHG reduction project or purchase offset credits. <p>With incorporation of this mitigation measure the impact on greenhouse gases is reduced below a level of significance.</p>				
IV. BIOLOGICAL RESOURCES -- Would the project:				

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion:				
<p>a). b). c). and d). The site has been fully developed for decades and is surrounded by an urban area. Except for a single tree, there are no substantial plants, trees, or other biological resources on the property. Nearly all the property is either paved or is occupied by buildings. No significant impact would occur.</p> <p>e). Sebastopol has a Tree Ordinance that protects certain classes of trees. The only tree on the site is a protected tree, a 48-inch diameter California Black Walnut, which is proposed to be retained. A standard condition of approval for this project will require that a Tree Protection Plan that addresses protection measures that will be taken to prevent damage to the protected tree and included in the Improvement Plan submittal. While the applicant's evaluation indicates that the tree can be preserved, if it is determined that demolition, utility, grading or other improvements require tree removal, a Tree Removal application will need to be considered by the Sebastopol Tree Board. In this event, removal of a single tree would not be considered a significant impact. The project also proposes to plant approximately 64 trees on the property as well as providing landscaped areas. No significant impact would occur.</p> <p>f). The project site is not subject to any habitat conservation plan. No significant impact would occur.</p>				
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion:				
<p>a). and b). The project site is currently developed with several older buildings in fair to poor condition, the last use of which was for a car dealership. The buildings would be demolished under the project proposal. None of the buildings are designated City, State, or national landmarks, or listed in the State or National Register of historic resources or identified as potential historic resources in any identified reports or surveys, including the 1981 Western Sonoma County Historic Resources Survey for the City of Sebastopol Area. The Northwest Information Center, part of the California Historical Resources Information System, was sent a project referral and found no record of any cultural resources studies for the subject site. The buildings are not associated with events that have made a significant contribution to California's history or cultural heritage; are not associated with the lives of persons important in the past; do not include distinctive building characteristics or represent the work of an important creative individual, or possess high artistic values; nor have they yielded or are likely to yield important information in prehistory or history. There are no known cultural resources on the project site. No significant impact would occur.</p> <p>c). There are no known paleontological or geological resources in the project area. No significant impact would occur.</p> <p>d). There are no known human remains in the project area. A standard condition of approval for this project will require that activities cease and the Planning Director be contacted if any human remains are encountered during construction. No significant impact would occur.</p>				
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion:</p> <p>a). i). The site is not located within an Earthquake Fault Study Zone and no known fault traces traverse the site. Therefore, the risk of ground rupture within the limits of the site is considered to be low. As a result, the Uniform Building Code does not require any special structural engineering beyond the basic code requirements for new construction. No significant impact would occur.</p> <p>ii). The nearest active faults to Sebastopol are the Healdsburg-Rodgers Creek and San Andreas faults, which are located approximately 8 miles northeast and 12 miles southwest of the city. The project site will be subjected to very strong ground shaking during a moderate to major earthquake along these faults. On the basis of current technology, as well as historical evidence, it is reasonable to assume that, during the life of the proposed development, the project site will be subjected to at least one moderate to severe earthquake that could produce potentially damaging ground shaking at the site. Further, it is anticipated that the project site will periodically experience small to moderate magnitude earthquakes. As a condition of approval, the project developer will be required to submit a Soils Report to the City, which shall provide recommendations as to measures that shall be taken to reduce the potential for adverse impacts from seismic activity. Adherence to the recommendations of the geotechnical engineer and the Uniform Building Code will reduce potential impacts from seismic activity to the proposed project site to a less than significant level.</p> <p>iii). According to the "Liquefaction Hazard Map" published by the Association of Bay Area Governments, the project site is located in area with very low susceptibility to liquefaction. Adherence to the recommendations of the geological engineer and the Uniform Building Code will reduce the potential impact from seismic-related ground failure, including liquefaction. No significant impact would occur.</p> <p>iv). The project site terrain is relatively flat with no identified landslide hazard. No significant impact would occur.</p> <p>b). Due to the relatively flat topography of the site, and the fact that the site will be redeveloped with asphalt, concrete, buildings and landscaping, the potential for erosion on this site is considered to be very low. Per a standard Engineering Department condition of approval, the applicant will be required to submit an erosion control plan as part of the improvement plan submittal. No significant impact would occur.</p> <p>c). Please refer to iii. above.</p> <p>d). Per an Engineering Department condition of approval, the project developer will be required to submit to the City of Sebastopol for its review, a detailed Soils Report certified by an Engineer registered in the State of California and qualified to perform soils work. The report shall include a minimum of geotechnical investigation with regard to liquefaction, expansive soils, and seismic safety. Adherence to the recommendations of the geotechnical engineer and the Uniform Building Code will reduce potential impacts from seismic activity to the proposed project site to a less than significant level.</p> <p>e). The project will be connected to the City's wastewater system. Septic tanks or other alternative systems are not permitted. This issue is not applicable to this project, and no impacts will occur.</p>				
VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a). None of the proposed project’s anticipated uses would involve the transport, use, emission, or disposal of hazardous substances. However, a June 25, 2009 Asbestos and Lead Based Paint Inspection Report prepared by Shaw (Executive Summary attached in Exhibits and incorporated into this Initial Study; full report is hereby incorporated by reference) found that asbestos fibers and lead-based paint were present in the existing buildings which are proposed for demolition.

Bay Area Air Quality Management District (BAAQMD) regulations require that a “J Number” permit be applied for and obtained prior to pulling a Sebastopol Demolition Permit for removal of an existing structure. This J Number process is designed to ensure that no asbestos is released into the air when buildings are demolished in the San Francisco Bay Area. Abatement will be required to be conducted by a registered, licensed and certified contractor. With required procedures, removal of these materials can be accomplished without significant impact to the environment and removal of these materials will be a positive environmental action. Otherwise, short term construction and normal commercial operations do not require the routine transport, use, or disposal of hazardous materials. No significant impact would occur.

b). In that the project does not involve the use of hazardous materials, the project does not pose any significant hazard to the public or the environment from the potential accidental release of such materials. No significant impact would occur.

c). See Response a) above. The project is within one-quarter mile of a school (the Sebastopol Independent Charter School located at 200 South Main Street). Except for the removal of asbestos materials and lead-based paint in the existing buildings for which there are established abatement requirements and procedures, the project includes the use of routine construction materials, and the project proposal does not include activities or the use of materials that would emit hazardous emissions or handle hazardous, or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No significant impacts would occur.

d).The project site was listed as a LUST (Leaking Underground Tank Cleanup Site) location by the State of California. The site has been remediated and per the Sonoma County Department of Health Services, no further action is required (see July 9, 2009 letter in Exhibits and incorporated into this Initial Study). No significant impacts would occur.

e).The project site is not located within an airport land use plan and there are no public or private airstrips or airfields located within two miles of the City of Sebastopol. No significant impacts would occur.

g). The site is presented developed and has access to streets. Barnes Avenue, an alley-like street, would be abandoned as part of the project. Due to its narrow dimensions and limited area served, Barnes does not serve as a critical emergency route and in addition, with the proposed project, an access route and driveway would be provided along a similar route as Barnes, providing comparable access (the new driveway would shift to the east.) The driveway width would exceed that of Barnes Avenue, however there would be parking along it. Construction of the project will not impair implementation or physically interfere with an adopted emergency evacuation plan. No significant impacts would occur.

h). The existing buildings do not have fire sprinklers. The new buildings would be required to have fire sprinklers and would therefore improve site and community fire safety. The project site is located in an urbanized area and is not adjacent or intermixed with any heavily wooded wildlands. No significant impacts would occur.

VIII. HYDROLOGY AND WATER QUALITY -- Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a). As a redevelopment of an existing commercial site which has no natural water features and with most of the site currently covered with impervious surfaces, this development would not create any unusual water quality impacts. The applicant will be required to meet all City of Sebastopol storm water requirements as set forth in the Municipal Code and in addition would be required to obtain a Construction General storm water permit from the State Regional Water Quality Control Board to ensure compliance with State requirements. No significant impacts would occur.

b). The project is within long-term, planned parameters of water use identified by the General Plan. Further, it represents a 13,334 sq. ft. net reduction in square footage of building area on the site. While the buildings are currently unoccupied, they could be reactivated resulting in water use. Regardless of hypothetical water utilization that could be associated with reoccupation of the existing buildings, based on historical water use, the City of Sebastopol’s Engineering Department has determined that there is adequate water system capacity, production and distribution to accommodate this project. The project will be conditioned to include on-site water detention and pervious paving where feasible to promote recharge, and will be required to provide low-water use fixtures to reduce impacts of the project. No significant impacts would occur.

c). The project site does not contain any naturally occurring creeks or bodies of water. Per a condition of approval the applicant will be required to submit an Erosion Control Plan. No significant impacts would occur.

d). and e). Currently, most of the site is either paved or is occupied by buildings. As an existing development, the property improvements do not provide current storm water controls or mitigations that will be required of the new development, most likely resulting in greater existing runoff than will occur with the new development, which will also include over 19,000 sq. ft. of new landscaped areas. A condition of approval will require any increased amount of surface run-off related to the impervious surface of the development to be collected in a detention basin, or addressed through other appropriate means, and conducted to the city’s stormwater drainage system at a rate that can be accommodated by the existing system per City standards. In addition to City review and requirements, the project will require a Construction General storm water permit from the North Coast Regional Water Quality Control Board. As result of these requirements, there are no significant storm water-related impacts.

f). See answer to a).

g). and h). Small portions of the proposed development site are located in either the 100-year flood hazard area or in a transition zone (Zone X) adjacent to a mapped 100-year flood hazard area. To confirm compliance with flood regulations, the Building Department will require a flood elevation certificate to be provided prior to issuance of a Building Permit. If this information confirms that portions of the site are within the 100-year flood hazard area, compliance with flood regulations will be required and will address any potential flood-related issues, which would likely represent an improvement from current conditions. No significant impacts would occur.

i). See Responses to g) and h) above. Standard conditions of approval will require the applicant to demonstrate to the City of Sebastopol that the building pads are designed to provide adequate protection from a 100-year frequency storm and feasible access during a 10-year frequency storm. According to the 2007 Northeast Area Specific Plan Draft EIR, the project is also within the potential inundation area associated with failure of the Warm Springs/Coyote dams, located approximately 30 miles to the north. The dams were designed to absorb displacement and ground shaking from any fault in the region and there is a low risk to the project area. No significant impacts would occur.

j). See Responses to g) and h) above. The project site is not located within a 100-year floodplain, nor is it located in an area that is susceptible to inundation by seiche, tsunami, or mudflow. No significant impacts would occur.

IX. LAND USE AND PLANNING - Would the project:

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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<p>b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>c) Conflict with any applicable habitat conservation plan or natural community conservation plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion:</p> <p>a). The project site is presently located within the City of Sebastopol. The property is zoned Downtown Core (CD) which allows a variety of commercial and residential uses. The proposed project is consistent with the existing zoning which allows banks and retail uses. The project site is flanked by commercial and industrial development. The project is an infill development that would not physically divide an established community; it would however reactivate a site that has had no commercial activity for a number of years, which is expected to have a positive impact on nearby businesses.</p> <p>The proposed retail pharmacy and bank uses are permitted uses under CD regulations, however off-site alcohol sales require Use Permit approval by the Planning Commission. The existing permit for alcohol sales at the current CVS store would be relinquished, resulting in no net change to alcohol allowances in Sebastopol attributable to the project.</p> <p>At one story and 24-28' in height, the proposed buildings are lower than the maximum height permitted in the CD zone (three stories and 40' in height). No building setbacks are required; the project provides landscaped planter areas between the street sidewalks and the buildings. The project is far below permitted floor area; the CD zone allows a 2.0 Floor Area Ratio (FAR) which would permit buildings of up to 213,444 sq. ft. At 18,903 sq. ft. the proposed project provides an FAR of 0.18. The proposed project would reduce on-site square footage by 13,334 sq. ft. from existing conditions.</p> <p>The project includes a proposed drive-through pharmacy and drive-through ATM. Sebastopol does not have allowances for drive-through fast-foot restaurants, but does not prohibit other types of drive-through uses, such as the accessory drive-through pharmacy or the drive-through ATM.</p> <p>The project would be subject to Design Review to examine architectural and landscaping design issues and ensure that the design is consistent with the City's aesthetic objectives.</p> <p>CVS operates an existing retail pharmacy in Sebastopol at the Redwood Marketplace shopping center. The store is one of the major tenants at the shopping center. With project approval and construction, this store would be closed and its operations transferred to the new location. The project applicant indicates that they have begun the process to identify a conforming replacement commercial tenant or tenants for the Redwood Marketplace space, with the objective of addressing community needs and minimizing any vacancy at that site following closure of the existing CVS store. Redwood Marketplace has had a low vacancy rate. However, there could be a period of months that the space would be unoccupied while tenant improvements for the new tenant(s) were being constructed or an appropriate tenant was secured; since CVS is a major tenant at the Marketplace, this may affect the business activity of other businesses in the center. This potential business impact would be temporary and localized and is not expected to result in physical effects to the environment. The proposed project development site is presently vacant, with some boarded-up windows creating a blighted appearance, and with buildings in fair to poor condition, and is not contributing to economic activity in Sebastopol. The site would be redeveloped and activated by the proposed project, a positive impact on the urban setting. No significant impacts would occur.</p> <p>b). The General Plan designation is Downtown Core which provides for a variety of commercial and residential uses. The project is consistent with this designation. No significant impacts would occur.</p> <p>c). Neither a conservation plan, nor a natural community conservation plan has been adopted by the City for this project area. No significant impacts would occur.</p> <p>X. MINERAL RESOURCES -- Would the project:</p>				

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion:				
a). There are no known mineral resources associated with this project site. No significant impacts would occur.				
b). There are no locally-imported mineral resource recovery sites delineated in the General Plan. No significant impacts would occur.				
XI. NOISE -- Would the project result in:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a), b), c), and d). The proposed project will not exceed established noise levels in the project area. Construction activities will result in a temporary increase in noise levels, however construction hours will be subject to City ordinance limits. In terms of long-term effects, commercial development is not identified as a significant noise generator and therefore the development of this project will not result in the generation of noise levels that will be in excess of the standards established in the General Plan. No operations are anticipated that will generate excessive groundborne vibration or noise levels. There will be an increase in ambient noise levels in the project vicinity from activation of the site, although noise generation from the inoperative former car dealership or reoccupation of the (larger than the project) buildings at the site with new permitted uses might have or could exceed that of the new uses. In any case, the noise level that will be generated by the new commercial space will not be substantial. In terms of impacts from the existing setting on the project, noise levels in the vicinity of the project site were measured in the August 2007 Draft Environmental Impact Report on the Northeast Area Specific Plan. The measurement location was near the subject site, on the north side of Sebastopol Avenue near Brown Street, and found that traffic noise was the primary noise source, with daytime noise levels ranging from about 66 dBA to 75 dBA. The EIR indicates that new multi-family construction with closed windows results in a reduction of interior noise levels of approximately 25 dBA. With fewer windows than multi-family construction, the proposed project would be expected to exceed this reduction amount, with resulting interior noise levels in the range of 41-50 dBA or lower, well within the normally acceptable noise level range for commercial development set forth in Table 3 of the Safety Element of the General Plan. Based on the above analysis, no significant noise impacts would occur.

e).and f).The project site is not located near any public or private airfields or airstrips, nor is it located within an airport land use plan, so there would be no impact on the people residing in the project area. No significant impacts would occur.

XII. POPULATION AND HOUSING -- Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a). The project site is located in the downtown area of the City of Sebastopol in a populated area. The project does not increase infrastructure capacity or remove key obstacles to growth, and as such is not growth-inducing. The project proposal includes the construction of 18,903 sq. ft. of commercial space, replacing 32,237 sq. ft. of existing buildings on the site which would be demolished. The existing buildings are currently vacant, but could be re-occupied with permitted uses. In that the project would result in a reduction of 13,334 sq. ft. in overall commercial square footage in Sebastopol, it would likewise not be growth-inducing. Adequate infrastructure is available to accommodate the new development. The project is within the allowances of the Zoning Ordinance, and within the planned urban development of the General Plan. The primary use, a CVS retail pharmacy, would replace an existing CVS store in another Sebastopol location in a format that the applicant believes will an improvement for their business. The former location would be utilized for other permitted commercial uses. Based on the above analysis the project is not considered to be growth-inducing. No significant impacts would occur.

b). and c). No housing would be removed as part of the project and since the existing buildings are unoccupied, no displacement of people would occur. No significant impacts would occur.

XIII. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a).According to the City’s Police and Fire departments, the project can be adequately serviced by existing police and fire facilities and would not have a significant effect on acceptable service ratios, response times, or other performance objectives. None of the existing on-site buildings have fire sprinklers; the new buildings will be required to provide fire sprinklers and therefore represent a fire safety improvement. The project involves application for an off-sale alcohol license; if this is approved, standard conditions of approval will address security and requirements for alcohol awareness training for CVS staff. As a non-residential project, construction of this project will not contribute to the addition of school-aged children to the local school population. Routine maintenance of the city parks and public facilities can be accommodated by existing public facilities and city staff. No significant impacts would occur.

XIV. RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

- a) The proposed project includes no residential component and therefore is not expected to have any significant impact on parks or other recreational facilities. No significant impacts would occur.
- b) The project does not include recreational facilities, and there is no aspect which would require the construction or expansion of recreational facilities. No significant impacts would occur.

XV. TRANSPORTATION/TRAFFIC -- Would the project:

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a). and b). A detailed Transportation Impact Study was prepared by the City’s Traffic Engineer, AECOM (March 16, 2011 report attached and hereby incorporated into the Initial Study). This study reviews the existing setting and project impacts related to the roadway network; traffic conditions; transit conditions; pedestrian conditions; bicycle conditions; parking conditions; and site access and circulation. The study evaluated conditions and impacts at ten intersections in the project area, including cumulative conditions in future years. The study utilized adopted City standards, policies and methodologies for its analysis. The study utilizes use-specific trip generation factors for the planned retail pharmacy and bank. The project applicant commissioned a study (TJKM March 24, 2011 letter attached) by their traffic engineer that contends that the City’s study is overly conservative by not accounting for capture of ‘pass-by’ trips. If this methodology were employed, estimated project impacts would be reduced.

The existing vacant site buildings have greater square footage than the proposed project. Although they could be re-occupied with permitted commercial uses which would generate traffic impacts (without preparation of traffic impact studies), the project traffic study provides no ‘net impact’ or ‘credit’ for the trips that might be generated by re-use of the existing buildings as compared to the proposed project.

While the Transportation Impact Study did not find significant impacts relative to pedestrian conditions, in a meeting with area business neighbors conducted by the applicant, it was suggested that improvements to the mid-block crosswalk on Sebastopol Avenue would be desirable. The applicant obtained information about similar ‘Street Smart Sebastopol’ crossing improvement projects and has incorporated improvements to this crosswalk into their planned improvements. These are expected to include embedded lights, push-button activators and distinctive paving. Specific design will be subject to review by the City Engineer and Caltrans.

In terms of circulation issues, while not finding a significant impact requiring mitigation, the Study recommends that the driveway on Sebastopol Avenue be restricting to ‘right in, right out’ turns. The Planning Commission may consider this as condition of approval for the project. Caltrans could also impose this requirement.

The Transportation Impact Study found no significant impacts to any of the topics studied, with the exception of impacts at two intersections in the ‘cumulative plus project’ scenario (year 2030 estimated traffic, plus traffic generated by the proposed project) conditions. In such future conditions, the contribution of the project would cause the intersection of North High Street/Bodega Avenue to operate at Level of Service (LOS) E or worse during the PM peak hour traffic conditions; and the intersection of North Main Street/Bodega Avenue to operate at LOS E or worse during the weekday PM peak hour. City LOS standards call for these intersections to operate at LOS D or better.

The Study identifies mitigation measures for both significant traffic impacts:

- At North High/Bodega, prohibiting left turns on the northbound and southbound approaches on North High Street will eliminate the identified significant impact. This intersection is under City jurisdiction.
- At North Main/Bodega, the traffic signal timing can be re-optimized during the weekday PM peak period. This will eliminate the significant impact. This intersection is under Caltrans jurisdiction. Caltrans has indicated that this adjustment is feasible, with the specific adjustments requiring review and approval under an Encroachment Permit.

With implementation of the mitigation measures, no significant traffic impacts would occur.

While not required mitigation measures, the Study also recommends several potential conditions of approval:

- Reserve parking spaces closest to the loading space for additional loading activity in order to alleviate conflicts between vehicles and loading activity;
- Schedule deliveries during off-peak hours in order to alleviate conflicts between vehicles and loading activity;
- Require staff of the associated delivery truck (bank/pharmacy) to direct pedestrians and traffic in the parking lot when delivery trucks enter and exit the site in order to ensure safe truck ingress and egress;
- Place three signs (locations of these signs are discussed in Section 4.2.7 of the Study) in order to direct vehicles to properly access the drive-up ATM; and,
- Restrict the Sebastopol Avenue driveway to right-in/right-out access through signage, installation of barriers in the median of Sebastopol Avenue, and/or design the driveway with a channelizing concrete island.

The Planning Commission may consider the recommendations as potential conditions of approval.

c).The project site is not located near any public or private airstrips and therefore no significant impact would occur.

d).The construction of the proposed project will not substantially increase hazards to the streets or intersections studied, as other than abandonment of Barnes Avenue, no major changes to streets would occur. Although Barnes would be abandoned as a public street, the replacement driveway would provide comparable circulation functionality, being of greater width and in a comparable location, and in that Barnes accommodates minimal vehicle traffic. The proposed project would improve the site's relationship to Sebastopol Avenue, Abbott Avenue and Petaluma Avenue by reducing the number of driveways (from eight to four) which will reduce points of potential vehicle conflict. No significant impacts would occur.

e).Emergency access into the project site is being provided via four driveways. The Fire Department and Traffic Engineer have reviewed the site access and determined that this access is sufficient for circulation and emergency access and therefore no significant impacts would occur.

f). The development would provide 105 on-site parking spaces. This exceeds code requirements of 47 spaces and also exceeds the 44-space parking demand estimated by the ITE Parking Generation Manual. The downtown area has a lower parking requirement than would otherwise be applicable in other areas of Sebastopol. However, the applicant's stated intent is to ensure an adequate parking supply for the planned uses, as well as to accommodate existing parking on right-of-way or the project site by neighboring businesses that will be eliminated by planned improvements. No significant impacts would occur.

g).This project proposal does not conflict with City of Sebastopol adopted policies, plans, or programs supporting alternative transportation. The project will be required to provide bike racks.

XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a).Based on the 2010 annual Level of Service Report provided to the City Council on March 15, 2011 (incorporated by reference), ample capacity remains in the City of Sebastopol’s waste water treatment allocation to serve this development and meet applicable requirements of the Regional Water Quality Control Board. The Level of Service report indicates that 2010 City-wide wastewater flows were at approximately 49% of treatment capacity. The project is within the planned growth identified in the General Plan. No significant impacts would occur.

b).The site is currently improved with water and sewer connections. The project will be required to inspect existing connections and evaluate any specific water or sewer line improvements needed to meet current code requirements, and to provide such improvements as part of an Improvement Plan. Once connected, per the 2010 Level of Service report, there is ample capacity in the City of Sebastopol’s water and sewer systems to accommodate this project. No significant impacts would occur.

c).An Engineering Department condition of approval will require the applicant to submit to the City of Sebastopol for review and approval by the City Engineer, a hydrology study, hydraulic calculations and drainage plans prepared by a Registered Civil Engineer licensed in the State of California, in accord with applicable City standards. In addition, a Regional Water Quality Board Construction General storm water permit will be required to ensure compliance with State storm water requirements. No significant impacts would occur.

d). See answer to b). above. Based on the 2010 annual Level of Service Report provided to the City Council on March 15, 2011 (incorporated by reference), ample capacity remains in the City of Sebastopol’s water system to serve the proposed development. The Level of Service report indicates that 2010 water production was at approximately 29% of pumping capacity. No significant impacts would occur.

e). See answer to a). above.

f).The solid waste from the development will be collected and disposed of by the City’s franchise hauler Redwood Empire Disposal. There is sufficient capacity in the disposal system to accommodate the additional solid waste that will be generated by this project. No significant impacts would occur.

g).The solid waste generated by the development will be handled in compliance with federal, state, and local statutes. No significant impacts would occur.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

<p>a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>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)?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

a). Please refer to all sections of the Initial Study, including but not limited to Section IV, Biological Resources, and Section V, Cultural Resources. With one exception, the project will not create significant biotic, cultural or other effects referenced by this question. However, the project has the potential to create a significant impact on air quality by exceeding designated the Bay Area Air Quality Management District threshold for greenhouse gases. A mitigation measure is available which would reduce impacts below a level of significance. This mitigation measure is:

A GHG emission reduction of 170 MT CO₂e/yr. for a calculated 40-year period shall be achieved by either or a combination of the following:

1. Subject to City review and approval, the applicant shall purchase CO₂e emission offsets (or “carbon credits”) from a recognized organization with registered GHG reduction projects whose CO₂e emission reduction values have been verified through a protocol acceptable to the City of Sebastopol. Payment shall be required prior to issuance of a Building Permit for the first building in the project.
2. Subject to City review and approval, the applicant shall perform an improvement in Sonoma County resulting in a reduction in GHG emissions. Examples of such potential improvements include, but are not limited to: replacement of aging water or sewer pumps with more efficient pumps; installation of alternative energy systems; energy conservation improvements; alternative transportation improvements; lighting efficiency projects; or other measures providing the required offset mitigation. The Applicant shall be responsible for providing verification of proposed measures acceptable to the City of Sebastopol. City approval of a Building Permit for the Project shall not be granted unless the City has approved the measure, with any such measure required to be funded prior to issuance of a Certificate of Occupancy for the first building in the project. The funding for this measure will be provided through a contract that requires the improvement will be implemented within 5 years and if not, the funding will revert to the City of Sebastopol which will use the funding to implement another GHG reduction project or purchase offset credits.

Following implementation of this mitigation measure, greenhouse gas impacts would be reduced to less-than-significant.

b). This Initial Study has identified two potential substantial adverse impacts associated with the project in regards to traffic at the intersections of North High/Bodega, and North Main/Bodega. In year 2030 cumulative conditions, with the addition of project traffic, these intersections would not meet City Level of Service standards. Mitigation measures are available which would reduce impacts below a level of significance. These mitigation measures are:

3. At North High/Bodega, prohibiting left turns on the northbound and southbound approaches on North High Street will eliminate the identified significant impact. This intersection is under City jurisdiction.
4. At North Main/Bodega, the traffic signal timing can be re-optimized during the weekday PM peak period. This will eliminate the significant impact. This intersection is under Caltrans jurisdiction. Caltrans has indicated that this adjustment is feasible, with the specific adjustments requiring review and approval under an Encroachment Permit.

Following implementation of the recommended mitigation measures, potential traffic impacts that could occur as a result of the proposed project would be reduced to less-than-significant impacts.

c). As indicated in responses a) and b) above, the project has potential significant environmental impacts in the areas of traffic and air quality. Mitigation measures are available to reduce these effects below a level of significance. Otherwise, as indicated in this Initial Study, the project will not pose any direct or indirect environmental effects which would cause substantial adverse effects on human beings.

Exhibits:

Location map

Site air photograph

Applicant Operational Statement

Project plans

Transportation Impact Study, 6877 Sebastopol Avenue

Air Quality Impact Study, 6877 Sebastopol Avenue

Sonoma County Department of Health Services letter, July 9, 2009

Executive Summary, Asbestos and Lead-Based Paint Inspection Report for 6877 Sebastopol Avenue, June 25, 2009

Letter from applicant's traffic consultant, TJKM, March 24, 2011

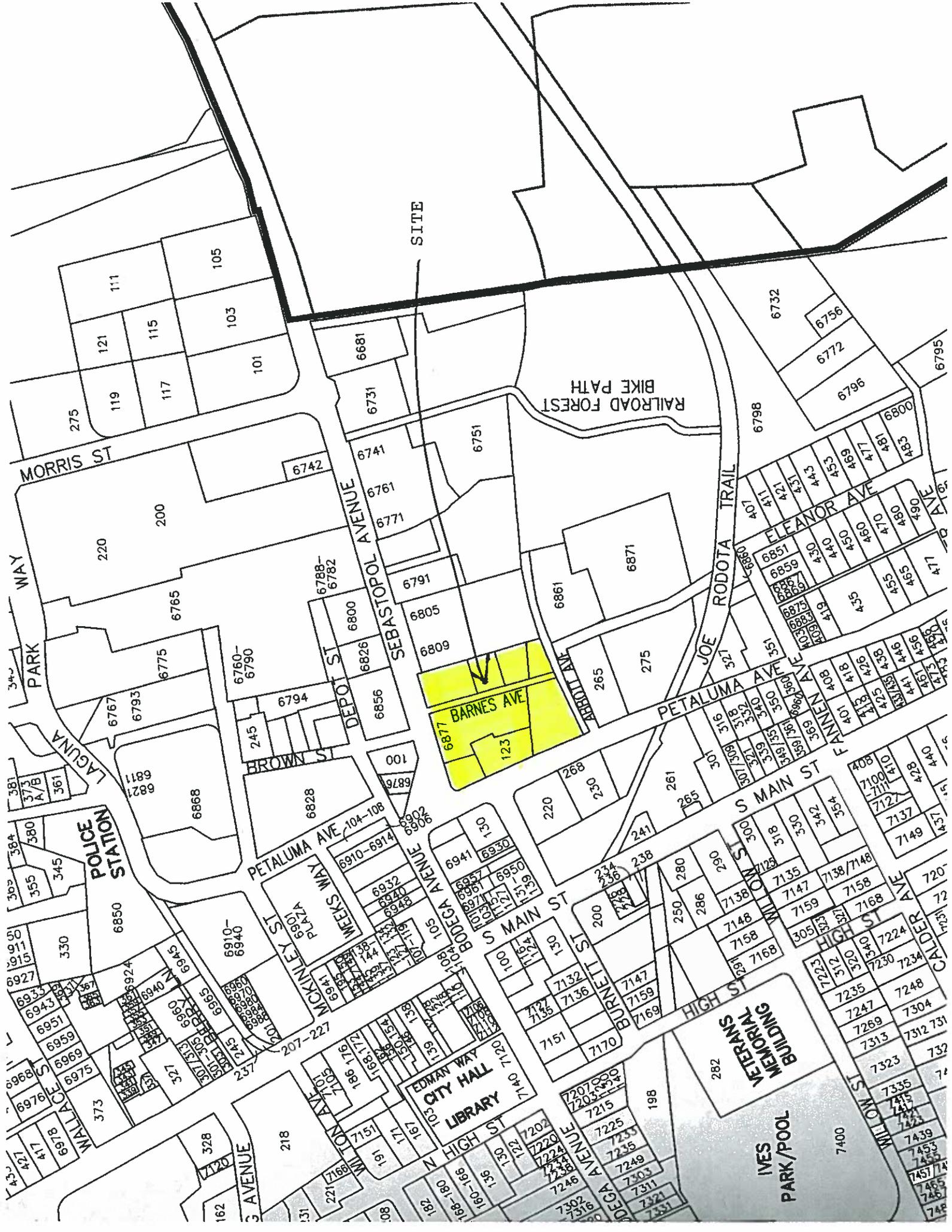
Documents incorporated by reference (documents available for review at the Sebastopol Planning Department, 714 Johnson Street, Sebastopol, California):

Technical Appendix, 6877 Sebastopol Avenue Transportation Impact Study

Technical Appendix, 6877 Sebastopol Avenue Air Quality Impact Study

Asbestos and Lead-Based Paint Inspection Report for 6877 Sebastopol Avenue, June 25, 2009

2010 Annual Level of Service and General Plan Report, March 15, 2011



SITE

RAILROAD FOREST BIKE PATH

MORRIS ST

WAY

PARK

LAGUNA

POLICE STATION

BROWN ST

DEPO S

SEBASTOPOL AVENUE

BARNES AVE

RODOTA TRAIL

PETALUMA AVE

MAIN ST

WILLOW ST

HIGH ST

WILLOW ST

VETERANS MEMORIAL BUILDING

IVES PARK/POOL

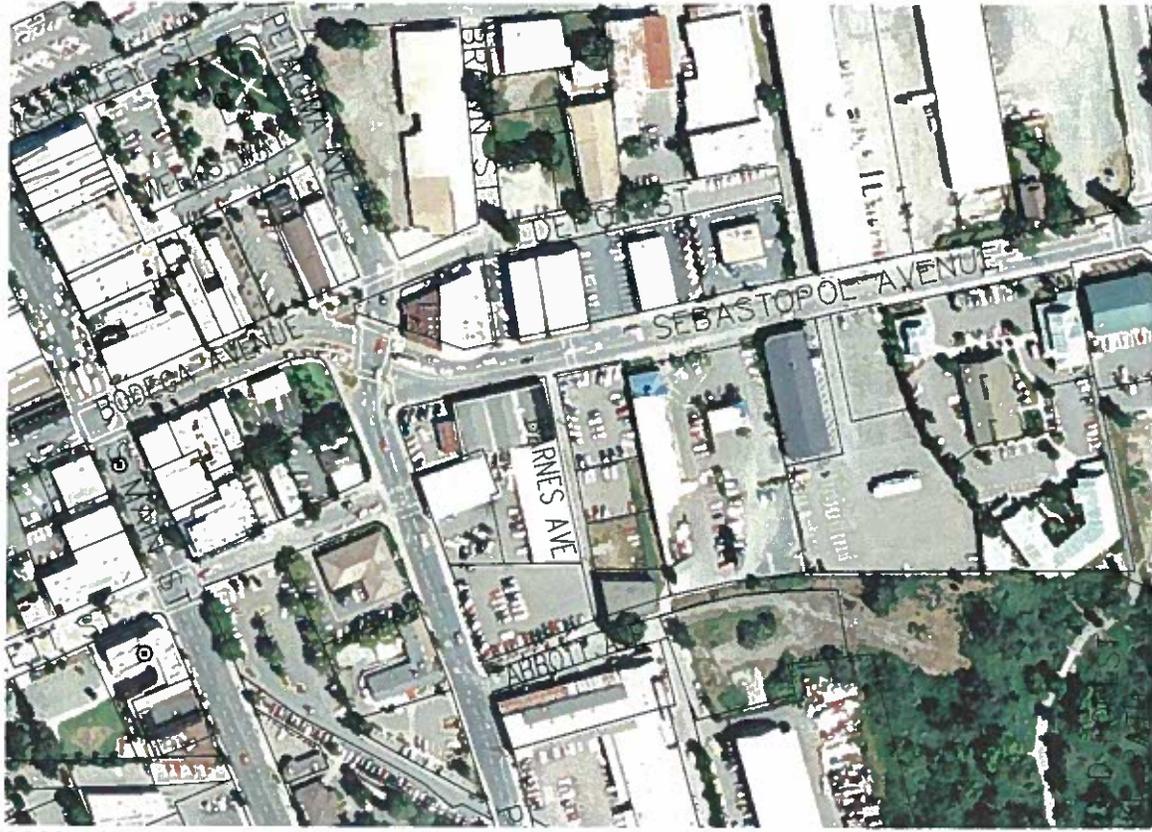
CITY HALL

LIBRARY

EDMAN WAY

WALLACE ST

WILLOW AVE



2007 Air Photograph Showing Site



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Suite 101
Sacramento, CA 95818
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Operational Statement
Proposed Redevelopment – Former Pellini Chevrolet Property
SEC Sebastopol & Petaluma, Sebastopol, CA

Armstrong Development Properties, Inc. (ADPI) proposes to redevelop the 2.45 acre property formerly occupied by Pellini Chevrolet. This redevelopment will include demolition of all existing structures, including all associated on site improvements. The new construction proposed includes a 14,576 square foot CVS/pharmacy retail store and the construction of a 4,327 square foot Chase Bank branch. Included with the Chase Bank will be a remote drive-up ATM.

The Assessor Parcel Numbers for the project are 004-063-001, 013, 014, 015, 024, 025, 026, and 027. The property is currently zoned "C-D" Downtown Core District. The proposed CVS/pharmacy / Chase project is consistent with both the current "Downtown Core District" land use designation as well as the Sebastopol General Plan.

As mentioned, all existing vacant buildings, totaling approximately 32,237 square feet, will be demolished to allow for the construction of the CVS/pharmacy and Chase Bank. The intent of this redevelopment project is to create a sustainable and viable project that will be an asset to the community for years to come.

The CVS/pharmacy will provide health and beauty aids, personal care items, gift items, beer, wine, distilled spirits, common household goods, vitamins, and retail pharmaceutical products available over-the-counter or by prescription from the in-store pharmacy. In addition to these products, the proposed store will also provide one-hour photo processing, as well as standard photo processing from standard negatives or digital photography. Other than photographic prints, products are not produced onsite, but a full range of products are available in-store, with an emphasis on convenience to the consumer.

The proposed CVS/pharmacy building will include drive-through facilities for prescription pharmaceuticals drop-off and pick-up only. The purpose of the drive-through is to offer a convenient service for all customers including those who are sick, injured, or the elderly that may be hindered by an ailment that discourages them from entering the store. During peak hours of business, the typical CVS/pharmacy drive-through window services a maximum of five to seven customers an hour. The proposed site plan layout includes sufficient stacking for the two drive-through lanes which are isolated from the shopping center's parking field in order to avoid any potential conflicts between customers utilizing the drive-through and other motorists or pedestrians. Although the necessary orientation of the CVS/pharmacy building due to site constraints forces the drive-through window to face the intersection, a substantial effort has been made to integrate the drive-through into the design of the rest of the building. For instance, a porte-cochere has been incorporated that extends over both drive-through lanes and offers a strong architectural element at the corner of the intersection. The goal of the design of the porte-cochere was to create an element that resembles the front entry of a CVS/pharmacy to improve the aesthetic appearance of the drive-through from the right of way. Additionally, ADPI proposes the use of both hardscape and landscape materials to screen the drive through from the adjoining right-of-way. The site design of the proposed development also ensures that

the project conforms to the City of Sebastopol design guidelines requirement to locate buildings between the public right of way and parking lots, thus locating the building in a more urban, pedestrian friendly setting. With these same Design Guidelines in mind, the Chase branch will be located in a full landscape setting at the northeast corner of Abbott Avenue and Petaluma Avenue. The parking area for the Chase branch is located to the east of the building, away from the view from the public right-of-way. The remote ATM drive up will be located at the far eastern edge of the development, which allows for on site circulation to occur, without impeding the traffic flow from the public rights-of-way.

Initially the CVS/pharmacy will operate approximately from the hours of 7 a.m. to 10 p.m., seven days week; however, if the demand of the neighborhood warrants 24 hour operations CVS/pharmacy would like the ability to remain open as a service to the community. The Chase branch will most likely operate under the standard banking hours of 9 a.m. to 6 p.m. Monday-Friday, 9 a.m. to 4 p.m. on Saturday and closed on Sunday.

CVS/pharmacy presently operates a store in Sebastopol at 788 Gravenstein Highway North, in the 'Redwood Marketplace' shopping center. If the proposed project is approved, the intent of CVS/pharmacy is to close the existing store, with all services transferred to the new location and the Redwood Marketplace space will be utilized for other permitted uses. Armstrong and CVS/pharmacy have been working with Sebastopol Chamber of Commerce as well as Economic Development to identify retail services that are needed in the City of Sebastopol and are a compliment to the existing tenants of Redwood Marketplace. Among the tenant types CVS/pharmacy and Armstrong are seeking out are smaller, regional level department stores and sporting goods suppliers. In these economic times, CVS/pharmacy is one of the few retailers that are still actively constructing new projects. By bearing the costs incurred to demolish the structures on an underutilized property and build a new store at the Pellini Chevrolet property, CVS/pharmacy is creating an opportunity for a new business to locate in Sebastopol in the Redwood Marketplace that may not otherwise be financially or logistically possible.

While the existing CVS/pharmacy (a former Longs Drug acquired by CVS/pharmacy in 2008) is a successful store, CVS/pharmacy is confident that the relocation site proposed will better serve the community of Sebastopol as the store will include a drive through pharmacy for convenient pharmaceutical transactions. Additionally, the smaller square footage of the new store is more aligned with the CVS/pharmacy business model, which focuses on convenience of access to a variety of daily need items.

As previously mentioned, CVS/pharmacy will sell a limited amount of beer, wine, and distilled spirits for off site consumption only. While alcoholic beverages are expected to comprise only a small percent of the store's shelf-space, it is nevertheless necessary in order to provide CVS/pharmacy customers with a complete range of convenient products.

CVS/pharmacy is committed to taking all feasible steps to address law enforcement concerns about the site with regard to the sale of alcoholic beverages. For instance, CVS/pharmacy has an extensive employee-training program and is a responsible retailer of alcoholic beverages. CVS/pharmacy is a large corporate retailer with a national presence. CVS/pharmacy has the resources to be a responsible retailer of all types of goods including alcoholic beverages.

CVS/pharmacy facilities are designed to provide a safe environment for patrons and employees. To that end, the following design elements are incorporated into the security plan: adequate lighting levels both

on the interior and exterior of the store, employee supervision of the facility, and closed circuit video monitoring system with strategically located cameras.

As part of the commitment to the safety of the community, CVS/pharmacy will voluntarily agree to the following stipulations that are often required for authorization to obtain a California Alcohol Beverage Control Type 21 alcohol license:

1. Provide adequate off street parking spaces for use by customers.
2. A closed circuit video monitoring system shall be installed with colored digital video cameras mounted in the interior and exterior of the premises in such a position as to be visible to patrons yet not accessible by reach.
3. A notice shall be placed therein that California state law prohibits the sale of alcoholic beverages to persons who are under the age of twenty-one (21) years and no such sales will be made.
4. Post and maintain a professional quality sign stating "No loitering is allowed on or in front of these premises."
5. The possession of alcoholic beverages in open containers or the consumption of alcoholic beverages will be prohibited on the premises or any adjacent property under the control of CVS/pharmacy. CVS/pharmacy will post and maintain a professional quality sign stating "No open alcoholic beverage containers are allowed on these premises."
6. The parking lot of the premises shall be equipped with lighting of sufficient power to illuminate and make easily discernible the appearance and conduct of all persons on or about the parking lot. Additionally, the position of such lighting shall not disturb the normal privacy and use of any neighboring residences.
7. CVS/pharmacy will adhere to any applicable Business and Professions Codes.

ADPI's clients recognize the seriousness of loitering, delinquency, crime and underage drinking. Therefore, through over 40 years of experience, CVS/pharmacy has developed stringent operational standards and training programs to teach techniques for the lawful selling of alcoholic beverages. CVS/pharmacy will require all employees selling alcoholic beverages to complete its training program and execute a semi-annual acknowledgement of its alcohol sales policies. In addition CVS/pharmacy is open to operating conditions that the City of Sebastopol considers necessary to ameliorate significant concerns that do exist.

In addition to the everyday services that were previously mentioned that CVS/pharmacy will provide, this location may host a seasonal or annual flu clinic for the benefit of the local consumers, which may include an in-store display or sign to notify consumers of the date and time. If held, this activity would be inside the store. Besides the seasonal clinic, many CVS/pharmacy facilities also include a wellness center. This center, known as a "Minute Clinic", is staffed by a registered nurse practitioner who can diagnose and prescribe pharmaceuticals for minor ailments.

CVS/pharmacy will receive regular weekly deliveries, typically loading and unloading from a Standard 69 foot delivery truck. There may be as many as three of these trucks arriving at different days and times throughout the week to unload product for the store.

Redevelopment of the site will include installation of landscaping along both the Sebastopol Avenue and Petaluma Avenue frontages as well as throughout the property. Currently there is no landscaping on the property. The redevelopment plan proposes a design that includes landscape coverage (permeable area) of approximately 20% of the entire development.

The following summarizes the anticipated scope of work for offsite improvements immediately adjacent to this project. The proposed redevelopment includes the elimination of eight (8) existing driveways to the public right-of-way and the construction of four (4) new driveways: one to the Sebastopol Avenue frontage, one to the Petaluma frontage, and two to the less traveled Abbott Avenue frontage. This reduction in driveways will significantly improve the safety of this busy intersection. New curb, gutter, sidewalks and landscaping will be installed around the perimeter of the entire development. As part of the proposed improvements, ADPI is proposing to construct thirteen (13) new public parking spaces along the Abbott Avenue frontage that will benefit our neighbors to the south of Abbott. Based on feedback provided by the Community, ADPI has voluntarily elected to construct an improved pedestrian crossing across Sebastopol Avenue. The existing crossing is limited to ramps and striping, with minimal signage. The proposed crossing will include pedestrian push button pedestals that will illuminate embedded flashing lights, new ramps, new signage and new decorative paving that will match similar proposed crossings throughout Sebastopol. It is the objective of ADPI to limit any potential traffic control or lane closures that adversely impact the surrounding businesses during the construction of these improvements. With that goal in mind, ADPI will work with CalTrans to minimize lane closures to off peak times for the surrounding businesses.

ADPI has coordinated directly with Redwood Empire Disposal, Inc (Redwood) to confirm that the design and locations of the trash enclosures conform to the standards for their waste removal practices. Additionally, confirmation was received from Redwood that given the practices of the bank to shred all paper waste internally and have a private janitorial service remove all waste from the building, no separate enclosure is required for the bank portion of the development. Also, no hazardous materials or waste will be produced during the construction of this project or during the normal operation of the CVS/pharmacy and Chase branch.

Armstrong Development Properties, Inc. believes that a retailer such as CVS/pharmacy and a service provider such as Chase will be a welcome use to this area and the redevelopment of this property will be an added benefit to the entire community. ADPI has met with many of the neighbors in the general vicinity of the project and to date, has receive nothing but positive feedback regarding the project. It is the intent of ADPI to continue to meet with neighbors leading up to the public hearings for this application and to incorporate any possible feedback into the conditions of approval for this project.

Should Staff have any questions or concerns regarding this application, please do not hesitate to contact the undersigned at Armstrong Development Properties, Inc. at any time.

Sincerely,



William McDermott
Regional Director of Entitlements and Construction
Armstrong Development Properties, Inc
wmcdermott@agoc.com
916-798-2559 (c)

CVS/pharmacy

SEC SEBASTOPOL AVE. & PETALUMA AVE.
SEBASTOPOL, CA

Finish Colors:

- A** STO/EIFS Color #32112
- B** STO/EIFS Color #32210
- C** STO/EIFS Color #32120
- D** STO/EIFS NA00-0047 TERRA COTTA
- E** CMU TO MATCH STO/EIFS NA00-0047 TERRA COTTA
- F** ALUM STOREFRONT Anodized Aluminum

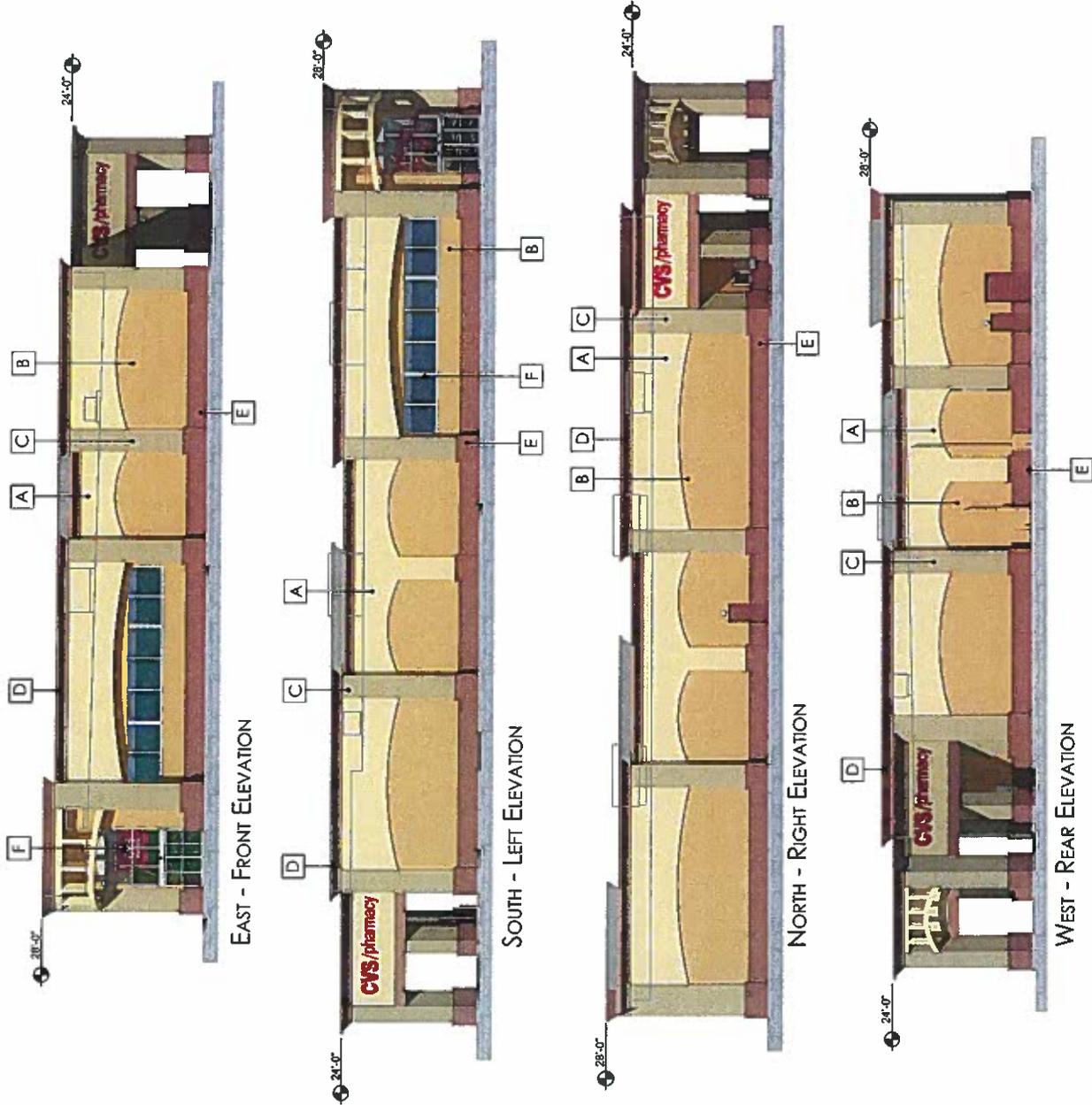


PERSPECTIVES



1375 Exposition Blvd.
SUITE 101
SACRAMENTO, CA 95818
(916)643-9610

JACOBS





CONSULT PART



CVS/
pharmacy
LEFT HAND CHAMFER
14375 HWY. A
SUITE 200
SEBASTOPOL, CA

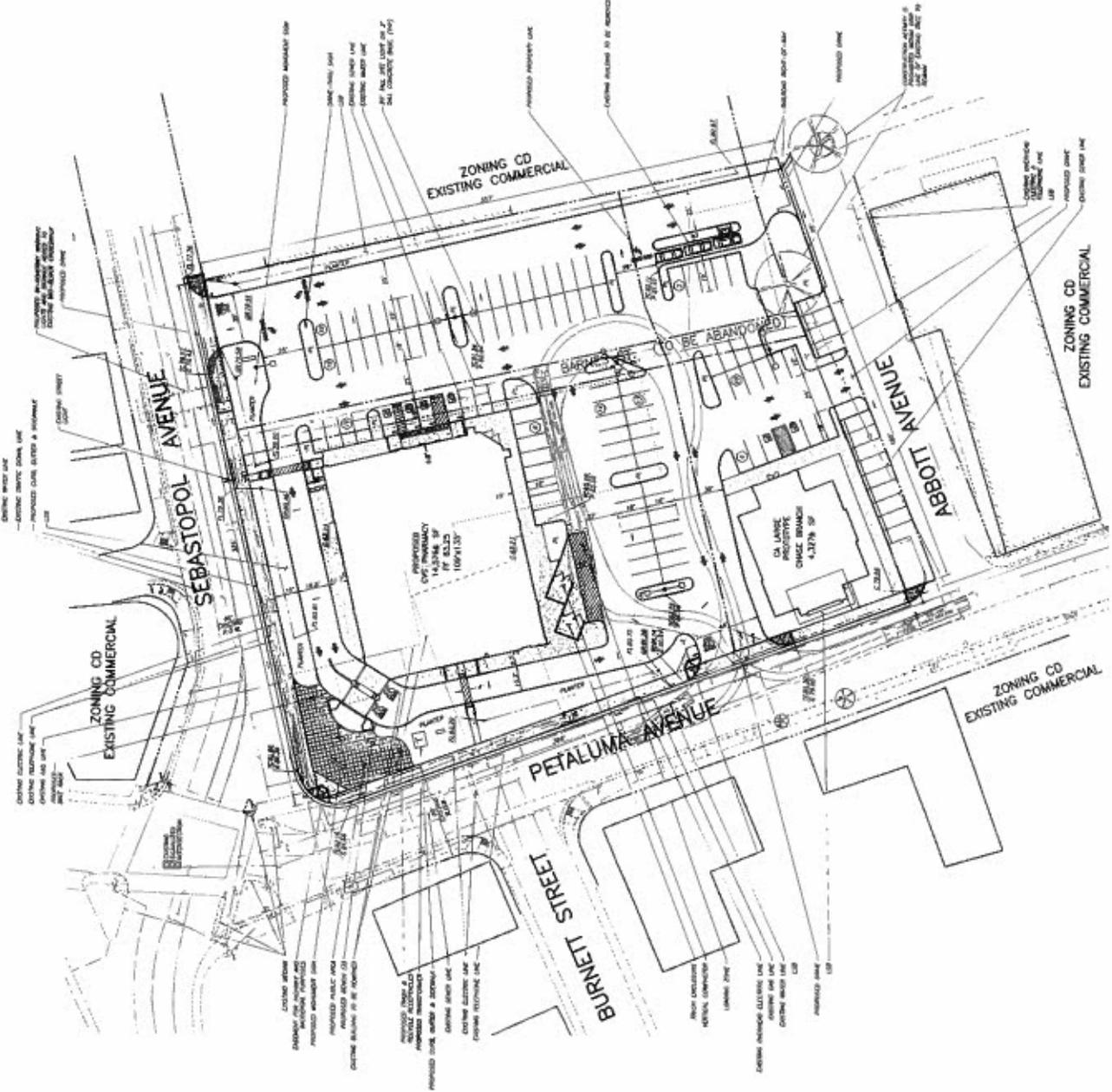
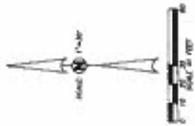
DEVELOPER
ARMSTRONG DEVELOPMENT
1275 CALIFORNIA STREET, SUITE 100
SAN FRANCISCO, CA 94109
TEL: 415.774.1111
FAX: 415.774.1113

REVISIONS:

DATE:	5 APRIL 2011
BY:	
JOB NUMBER:	210-11008
TITLE:	DESIGN REVIEW SITE PLAN
SHEET NUMBER:	1 OF 1

COMMENTS:
NOT RELEASED FOR CONSTRUCTION

- SITE NOTES:**
1. SEE 084-082-082, 014, 016, 018, 024, 026, 028, 027
 2. SEE 084-082-082, 014, 016, 018, 024, 026, 028, 027
 3. SEE 084-082-082, 014, 016, 018, 024, 026, 028, 027
 4. SEE 084-082-082, 014, 016, 018, 024, 026, 028, 027
 5. SEE 084-082-082, 014, 016, 018, 024, 026, 028, 027
 6. SEE 084-082-082, 014, 016, 018, 024, 026, 028, 027
 7. SEE 084-082-082, 014, 016, 018, 024, 026, 028, 027
 8. SEE 084-082-082, 014, 016, 018, 024, 026, 028, 027



6877 SEBASTOPOL AVENUE TRANSPORTATION IMPACT STUDY

Final Report

Prepared for:
City of Sebastopol

AECOM

March 16, 2011

6877 Sebastopol Avenue
Transportation Impact Study

Final Report

March 16, 2011

Prepared for:

City of Sebastopol

714 Johnson Street
Sebastopol, CA 95472

Prepared by:

AECOM

2101 Webster Street, Suite 1900
Oakland, CA 94612

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1.0 INTRODUCTION

This analysis has been conducted to assess the potential transportation impacts associated with the proposed bank with drive-up ATM and pharmacy with a drive-through facility located at 6877 Sebastopol Avenue in the City of Sebastopol, herein referred to as the "Project". The following transportation topics were addressed:

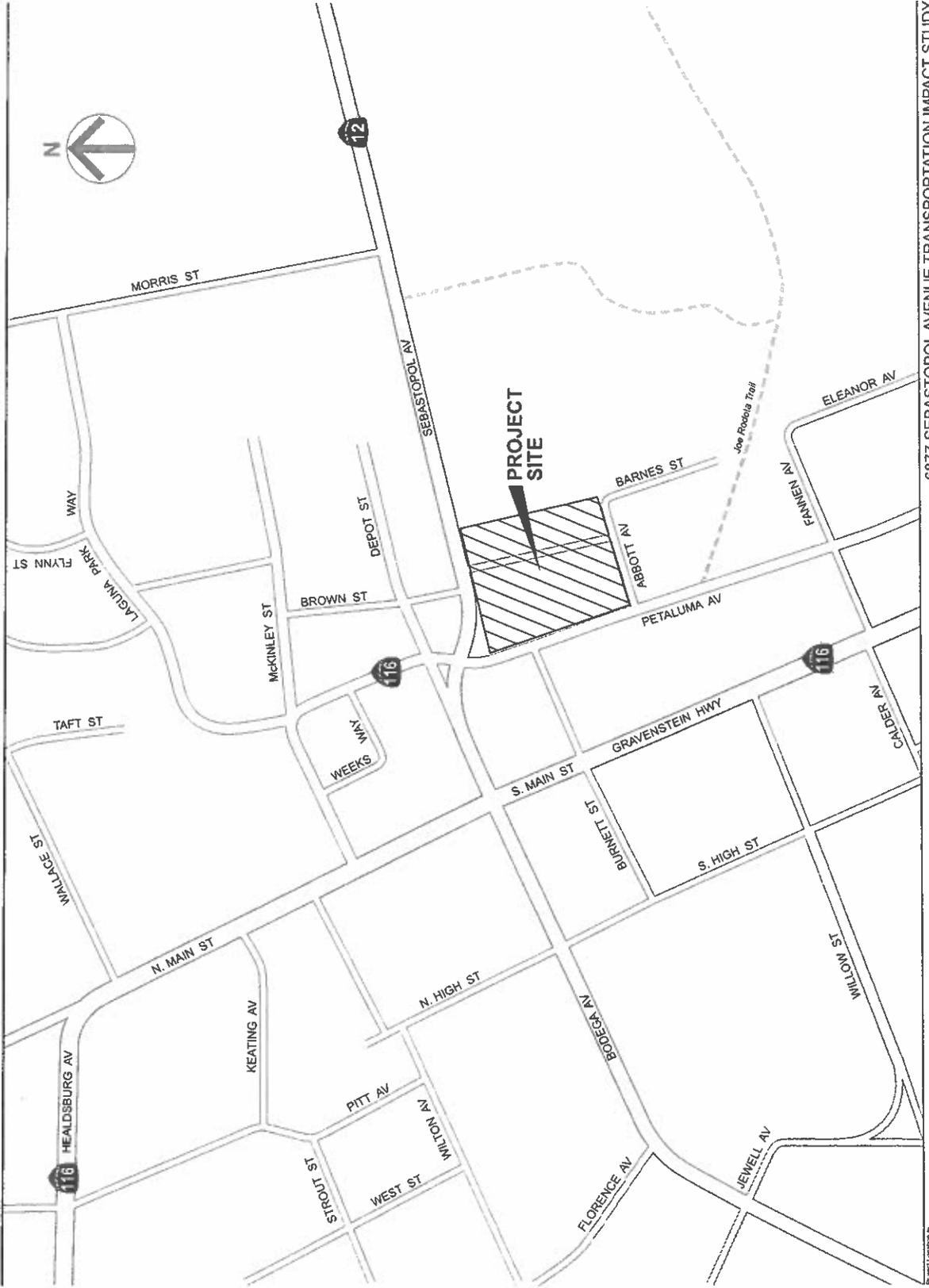
- Traffic conditions;
- Transit conditions;
- Pedestrian conditions;
- Bicycle conditions;
- Parking and loading conditions; and,
- Site access and circulation.

1.1 PROJECT LOCATION

The Project is located at the southeast corner of the intersection of Petaluma Avenue / Sebastopol Avenue and bounded by Sebastopol Avenue to the north, Abbott Avenue to the south, and Petaluma Avenue to the west. The Project location is illustrated in **Figure 1**. Currently, the Project site is occupied by an existing, but inactive, car dealership of 32,237 square feet.

1.2 PROJECT DESCRIPTION

The Project would entail demolishing the existing buildings on the site and constructing a 14,576 square foot CVS/pharmacy retail store with a drive-through facility and a 4,327 square foot bank with a drive-up ATM. Project site plan is illustrated in **Figure 2**. The Project will provide 118 parking spaces and one loading space. The Project can be accessed from each of the three public rights-of-way bordering the Project—Sebastopol Avenue, Petaluma Avenue, and Abbott Avenue. The Project provides four driveways: one on Sebastopol Avenue; one on Petaluma Avenue; and two on Abbott Avenue. Barnes Street is proposed to be abandoned and closed off to traffic, as the street currently bisects the property.



1.3 STUDY SCOPE AND APPROACH

This transportation study was prepared according to the scope of work approved by the City of Sebastopol.⁽¹⁾ The following scenarios were evaluated to identify the potential transportation impacts of the Project:

- Existing Conditions;
- Existing plus Project Conditions;
- 2030 Cumulative Conditions; and,
- 2030 Cumulative plus Project Conditions.

The following ten study intersections were selected for analysis:

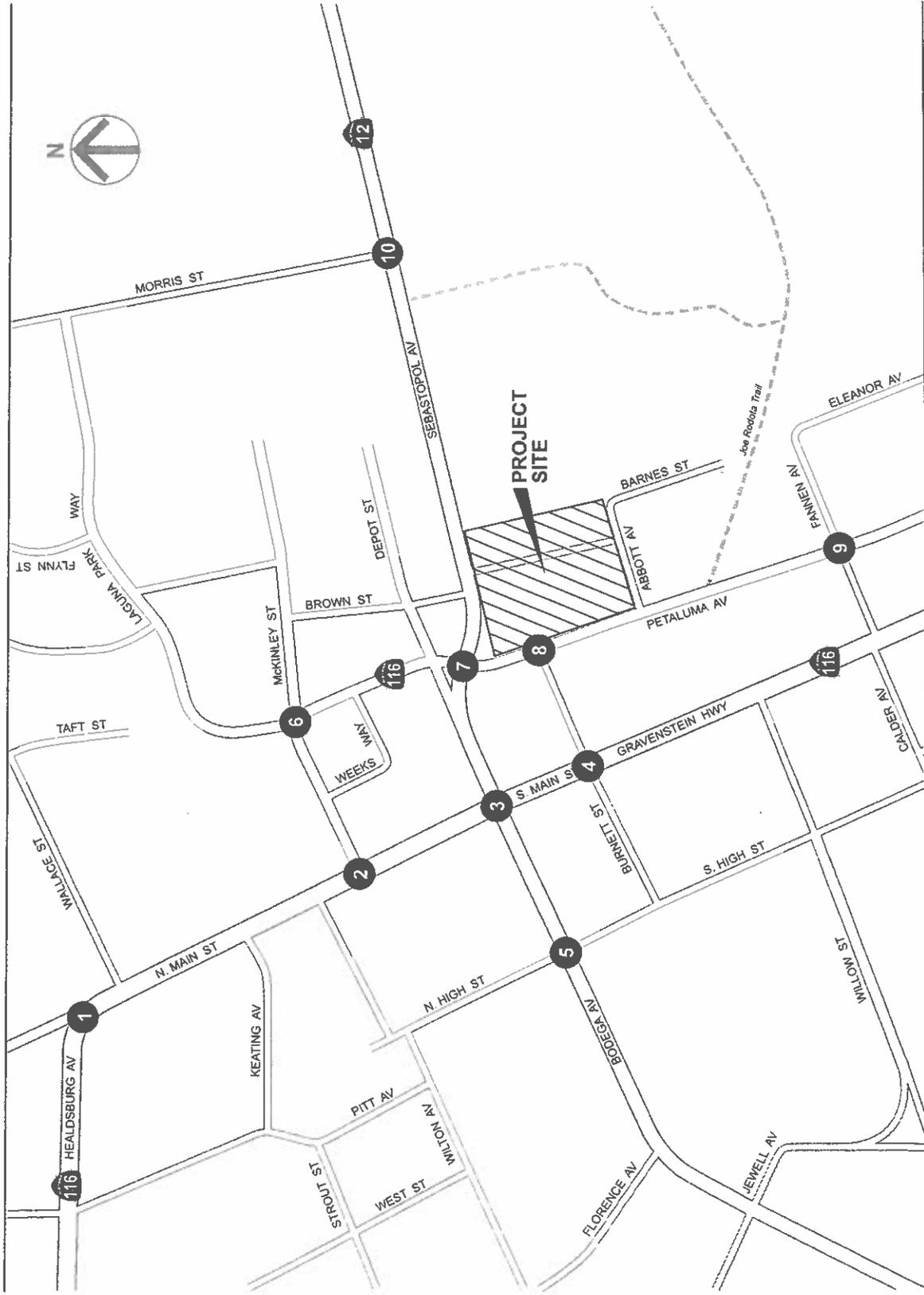
1. North Main Street / Healdsburg Avenue (signalized);
2. North Main Street / McKinley Street (signalized);
3. North Main Street / Bodega Avenue (signalized);
4. South Main Street / Burnett Street (two-way stop control);
5. North High Street / Bodega Avenue (two-way stop control);
6. Petaluma Avenue / McKinley Street (two-way stop control);
7. Petaluma Avenue / Sebastopol Avenue (signalized);
8. Petaluma Avenue / Burnett Street (one-way stop control);
9. Petaluma Avenue / Fannen Avenue (two-way stop control); and,
10. Morris Street / Sebastopol Avenue (signalized).

The locations of the ten study intersections surrounding the Project are illustrated in **Figure 3**.

Level of Service (LOS) was analyzed at these ten study intersections, which represent locations where the Project could potentially impact operations. All ten study intersections were analyzed for the weekday AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak hour.

Currently, there are no other approved or proposed uses in the Project vicinity that would add traffic to the study intersections; thus, Existing Conditions traffic volumes are expected to be similar to those during the inception year of service of the Project.

⁽¹⁾ 6877 Sebastopol Avenue Transportation Study Proposal. Prepared by AECOM. Prepared for City of Sebastopol. Submitted on April 6, 2010.



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Figure 3

STUDY INTERSECTIONS

2.0 EXISTING CONDITIONS

This chapter provides a description of the existing transportation conditions in the vicinity of the Project. Included in this chapter are descriptions of the existing roadway, transit, pedestrian, and bikeway networks and documentation of the existing traffic, transit, pedestrian, bicycle, site access and circulation, and parking conditions.

2.1 ROADWAY NETWORK

The Project is located in downtown Sebastopol. Downtown Sebastopol is bounded by Willow Street to the south, Healdsburg Avenue and Wallace Street to the north, Depot Street and Flynn Street to the east, and North High Street / South High Street and Pitt Avenue to the west. The Project area is served by the following major roadways:

State Route 116 (SR 116) is a two- to five-lane north-south highway (one to three lanes southbound and one to three lanes northbound) that consists of Gravenstein North Highway, Healdsburg Avenue, North Main Street, South Main Street, Gravenstein Highway South, and Petaluma Avenue. The annual average daily traffic (AADT) for SR 116 north of the Project is 12,500 vehicles and 15,200 vehicles south of the Project.

Healdsburg Avenue is a two-lane east-west arterial (one lane in each direction) and is designated as part of SR 116. Sidewalks are provided on both sides of Healdsburg Avenue between Harrison Street and North Main Street. No on-street parking is provided on Healdsburg Avenue between Harrison Street and North Main Street.

North Main Street is a two-way, three-lane north-south arterial (one lane northbound and two lanes southbound) between Healdsburg Avenue and McKinley Street and is designated as part of SR 116. North Main Street becomes a one-way roadway between McKinley Street and Bodega Avenue where North Main Street becomes South Main Street. Sidewalks are provided on both sides of North Main Street between Bodega Avenue and Wallace Street. Unmetered on-street parking is provided on the east side of North Main Street between Bodega Avenue and Wallace Street. Unmetered on-street parking is also provided on North Main Street between McKinley Street and Bodega Avenue.

South Main Street is a one-way southbound, two- to three-lane north-south arterial that merges with Petaluma Avenue after Palm Avenue and is designated as part of SR 116. Sidewalks are provided on both sides of South Main Street between Bodega Avenue and Willow Street. Unmetered on-street parking is provided on both sides of South Main Street between Bodega Avenue and Willow Street.

North High Street is a two-lane local road (one lane northbound and one lane southbound) with a north-south alignment. Sidewalks are provided on both sides of North High Street between Wilton Avenue and Bodega Avenue. Unmetered on-street parking is provided on both sides of North High Street between Wilton Avenue and Bodega Avenue.

Bodega Avenue is a two-lane east-west arterial (one lane eastbound and one lane westbound). Sidewalks are provided on both sides of Bodega Avenue between Petaluma Avenue and North High Street / South High Street. Unmetered on-street parking is provided along the north side of Bodega Avenue between North Main Street / South Main Street and Edman Way.

McKinley Street is a two-way, two-lane east-west arterial (one lane eastbound and one lane westbound) east of Petaluma Avenue / Laguna Park Way and terminates after Depot Street. McKinley Street becomes a one-way, two-lane (two lanes westbound) roadway between Petaluma Avenue / Laguna Park Way and North Main Street. Sidewalks are provided on both sides of McKinley Street between Flynn Street and Brown Street. Sidewalk is provided on the south side between Brown Street and Petaluma Avenue. Sidewalk is provided on both sides of McKinley Street between Petaluma and North Main Street / South Main Street. Unmetered on-street parking is provided on both sides of McKinley Street between Johnson Street and Brown Street.

Petaluma Avenue is a one-way, two- to three-lane north-south arterial (three lanes northbound adjacent to the Project site) and is designated as part of SR 116. Sidewalks are provided on both sides of Petaluma Avenue. Sidewalks are provided on both sides of Petaluma Avenue between McKinley Street and Walker Avenue. Unmetered on-street parking is provided along the both sides of Petaluma Avenue between McKinley Avenue and Walker Avenue. The on-street parking along Petaluma Avenue is discontinuous.

Burnett Street is a two-lane east-west local road (one lane eastbound and one lane westbound). Sidewalks are provided on both sides of Burnett Street between Petaluma Avenue and North High Street / South High Street. Unmetered on-street parking is provided on both sides of Burnett Street between Petaluma Avenue and North High Street / South High Street.

Fannen Avenue is a two-lane east-west local road (one lane eastbound and one lane westbound). Sidewalks are provided on both sides of Fannen Avenue between South Main Street and Eleanor Avenue. Unmetered on-street parking is provided on both sides of Avenue between Petaluma Avenue and Eleanor Avenue.

Morris Street is a two-lane north-south collector (one lane northbound and one lane south bound). Sidewalks are provided on both sides of Morris Street between Laguna Park Way and Sebastopol Avenue. Unmetered on-street parking is provided on both sides of Morris Street between Laguna Park Way and Sebastopol Avenue.

Sebastopol Avenue is a two-lane east-west arterial (one lane eastbound and one lane westbound) and is designated as part of State Route 12 (SR 12). Sebastopol Avenue consists of two westbound lanes and one eastbound lane in the immediate vicinity of the Project. Sidewalks are provided on both sides of Sebastopol Avenue between Morris Street and Petaluma Avenue. No on-street parking provided. The AADT for SR 12 near the Project east of Petaluma Avenue is 23,500.

Abbott Avenue is a two-lane east-west local street (one lane eastbound and one lane westbound) serving as the southern boundary of the Project. There are no sidewalks or on-street parking provided on Abbott Avenue.

Barnes Street is a 15-foot wide north-south alley between Sebastopol Avenue and Abbott Avenue and currently bisects the Project site. There are no sidewalks or on-street parking provided on Barnes Street. Barnes Street is primarily utilized to service and access the parking spaces at the car dealership. The roadway carries minimal traffic due to the inactive site, as field observations conducted in September 2010 recorded one vehicle traveling on Barnes Street during the weekday midday peak hour and zero vehicles during the PM peak hour.

2.2 TRAFFIC CONDITIONS

Traffic counts for each of the study intersections were collected on Wednesday, August 25, 2010. The detailed traffic counts are included in **Appendix A**. The intersection analysis uses the 2000 *Highway Capacity Manual* (HCM) methodology, which is based on Level of Service. The LOS methodology is a qualitative description of the performance of an intersection based on average delay per vehicle. Intersection LOS ranges from LOS A, which indicates free flow or excellent conditions with short delays, to LOS F, which indicates congested or overloaded conditions with extremely long delays.

For signalized intersections, the 2000 HCM methodology determines the capacity of each lane group approaching the intersection. The LOS is then based on average delay (in seconds per vehicle) for the various movements within the intersection. A combined weighted average delay and LOS are then presented for the intersection. For unsignalized intersections, the LOS is based on the average delay (in seconds per vehicle) for all approaches for an all-way stop or the worst approach for a one- or two-way stop-controlled intersection. Level of Service definitions for signalized and unsignalized intersections are summarized in **Table 1**.

It should be noted that signalized intersections operating at LOS F with delays above 120 seconds per vehicle are typically reported as "greater than 120 seconds per vehicle," as 120 seconds is generally considered the limit of the meaningful range for the analysis methodology.

Table 1: Intersection Level of Service Definitions

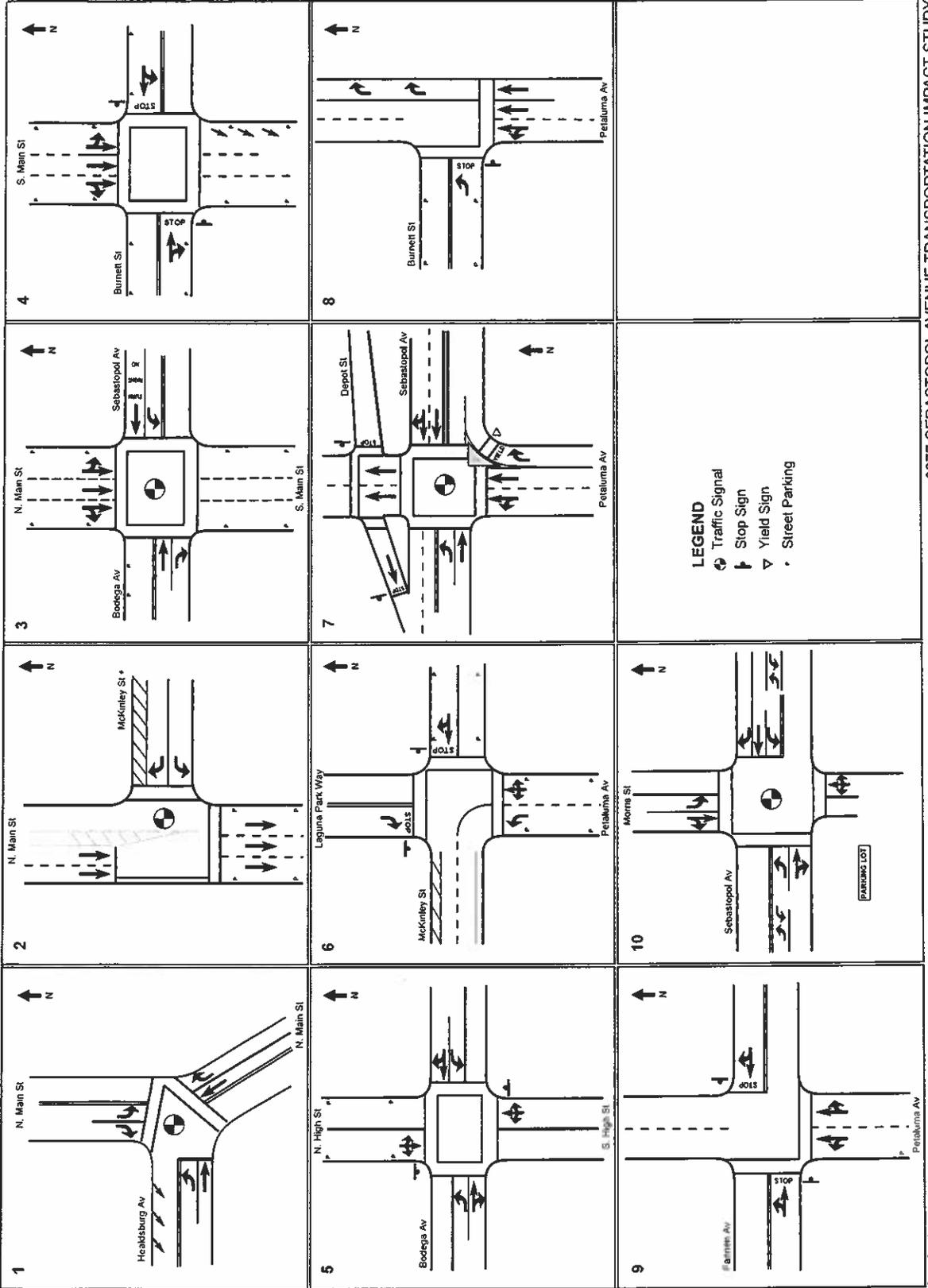
LOS	Description	Average Delay (sec / veh)	
		Signalized Intersections	Unsignalized Intersections
A	Little or no delay	≤ 10.0	≤ 10.0
B	Short traffic delay	> 10.0 and ≤ 20.0	> 10.0 and ≤ 15.0
C	Average traffic delay	> 20.0 and ≤ 35.0	> 15.0 and ≤ 25.0
D	Long traffic delay	> 35.0 and ≤ 55.0	> 25.0 and ≤ 35.0
E	Very long traffic delay	> 55.0 and ≤ 80.0	> 35.0 and ≤ 50.0
F	Extreme traffic delay	> 80.0	> 50.0

Source: *Highway Capacity Manual*, Transportation Research Board, 2000.

Notes:

- Delay in seconds per vehicle.
- For signalized intersections, average delay represents the average of all approaches.
- For unsignalized intersections, average delay represents the average of all approaches (all-way stop control) or the worst approach (one- or two-way stop control).

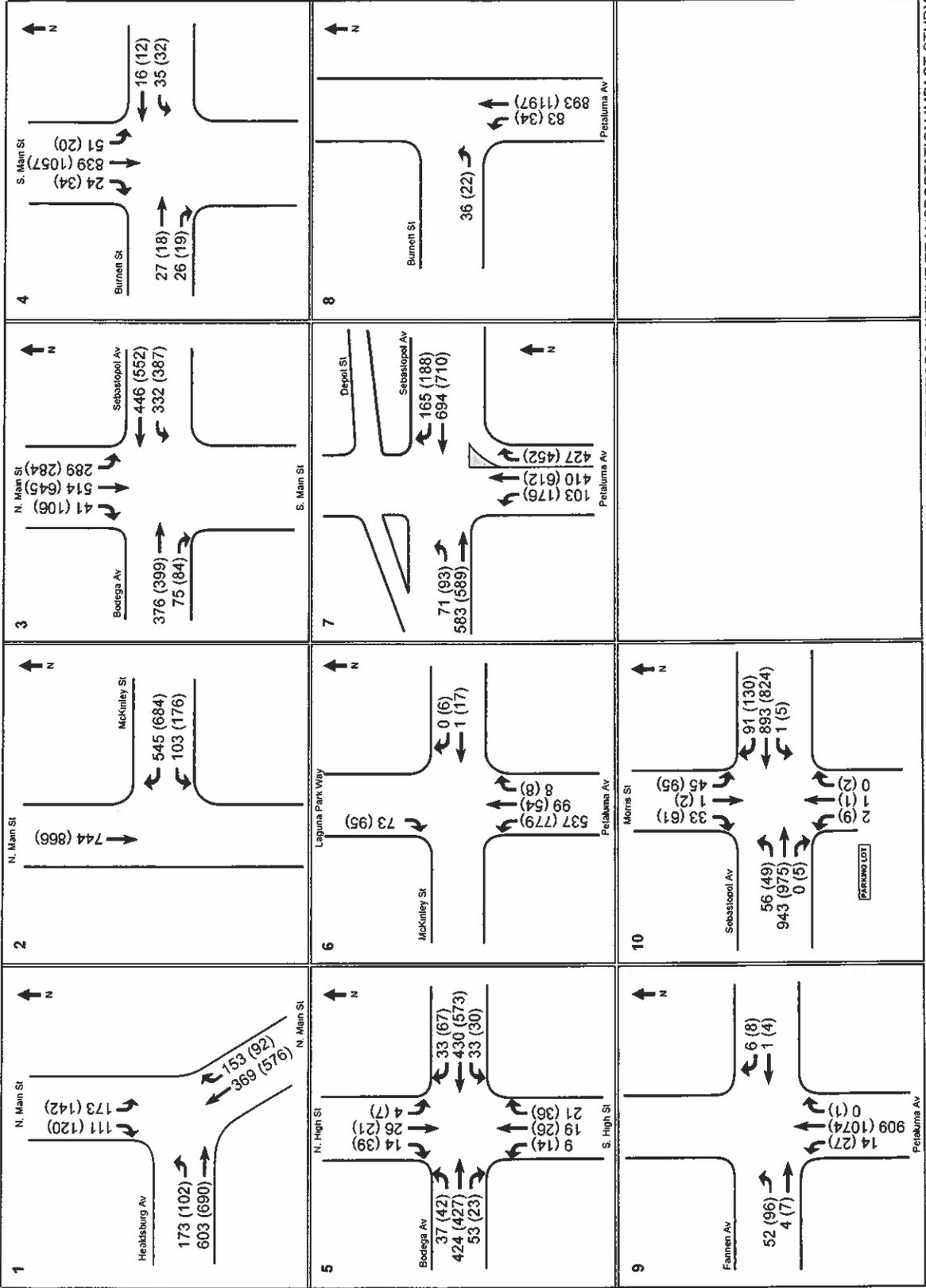
Lane geometries for each intersection are shown in **Figure 4**. The Existing Conditions traffic volumes are shown in **Figure 5**. The Existing Conditions intersection LOS is summarized in **Table 2**. The detailed LOS calculations are included in **Appendix B**.



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Figure 4

EXISTING CONDITIONS - LANE GEOMETRY



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Figure 5
EXISTING CONDITIONS - TRAFFIC VOLUMES
 Weekday AM (PM) Peak Hour

Table 2: Intersection Level of Service — Existing Conditions

Intersection	Control Type	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS	Delay ⁽¹⁾	LOS	Delay ⁽¹⁾
1 North Main Street / Healdsburg Avenue	Signal	B	13.0	B	13.1
2 North Main Street / McKinley Street	Signal	A	7.6	A	8.8
3 North Main Street / Bodega Avenue	Signal	D	37.0	D	41.0
4 South Main Street / Burnett Street	TWSC	C	18.4	B	14.6
5 North High Street / Bodega Avenue	TWSC	C	24.5	E	35.1
6 Petaluma Avenue / McKinley Street	TWSC	C	15.8	D	28.2
7 Petaluma Avenue / Sebastopol Avenue	Signal	C	29.9	C	29.7
8 Petaluma Avenue / Burnett Street	OWSC	C	14.2	B	13.2
9 Petaluma Avenue / Fannin Avenue	TWSC	C	15.7	C	22.6
10 Morris Street / Sebastopol Avenue	Signal	B	14.2	B	17.5

Source: AECOM, 2011.

Notes:

- OWSC = One-way stop control
- TWSC = Two-way stop control

- **Bold** indicates intersection operating at unacceptable LOS (LOS E or LOS F).

⁽¹⁾ Delay presented in seconds per vehicle. Average delays beyond 120 seconds are shown as ">120.0" because delays above this threshold are beyond the meaningful range of the analysis.

The following intersections operate at LOS E or worse in Existing Conditions:

5. North High Street / Bodega Avenue (*weekday PM peak hour*).

2.3 TRANSIT CONDITIONS

Sonoma County Transit operates transit bus Routes 20, 22, 24, and 26 near the Project. The key characteristics of each route are summarized in **Table 3**. The routes are illustrated in **Figure 6**.

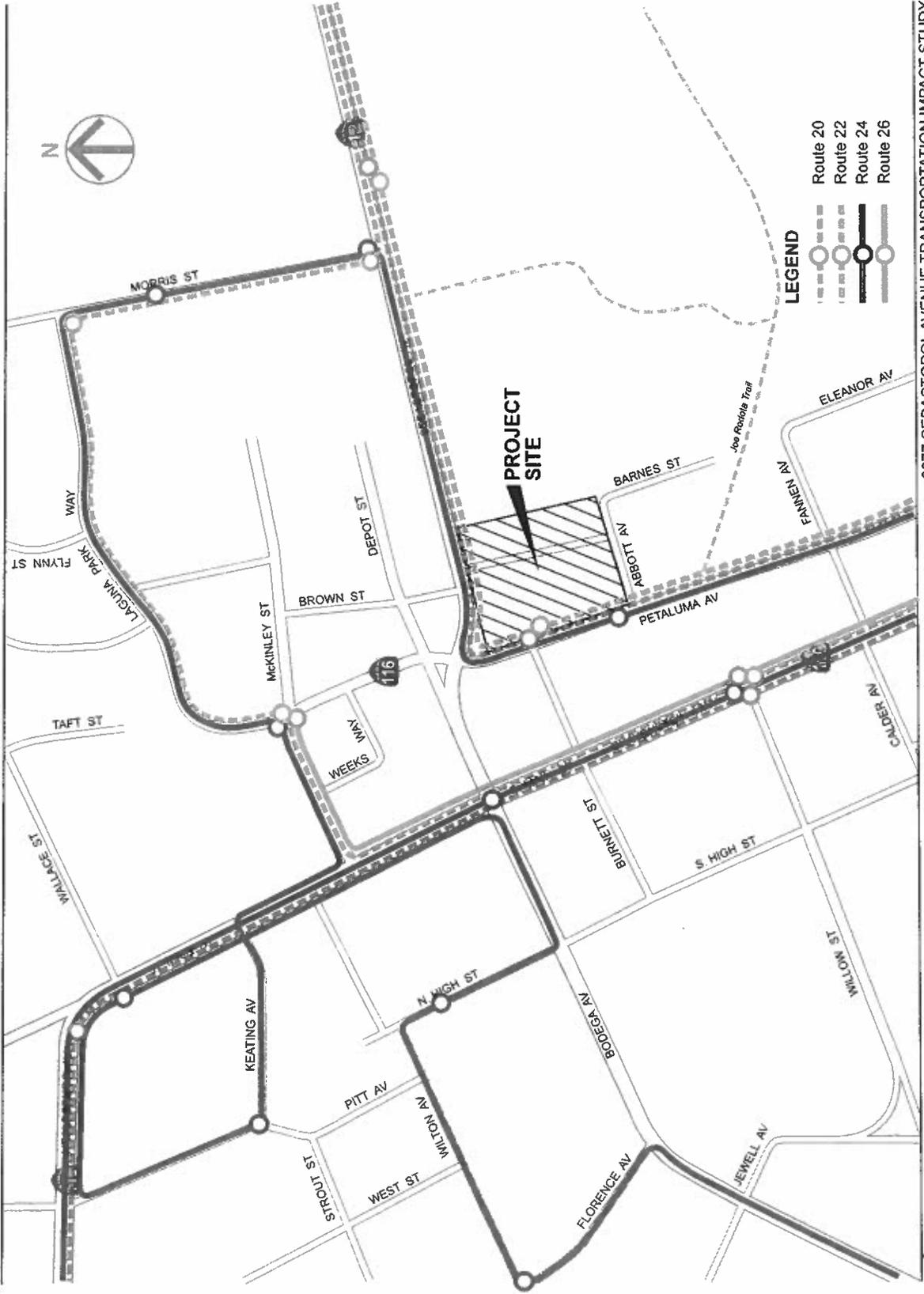
Table 3: Transit Service — Existing Conditions

Bus Route	Service Area / Destination	Headway	Nearest Stops
20	Santa Rosa, Sebastopol, Graton, Forestville, Russian River Area	60 minutes to 180 minutes	Petaluma Avenue / Burnett Avenue
22	Santa Rosa, Sebastopol	60 minutes	Petaluma Avenue / Burnett Avenue
24	Sebastopol	45 minutes	Petaluma Avenue / Burnett Avenue
26	Sebastopol, Rohnert Park	60 minutes	South Main Street / Willow Street

Source: Sonoma County Transit, 2010.

Route 20 in the westbound direction travels from Santa Rosa to Sebastopol and continues north to Forestville and the Russian River Area. Route 20 in the westbound direction begins at the intersection of Venture Avenue / Russell Avenue and runs along Sebastopol Avenue past the Project. Route 20 in the westbound direction runs north on Morris Street onto Laguna Park Way, turns onto McKinley Avenue and travels north of the Project onto Highway 116. Route 20 in the eastbound direction runs through Main Street and travels onto Petaluma Avenue. The eastbound line has a stop at the Sebastopol Post Office, while the westbound line does not stop at the Post Office but instead stops at the Laguna Park Way / McKinley Street intersection. Route 20 in the westbound direction operates between 6:00 AM and 8:00 PM, while Route 20 in the eastbound direction operates between 5:00 AM and 9:00 PM on weekdays, both with approximately eight trips daily. Route 24 also operates on Saturday and Sunday between 8:00 AM and 8:00 PM with four trips daily. The ridership is generally low throughout the weekdays.

Route 22 connects to Route 26. Route 22 in the westbound direction travels from Santa Rosa to Sebastopol and continues as Route 26 in the eastbound direction. Route 22 begins at the intersection of Santa Rosa Avenue / Second Street and runs along Sebastopol Avenue near the Project. Route 22 runs north on Morris Street, onto Laguna Park Way, south on North Main Street though McKinley Street, and turns north onto Petaluma Avenue. Route 22 in the westbound direction operates between 7:00 AM and 8:00 AM and between 3:00 PM and 4:00 PM, while Route 22 in the eastbound direction operate between 7:00 AM and 9:00 AM and between 3:00 PM and 5:00 PM on weekdays, both with approximately four daily trips. Route 22 does not operate on Saturday or Sunday. The ridership is generally low throughout the weekdays.



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Figure 6

TRANSIT ROUTES

Route 24 travels only within Sebastopol. Route 24 begins at the intersection of Petaluma Avenue / Laguna Park Way / McKinley Street, travels onto Bodega Avenue, loops around Burbank Heights and loops around Pleasant Hill Avenue, Ragle Road, and North Gravenstien Highway north of the Project. Route 24 runs south along Healdsburg Avenue, travelling south on North Main Street / South Main Street, onto Morris Street and connects back to Laguna Park Way. Route 24 operates between 9:00 AM and 4:00 PM with approximately nine trips daily. Route 24 also operates on Saturday between 9:00 AM and 2:00 PM. The ridership is generally low throughout the weekdays.

Route 26 connects to Route 22 at the intersection of Petaluma Avenue / Laguna Park Way / McKinley, travels south along North Main Street / South Main Street, and on to Petaluma Avenue into Rohnert Park / Cotati. Route 26 West operates between 6:00 AM and 8:00 AM and 3:00 PM and 6:00 PM, while Route 26 East operate between 7:00 AM and 8:00 AM and 3:00 PM and 5:00 PM on the weekdays, both with approximately five trips daily. Route 26 does not operate on Saturday or Sunday. The ridership is generally low throughout the weekdays.

2.4 PEDESTRIAN CONDITIONS

Sidewalks are currently provided on both sides of Petaluma Avenue and Sebastopol Avenue near the Project. All sidewalks are in generally adequate condition, but sidewalk width varies bordering the Project. Along Petaluma Avenue on the south end of the Project, the width is narrow, at four feet. Closer to the corner of Petaluma Avenue / Sebastopol Avenue, the sidewalk widens to seven feet (an effective width of six feet when accounting for obstructions such as utility poles). Along Sebastopol Avenue near the corner of the intersection, the width of the sidewalk is nine and a half feet. Pedestrian activity near the Project is generally low throughout the weekdays.

An unsignalized pedestrian crosswalk is provided on the south and west legs of the intersection of Petaluma Avenue / Burnett Street. A signalized pedestrian crosswalk using push button actuation is provided on all four legs of the intersection of Petaluma Avenue / Sebastopol Avenue. The width of all four legs of the crosswalk is ten feet. An unsignalized midblock crossing is provided on Petaluma Avenue between Fannen Avenue and Abbott Avenue and on Sebastopol Avenue east of Barnes Street. Crosswalks are provided at signalized and unsignalized intersections to the north, south, and east of the Project.

In addition to the above pedestrian facilities, the Street Smart Sebastopol program recommends proposed crossing enhancements along the following roadways: Bodega Avenue, Healdsburg Avenue, McKinley Street, North Main Street / South Main Street, Petaluma Avenue, and Sebastopol Avenue. Crossing enhancements include traffic control, warning lights, signing, striping, pavement treatments, and curb bulbouts.

According to the *2008 Sebastopol Bicycle and Pedestrian Master Plan* (Bike and Pedestrian Plan), 100 curb ramps in Sebastopol were identified as non-compliant with Americans with Disabilities Act (ADA) requirements. Of the 100 non-compliant ramps, 80 ramps were reconstructed in order to comply with the ADA warning surfaces requirements. The City will continue to reconstruct non-compliant ramps with detectable warning surfaces to meet the ADA requirements. Most curb ramps located on the state highways are currently non-compliant, except those recently constructed or reconstructed by the City, Caltrans, or private developers. The state is currently working to replace the ramps for compliance at the intersection of North Main Street / Sebastopol Avenue / Bodega Avenue. Currently, at the intersection of Petaluma Avenue / Sebastopol Avenue all corners have ramps but are not in compliance with ADA warning surface requirements. There is one ramp along Sebastopol Avenue and one ramp along Petaluma Avenue adjacent to the Project for midblock crossings, both of which are non-compliant. At the intersection of Petaluma Avenue and Abbott Avenue there are no ramps; however, the northeast corner is level with the roadway.

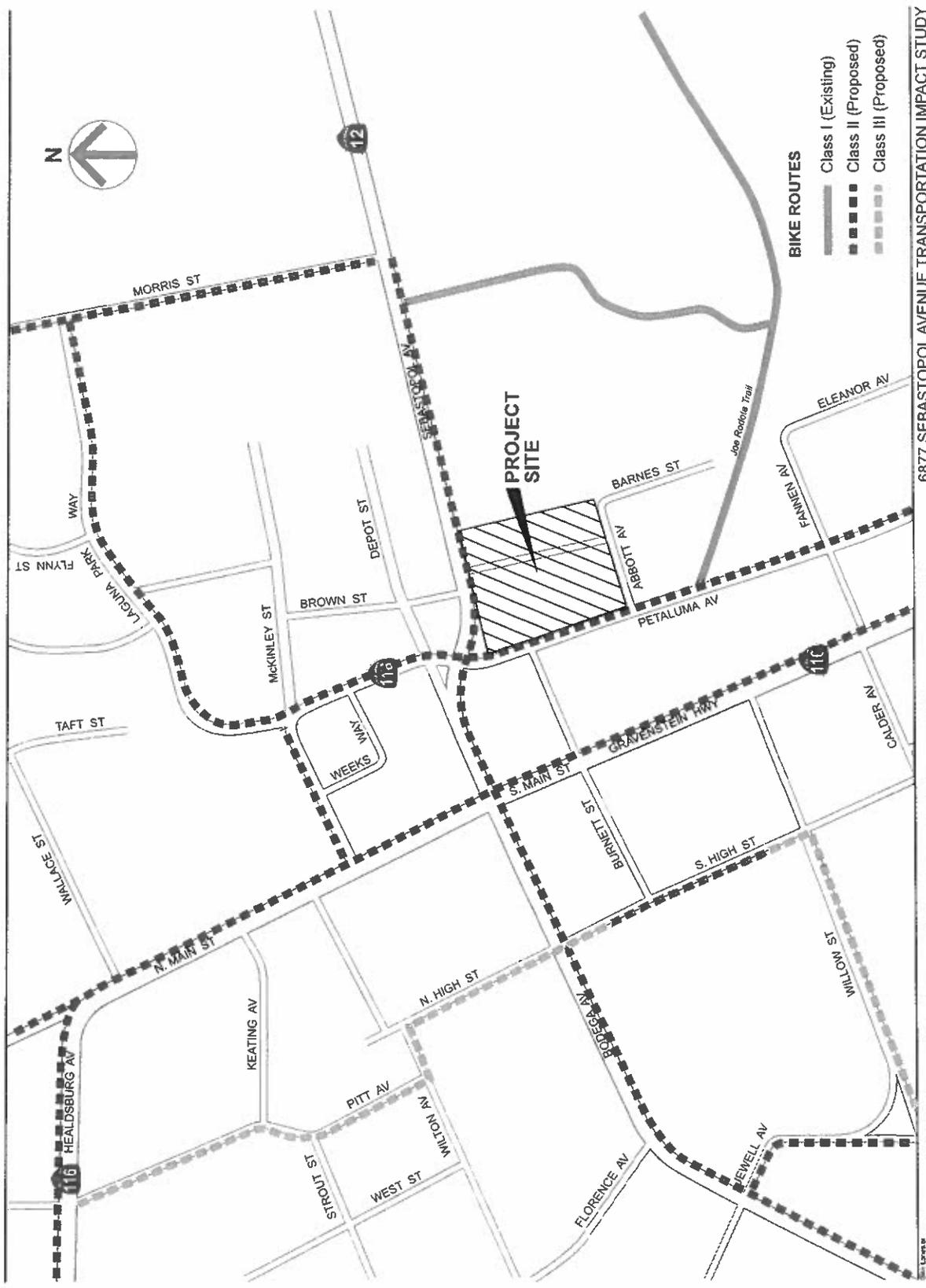
2.5 BICYCLE CONDITIONS

The existing bicycle network consists of Class I bikeways; there are no Class II or Class III bikeways in the City of Sebastopol. Near the Project, there are two bikeways—Joe Rodota Trail and Railroad Forest Bike Path. The Joe Rodota trail extends east from Petaluma Avenue to Sebastopol Road. The Railroad Forest Bike Path extends northward from the Joe Rodota Trail to Sebastopol Avenue. Bicycle activity near the Project is generally low during the weekdays.

In addition to the above bikeways, the 2008 Bike and Pedestrian Plan recommends proposed improvements to the bicycle route network, including the creation of bicycle lanes on Bodega Avenue, Healdsburg Avenue, McKinley Street, Murphy Avenue, North Main Street, South Main Street, Petaluma Avenue, and Sebastopol Avenue. A total of 12.4 miles of bikeways are proposed in Sebastopol in the 2008 Bike and Pedestrian Plan, 0.1 miles of Class I paths, 9.5 miles of Class II lanes, and 2.8 miles of Class III routes. Near the Project, Class II bike lanes are proposed on the following roadways: North Main Street / South Main Street, Petaluma Avenue, Morris Street, Sebastopol Avenue / Bodega Avenue, Laguna Park Way, and Healdsburg Avenue. Existing and proposed bike lanes are shown in **Figure 7**.

2.6 PARKING CONDITIONS

The existing Project site is approximately 82,600 square feet in area with no defined parking spaces. There is no on-street parking available on Petaluma Avenue and Sebastopol Avenue, as the curbs bordering the Project are in a red zone. South of the Project, unmetered on-street parking is provided along the west side of Petaluma Avenue. Unmetered on-street parking is also available along Burnett Street and residential streets east of the Project.



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Figure 7

EXISTING AND PROPOSED BIKE LANES

2.7 SITE ACCESS AND CIRCULATION

Currently, there are eight access driveways to and from the Project site; five driveways along Petaluma Avenue and three along Sebastopol Avenue. Petaluma Avenue and South Main Street operate as one-way couplets with Petaluma Avenue operating in the northbound direction and South Main Street operating in the southbound direction. Sebastopol Avenue is a two-way east-west roadway.

Vehicles from the north travelling to the Project site would need to turn left onto Bodega Avenue and enter from one of the three driveways along Sebastopol Avenue. Vehicles from the south travelling to the Project site would either drive north on Petaluma Avenue and enter the Project through one of the five driveways along Petaluma Avenue, or drive north along a street parallel to Petaluma Avenue and turn right onto Bodega Avenue and enter from one of the three driveways along Sebastopol Avenue.

The existing roadway network currently enables sufficient emergency vehicle response to the Project site.

3.0 PROJECT TRAVEL DEMAND

Travel demand refers to the new vehicle, transit, pedestrian, and other trips that would be generated by the Project. This chapter provides an estimate of the travel demand that would be generated by the Project including parking demand.

3.1 METHODOLOGY

3.1.1 TRIP GENERATION

The trip generation for the Project was based on the provided land use information using trip generation rates from the Institute of Transportation Engineers' (ITE) *Trip Generation* (8th Edition). Trip generation estimates from the ITE's *Trip Generation* are based on a sample of trip generation studies at sites across the United States, for each land use provided. An average trip generation rate is then calculated, which can be used to estimate trips generated by land use. In cases where the sample is of sufficient size, a regression analysis is also conducted to derive a linear or logarithmic equation that relates land use size to trips generated.

Due to pass-by and linked trips, the total number of trips generated by the site would be less than the amount of traffic accessing the Project site. Linked trips are trips which occur in series en route to a primary destination, such as stopping by the bank or pharmacy on the way to work. Pass-by trips are existing vehicle trips that deviate from the primary route to make a stop, such as drivers who already use Sebastopol Avenue who decide to stop at a new bank or pharmacy.

However, a pharmacy is a special retail use and the Project site is located in an area with an existing CVS/pharmacy store as well as other stores that provide pharmacy-type services. Without specific data on the special distribution of trips generated by these existing uses, deriving an accurate reduction for pass-by and linked trips would be difficult. As a result, the analysis is slightly conservative and assumes no reduction for pass-by or linked trips.

3.1.2 MODE SPLIT

The Project-generated person-trips are assigned to travel modes in order to determine the number of auto, transit, and "other" trips, where "other" includes walk, bicycle, motorcycle, taxi, and additional modes.

3.1.3 TRIP DISTRIBUTION / ASSIGNMENT

The trips generated by the Project are distributed throughout the network. Trip distribution was based on existing traffic patterns. The directional distribution of the Project-generated traffic onto the roadway network was estimated based on the existing travel patterns and traffic volumes at the study intersections. The percentage of trips generated to and from each directional quadrant (north, south, east, and west) was calculated.

3.1.4 PARKING DEMAND

The parking demand consists of short-term demand (typically patrons) and long-term demand (typically employees). For the Project's pharmacy and bank, the parking demand is determined for the weekday peak period based on ITE's *Parking Generation* (3rd Edition).

3.2 PROJECT TRAVEL DEMAND

3.2.1 TRIP GENERATION

The Project involves the demolition of the existing car dealership with service buildings on the site. However, since these uses are inactive and not generating trips, no trip credits were assumed for the removal of existing uses. However, for reference purposes, a comparative trip generation analysis was conducted assuming the existing site was active to determine the trip-making potential of the existing uses on the site.

Based on the City's existing zoning for the site as "retail," the site could serve any number of commercial uses including car sales, automobile care center, general retail, or office, as well as any combination of these uses. The estimated trip generation potential of the existing 32,237 square foot site assuming various possible uses is summarized in **Table 4**.

Table 4: Trip Generation — Existing Uses

Land Use	Size (SF)	Person-Trips						
		Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
			In	Out	Total	In	Out	Total
Car Sales ⁽¹⁾	32,237	1,075	48	17	65	33	51	84
Retail ⁽²⁾	32,237	1,384	20	12	32	59	61	120
Automobile Care Center ⁽³⁾	32,237	--	61	33	94	54	54	108
Office ⁽⁴⁾	32,237	558	67	9	76	20	95	115

Source: ITE Trip Generation, 8th Edition; AECOM, 2011.

Notes:

- (1) ITE Land Use Code 841 — Car Sales
 ITE Land Use Code 841 — Daily Equation: $T = 33.34(X)$, where $X = 1,000$ sf
 ITE Land Use Code 841 — AM Peak Hour Equation: $T = 2.03(X)$, where $X = 1,000$ sf
 ITE Land Use Code 841 — PM Peak Hour Equation: $T = 2.59(X)$, where $X = 1,000$ sf
- (2) ITE Land Use Code 820 — Shopping Center
 ITE Land Use Code 820 — Daily Equation: $T = 42.94(X)$, where $X = 1,000$ sf
 ITE Land Use Code 820 — AM Peak Hour Equation: $T = 1.00(X)$, where $X = 1,000$ sf
 ITE Land Use Code 820 — PM Peak Hour Equation: $T = 3.73(X)$, where $X = 1,000$ sf
- (3) ITE Land Use Code 942 — Automobile Care Center
 ITE Land Use Code 942 — No Equation for Daily Trips
 ITE Land Use Code 942 — AM Peak Hour Equation: $T = 2.94(X)$, where $X = 1,000$ sf
 ITE Land Use Code 942 — PM Peak Hour Equation: $T = 3.38(X)$, where $X = 1,000$ sf
- (4) ITE Land Use Code 710 — General Office
 ITE Land Use Code 710 — Daily Equation: $\ln(T) = 0.77 \ln(X) + 3.65$, where $X = 1,000$ sf
 ITE Land Use Code 710 — AM Peak Hour Equation: $\ln(T) = 0.80 \ln(X) + 1.55$, where $X = 1,000$ sf
 ITE Land Use Code 710 — PM Peak Hour Equation: $T = 1.12(X) + 78.81$, where $X = 1,000$ sf

It should be noted that the current zoning of the Project site allows for the operation of an automotive dealership, as such, the estimated travel demand presented in **Table 4** above represents the vehicle trips that may occur should this current land use becomes active.

The trip generation for the new uses proposed for the Project is included in **Table 5**. As discussed above, the existing building is no longer active and currently not generating any trips, thus, no trip credits were assumed for the removal of existing uses (inactive or active) on the site.

Table 5: Trip Generation — Proposed Uses⁽¹⁾

Land Use	Size (SF)	Person-Trips						
		Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
			In	Out	Total	In	Out	Total
Pharmacy ⁽²⁾	14,576	1,285	22	17	39	76	76	152
Bank ⁽³⁾	4,327	641	30	24	54	56	56	112
Total		1,926	52	41	93	132	132	264

Source: *ITE Trip Generation, 8th Edition*; AECOM, 2011.

Notes:

⁽¹⁾ The trip generation calculations presented in this table are shown for the latest land use program, which assumes an increase in the size of the proposed bank from 4,120 SF to 4,327 SF. A sensitivity analysis was subsequently conducted that indicated the larger bank would not result in any material change to the impact findings above what was determined for the smaller bank. The intersection analysis, including the delay calculations and Project volumes, assumed the smaller bank size.

⁽²⁾ ITE Land Use Code 881 — Pharmacy / Drugstore with Drive-Through Window
 ITE Land Use Code 881 — Daily Equation: $T = 88.16(X)$, where $X = 1,000$ sf
 ITE Land Use Code 881 — AM Peak Hour Equation: $T = 2.66(X)$, where $X = 1,000$ sf
 ITE Land Use Code 881 — PM Peak Hour Equation: $T = 10.35(X)$, where $X = 1,000$ sf

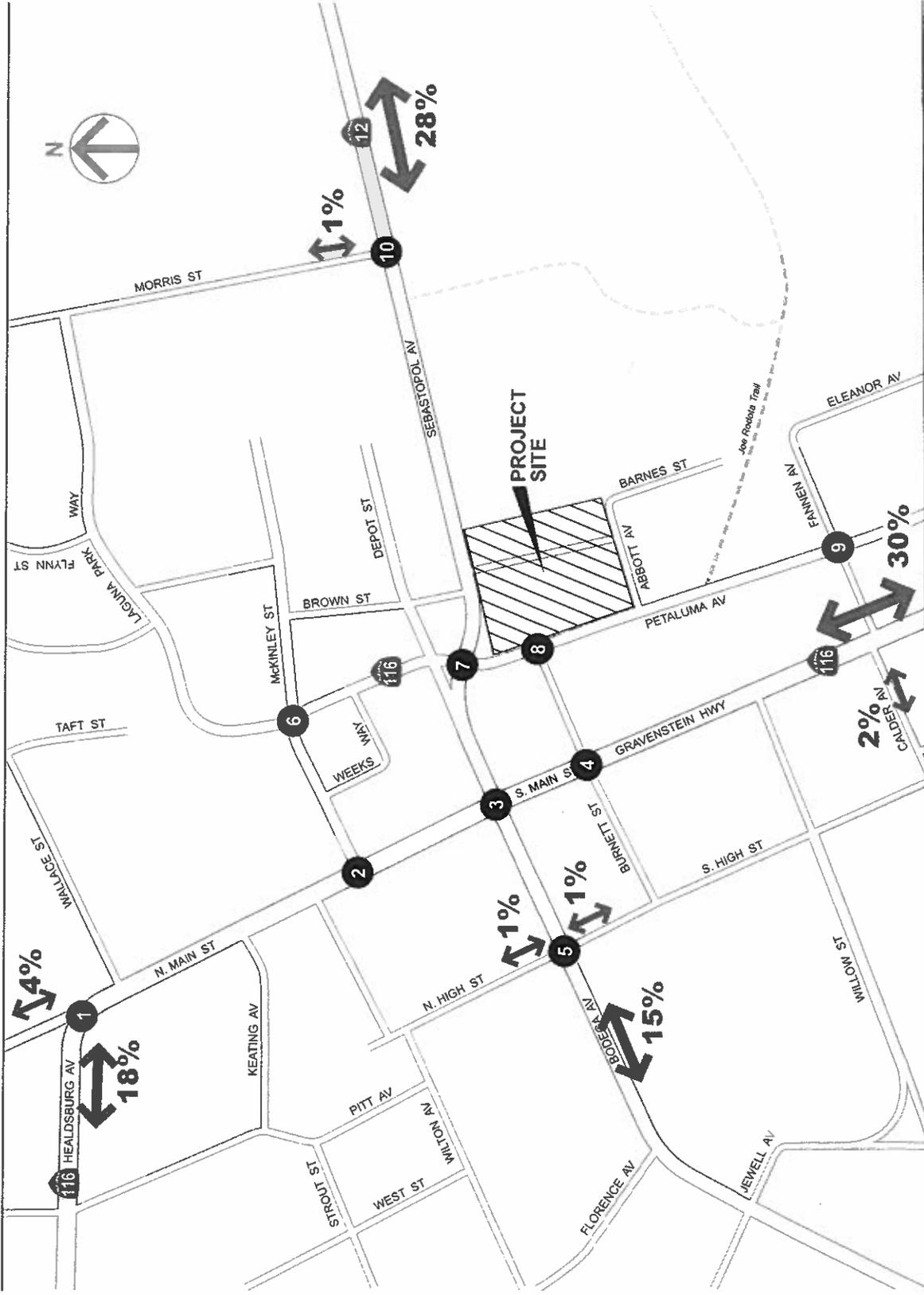
⁽³⁾ ITE Land Use Code 912 — Drive-in Bank
 ITE Land Use Code 912 — Daily Equation: $T = 148.15(X)$, where $X = 1,000$ sf
 ITE Land Use Code 912 — AM Peak Hour Equation: $T = 12.35(X)$, where $X = 1,000$ sf
 ITE Land Use Code 912 — PM Peak Hour Equation: $T = 25.82(X)$, where $X = 1,000$ sf

3.2.2 MODE SPLIT

The Project will generate transit, bicycle, and pedestrian trips; however, the share of these modes is expected to be much less than the share of vehicle-trips, given the relatively infrequent transit service and the general suburban nature of the area. To ensure a conservative approach, the mode split is assumed to be 100 percent auto trips with one person per car.

3.2.3 TRIP DISTRIBUTION

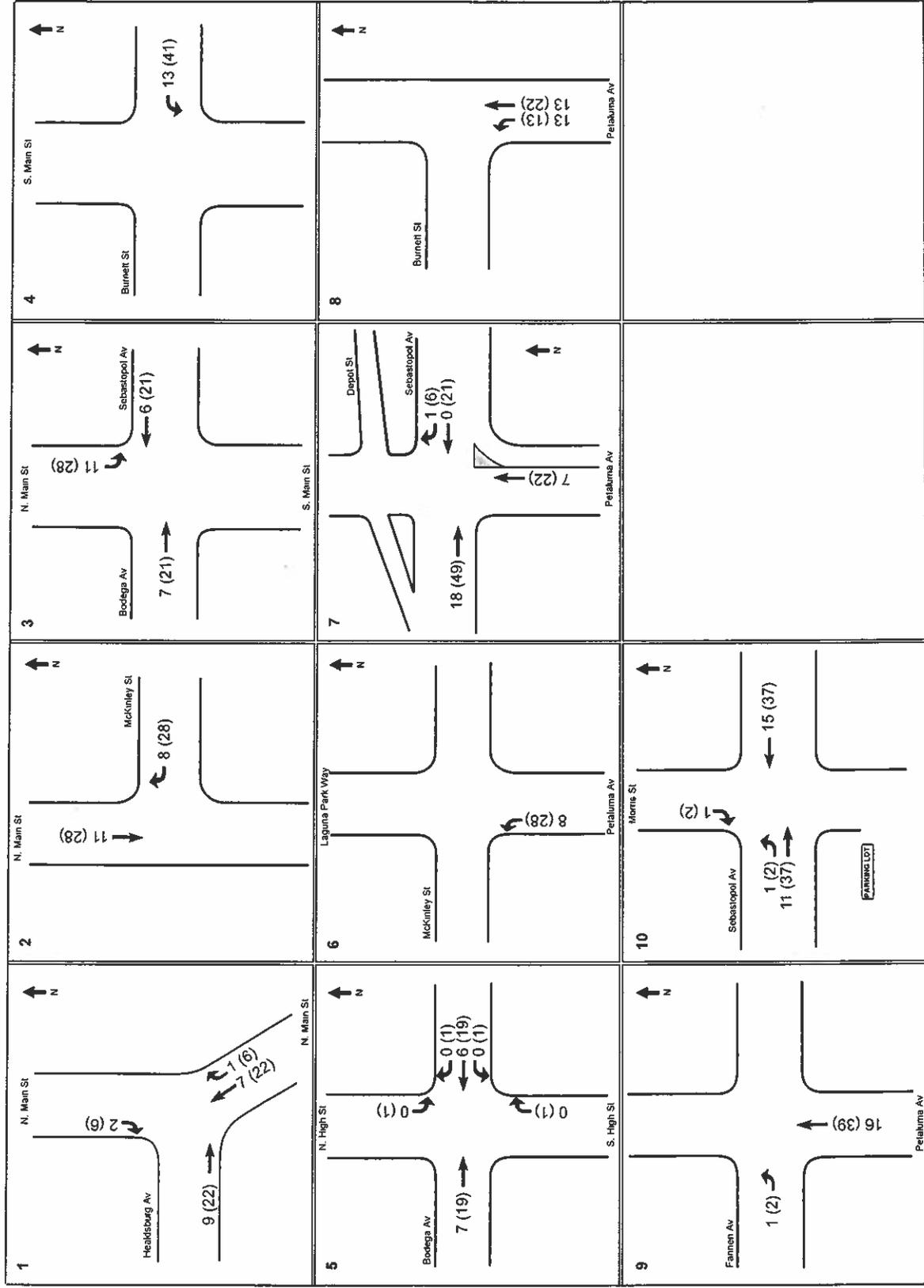
Trip distribution for the net-new vehicle-trips generated by the Project is illustrated in **Figure 8**. Project trips are illustrated in **Figure 9**. The new trips to the Project from the access driveways are summarized in **Table 6**.



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Figure 8

PROJECT TRIP DISTRIBUTION



6877 SEBASTOPOLO AVENUE TRANSPORTATION IMPACT STUDY

Figure 9

PROJECT TRIPS

Weekday AM (PM) Peak Hour

Table 6: Driveway Access Volumes⁽¹⁾

Access Driveway	Volumes					
	Weekday AM Peak Hour			Weekday PM Peak Hour		
	In	Out	Total	In	Out	Total
Petaluma Avenue	6	7	15	14	21	35
Sebastopol Avenue	34	19	47	88	66	154
Abbott Avenue (west)	6	11	19	14	28	42
Abbott Avenue (east)	9	6	17	20	21	41
Total	55	43	98	136	136	272

Source: AECOM, 2011.

Notes:

⁽¹⁾ The total driveway volumes presented in this table are higher than the total number of vehicle-trips generated by the Project (and summarized in Table 5) due to estimated expected internal vehicle circulation.

3.2.4 PARKING DEMAND

The weekday peak period parking demand for the Project according to the ITE's *Parking Generation* (3rd Edition) is included in Table 7.

Table 7: Project Parking Demand

Land Use	Size (SF)	Parking Spaces	
		Demand	Supply
Pharmacy ⁽¹⁾	14,576	29	71
Bank ⁽²⁾	4,327	15	47
Total		44	118

Source: *ITE Parking Generation, 3rd Edition*; AECOM, 2011.

Notes:

⁽¹⁾ ITE Land Use Code 881 — Pharmacy / Drugstore with Drive-Through Window

ITE Land Use Code 881 — Peak Period Equation: $T = 2.02(X)$, where $X = 1,000$ sf

⁽²⁾ ITE Land Use Code 912 — Drive-in Bank

ITE Land Use Code 912 — Peak Period Equation: $T = 3.49(X)$, where $X = 1,000$ sf

The Project proposes to provide 118 parking spaces, which exceeds the estimated demand for the Project. Therefore, there will be no need for on-street parking since sufficient off-street parking is provided by the Project. The peak time where vehicles are expected to be parked in the parking lot is between 4:00 PM and 6:00 PM. The parking demand during the rest of the day will be less than the peak period parking demand.

4.0 IMPACT ANALYSIS

This section discusses the impacts of the Project to Existing Conditions and Cumulative Conditions. Analyses were conducted to determine the Project's potential impacts to traffic facilities, transit facilities, pedestrian facilities, and bicycle facilities. Project site access and circulation and parking / loading supply were also evaluated.

4.1 SIGNIFICANCE CRITERIA

A project would normally have a significant adverse impact on the environment if it would cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., results in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads or delays at intersections), or change the condition of an existing street (i.e., street closures, changing direction of travel) in a manner that would substantially affect access or traffic load and capacity of the street system. The specific City of Sebastopol criteria utilized for this analysis are as follows:

A project-related or cumulative traffic impact is considered to be significant if the proposed project would do any of the following:

- Cause the existing baseline LOS to degrade to worse than LOS D at any signalized intersection within the Downtown; or,
- Cause the existing baseline LOS to degrade to worse than LOS C at any signalized intersection outside of the Downtown. It should be noted that there are no intersections in the study area outside of Downtown, and this criterion is not used in this traffic study; or,
- Cause the existing baseline LOS to degrade to worse than LOS D at any side street approach at unsignalized intersections.

The City of Sebastopol does not have an adopted threshold of significance for project-related impacts at intersections that are already operating, or projected to operate, at unacceptable LOS under Existing or Cumulative Conditions without the addition of any project-related traffic.

Therefore, for the purpose of such studies to determine whether a project-related impact would be significant, the following criteria have been utilized in other studies in the City of Sebastopol. Similar criteria are utilized within other jurisdictions such as the City of Napa, City of Santa Rosa, City of San Francisco, and the City of Oakland.:

- A project impact is considered significant if the proposed project would cause the average control delay at any signalized intersections to increase by five (5.0) or more seconds for intersections already operating at unacceptable LOS E or LOS F under the no project conditions; or,
- A project impact is considered significant if the proposed project would cause the delay at any side street approach at OWSC and TWSC intersections to increase by five (5.0) or more seconds for intersections already operating at unacceptable LOS E or LOS F under the no project conditions; or,

- A project impact is considered significant if the proposed project would cause the average control delay at an all-way stop-controlled (AWSC) intersection to increase by five (5.0) or more seconds for the intersections already operating at unacceptable LOS E or LOS F under the no project conditions. It should be noted that there are no AWSC intersections in the study area, and this criterion is not used in this traffic study.

4.2 EXISTING PLUS PROJECT CONDITIONS

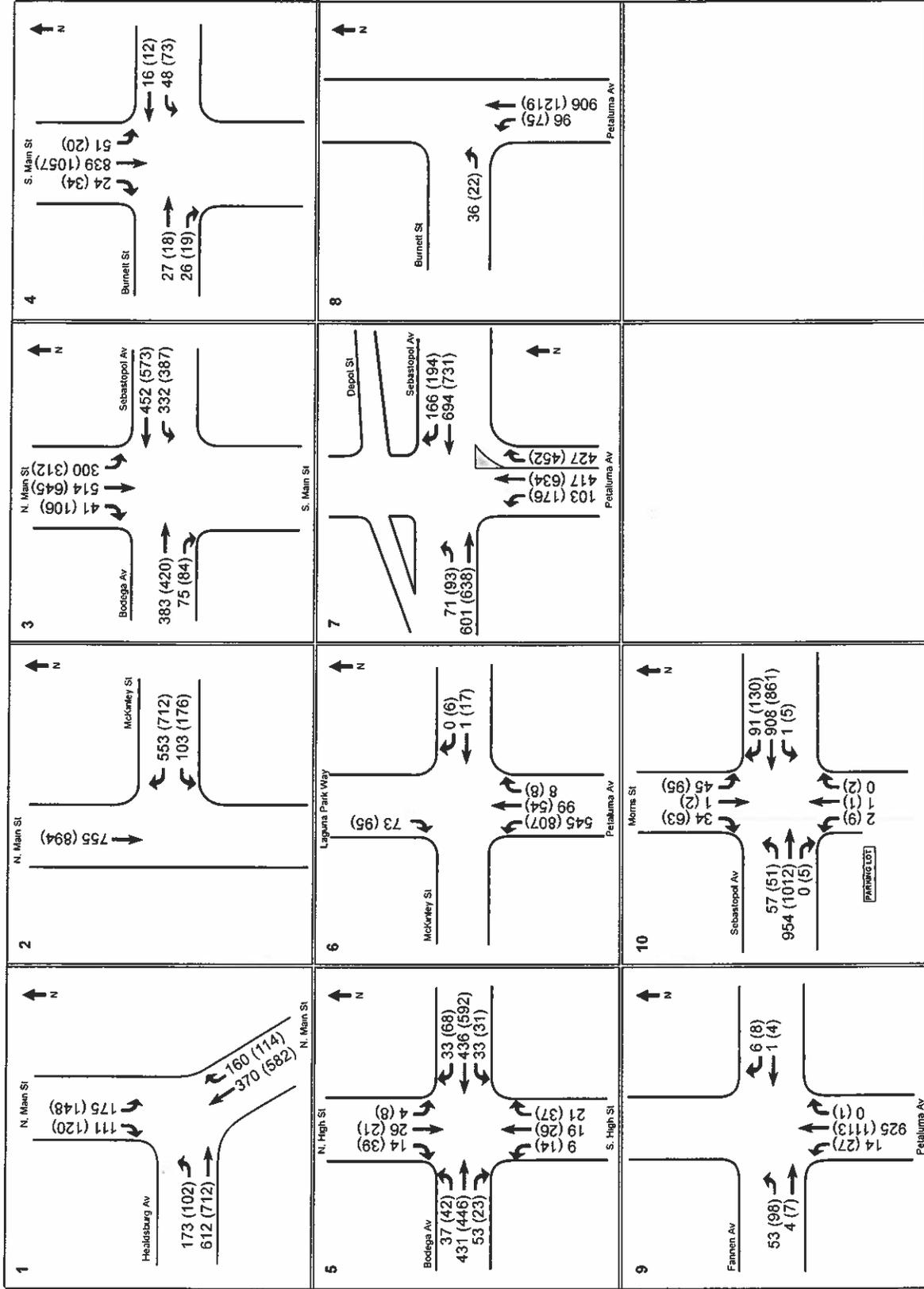
The following presents the traffic operations and potential traffic impacts under the Existing plus Project Conditions at the ten study intersections. Intersections that would result in unacceptable LOS due to the implementation of the Project are identified in accordance with City of Sebastopol policy.

4.2.1 TRANSPORTATION NETWORK CHANGES

Under Existing plus Project Conditions, Barnes Street, which bisects the Project, would be abandoned as part of the Project, thus allowing the two parcels of the current Project site to be combined into one congruent parcel. Barnes Street is an alley utilized for local circulation that runs between Sebastopol Avenue and Abbott Avenue. The primary purpose of Barnes Street is to service and access the parking spaces at the car dealership. Field observations conducted in September 2010 recorded one vehicle traveling on Barnes Street during the weekday midday peak hour and zero vehicles during the PM peak hour. Thus, the proposed abandonment of Barnes Street is not expected to result in a substantial change to vehicular circulation patterns or impedance to emergency and delivery vehicle access.

4.2.2 TRAFFIC IMPACTS

The Existing plus Project Conditions traffic volumes are shown in **Figure 10**. The Existing plus Project Conditions intersection Level of Service is summarized in **Table 8**. The detailed LOS calculations are included in **Appendix B**.



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Figure 10
EXISTING PLUS PROJECT CONDITIONS - TRAFFIC VOLUMES
 Weekday AM (PM) Peak Hour

Table 8: Intersection Level of Service — Existing plus Project Conditions

Intersection	Peak Hour	Existing Conditions		Existing plus Project Conditions	
		LOS	Delay ⁽¹⁾	LOS	Delay ⁽¹⁾
1 North Main Street / Healdsburg Avenue	AM	B	13.0	B	13.1
	PM	B	13.1	B	13.3
2 North Main Street / McKinley Street	AM	A	7.6	A	7.7
	PM	A	8.8	A	9.1
3 North Main Street / Bodega Avenue	AM	D	37.0	D	37.5
	PM	D	41.0	D	44.2
4 South Main Street / Burnett Street	AM	C	18.4	C	18.4
	PM	B	14.6	C	19.8
5 North High Street / Bodega Avenue	AM	C	24.5	C	24.8
	PM	E	35.1	E	38.4
6 Petaluma Avenue / McKinley Street	AM	C	15.8	C	16.0
	PM	D	28.2	D	28.2
7 Petaluma Avenue / Sebastopol Avenue	AM	C	29.9	C	30.2
	PM	C	29.7	C	29.9
8 Petaluma Avenue / Burnett Street	AM	C	14.2	B	14.8
	PM	B	13.2	B	14.8
9 Petaluma Avenue / Fannen Avenue	AM	C	15.7	C	15.9
	PM	C	22.6	C	23.9
10 Morris Street / Sebastopol Avenue	AM	B	14.2	B	14.6
	PM	B	17.5	B	19.2

Source: AECOM, 2011.

Notes:

- **Bold** indicates intersection operating at unacceptable LOS (LOS E or LOS F).

⁽¹⁾ Delay presented in seconds per vehicle. Average delays beyond 120 seconds are shown as ">120.0" because delays above this threshold are beyond the meaningful range of the analysis.

The following intersections would continue to operate at LOS E in Existing plus Project Conditions:

- 5. North High Street / Bodega Avenue (*weekday PM peak hour*).

The intersections operating at LOS E or worse are evaluated using the significance criteria for Existing plus Project Conditions:

- 5. North High Street / Bodega Avenue

This unsignalized intersection would operate at LOS E under Existing Conditions and Existing plus Project Conditions in the weekday PM peak hour. Since the Project would cause the average control delay to increase by 3.3 seconds, which is below the five (5.0) second threshold, the Project would not cause a significant impact at this intersection.

ACCESS DRIVEWAY ANALYSIS

The Existing plus Project Conditions driveway Level of Service is summarized in **Table 9**.

Table 9: Level of Service—Existing plus Project Conditions

Intersections	Peak Hour	Existing plus Project Conditions		Existing plus Project Conditions with Restriction	
		LOS	Delay ⁽¹⁾	LOS	Delay ⁽¹⁾
Driveway Access / Sebastopol Avenue	AM	E	48.2	D	25.9
	PM	F	>120.0	D	33.6
Petaluma Avenue / Driveway Access	AM	B	10.8	B	11.0
	PM	B	12.0	B	12.7
Petaluma Avenue / Abbott Avenue ⁽²⁾	AM	B	10.8	B	10.9
	PM	B	12.0	B	12.2

Source: AECOM, 2011.

Notes:

- **Bold** indicates intersection operating at unacceptable LOS (LOS E or LOS F).

⁽¹⁾ Delay presented in seconds per vehicle. Average delays beyond 120 seconds are shown as ">120.0" because delays above this threshold are beyond the meaningful range of the analysis.

⁽²⁾ Two driveways are located along Abbott Avenue; however, only the intersection of Petaluma Avenue / Abbott Avenue was analyzed as Abbott Avenue carries minimal through traffic and Project trips would enter and exit the Abbott Avenue driveways via Petaluma Avenue, which carries high through traffic. Thus, the Petaluma Avenue / Abbott Avenue intersection would account for all traffic utilizing both Abbott Avenue driveways. The analysis focuses on the governing condition for the two Abbott Avenue driveways, which occurs at the Petaluma Avenue / Abbott Avenue intersection.

The Project access driveway on Sebastopol Avenue is expected to operate at LOS E in the weekday AM peak hour and LOS F in the weekday PM peak hour under Existing plus Project Conditions. The driveway on the northbound approach would have a 95th percentile queue length of 25 feet in the weekday AM peak hour, which is approximately one vehicle-length, and 125 feet in the weekday PM peak hour, which is approximately five vehicle-lengths.⁽²⁾ Although Project traffic using this driveway would experience some queuing and delays, these effects would be contained within the Project's parking lot and not affect traffic on adjacent roadways. A crosswalk immediately west of the Project driveway on Sebastopol Avenue would create gaps to allow vehicles to turn right onto Sebastopol Avenue. The Project site plan would be able to accommodate queuing; however, queuing may result in a conflict between parked vehicles trying to back up or vehicles trying to park in the parking spaces provided along the eastern edge of the site.

⁽²⁾ The 95th percentile queue length is the maximum back of queue with 95th percentile traffic volumes.

The queues within the Project parking lot would not cause substantial impacts to traffic flow on adjacent streets. For a one-way stop controlled intersection, the HCM LOS is based on the worst approach—in this case is the northbound approach, which serves drivers attempting to exit the Project parking lot. Exiting vehicles may experience high levels of delay, but since these delays would be contained within the Project site and would not affect any City roadways, this would be not considered an impact. To alleviate potential queues and / or delays at the Sebastopol Avenue driveway inside the Project parking lot, restricting the access driveway on Sebastopol Avenue to operate as a right-in / right-out driveway would reduce most of these queues and delays. Vehicles making westbound left turns into this driveway or northbound left turns out of this driveway would need to be rerouted as a result of the prohibition of these movements.

In addition to vehicles queuing attempting to exit the Project site, vehicles would queue attempting to enter the Project site from westbound Sebastopol Avenue. The left most lane along westbound Sebastopol Avenue would have a 95th percentile queue length of 25 feet in the weekday AM and PM peak hours, (approximately one vehicle-length), and an average delay of 1.2 seconds in the weekday AM peak hour and 1.0 seconds in the weekday PM peak hour. Thus, although the driveway location and configuration may result in some queuing for drivers attempting to exit the Project parking lot, drivers attempting to enter the parking lot from westbound Sebastopol Avenue would not substantially affect traffic flow along Sebastopol Avenue.

Under unrestricted conditions, 16 vehicles in the weekday AM peak hour and 39 vehicles in the weekday PM peak hour are expected to enter the Project from the westbound left turn at this driveway off of Sebastopol Avenue. To implement the right-in / right-out restriction, these vehicles would be rerouted to the westbound through movement at the Petaluma Avenue / Sebastopol Avenue intersection, the westbound left at the North Main Street / Bodega Avenue intersection, the southbound through at the North Main Street / Burnett Street intersection, the eastbound left at the Petaluma Avenue / Fannen Avenue intersection, and the northbound right into the access driveway on Petaluma Avenue. The Petaluma Avenue / Sebastopol Avenue, North Main Street / Bodega Avenue, North Main Street / Burnett Street, and Petaluma Avenue / Fannen Avenue intersections are expected to continue to operate at acceptable LOS with the proposed mitigation measures, and would continue to do so with the additional rerouted traffic during both the weekday AM and PM peak hours.

Under unrestricted conditions, seven vehicles in the weekday AM peak hour and 27 vehicles in the weekday PM peak hour are expected to exit the Project from the Sebastopol Avenue driveway and turn left onto Sebastopol Avenue. To implement the right-in / right-out restriction, these vehicles would be rerouted to exit westbound right out of the access driveway on Petaluma Avenue and use the northbound approach at the Petaluma Avenue / Sebastopol Avenue intersection. Even with the addition of this rerouted traffic, however, the Petaluma Avenue / Sebastopol Avenue is expected to continue to operate at acceptable LOS during both the weekday AM and PM peak hours. The right-in / right-out restriction would also alleviate conflicts between pedestrians utilizing the crosswalk located immediately west of the Sebastopol Avenue driveway and vehicles exiting the Project from the Sebastopol Avenue driveway and turn left onto westbound Sebastopol Avenue. Therefore, the restriction is not expected to result in any secondary impacts on adjacent intersections.

Adjacent intersection LOS due to the restriction is as follows:

3. North Main Street / Bodega Avenue
The intersection would continue to operate at LOS D during the AM and PM peak hour under restricted conditions.
4. North Main Street / Burnett Street
The intersection would continue to operate at LOS C during the AM and PM peak hour under restricted conditions.
7. Petaluma Avenue / Sebastopol Avenue
The intersection would continue to operate at LOS C during the AM and PM peak hour under restricted conditions.
9. Petaluma Avenue / Fannen Avenue
The intersection would operate at LOS C during the AM and operate at LOS D during the weekday PM peak hour under restricted conditions.

With the right-in / right-out restriction, the access driveway on Sebastopol Avenue is expected to operate at LOS D with 25.9 seconds of delay during the weekday AM peak hour and LOS D with 33.6 seconds of delay during the weekday PM peak hour. The 95th percentile queue length on the driveway is expected to be 25 feet (approximately one vehicle-length) during the weekday AM and PM peak hour. No queue is expected on the westbound approach during the weekday AM and PM peak hours, as the westbound left turn into the driveway would be prohibited. Although the Sebastopol Avenue driveway would continue to operate at LOS D during the PM peak hour, overall operations with respect to queues and delays within the Project parking lot would improve substantially with the right-in / right-out restriction. Thus, it is recommended that a right-in / right-out restriction for the Project driveway on Sebastopol Avenue be implemented.

The recommended right-in / right-out restriction on Sebastopol Avenue driveway can be implemented through physical barriers and traffic channelizing devices such as barrier wall systems, wide raised medians, non-traversable curb islands, and traversable raised curb systems. For example, a barrier wall system can be implemented between opposing travel lanes on Sebastopol Avenue in order to restrict left turns into and out of the driveway. Barrier wall systems are effective for deterring violations, but the driveway can also be designed with a channelizing concrete island to further deter left-in / left-out turns.

A barrier wall system would create a barrier between westbound and eastbound traffic on Sebastopol Avenue, which would restrict westbound vehicles from crossing over to the eastbound travel lanes in order to make a left turn into the driveway. Similarly, the barrier would restrict northbound vehicles from making a left turn out of the driveway. The concrete island would restrict maneuverability to allow entry / exit from / to the eastbound direction.

NEIGHBORHOOD TRAFFIC IMPACTS

The Project is located near residential areas, which may have an impact on residents living near the Project. General concerns relating to neighborhood traffic typically include the following:

- Safety of residential streets for pedestrians, cyclists, and other drivers;
- The effect of increased traffic on noise levels;
- Speeding; and,
- On-street parking supply and occupancy.

The Project is not expected to result in substantial increases to traffic on residential streets near the Project. Access to and from the Project will primarily be along major arterial roadways such as North Main Street, Sebastopol Avenue, and Petaluma Avenue. Although there may be some minor increase in traffic to / from adjacent residential neighborhoods as residents from these areas visit the Project, it is not expected that substantial amounts of through-traffic would be using these local roadways for access.

In addition, the Project would provide a sufficient supply of off-street parking (118 spaces) to meet the estimated peak parking demand of 44 spaces, and no parking spillover into adjacent residential neighborhoods is expected. As a result, the Project is not expected to result in significant impacts to neighborhood traffic conditions.

4.2.3 TRANSIT IMPACTS

The Project can be accessed through Sonoma County Transit Routes 20, 22 and 24. Given the relatively suburban nature of the area and the small project size, the Project is not expected to generate additional transit riders. However, even assuming a minor transit share of five percent would only result in one additional transit rider in the weekday AM peak hour and nine additional transit riders in the weekday PM peak hour. Travel surveys indicate that a five percent transit share is considered conservative. The level of Project-generated transit ridership is not expected to result in a significant impact to transit ridership and capacity, as sufficient capacity is available in order to accommodate the increased transit riders.

Although the Project would increase vehicular traffic on major transit service corridors such as Petaluma Avenue, Sebastopol Avenue, Bodega Avenue, North Main Street, and South Main Street, the Project's overall effect on intersection LOS and delay is negligible at most of the study intersections. Therefore, Project-generated vehicular traffic is not expected to result in a significant impact to transit operations.

4.2.4 PEDESTRIAN IMPACTS

Under Existing plus Project Conditions, the existing pedestrian sidewalk along Petaluma Avenue and Sebastopol Avenue will remain on both sides of the roadway. Pedestrian access to the Project would be provided by connections from the sidewalks along the Project site to the proposed pharmacy and bank. The project provides a pedestrian ramp at the southeast corner of Petaluma Avenue / Sebastopol Avenue. However, at the intersection there is a free right turn in the northbound direction, which may cause some minor conflict between pedestrians and vehicles. The location of the Project driveway on Sebastopol Avenue near an unsignalized crosswalk may cause a minor conflict between pedestrians and vehicles. However, the traffic volumes conflicting with the crosswalk on Sebastopol Avenue are seven vehicles in the AM peak hour and 27 vehicles in the PM peak hour. The pedestrian activity along the crosswalk is expected to be low throughout the day. However, with restricted right-in / right-out driveway implementation on Sebastopol Avenue, would alleviate the conflict between vehicles and pedestrians utilizing the crosswalk.

Travel surveys indicate that automobile is the predominate mode of travel to the Project; however, as a downtown Sebastopol location, pedestrian activity is encouraged and Project can be access by pedestrians. However, pedestrian activity is not expected to substantially increase. Therefore, the addition of Project-generated vehicular traffic would not result in any significant impacts to pedestrian conditions in the vicinity of the Project.

4.2.5 BICYCLE IMPACTS

Cyclists from the east can access the Project through the existing Railroad Forest bike path or the Joe Rodota Trail. Given the relatively suburban nature of the area, the Project is expected to generate a negligible increase in bicycle traffic in the Project area, which could be handled on existing roadways without major concern. Travel surveys indicate that automobile is the predominate mode of travel to the Project; however, bicycle activity is encouraged and the Project can be accessed by bicyclists. However, bicycle activity is not expected to substantially increase. The existing and proposed bicycle lanes would be able to accommodate the increase in cyclists. The existing and proposed bicycle lanes are illustrated in **Figure 7**.

In addition, although Project-generated vehicular traffic would increase overall traffic on roadways, this increase is relatively minor compared to existing traffic volumes, resulting in no significant impacts. While some minor increase in the potential for vehicle-bicycle conflict may occur, in general, this effect is negligible, and not expected to result in significant impacts to bicycle conditions in the Project area.

4.2.6 PARKING AND LOADING IMPACTS

The Project will provide two new parking areas: one parking area along the eastern portion of the Project with 54 spaces, and another parking area to the south of the pharmacy with 64 spaces. All the parking areas are accessible from driveways located along Petaluma Avenue, Sebastopol Avenue, and Abbott Avenue. The Project will provide 118 parking spaces for the proposed pharmacy and bank.

The *City of Sebastopol Municipal Code* requirement for parking spaces in the Downtown zoning district is as follows:

- 1 space for every 400 square feet of commercial.

The Project consists of 18,903 feet of commercial space. Based on the *City of Sebastopol Municipal Code* the Project requires 47 parking spaces. Based on the *ITE Parking Generation Manual*, the Project parking demand is expected to require 44 parking spaces. At 118 parking spaces, the Project will provide more parking spaces than are required by the *City of Sebastopol Municipal Code* or estimated by the *ITE Parking Generation Manual*. The configuration of the parking spaces is illustrated in the site plan. There will be no impacts on on-street parking as the curb bordering the Project will continue to be marked as a red zone.

Delivery trucks will most likely enter through the Petaluma Avenue driveway, loop around the parking spaces and into the loading space. The loading space for pharmacy deliveries may have an effect on circulation during delivery times due to the location of the loading space. Vehicles parking and backing up near the loading space may have an impact on the maneuverability and circulation of delivery trucks entering and exiting the loading space. Given that truck movements will only occur for short periods of a few minutes, the potential for conflict between loading activities and parking lot circulation are expected to be negligible.

The *City of Sebastopol Municipal Code* requirement for off-street loading spaces is as follows:

- For less than 5,000 square feet of floor area 0 spaces are required;
- For 5,001-10,000 square feet of floor area, 1 space is required;
- For 10,000-30,000 square feet of floor area, 2 spaces are required;
- For 30,001-90,000 square feet of floor area, 3 spaces are required; and,
- For more than 90,000 square feet of floor area, 4 spaces are required.

The first required loading space may meet the dimensional requirements for other standard required parking spaces. Additional required loading spaces shall have a minimum dimension of ten feet in width and 20 feet in depth.

The total floor area for the Project is 18,903 square feet, thus the Project is required to have two loading spaces according to the *City of Sebastopol Municipal Code*. The site plan for the Project provides 118 parking spaces, while the estimated demand is 44 spaces. Since the parking supply exceeds the parking demand, a series of parking spaces can be utilized as a loading space. The site plan currently does not designate a parking space as a loading space, though this designation may be recommended for the row of parking spaces closest to the proposed loading space location. This designation is not expected to result in any substantial changes to parking conditions as the parking supply exceeds the expected parking demand. Eight parking spaces immediately east of the proposed loading space may be reserved for additional loading activity. Reserving the parking spaces closest to the proposed loading space would also minimize potential conflicts between loading vehicles and vehicles. One loading space meeting the dimension requirements is provided. Thus, the proposed site plan parking and loading supplies meets the *City of Sebastopol Municipal Code* requirements.

Delivery trucks are expected to enter from the Petaluma Avenue driveway, loop around the parking area between the pharmacy and bank to the loading space and then exit from the Petaluma Avenue driveway. Delivery trucks using the same entry and exit as Project traffic may have a potential conflict between vehicles entering and exiting the Project. The loading space near the pharmacy entrance may have a conflict with delivery vehicles pulling into and out of the loading space and parking vehicles or vehicles backing out from the eight parking spaces adjacent to the loading space and 14 parking spaces across from the loading space. Delivery vehicles would cause a minor conflict with pedestrians entering and exiting the pharmacy. As discussed above, the conflict may be alleviated by reserving parking spaces closest to the loading space. The conflict may also be alleviated by limiting deliveries to occur only during off-peak hours or by requiring staff to go out into the lot to direct pedestrians and traffic when delivery trucks enter and exit the site in order to ensure safe truck entry and egress.

4.2.7 SITE ACCESS AND CIRCULATION IMPACTS

ACCESS DRIVEWAYS

The proposed access driveways to and from the Project will be reduced from eight existing driveways to four driveways. Each driveway will be to and from each of the three public rights-of-way bordering the Project — Sebastopol Avenue, Petaluma Avenue, and Abbott Avenue. The full access driveway (30 feet wide) along Sebastopol Avenue is proposed to be located at the easternmost property line approximately 75 feet further east than the existing driveway, which is furthest away from the intersection of Petaluma Avenue / Sebastopol Avenue. The proposed access driveway (40 feet wide) along Petaluma Avenue is aligned with an existing driveway across Petaluma Avenue. The eastern access driveway (25 feet wide) on Abbott Avenue is located at the eastern most edge of the development and aligns with the driveway along Sebastopol Avenue. The western access driveway (25 feet wide) on Abbott Avenue is located to the west of the abandoned Barnes Street.

All four driveways are located away from the Petaluma Avenue / Sebastopol intersection, which will ensure vehicles entering the Project will not spill back into the intersection. However, the Project proposes to allow westbound vehicles to enter the site from the Sebastopol Avenue driveway even though there is not an existing turning lane. Without a turning lane, there is a potential conflict between left turning vehicles and through traffic that could possibly cause queuing. Sixteen vehicles in the weekday AM peak hour and 39 vehicles in the weekday PM peak hour are expected to turn left into the driveway on Sebastopol Avenue. There is potential for queuing and conflict between westbound left vehicles entering the Project, northbound left vehicles exiting the Project, and the vehicles queued in the leftmost westbound through lane at the Petaluma Avenue / Sebastopol Avenue intersection, most of who are destined for the westbound left turn at North Main Street / Bodega Avenue. These conflicts could affect both Project-generated traffic attempting to enter or exit the site using the Sebastopol Avenue driveway, as well as traffic in the leftmost westbound through lane at the Petaluma Avenue / Sebastopol Avenue intersection.

For example, vehicles attempting to go westbound through the Petaluma Avenue / Sebastopol Avenue intersection (and eventually turn left at North Main Street / Bodega Avenue) may experience some delay if they are trapped behind vehicles attempting to turn left into the Project driveway on Sebastopol Avenue. However, it should be noted this does not necessarily represent an entirely "new" delay, as the impeded westbound through traffic may have been trapped in queue closer to the intersection if the signal was red for the westbound approach during this time. A similar effect could occur with the second downstream intersection at North Main Street / Bodega Avenue, as vehicles that get trapped may have been forced to wait at the signal to make their left turn regardless of the upstream conditions. Project-generated traffic exiting the Sebastopol Avenue driveway may also have difficulties finding a gap in traffic if the queue in the leftmost westbound through lane at the Petaluma Avenue / Sebastopol Avenue intersection extends to the driveway location. The crosswalk immediately west of the Project driveway on Sebastopol Avenue would create gaps to allow vehicles to exit the Project site. However, the recommended right-in / right-out restriction on the Sebastopol Avenue driveway would significantly improve operations at the driveway.

Given the traffic volumes and the available gaps in traffic, no significant circulation impact is expected due to the driveway placement along Sebastopol Avenue, but if conditions worsen, the conflict can be eliminated by restricting the Sebastopol Avenue driveway to right-in / right-out access. This could be achieved through signage or installation of barriers in the median of Sebastopol Avenue.

EMERGENCY VEHICLE ACCESS

Under Existing plus Project Conditions, the roadway network configuration remains the same as under Existing Conditions, which enables emergency vehicle response to all buildings near the Project. Emergency vehicles can enter or exit the Project site via any of the four driveways, all of which are wider than 20 feet, which would allow sufficient access for emergency vehicles. The configuration of the Project enables emergency vehicle response to the Project; however, maneuverability is restricted within the Project site due to Project parking. It is expected that emergency vehicles would enter the site from one driveway and exit through another driveway, which would allow vehicles to travel without having to back up. Given that emergency vehicle and truck movements will only occur for short periods, the potential conflict between emergency vehicles and delivery vehicles pulling into and out of the loading space is negligible. The closure of Barnes Street would not result in impacts to emergency vehicle access, as it is 15-foot wide which is too narrow to allow adequate emergency vehicle access.

PHARMACY DRIVE-THROUGH

The placement and configuration of the pharmacy drive-through and driveways allow for quick and easy access into the drive-through and permit drivers to exit the Project from any of the three driveways. The pharmacy drive-through consists of two lanes, which allows more vehicle queuing. The drive-through is isolated from the parking area, which helps avoid potential conflicts between customers utilizing the drive-through and motorists or pedestrians. Drivers going to the pharmacy drive-through will most likely enter from Sebastopol Avenue and exit onto Petaluma Avenue. It is recommended that clear signage directing vehicles to the pharmacy drive-through be placed. The pharmacy drive-through has a queue capacity of approximately fourteen vehicles, which is sufficient to avoid excess queuing that blocks the access driveways. The queue capacity was calculated based on the average length of a vehicle of 20 feet.

BANK DRIVE-UP ATM

The bank drive-up ATM is located immediately adjacent to the easterly driveway on Abbott Street as illustrated in **Figure 2**. Drivers going to the bank drive-up ATM can enter through the Sebastopol Avenue, Petaluma Avenue, or eastern Abbott Avenue driveway, but can only egress from the western Abbott Avenue driveway. It is recommended that clear signage directing vehicles to the drive-up ATM be placed. The bank drive-up ATM has sufficient queuing storage to accommodate three vehicles, but if demand exceeds this capacity, queues may spill back and interfere with vehicles within the site.

PEDESTRIAN ACCESS

Pedestrian access to and from the Project is adequate as there are crosswalks through the pharmacy drive-through along Sebastopol Avenue and Petaluma Avenue that allow pedestrians on the sidewalks of the streets to easily enter the Project. The location of the proposed driveway on Sebastopol Avenue causes a conflict between the unsignalized pedestrian midblock crosswalk and vehicles entering or exiting the driveway. Seven vehicle during the weekday AM peak hour and 27 vehicles during the weekday PM peak hour would conflict with the crosswalk on Sebastopol Avenue. Since the conflicting traffic volumes and corresponding pedestrian volumes in the crosswalk are low, and that the recommended right-in / right-out restriction at the Sebastopol Avenue driveway, discussed under the access driveway section, would also improve pedestrian safety and alleviate vehicle and pedestrian conflict at the crosswalk, the Project is not expected to result in a significant impact at this location.

SIGHT DISTANCE

The Project design at the southeast corner of Petaluma Avenue and Sebastopol Avenue does not affect the sight distance around the corner for vehicles turning right on the northbound approach, as the Project building does not block the vision of eastbound through vehicles. The Project design has a setback at the corner, which allows drivers sufficient sight distance. It is recommended that the landscaping and signage at the corner be low and maintained to allow for sufficient sight distance.

4.3 2030 CUMULATIVE CONDITIONS

4.3.1 BACKGROUND GROWTH

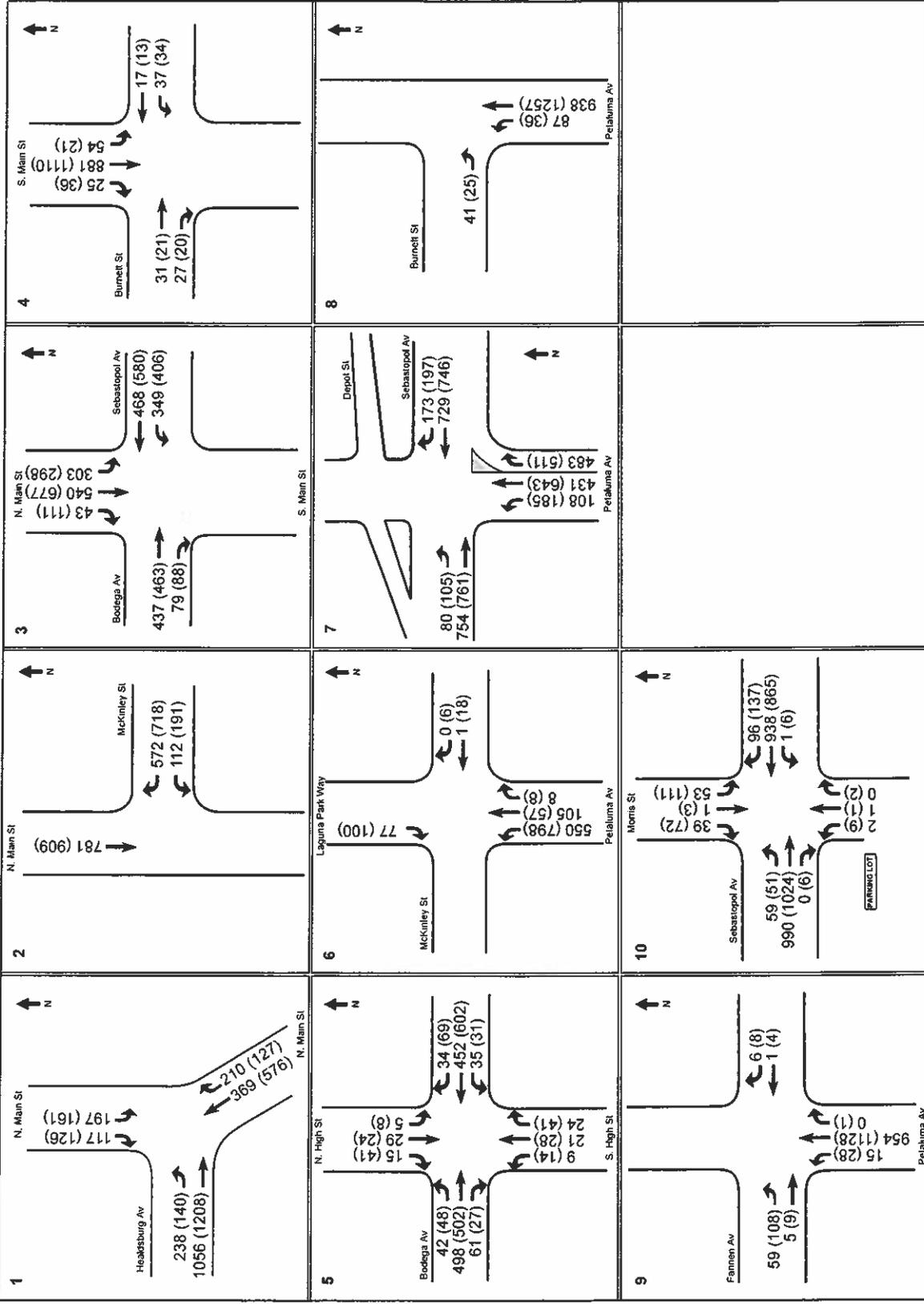
Background growth in travel demand near the Project consists of general growth in the city and region. General growth is accounted for through the use of growth factors. Annual growth rates for traffic were obtained from link volumes from the Sonoma County Transportation Authority Model and applied to the intersection counts for Existing Conditions to derive traffic volumes for 2030 Cumulative Conditions.

4.3.2 TRANSPORTATION NETWORK CHANGES

Under 2030 Cumulative Conditions, there are no changes to the roadway network from the Existing Conditions.

4.3.3 TRAFFIC CONDITIONS

The 2030 Cumulative Conditions traffic volumes are shown in **Figure 11**. The 2030 Cumulative Conditions intersection Level of Service is summarized in **Table 10**. The detailed LOS calculations are included in **Appendix B**.



2030 CUMULATIVE CONDITIONS - TRAFFIC VOLUMES
Weekday AM (PM) Peak Hour

Table 10: Intersection Level of Service — 2030 Cumulative Conditions

Intersection		Peak Hour	Existing Conditions		2030 Cumulative Conditions	
			LOS	Delay ⁽¹⁾	LOS	Delay ⁽¹⁾
1	North Main Street / Healdsburg Avenue	AM	B	13.0	C	24.4
		PM	B	13.1	C	31.9
2	North Main Street / McKinley Street	AM	A	7.6	A	7.8
		PM	A	8.8	A	9.3
3	North Main Street / Bodega Avenue	AM	D	37.0	D	46.5
		PM	D	41.0	D	52.6
4	South Main Street / Burnett Street	AM	C	18.4	C	19.8
		PM	B	14.6	C	15.2
5	North High Street / Bodega Avenue	AM	C	24.5	D	31.0
		PM	E	35.1	F	50.1
6	Petaluma Avenue / McKinley Street	AM	C	15.8	C	16.3
		PM	D	28.2	D	30.1
7	Petaluma Avenue / Sebastopol Avenue	AM	C	29.9	C	32.3
		PM	C	29.7	C	31.8
8	Petaluma Avenue / Burnett Street	AM	C	14.2	B	14.8
		PM	B	13.2	B	13.6
9	Petaluma Avenue / Fannen Avenue	AM	C	15.7	C	16.7
		PM	C	22.6	D	26.3
10	Morris Street / Sebastopol Avenue	AM	B	14.2	B	16.3
		PM	B	17.5	C	20.8

Source: AECOM, 2011.

Notes:

- **Bold** indicates intersection operating at unacceptable LOS (LOS E or LOS F).

⁽¹⁾ Delay presented in seconds per vehicle. Average delays beyond 120 seconds are shown as ">120.0" because delays above this threshold are beyond the meaningful range of the analysis.

The following intersections operate at LOS E or worse in 2030 Cumulative Conditions:

5. North High Street / Bodega Avenue (*weekday PM peak hour*).

4.4 2030 CUMULATIVE PLUS PROJECT CONDITIONS

4.4.1 TRAFFIC IMPACTS

The 2030 Cumulative plus Project Conditions traffic volumes are shown in **Figure 12**. The 2030 Cumulative plus Project Conditions intersection Level of Service is summarized in **Table 11**. The detailed LOS calculations are included in **Appendix B**.

Table 11: Intersection Level of Service — 2030 Cumulative plus Project Conditions

Intersection	Peak Hour	2030 Cumulative Conditions		2030 Cumulative plus Project Conditions	
		LOS	Delay ⁽¹⁾	LOS	Delay ⁽¹⁾
1 North Main Street / Healdsburg Avenue	AM	C	24.4	C	25.3
	PM	C	31.9	D	35.5
2 North Main Street / McKinley Street	AM	A	7.8	A	7.9
	PM	A	9.3	A	9.8
3 North Main Street / Bodega Avenue	AM	D	46.5	D	47.7
	PM	D	52.6	E	57.1
4 South Main Street / Burnett Street	AM	C	19.8	C	19.8
	PM	C	15.2	C	22.0
5 North High Street / Bodega Avenue	AM	D	31.0	D	31.7
	PM	F	50.1	F	56.4
6 Petaluma Avenue / McKinley Street	AM	C	16.3	C	16.5
	PM	D	30.1	D	32.9
7 Petaluma Avenue / Sebastopol Avenue	AM	C	32.3	C	32.5
	PM	C	31.8	C	32.5
8 Petaluma Avenue / Burnett Street	AM	B	14.8	C	15.5
	PM	B	13.6	C	15.3
9 Petaluma Avenue / Fannen Avenue	AM	C	16.7	C	16.9
	PM	D	26.3	D	28.0
10 Morris Street / Sebastopol Avenue	AM	B	16.3	B	17.0
	PM	C	20.8	C	23.5

Source: AECOM, 2011.

Notes:

- **Bold** indicates intersection operating at unacceptable LOS (LOS E or LOS F).

⁽¹⁾ Delay presented in seconds per vehicle. Average delays beyond 120 seconds are shown as ">120.0" because delays above this threshold are beyond the meaningful range of the analysis.

The following intersections operate at LOS E or worse in the 2030 Cumulative plus Project Conditions:

3. North Main Street / Bodega Avenue (*weekday PM peak hour*).

The following intersections continue to operate at LOS E or worse in the 2030 Cumulative plus Project Conditions:

5. North High Street / Bodega Avenue (*weekday PM peak hour*).

The intersections operating at LOS E or worse are evaluated for the significance criteria in the 2030 Cumulative plus Project Conditions:

3. North Main Street / Bodega Avenue

This signalized intersection would operate at LOS D under 2030 Cumulative Conditions and degrade to LOS E under 2030 Cumulative plus Project Conditions during the weekday PM peak hour. Thus, the Project would cause a significant impact at this intersection. Project-generated traffic would represent 1.9 percent of the total traffic volumes at this intersection under 2030 Cumulative plus Project Conditions. Mitigation measures are included in Section 5.1.1.

5. North High Street / Bodega Avenue

This unsignalized intersection would operate at LOS F under 2030 Cumulative Conditions and 2030 Cumulative plus Project Conditions in the weekday PM peak hour. Since the Project would cause the average control delay to increase by 6.3 seconds, which is above the five (5.0) second threshold, the Project would cause a significant impact at this intersection. Project-generated traffic would represent 1.9 percent of the total traffic volumes at this intersection under 2030 Cumulative plus Project Conditions. Mitigation measures are included in Section 5.1.1.

ACCESS DRIVEWAY ANALYSIS

The 2030 Cumulative plus Project Conditions driveway Level of Service is summarized in Table 12.

Table 12: Level of Service—2030 Cumulative plus Project Conditions

Intersections	Peak Hour	2030 Cumulative plus Project Conditions		2030 Cumulative plus Project Conditions with Restriction	
		LOS	Delay ⁽¹⁾	LOS	Delay ⁽¹⁾
Driveway Access / Sebastopol Avenue	AM	F	>120.0	E	48.5
	PM	F	>120.0	F	82.9
Petaluma Avenue / Driveway Access	AM	B	10.9	B	11.1
	PM	B	12.0	B	12.7
Petaluma Avenue / Abbott Avenue ⁽²⁾	AM	B	11.0	B	11.0
	PM	B	12.3	B	12.5

Source: AECOM, 2011.

Notes:

- **Bold** indicates intersection operating at unacceptable LOS (LOS E or LOS F).

⁽¹⁾ Delay presented in seconds per vehicle. Average delays beyond 120 seconds are shown as ">120.0" because delays above this threshold are beyond the meaningful range of the analysis.

⁽²⁾ Two driveways are located along Abbott Avenue; however, only the intersection of Petaluma Avenue / Abbott Avenue was analyzed as Abbott Avenue carries minimal through traffic and Project trips would enter and exit the Abbott Avenue driveways via Petaluma Avenue, which carries high through traffic. Thus, the Petaluma Avenue / Abbott Avenue intersection would account for all traffic utilizing both Abbott Avenue driveways. The analysis focuses on the governing condition for the two Abbott Avenue driveways, which occurs at the Petaluma Avenue / Abbott Avenue intersection.

The Project access driveway on Sebastopol Avenue is expected to operate at LOS F in the weekday AM and PM peak hours under 2030 Cumulative plus Project Conditions. The northbound approach would have a 95th percentile queue length of 50 feet in the weekday AM peak hour, which is approximately two vehicles, and 225 feet in the weekday PM peak hour, which is slightly greater than eight vehicles. The left-most lane along westbound Sebastopol Avenue would have a 95th percentile queue length of 25 feet in the weekday AM and PM peak hour (approximately one vehicle-length), and an average delay of 2.0 seconds in the AM peak hour and 5.4 seconds in the weekday PM peak hour. Thus, drivers attempting to exit the Project parking lot would experience high levels of delay, but there would be no substantial effect to traffic flow along Sebastopol Avenue.

If the right-in / right-out restriction described under Existing plus Project Conditions is implemented, vehicles on the northbound left and westbound left movements at the access driveway on Sebastopol Avenue will need to be rerouted to the access driveway on Petaluma Avenue. Even with the additional rerouted traffic, the Petaluma Avenue / Sebastopol Avenue, North Main Street / Bodega Avenue, North Main Street / Burnett Street, and Petaluma Avenue / Fannan Avenue intersections are expected to continue to operate at acceptable LOS with the previously proposed mitigation measures, during the weekday AM and PM peak hours. Therefore, the restriction is not expected to have any secondary impacts on study intersections.

The affected intersections due to the rerouted traffic are discussed in detail below:

3. North Main Street / Bodega Avenue
The intersection would continue to operate at LOS D during the AM and LOS E during the PM peak hour under restricted conditions. Proposed mitigations discussed in Chapter 5 would improve the intersection to acceptable LOS.
4. North Main Street / Burnett Street
The intersection would continue to operate at LOS C during the AM and PM peak hour under restricted conditions.
7. Petaluma Avenue / Sebastopol Avenue
The intersection would continue to operate at LOS C during the AM and PM peak hour under restricted conditions.
9. Petaluma Avenue / Fannen Avenue
The intersection would continue to operate at LOS C during the AM and LOS D during the weekday PM peak hour under restricted conditions.

With the right-in / right-out restriction, the access driveway on Sebastopol Avenue is expected to operate at LOS E with 48.5 seconds of delay during the weekday AM peak hour and LOS F with 82.9 seconds of delay during the weekday PM peak hour. The 95th percentile queue length on the driveway is expected to be 25 feet (approximately one vehicle-length) during the weekday AM peak hour and 50 feet (approximately two vehicle-lengths) during the weekday PM peak hour. No queue is expected on the westbound approach during the weekday AM and PM peak hour, as the westbound left-turn into the driveway would be prohibited. Although the Sebastopol Avenue driveway would continue to operate at LOS F during the PM peak hour, overall operations with respect to queues and delays within the Project parking lot would improve substantially with the right-in / right-out restriction. Thus, a right-in / right-out restriction on the Sebastopol Avenue driveway is recommended.

5.0 MITIGATION AND IMPROVEMENT MEASURES

This chapter presents the transportation mitigation measures that would be required to reduce the impacts of the Project to less-than-significant levels. In addition, improvement measures have been identified that would improve operating conditions where there would be non-significant impacts.

5.1 EXISTING PLUS PROJECT CONDITIONS

5.1.1 TRAFFIC

The Project would not result in any significant impacts to intersection operating conditions. Therefore, no mitigation measures for traffic conditions are required.

However, the following improvement measures are proposed to address circulation issues:

- Reserve parking spaces closest to the loading space for additional loading activity in order to alleviate conflicts between vehicles and loading activity;
- Schedule deliveries during off-peak hours in order to alleviate conflicts between vehicles and loading activity;
- Require staff of the associated delivery truck (bank / pharmacy) to direct pedestrians and traffic in the parking lot when delivery trucks enter and exit the site in order to ensure safe truck ingress and egress;
- Place three signs (locations of these signs are discussed in Section 4.2.7) in order to direct vehicles to properly access the drive-up ATM; and,
- Restrict the Sebastopol Avenue driveway to right-in / right-out access through signage, installation of barriers in the median of Sebastopol Avenue, and / or design the driveway with a channelizing concrete island.

5.1.2 TRANSIT

The Project would not have a significant impact to transit ridership and capacity, since Project-generated transit ridership is expected to be negligible.

The effect of Project-generated vehicular traffic on transit operations in the Project area is also expected to be negligible. Therefore, no mitigation measures for transit conditions are required.

5.1.3 PEDESTRIAN

Project-generated pedestrian traffic is expected to be low and can be accommodated on existing sidewalks and crosswalks without major concern.

The effect of Project-generated vehicular traffic on pedestrians would not be substantial enough to increase the potential for vehicle-pedestrian conflict. Therefore, no mitigation measures for pedestrian conditions are required.

5.1.4 BICYCLE

Project-generated bicycle traffic is expected to be negligible and can be accommodated on the existing roadways.

The addition of Project-generated vehicular traffic would not be substantial enough to increase the potential for vehicle-bicycle conflict. Therefore, no mitigation measures for bicycle conditions are required.

5.1.5 PARKING AND LOADING

The Project would not have a significant impact on parking and loading, since sufficient parking and loading spaces are provided for the Project.

The Project loading and parking supply exceeds the *City of Sebastopol Municipal Code* requirements and the parking supply exceeds the projected ITE demand for the Project.

5.1.6 SITE ACCESS AND CIRCULATION

The Project would not have a significant impact on site access and circulation, since access to and from the Project, as well as internal circulation within the Project, are sufficient.

The proposed abandonment of Barnes Street, currently bisecting the two parcels of the Project site, into one congruent parcel as part of the Project would not result in a significant impact on site access and circulation, and emergency vehicle access as these considerations would be adequately maintained.

5.2 2030 CUMULATIVE PLUS PROJECT CONDITIONS

5.2.1 TRAFFIC

The following mitigation measures are needed to mitigate Project-generated traffic impacts under 2030 Cumulative plus Project Conditions:

- North Main Street / Bodega Avenue

Reoptimize the signal timing at this intersection, during the weekday PM peak period while maintaining the existing cycle length. With reoptimization, the intersection is expected to operate at LOS D with delay of 39.8 seconds in the weekday PM peak hour.

Reoptimization of the signal typically includes development of signal timing plans and reallocation of green time for each intersection approach relative to the traffic volumes on those approaches. Depending on the existing traffic signal infrastructure, this may also require an upgrade to the signal controller, installation of global positioning system (GPS) communication, signal interconnect cables, and other equipment in order to allow the traffic signal to operate in concert with adjacent signals.

However, since North Main Street is designated as part of SR 116, any proposed mitigation measure—including changes to signalization, signal infrastructure, or lane geometries—would require further studies and Caltrans approval before implementation because the City has no jurisdiction over these facilities. Since Caltrans is in agreement with the proposed mitigation measure, the impact is expected to be less than significant with the implementation of the mitigation measure.

- North High Street / Bodega Avenue

This unsignalized intersection failed to meet any of the traffic signal warranting criteria based on *Manual on Uniform Traffic Control Devices* (MUTCD) that indicates that a traffic signal should not be installed. The detailed criteria are included in **Appendix C**. By prohibiting left turns on the northbound and southbound approach on North High Street at this intersection will improve the intersection level of service. With the prohibition, the intersection is expected to operate at LOS D with a delay of 31.7 seconds in the weekday AM peak hour and LOS E with a delay of 45.4 seconds in the PM peak hour. Prohibiting left turns on the southbound approach will redirect five vehicles in the AM peak hour and nine vehicles in the PM peak hour. Prohibiting left turns on the northbound approach will redirect nine vehicles in the AM peak hour and 14 vehicles in the PM peak hour. Prohibiting the northbound and southbound left turns at the intersection, will have minimal effects on residents as other nearby roadways such as Willow Street, Edman Way, and Wilton Avenue can be used. As these roadways are in a residential area, the expected impact on nearby intersections will not be significant.

With the proposed mitigation measure, the intersection would continue to operate at unacceptable LOS in the PM peak hour; however, the delay increase would be below the 5.0 second threshold. Therefore, with the implementation of the proposed mitigation the impact is expected to be less than significant.

Air Quality Impact Study for 6877 Sebastopol Avenue Sebastopol, California

Air Quality Impact Study for 6877 Sebastopol Avenue Sebastopol, California

Snigdha Mehta

Prepared By Snigdha Mehta, EIT

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Reviewed By John Koehler, Sc.D.

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1.0 Summary

Description of Proposed Action

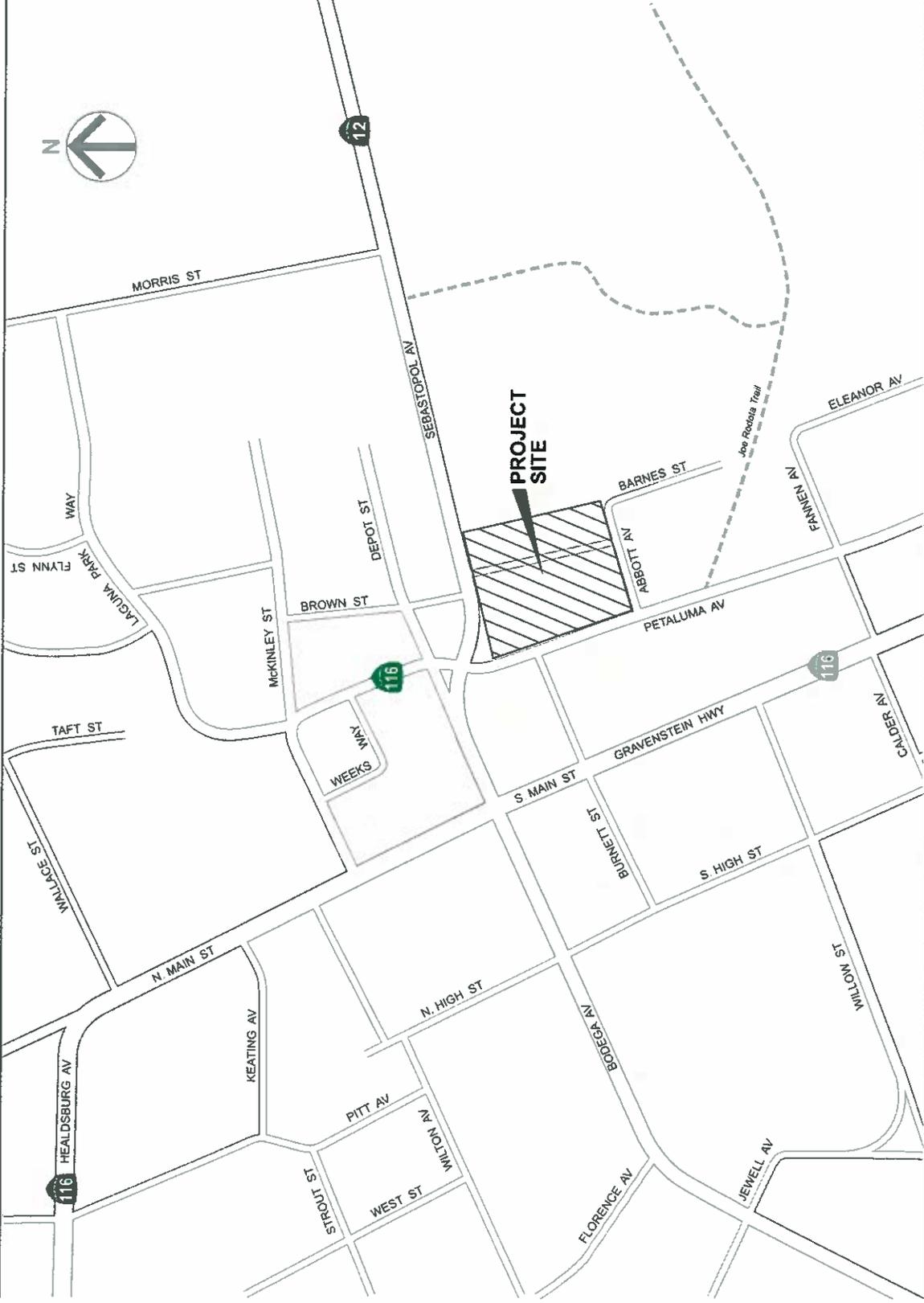
The City of Sebastopol is evaluating a proposed development that includes a drive-through pharmacy and a bank with drive-up ATM at 6877 Sebastopol Avenue in Sebastopol, California, herein referred to as the "Project". The Project is located at the southeast corner of the intersection of Petaluma Avenue and Sebastopol Avenue and bounded by Sebastopol Avenue to the north, Abbott Avenue to the south, and Petaluma Avenue to the west. The Project location is illustrated in **Figure 1**. Currently, the Project site is occupied by existing, but inactive, commercial/retail land uses. The existing buildings on the site will be demolished to construct a new CVS pharmacy retail store with a drive-through facility (14,576-square-foot building footprint area) and a new bank with a drive-up ATM (4,327-square-foot building footprint area).

This document evaluates the potential impacts on air quality from the construction and operation of the proposed Project.

The proposed Project falls within Bay Area Air Quality Management District (BAAQMD) jurisdiction. Potential air quality impacts were assessed according to the BAAQMD California Environmental Quality Act (CEQA) Guidelines, and against the new BAAQMD CEQA Significance Thresholds adopted on June 2, 2010. These include significance thresholds for:

- Criteria air pollutant emissions and greenhouse gas (GHG) emissions from Project operations
- Criteria air pollutant emissions from Project construction

As discussed below, with mitigation measures, the Project satisfies all the criteria set forth in the BAAQMD CEQA Guidelines and therefore, the air quality impacts from the proposed Project are less than significant.



6877 SEBASTOPOL AVENUE TRANSPORTATION IMPACT STUDY

Figure 1
PROJECT LOCATION AND VICINITY

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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2.0 Air Quality Impacts

- Would the project:

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

Comment to Question 2.a:

Background

The City of Sebastopol is located within the San Francisco Bay Area Air Basin (SFBAAB). Air quality issues are overseen by the BAAQMD. The "criteria air pollutants" are ozone (O₃)¹, nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter less than 10 micrometers in aerodynamic diameter (PM₁₀), particulate matter less than 2.5 micrometers in aerodynamic diameter (PM_{2.5}), and lead (Pb).

For planning purposes, regional air basins like the SFBAAB are given air quality status "labels" by the federal and state regulatory agencies with regard to compliance with the established standards for the criteria air pollutants. Areas with monitored pollutant concentrations that are lower than national or state ambient air quality standards are designated as "attainment areas" on a pollutant-by-pollutant basis. When monitored concentrations exceed ambient standards, areas are designated as "nonattainment areas." An area is designated "unclassified" if air quality data are inadequate to assign it an attainment or nonattainment designation. Unclassified areas are normally treated the same as attainment areas for regulatory purposes. Nonattainment areas are further classified based on the severity and persistence of the air quality problem as "marginal", "moderate," "serious", "severe", or "extreme." Classifications determine the applicability and minimum stringency of pollution control requirements.

The U.S. Environmental Protection Agency (EPA) classified the SFBAAB as a "marginal" nonattainment area for ozone (O₃) relative to the previous 8-hour national standard of 0.08 parts per million (ppm), effective June 15, 2004. The EPA lowered the national 8-hour O₃ standard to 0.075 ppm effective May 27, 2008, but an official classification relative to the new standard is anticipated by July 31, 2011. The air basin is also currently designated as "nonattainment" for the national 24-hour PM_{2.5} standard and "unclassified" for the national 24-hour PM₁₀ standard. The Bay Area is designated as an attainment area for the remaining national standards (NO₂, SO₂, CO, and lead). Relative to the generally more stringent state standards, the California Air Resources Board (ARB) has given the air basin state-level nonattainment status for O₃ (severe), PM₁₀ (serious), and PM_{2.5} (serious), and state-level attainment status for NO₂, SO₂, CO, and lead.

Significance Thresholds

Project-related air quality impacts would be considered significant if any BAAQMD CEQA significance thresholds are exceeded. On June 2, 2010, the BAAQMD adopted revised CEQA significance thresholds for air quality. These revised criteria apply to proposed new sources of emissions and proposed new sensitive receptors near existing emission sources. The currently proposed Project would present proposed new sources of emissions, for which the revised criteria apply if a Notice of Preparation (NOP) was published or the environmental analysis began on or after June 2, 2010, such as with the proposed Project. The BAAQMD CEQA significance levels include thresholds for construction and operational emissions. The thresholds as they apply to the proposed Project are summarized in **Table 2-1**.

1. Reactive organic gases (ROG) and nitrogen oxides (NO_x) are precursors to the formation of atmospheric ozone, a regional air pollutant

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Table 2-1 BAAQMD CEQA Significance Thresholds for Individual Projects Adopted June 2, 2010

Pollutant	Construction	Operation	
	Average Daily Emissions (lb/day)	Average Daily Emissions (lb/day)	Maximum Annual Emissions (tons/year)
Criteria Air Pollutants			
Reactive Organic Gases (ROG)	54	54	10
NO _x	54	54	10
PM ₁₀	82 (exhaust only)	82	15
PM _{2.5}	54 (exhaust only)	54	10
PM ₁₀ /PM _{2.5} (fugitive dust)	Best Management Practices	None	None
Local CO	None	9.0 ppm (8-hour average, 20.0 ppm (1-hour average)	
Risk/Hazards			
Increased Cancer Risk	>10 in one million	>10 in one million	>10 in one million
Increased Non-Cancer Risk	>1.0 Hazard Index (chronic or acute)	>1.0 Hazard Index (chronic or acute)	>1.0 Hazard Index (chronic or acute)
Ambient PM _{2.5} Increase	>0.3 µg/m ³	>0.3 µg/m ³	>0.3 µg/m ³
Zone of Influence	1000-foot radius from fenceline of source	1000-foot radius from fenceline of source	1000-foot radius from fenceline of source

Construction Emissions

Potential emissions during the Project construction phase were estimated using the Urban Emissions (URBEMIS) 2007 Version 9.2.4 computer model, in accordance with BAAQMD guidance provided in *California Environmental Quality Act Air Quality Guidelines* (BAAQMD 2010a). URBEMIS is designed to model construction emissions for land use development projects and allows for the input of project-specific information.

The supporting documentation provided in **Appendix A** for construction air emissions calculations includes the URBEMIS model inputs and outputs. Electronic versions are also on file with the City of Sebastopol and available upon request. Construction is anticipated to begin in the Fall of 2011 and continue through the Spring of 2012. Sources of NO_x, PM₁₀, PM_{2.5}, CO, and ROG² emissions considered, for modeling, during construction include off-road equipment and vehicle exhaust. Emissions of PM₁₀ and PM_{2.5} from fugitive dust and ROG from asphalt paving and architectural coating activities were also included in the estimates. ROG emissions from architectural coatings were calculated outside of URBEMIS, and are based on the Project developer's estimate of paint use for the interior surfaces of the buildings. The exterior surfaces of the buildings will be finished with pre-mixed stucco of pre-determined color. The developer proposes to use zero-VOC paints only. However, the emissions were calculated using the default VOC content of 250 grams of VOC per liter of paint, provided in URBEMIS, and therefore, providing conservative emission estimates.

2. For purposes of air quality regulation, ROG is sometimes referred to as "volatile organic compounds" (VOC).

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Table 2-2 summarizes the results of the annual and daily average construction emissions as compared to the June 2, 2010 BAAQMD CEQA significance thresholds. No mitigation measures were assumed to estimate these emissions. As such, URBEMIS "unmitigated" runs are reported.

Table 2-2 Construction Emissions

Parameter	ROG	NOx	PM ₁₀ (exhaust)	PM _{2.5} (exhaust)	PM ₁₀ (dust)	PM _{2.5} (dust)
Average Annual Emissions (tons/yr)	0.13	0.75	0.03	0.03	0.89	0.19
Average Daily Emissions (lb/day)	16.67	48.71	2.88	2.65	60.18	12.54
BAAQMD Significance Levels (lb/day)	54	54	82	54	Best Management Practices	
Significant Emissions Increase?	NO	NO	NO	NO	NO	NO

BAAQMD recommends that projects implement all basic construction measures listed in Table 8-2 of the *BAAQMD CEQA Guidelines* (BAAQMD 2010a) whether or not the construction-related emissions exceed applicable thresholds of significance. Consequently, even though the construction emissions are below the thresholds, the proposed project should implement all of the following construction measures via conditions of approval, as listed in Table 8-2 of the *BAAQMD CEQA Guidelines*:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

As shown in Table 2-2, these findings lead to a **less-than-significant** impact to air quality according to the *BAAQMD CEQA Air Quality Guidelines*. Details of these calculations can be found in **Appendix A**.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Operational Emissions

Emissions during the Project's operation phase were also estimated using the URBEMIS2007 model. These emissions will result from mobile sources – such as customer and employee travel, and material transportation – and fuel combustion to power equipment within the buildings. **Appendix B** provides the URBEMIS inputs and outputs for the operation phase. Electronic versions are also on file with the City of Sebastopol and available upon request. As explained in **Appendix B**, the URBEMIS2007 model has default “unmitigated” assumptions and additional “mitigation” options that can be selected, which are inherent project features or additional project add-on measures. Some of the “mitigation” measures built into the URBEMIS2007 model were incorporated by the project. The BAAQMD recommends lead agencies to consider project design features, attributes, or local development requirements as part of the project as proposed. As the selected additional measures in the URBEMIS2007 model runs are inherent features of the proposed Project or additional project add-on measures, these are considered Project-committed attributes.

Table 2-3 summarizes the estimated project operational emissions, including the effect of the incorporated project features, and compares the results against the June 2, 2010 BAAQMD CEQA significance thresholds. As shown in **Table 2-3**, operational emissions of criteria pollutants are below the BAAQMD CEQA significance thresholds and therefore, the impacts are **less than significant**.

Table 2-3 URBEMIS Project Operations Emissions

Emissions		ROG	NOx	PM10 Total	PM2.5 Total
Mitigated Maximum Daily Emissions (lb/day)	Area Source	0.13	0.14	0.01	0.01
	Vehicle	9.48	11.03	12.31	2.36
	Total	9.61	11.17	12.32	2.37
CEQA Significance Thresholds	Daily Emissions (lb/day)	54	54	82	54
Significant Impact? (Yes/No)	Daily	NO	NO	NO	NO
Mitigated Annual Emissions (tons per year)	Area Source	0.04	0.03	0.00	0.00
	Vehicle	1.47	1.58	2.25	0.43
	Total	1.51	1.61	2.25	0.43
CEQA Significance Thresholds	Annual Emissions (tpy)	10	10	15	10
Significant Impact? (Yes/No)	Annual	NO	NO	NO	NO

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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The Project will also meet all of the screening criteria set forth in BAAQMD CEQA Guidelines Section 3.3 for carbon monoxide (CO) impacts from project-related traffic, including:

1. *Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.*
2. *The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.*
3. *The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).*

The cumulative traffic volume, at the affected intersections, after the Project will be 19,068 vehicles per hour (AECOM 2010) and will not increase substantially at intersections where vertical and/or horizontal mixing is limited. Given that the Project meets the CO screening levels, no further analysis or quantification of CO impacts are needed.

As shown above, no BAAQMD CEQA significance thresholds will be exceeded during construction or operation of the Project. Thus, the project will have **less-than-significant impact** on the implementation of any applicable air quality plans and no mitigation is required.

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

Comment to Question 2.b:

The BAAQMD has established screening criteria as conservative indicators of whether the proposed Project could result in potentially significant air quality impacts. **Table 2-4** below shows the square footages of the proposed Project are less than the screening level sizes for construction and operation-related criteria air pollutants, set forth in Table 3-1 of the BAAQMD CEQA Guidelines (BAAQMD 2010a), which indicate less-than-significant air quality impacts.

Table 2-4 Screening Level Sizes and Project Size Comparison

Land Use Type	Project Size (sq. ft)	
	Pharmacy/drugstore (with drive through)	Bank (with drive-through)
Operational-Related Screening Size	49,000 (NO _x)	17,000 (NO _x)
Construction-Related Screening Size	277,000 (ROG)	277,000 (ROG)
Gross Interior Floor Space ^a	16,530	4,327

^a Gross interior floor space area includes a mezzanine inside the proposed CVS/pharmacy, thus gross floor space is larger than the proposed building footprint. In the case of the bank, gross floor space is the same as the proposed building footprint.

Supplementing this finding are the actual emissions analyses presented above under 2.a. demonstrating that all criteria pollutant emissions during both the construction and operation phases will be less than the applicable BAAQMD significance thresholds. According to BAAQMD guidance (BAAQMD 2010a), emissions from individual projects present a **less-than-significant** air quality impact.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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In developing thresholds of significance for air pollutants, the BAAQMD considered emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, then no further analysis for cumulative impacts is needed; its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. In the case of the proposed Project, the individual project emissions are less than significant, and as discussed under 2.c. below, the Project's emissions are not cumulatively considerable. Therefore, construction and operational emissions from the Project will not cause or contribute to a violation of any national or state ambient air quality standard when considering its projected emissions with other regional emissions and the impacts will be **less than significant**.

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

Comment to Question 2.c:

The BAAQMD is currently in nonattainment of the national and state ozone standards. NOx and ROG are precursors to ozone formation. The District is also nonattainment for PM₁₀ and PM_{2.5}. Temporary net increases of these emissions will result from construction activities. During operation, these will be generated mainly from mobile sources.

Because the project-level impacts are less than the adopted project-level CEQA significance thresholds, and these emissions are accounted for in regional air quality planning, they would not conflict with or obstruct the implementation of air quality plans as stated under Question 2.a, above. Project-level CEQA significance levels are set at values above which there would be significant adverse air quality impacts to the region's existing air quality conditions. Since emissions from the proposed Project would be well below these significance thresholds, significant cumulative air quality impacts would not result when considering existing background air quality, but could arise locally if there are other reasonably foreseeable projects with potential air quality impacts in the vicinity of the proposed project. At the present time, there are no other such reasonably foreseeable projects under consideration by the City of Sebastopol. Therefore, the Project's impacts to air quality would not be cumulatively considerable.

d) Expose sensitive receptors to substantial pollutant concentrations?

Comment to Question 2.d:

Sensitive receptors are defined as land uses where sensitive population groups are likely to be located (e.g., children, the elderly, the acutely ill, and the chronically ill). These land uses include residences, schools, childcare centers, retirement homes, convalescent homes, and medical care facilities. Emissions of criteria air pollutants associated with construction and operation of the proposed project are below BAAQMD CEQA significance levels, thus sensitive receptors would not be exposed to substantial concentrations of these pollutants or secondary regional ozone formation as a result of the Project. However, exhaust from diesel-powered vehicles and off-road equipment used during construction and diesel-fueled vehicles during operation of the Project includes PM_{2.5} and diesel particulate matter (DPM), which is identified as a toxic air contaminant (TAC) by the ARB. The potential for substantial localized exposures to TACs are assessed by the increased health risks they may pose.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Cancer risk is defined as the probability (chance) of developing cancer as a result of exposure to a carcinogen, typically expressed as the probable number of increased cases per one million population. **Non-cancer health risk** of an inhaled air toxic is measured by the hazard index, which is the ratio of the reported concentration of an air toxic compound to an acceptable or "reference" exposure level (REL). Hazard indices can be calculated both on a chronic toxicity and acute toxicity basis. Chronic toxicity is defined as adverse biologic effects caused by prolonged chemical exposure. Since chemical accumulation to toxic levels typically occurs slowly, symptoms of chronic effects usually do not appear until long after exposure commences. Acute toxicity is defined as adverse biologic effects caused by a brief chemical exposure of no more than 24 hours.

Significance thresholds for maximum increased health risks from new projects, as contained in the revised BAAQMD CEQA significance thresholds adopted July 2, 2010, are:

- An increased cancer risk greater than 10.0 in one million
- An increased non-cancer risk greater than a hazard index of 1.0 (chronic or acute)
- An ambient PM_{2.5} increase greater than 0.3 micrograms per cubic meter (µg/m³) annual average

Construction Emissions

To assess potential health risk impacts from the construction phases of the Project, the recent BAAQMD guidance, *Screening Tables for Air Toxics Evaluation During Construction* (BAAQMD 2010b) was consulted³. This guidance lists minimum distances required between a construction site and a nearby sensitive receptor to ensure that cancer and non-cancer risks associated with the project are less than significant per the District's significance thresholds for construction risk/hazards (see Table 2-1). These distances are tabulated for residential, commercial, or industrial projects as a function of the number of units or the project site acreage, based on conservative construction and dispersion modeling scenarios.

In this case, the Project would be commercial and would be assessed based on the site acreage. The total Project site area is about 2.45 acres. For this site acreage, the next higher acreage (2.8-acre) row in Table 2 of the *Screening Tables for Air Toxics Evaluation During Construction* (BAAQMD 2010b) for commercial projects would apply, which provides the following "safe" setback distances between the construction site and an off-site receptor:

Cancer risk (based on diesel particulate matter [DPM] emissions):	100 meters
Chronic hazard index (based on DPM emissions):	9 meters
Chronic hazard index (based on acrolein emissions):	1 meters
Acute hazard index (based on acrolein emissions):	55 meters
PM _{2.5} annual average concentration:	85 meters

Based on this analysis, a setback of 100 meters (328 feet) would provide for a less-than-significant cancer risk and would be greater than the minimum distances required for the other health risk parameters. The minimum distance from the construction site fence line to the closest sensitive receptor is about 115 meters (closest sensitive receptor is Sebastopol Charter School). Therefore, the potential health risks posed by construction of the proposed Project would be **less than significant**.

3. A link to the *Screening Tables for Air Toxics Evaluation During Construction* is provided hereto in Section 4.0 References.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Prior to construction of the proposed Project, the existing buildings potentially containing asbestos will be demolished. Demolition of existing buildings would be subject to BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing). BAAQMD Regulation 11, Rule 2 is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities. The rule addresses the national emissions standards for asbestos along with some additional requirements. The rule requires the Lead Agency and its contractors to notify BAAQMD of any regulated renovation or demolition activity. This notification includes a description of structures and methods utilized to determine whether asbestos-containing materials are potentially present. All asbestos-containing material found on the site must be removed prior to demolition or renovation activity in accordance with BAAQMD Regulation 11, Rule 2, including specific requirements for surveying, notification, removal, and disposal of material containing asbestos. Therefore, projects that comply with Regulation 11, Rule 2 would ensure that asbestos-containing materials would be disposed of appropriately and safely. Because BAAQMD Regulation 11, Rule 2 is in place, no further analysis about the demolition of asbestos-containing materials is needed, as stated in Section 8.3.2 of the BAAQMD CEQA Guidelines (BAAQMD 2010a). By complying with BAAQMD Regulation 11, Rule 2, demolition activity associated with the proposed Project would not result in a significant impact to air quality from asbestos.

Operational Emissions

The building equipment modeled in the URBEMIS2007 runs includes natural-gas-fired hot water heaters and space heaters. These will be less than 10 million British thermal units per hour (MMBtu/hr) in capacity, and thus, exempt from requiring a BAAQMD Permit to Operate. Such sources have very low health risk potential, typically much smaller than the risk posed by mobile sources. The Project will not use any diesel-powered emergency engines and will not have any other stationary emission sources. Thus, the only sources of TACs evaluated from the proposed Project are mobile sources. For such sources, the CEQA guidelines do not provide any screening methods for risk analysis. Therefore, a qualitative assessment of potential risk and hazards to sensitive receptors is presented here to ascertain the Project's impacts.

The total vehicle trips resulting from the proposed Project will be about 2,100 trips per day, including 55 trips per day by diesel-powered vehicles. Conservative estimates of cancer risk and health hazards for these roadways have been provided by the BAAQMD in *Roadway Screening Tables* (BAAQMD 2010c)⁴. As shown in **Table 2-5** below, the individual risks are based on an annual average daily traffic (AADT) of 78,000 vehicles/day for State Route (SR) 12 and an AADT of 4,700 for SR 116. The cumulative risk from these roadways is below 10 in one million and the PM_{2.5} concentration below 0.3 µg/m³. Therefore, it can be safely predicted that the incremental risk from the Project, with just 2,100 trips per day, will be below the BAAQMD CEQA significance thresholds for an individual project. The Project values presented in **Table 2-5** apply a simple ratio of Project AADT to the existing cumulative AADT for estimation purposes.

4. A link to the *Roadway Screening Tables* is provided hereto in Section 4.0 References.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Table 2-5 Project Risk Analysis

Roadway	SR 12	SR 116	Cumulative	Project
AADT	78,000	4,700	---	2,100
Direction	North-South	East-West	---	---
Distance from Project	100 ft	100 ft	---	---
Cancer Risk (1×10^6)	3	0.3	3.3	0.08
Chronic Hazard	0.0	0.0	0.0	0.0
Acute Hazard	0.0	0.0	0.0	0.0
PM _{2.5} Concentration ($\mu\text{g}/\text{m}^3$)	0.24	0.020	0.26	0.01

For cumulative health risk impacts from operations, the BAAQMD CEQA significance thresholds are 100-in-one-million for cancer risk, 10.0 for chronic hazard index, and $0.8 \mu\text{g}/\text{m}^3$ for PM_{2.5} from all local sources, when assessed by State- and BAAQMD-approved calculation methodologies.

For cumulative health risk screening calculations all permitted sources and major roadways within 1,000 feet from the project boundary were considered. **Table 2-6** lists these permitted sources. As shown in **Table 2-6**, the cumulative health risk will be below the BAAQMD CEQA significance thresholds for cumulative risk. Therefore, the cumulative health risk will be **less than significant**.

Table 2-6 Cumulative Risk Analysis

Plant Number / Highway Name	Facility Name	Cancer Risk (1×10^6)	Hazard Index	PM _{2.5} Concentration ($\mu\text{g}/\text{m}^3$)
G8087	Miller Oil Company	0.2	0.003	0
3605	Sebastopol Auto Body Inc	0	0	0.001
15945	Coffee Catz	0.01	0	0.04
17458	Verizon Wireless	0	0	0
SR 12	Major Roadway	3	0	0.24
SR 116	Major Roadway	0.3	0	0.02
Project	CVS Pharmacy/Bank	0.08	0	0.01
Cumulative Risk		3.59	0.003	0.311
CEQA Cumulative Risk Threshold		100	10	0.8
Significant Impact (YES/NO)		NO	NO	NO

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

Comment to Question 2.e:

The proposed land use does not fall under the specific odor generating facilities listed in Table 3-3 of the BAAQMD CEQA Guidelines and will not operate any odor source. Therefore, there will be **no impact** from the proposed Project.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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3.0 Greenhouse Gas Emissions Impact

- Would the project:

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

Comment to Question 3.a:

Greenhouse gas (GHG) emissions are quantified in units of carbon dioxide equivalent (CO₂e), which is a summation of carbon dioxide (CO₂) emissions and emissions of other GHGs such as methane (CH₄) and nitrous oxide (N₂O), each weighted relative to the global warming potential (GWP) of CO₂. Once emitted, GHGs mix in the global atmosphere and can persist for many years. The typical GWP values used in GHG assessments represent a 100-year atmospheric residence time. Thus, emissions of CO₂e anywhere on the planet contribute cumulatively to global CO₂e concentrations. GHG emissions can occur directly from the actions of a project (e.g., increased fuel usage) or indirectly, for example from increased purchased electricity.

Construction of the project would involve use of fossil-fueled vehicles and equipment. Annual GHG emissions from construction activities were estimated by URBEMIS2007 to be 92 metric tons CO₂e per year (MT CO₂e/yr). The URBEMIS2007 output files for construction are included in **Appendix A**. These estimates include only direct GHG emissions due to fuel combustion in equipment and vehicles used during construction activities.

The BAAQMD has not proposed or adopted a quantitative threshold of significance for construction-related GHG emissions. However, the June 2010 *Air Quality Guidelines* (BAAQMD 2010a) recommend that a project's construction-related GHG emissions should be quantified, and that the lead agency should attempt to make a significance determination in the absence of a numeric significance threshold. For comparative purposes, the construction-phase CO₂ emissions shown in **Appendix A** are well below the BAAQMD's June 2, 2010, significance criterion of 1,100 MT CO₂e/yr for operational emissions from a proposed source not requiring a BAAQMD permit and would not interfere with meeting AB 32 GHG reduction goals.

Sources of operational-related GHG emissions, considered for this study, include:

1. Direct sources
 - Area sources including maintenance painting and landscape equipment;
 - Mobile sources including vehicles used by customers and employees, and from material transport trucks; and
 - Natural gas combustion to power onsite equipment.
2. Indirect sources
 - Electricity consumption;
 - Energy consumption for water/wastewater treatment and conveyance; and
 - Solid waste disposal in landfills including hauling and off-gassing.

The BAAQMD-recommended URBEMIS2007 and BGM models were used to estimate CO₂e from all of these operational sources. URBEMIS2007 estimates CO₂ emissions from mobile and area sources. The URBEMIS2007 model file is imported into the BGM model to estimate CO₂e GHG emissions from rest of the sources. The inputs used to estimate the operational-related GHG emissions are listed in **Appendix C**.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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As explained in **Appendices B and C**, the URBEMIS2007 and BGM models have default “unmitigated” assumptions and additional “mitigation” options that can be selected, which are inherent project features or additional project add-on measures. Some of the “mitigation” measures built into the URBEMIS2007 and BGM models were incorporated by the project to reduce GHG emissions and are shown in **Appendix C**. Those available through the URBEMIS2007 model are included in the runs shown in **Appendix B**. These URBEMIS2007 runs were imported into the BGM model, where the effect of additional add-on measures were calculated through the BGM model. Electronic versions of BGM model outputs (as well as the URBEMIS2007 outputs) are on file with the City of Sebastopol and available upon request.

As noted above, the BAAQMD recommends lead agencies to consider project design features, attributes, or local development requirements as part of the project as proposed. As the selected additional measures in the URBEMIS2007 and BGM model runs are inherent features of the proposed Project or additional project add-on measures, these are considered Project-committed attributes. **Table 3-1** summarizes the effect of the incorporated project features.

Table 3-1 Operational GHG Emissions

Source	CO ₂ e Emissions (Metric Tons/Year)
Transportation	1,130.91
Area Sources	0.46
Electricity	99.38
Natural Gas	11.73
Water and Wastewater	1.21
Solid Waste	26.34
Sequestration	-0.23
Totals (with Project Design Features and Add-on Reductions, and no Mitigation)	1,269.80
Purchase Emission Credits and/or Implement Verified GHG Emission Reductions	-170.00
Totals (with Mitigation)	1,099.80
CEQA GHG Threshold	1,100
Significant Impact (YES/NO)	NO

As summarized in **Table 3-1**, despite the implementation of feasible project design features to reduce GHG emissions, the total operational GHG emissions associated with the proposed project without further mitigation would exceed the BAAQMD's significance threshold of 1,100 MT CO₂e/yr for an individual project. The applicant is therefore committing to further CO₂e reductions in the form of “carbon credits” and/or other City of Sebastopol or Sonoma County GHG reduction measures to offset the remaining difference between the project's estimated GHG emissions after implementation of committed project design measures and the BAAQMD significance threshold. Unlike criteria or toxic air pollutants, GHGs have a global impact in terms of potential atmospheric warming. GHG reductions anywhere on the planet can offset the impacts of increased local GHG emissions. Following the implementation of this additional mitigation, the impacts from the project will be **less than significant with mitigation incorporated**.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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The discussion below briefly summarizes the relationship between the BAAQMD's GHG significance thresholds and the relationship of these thresholds with California's goal to reduce GHG emissions to 1990 levels by 2020 pursuant to AB 32, the California Global Warming Solutions Act of 2006. An expanded discussion of the bases of the BAAQMD GHG significance thresholds is available in Appendix D, Section 2.2.2, of the *BAAQMD CEQA Air Quality Guidelines* (BAAQMD 2010a).

Discussion of BAAQMD GHG Significance Thresholds for Operational Emissions

As described in the *BAAQMD CEQA Air Quality Guidelines* (BAAQMD 2010a), there are three possible GHG significance thresholds for projects that are not stationary (industrial) sources, each of which are tied to the goals of AB 32:

1. Compliance with Qualified GHG Reduction Strategy
2. 4.6 MT CO₂e/SP*/yr (residents+employees)
3. 1,100 MT CO₂e /yr

*SP = service population

The first significance threshold is compliance with a **qualified GHG Reduction Strategy** (or an equivalent collective set of climate action policies, ordinances and other programs consistent with AB 32) adopted by a local jurisdiction, and consistent with the AB 32 Scoping Plan (ARB 2008) measures and goals. The GHG Reduction Strategy or equivalent set of measures must be approved by the BAAQMD in order to be "qualified." These should identify a land use design, transportation network, goals, policies, and implementation measures that would achieve AB 32 goals. To date, the only local jurisdiction within the BAAQMD with an approved qualified Greenhouse Gas Reduction Strategy is the City and County of San Francisco. Other local jurisdictions are seeking BAAQMD approval of their GHG Reduction Strategies, but San Francisco's is the first to be qualified. Therefore, the first significance threshold option of a qualified GHG Reduction Strategy is not currently available for the proposed project.

Although the City of Sebastopol does not have a qualified GHG Reduction Strategy or equivalent, as defined by the BAAQMD CEQA Guidelines, the City passed Resolution No. 5229 on January 15, 2002, endorsing the aims and objectives of the Cities for Climate Protection Campaign, and as a participant in this program, pledged to take a leadership role in promoting public awareness about the causes and impacts of climate change and reduce both GHG and air pollution emissions throughout the community. In October 2008, Sonoma County adopted the *Sonoma County Community Climate Action Plan* (Sonoma County 2008), outlining measures toward meeting the County's bold goal of 25 percent GHG reduction below 1990 levels by 2015 through a mix of efficiency improvements, smart transit and land use, increased renewable energy sources, and forest/farmland protection as well as other carbon sequestration practices. Example projects in Sebastopol or Sonoma County that can provide GHG reductions are listed below in the discussion of further proposed GHG mitigations for this Initial Study. Based on discussions with BAAQMD staff, while a project applicant cannot rely on conformance with a GHG Reduction Strategy or an equivalent local program that has not been through the BAAQMD qualification process, the applicant can perform or fund another project or local program that achieves verified GHG emission reductions as CEQA mitigation.

The second significance threshold option is **4.6 MT CO₂e/SP/yr** (or metric tons CO₂e per "service population" per year). To apply this metric, this value is multiplied by a number representing the "service population" (employees + residents) attributable to the proposed project to calculate a total metric tons CO₂e per year (MT CO₂e/yr) threshold for the project. This significance criterion is applicable to residential or mixed use land development projects with higher contributing populations (residents and/or employees), and is based on efficiency goals over that "service population" in line with the GHG reduction goals of AB 32. This threshold is not as appropriate to the proposed small-scale commercial project that the currently proposed action represents.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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The third significance threshold is a “bright line” of **1,100 MT CO₂e/yr** that can be applied to any project that is not a “stationary source.” This conservative threshold was established by the BAAQMD following an eight-step process. The overall approach for establishing this “bright-line” threshold was based on an assessment of the short fall or “gap” between projected 2020 statewide GHG emission inventory estimates and anticipated GHG emission reductions from adopted Scoping Plan regulations (ARB 2008). This “gap” represented additional GHG emission reductions needed statewide from land use-driven emissions, which according to the BAAQMD represented new land use development’s share of the emission reductions needed to meet statewide GHG emission reduction goals. The BAAQMD noted that the “gap-based approach” was “...a conservative approach that focused on a limited set of state mandates that appear to have the greatest potential to reduce land use development-related GHG emissions.” The approach was, as stated by the BAAQMD, “...intended to attribute an appropriate share of GHG emission reductions necessary to reach AB 32 goals to new land use development projects in BAAQMD’s jurisdiction that are evaluated pursuant to CEQA.”

Following the eight-step process explained in detail in Section 2.2.2 of Appendix D of the *BAAQMD CEQA Air Quality Guidelines* (BAAQMD 2010a), the BAAQMD choose the 1,100 MT CO₂e/yr “bright line” significance threshold (equivalent to approximately 60 single-family units), which they assessed would result in about 59 percent of all projects being above the significance threshold and having to implement feasible mitigation measures to meet their CEQA obligations. The BAAQMD estimated that these projects would account for approximately 92 percent of all GHG emissions anticipated to occur between 2010 and 2020 from new land use development in the San Francisco Bay Area Air Basin.

As depicted in **Table 3-1**, the Applicant shall commit to provide an additional reduction of 170 metric tons of carbon dioxide equivalent emissions per year (MT CO₂e/yr) beyond those achieved by project design measures in order for GHG emissions associated with the Project to be below the 1,100 MT CO₂e/yr significance threshold. The following excerpt from Section 2.2.6 of Appendix D of the *BAAQMD CEQA Air Quality Guidelines* (BAAQMD 2010a) summarizes what being below any of the BAAQMD GHG significance thresholds means in terms of contributing to solving global warming:

...the greenhouse gas emissions from land use projects expected between now and 2020 built in compliance with these thresholds would be approximately 26 percent below BAU 2020 conditions and thus would be consistent with achieving an AB 32 equivalent reduction. The 26 percent reduction from BAU 2020 from new projects built in conformance with these thresholds would achieve an aggregate reduction of approximately 1.6 MMT CO₂e/yr, which is the level of emission reductions from new Bay Area land use sources needed to meet the AB 32 goals, per ARB’s Scoping Plan as discussed above. Projects with greenhouse gas emissions in conformance with these thresholds would therefore not be considered significant for purposes of CEQA. Although the emissions from such projects would add an incremental amount to the overall greenhouse gas emissions that cause global climate change impacts, emissions from projects consistent with these thresholds would not be a “cumulatively considerable” contribution under CEQA. Such projects would not be “cumulatively considerable” because they would be helping to solve the cumulative problem as a part of the AB 32 process.

- Notations:
1. BAU stands for “business as usual”
 2. MMT means “million metric tons”

Further GHG Mitigations in Addition to Committed Project Design Measures

A GHG emission reduction of 170 MT CO₂e/yr for a calculated 40-year period shall be achieved by either or a combination of the following:

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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1. Subject to City review and approval, the applicant shall purchase CO₂e emission offsets (or "carbon credits") from a recognized organization with registered GHG reduction projects whose CO₂e emission reduction values have been verified through a protocol acceptable to the City of Sebastopol. Payment shall be required prior to issuance of a Building Permit for the first building in the project.

2. Subject to City review and approval, the applicant shall perform an improvement in Sonoma County resulting in a reduction in GHG emissions. Examples of such potential improvements include, but are not limited to: replacement of aging water or sewer pumps with more efficient pumps; installation of alternative energy systems; energy conservation improvements; alternative transportation improvements; lighting efficiency projects; or other measures providing the required offset mitigation. The Applicant shall be responsible for providing verification of proposed measures acceptable to the City of Sebastopol. City approval of a Building Permit for the Project shall not be granted unless the City has approved the measure, with any such measure required to be funded prior to issuance of a Certificate of Occupancy for the first building in the project. The funding for this measure will be provided through a contract that requires the improvement will be implemented within 5 years and if not, the funding will revert to the City of Sebastopol which will use the funding to implement another GHG reduction project or purchase offset credits.

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

Comment to Question 3.b:

The proposed Project will not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

4.0 References

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Appendix A

Construction Air Emissions Calculations

Notes for Appendix A

*It is noted that the URBEMIS runs shown in this appendix present results without further mitigation. These results are reported in **Table 2-2, Construction Emissions**.*

Electronic versions of these files are also on file with the City of Sebastopol and are available upon request.

Table 1 - URBEMIS Input Data

Step 1 - Project Location	
Project Location	BAAQMD

Step 2 - Land Use Data			
Land Use Type	Gross Area Covered (sq. feet)	Site Acreage (Acres)	Trip Rate (Trips/per day/1000 sq. ft)
Bank Drive Through	4327	0.51	148.15
Pharmacy Drive Through	16530	1.94	88.16

Step 3 - Construction Phasing			
Construction Phase	Phase Start Date	Phase End Date	Comment
Demolition	October 24, 2011	November 21, 2011	5 Existing Buildings To be Demolished
Mass Site Grading	November 28, 2011	December 12, 2011	
Fine Site Grading	January 12, 2012	January 19, 2012	
Trenching	December 12, 2011	January 12, 2012	
Building Construction	January 12, 2012	April 20, 2012	
Asphalt Paving	January 19, 2012	February 19, 2012	
Architectural Coating	Apr-12	May-12	4 days in April for Pharmacy and 1 day in May for Bank. Refer to Table 3

Table 1 - URBEMIS Input Data

Step 4 - Construction Phase Specific Data			
Phase	Parameter	Value	Comment
Demolition	Total width of the building demolished (Feet)	180	Refer to Table 2
	Total length of the building demolished (Feet)	180	
	Total height of the building demolished (Feet)	21	
	Max daily width of the building demolished (Feet)	85	
	Max daily length of the building demolished (Feet)	80	
	Max daily height of the building demolished (Feet)	21	
Mass Site Grading	Debris hauling distance (Miles)	21	Refer to Table 2
	Equipment type and daily number	URBEMIS Default	
	Total Area to be graded (Acres)	2.33	
	Maximum area disturbed daily (acres/day)	2.33	
	Fugitive Dust	URBEMIS Default	
	Equipment type and daily number	URBEMIS Default	
Fine Site Grading	Total amount of soil imported (cu. Yd)	3,800	
	Total amount of soil exported (cu. Yd)	0	
	Total Area to be graded (Acres)	2.33	
	Maximum area disturbed daily (acres/day)	1.00	
	Fugitive Dust	URBEMIS Default	
	Equipment type and daily number	URBEMIS Default	
Trenching	Total amount of soil imported (cu. Yd)	400	
	Total amount of soil exported (cu. Yd)	0	
Building Construction	Equipment type and daily number	URBEMIS Default	
	Equipment type and daily number	URBEMIS Default	
Asphalt Paving	Total area to be paved with asphalt (Acres)	1.53	
	Equipment type and daily number	URBEMIS Default	

Table 2 - Demolition Tab Data

Average Dimensions of Buildings to be Demolished			
Existing Building	Area*	Height*	Volume
	sq. ft	ft	cu. ft
A	3446	30	103380
B	11436	20	228720
C	10400	20	208000
D	5916	20	118320
E	1040	18	18720
TOTAL	32238		677140
Average	Average Width	Average Width	Average Height
Building Dimensions	180	180	21

Average Distance of Disposal Sites from the Project Site		
Debris Haul Distance*	Percent Time*	Average Distance
Miles		Miles
8	90%	10.4
32	10%	21
Total	100%	
* Reference - Email communication between Bill McDermott at Armstrong Development Properties Inc. and Snigdha at AECOM		

Table 3 - Architectural Coating Emissions

Parameter	Value	Units
Project Paint Use Estimate*	40	gallons
Duration*	5	days
VOC Content**	250	g VOC/liter paint
Daily ROG Emissions	17	lb/day
Annual ROG Emissions (2011)	0	tpy
Annual ROG Emissions (2012)	0.04	tpy
* Reference: Bill McDermott, Armstrong Development Properties Inc		
** Reference - URBEMIS2007		

Urbemis 2007 Version 9.2.4
Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

Project Name: CVS-Sebastopol Construction
 Project Location: Bay Area Air District
 On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
 Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10</u>	<u>PM10 Total</u>	<u>PM2.5 Dust</u>	<u>PM2.5</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 10/24/2011-	3.32	42.38	17.00	0.05	60.18	1.82	62.00	12.54	1.67	14.21	6,391.72
Demolition 10/24/2011-	3.32	42.38	17.00	0.05	60.18	1.82	62.00	12.54	1.67	14.21	6,391.72
Fugitive Dust	0.00	0.00	0.00	0.00	59.98	0.00	59.98	12.48	0.00	12.48	0.00
Demo Off Road Diesel	1.05	7.22	4.58	0.00	0.00	0.55	0.55	0.00	0.50	0.50	700.30
Demo On Road Diesel	2.24	35.10	11.34	0.05	0.20	1.27	1.46	0.06	1.17	1.23	5,589.44
Demo Worker Trips	0.03	0.06	1.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.97
Time Slice 11/28/2011-	3.42	32.23	15.85	0.01	46.65	1.49	48.14	9.75	1.37	11.12	3,740.10
Mass Grading 11/28/2011-	3.42	32.23	15.85	0.01	46.65	1.49	48.14	9.75	1.37	11.12	3,740.10
Mass Grading Dust	0.00	0.00	0.00	0.00	46.60	0.00	46.60	9.73	0.00	9.73	0.00
Mass Grading Off Road	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Mass Grading On Road	0.56	8.73	2.82	0.01	0.05	0.32	0.36	0.02	0.29	0.31	1,390.80
Mass Grading Worker	0.03	0.06	1.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.97
Time Slice 12/12/2011-	5.40	48.71	25.00	0.01	46.66	2.31	48.97	9.75	2.13	11.88	5,556.71
Mass Grading 11/28/2011-	3.42	32.23	15.85	0.01	46.65	1.49	48.14	9.75	1.37	11.12	3,740.10
Mass Grading Dust	0.00	0.00	0.00	0.00	46.60	0.00	46.60	9.73	0.00	9.73	0.00
Mass Grading Off Road	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Mass Grading On Road	0.56	8.73	2.82	0.01	0.05	0.32	0.36	0.02	0.29	0.31	1,390.80
Mass Grading Worker	0.03	0.06	1.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.97
Trenching 12/12/2011-	1.98	16.48	9.15	0.00	0.00	0.82	0.83	0.00	0.76	0.76	1,816.61
Trenching Off Road Diesel	1.95	16.42	8.07	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,714.64
Trenching Worker Trips	0.03	0.06	1.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.97
Time Slice 12/13/2011-	1.98	16.48	9.15	0.00	0.00	0.82	0.83	0.00	0.76	0.76	1,816.61
Trenching 12/12/2011-	1.98	16.48	9.15	0.00	0.00	0.82	0.83	0.00	0.76	0.76	1,816.61
Trenching Off Road Diesel	1.95	16.42	8.07	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,714.64
Trenching Worker Trips	0.03	0.06	1.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.97
Time Slice 12/2012-11/1/2012	1.84	15.30	9.00	0.00	0.00	0.74	0.74	0.00	0.68	0.68	1,816.67
Trenching 12/12/2011-	1.84	15.30	9.00	0.00	0.00	0.74	0.74	0.00	0.68	0.68	1,816.67
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10</u>	<u>PM10 Total</u>	<u>PM2.5 Dust</u>	<u>PM2.5</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 1/12/2012-	5.74	46.88	27.99	0.01	20.03	2.36	22.38	4.19	2.17	6.35	5,497.72
Building 01/12/2012-	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.01	0.13	0.12	0.00	0.00	0.01	0.01	0.00	0.00	0.01	33.68
Building Worker Trips	0.04	0.07	1.32	0.00	0.01	0.00	0.01	0.00	0.00	0.01	136.22
Fine Grading 01/12/2012-	2.82	23.50	12.99	0.00	20.01	1.13	21.14	4.18	1.04	5.22	2,617.75
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road	0.10	1.50	0.49	0.00	0.01	0.05	0.06	0.00	0.05	0.05	268.40
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Trenching 12/12/2011-	1.84	15.30	9.00	0.00	0.00	0.74	0.74	0.00	0.68	0.68	1,816.67
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Time Slice 1/13/2012-	3.91	31.58	18.99	0.01	20.02	1.62	21.64	4.18	1.49	5.68	3,681.04
Building 01/12/2012-	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.01	0.13	0.12	0.00	0.00	0.01	0.01	0.00	0.00	0.01	33.68
Building Worker Trips	0.04	0.07	1.32	0.00	0.01	0.00	0.01	0.00	0.00	0.01	136.22
Fine Grading 01/12/2012-	2.82	23.50	12.99	0.00	20.01	1.13	21.14	4.18	1.04	5.22	2,617.75
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road	0.10	1.50	0.49	0.00	0.01	0.05	0.06	0.00	0.05	0.05	268.40
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Time Slice 1/19/2012-	6.52	46.50	30.11	0.01	20.04	2.88	22.92	4.19	2.65	6.84	5,240.15
Asphalt 01/19/2012-	2.62	14.92	11.12	0.00	0.01	1.26	1.28	0.00	1.16	1.17	1,559.11
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.35	8.99	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,272.04
Paving On Road Diesel	0.03	0.46	0.15	0.00	0.00	0.02	0.02	0.00	0.02	0.02	83.00
Paving Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.07
Building 01/12/2012-	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.01	0.13	0.12	0.00	0.00	0.01	0.01	0.00	0.00	0.01	33.68
Building Worker Trips	0.04	0.07	1.32	0.00	0.01	0.00	0.01	0.00	0.00	0.01	136.22
Fine Grading 01/12/2012-	2.82	23.50	12.99	0.00	20.01	1.13	21.14	4.18	1.04	5.22	2,617.75
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road	0.10	1.50	0.49	0.00	0.01	0.05	0.06	0.00	0.05	0.05	268.40
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10_Dust</u>	<u>PM10</u>	<u>PM10 Total</u>	<u>PM2.5_Dust</u>	<u>PM2.5</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 1/20/2012-	3.70	23.00	17.12	0.00	0.02	1.76	1.78	0.01	1.61	1.62	2,622.40
Asphalt 01/19/2012-	2.62	14.92	11.12	0.00	0.01	1.26	1.28	0.00	1.16	1.17	1,559.11
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.35	8.99	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,272.04
Paving On Road Diesel	0.03	0.46	0.15	0.00	0.00	0.02	0.02	0.00	0.02	0.02	83.00
Paving Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.07
Building 01/12/2012-	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.01	0.13	0.12	0.00	0.00	0.01	0.01	0.00	0.00	0.01	33.68
Building Worker Trips	0.04	0.07	1.32	0.00	0.01	0.00	0.01	0.00	0.00	0.01	136.22
Time Slice 2/20/2012-	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building 01/12/2012-	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.01	0.13	0.12	0.00	0.00	0.01	0.01	0.00	0.00	0.01	33.68
Building Worker Trips	0.04	0.07	1.32	0.00	0.01	0.00	0.01	0.00	0.00	0.01	136.22

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Phase Assumptions

- Phase: Demolition 10/24/2011 - 11/21/2011 - Default Fine Site Grading Description
Building Volume Total (cubic feet): 680400
Building Volume Daily (cubic feet): 142800
On Road Truck Travel (VMT): 1388.33
Off-Road Equipment:
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day
- Phase: Fine Grading 1/12/2012 - 1/19/2012 - Default Building Construction Description
Total Acres Disturbed: 2.33
Maximum Daily Acreage Disturbed: 1
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 66.67
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day
- Phase: Mass Grading 11/28/2011 - 12/12/2011 - Default Paving Description
Total Acres Disturbed: 2.33
Maximum Daily Acreage Disturbed: 2.33
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 345.45
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Phase: Trenching 12/12/2011 - 1/12/2012 - Default Architectural Coating Description

Off-Road Equipment:

- 2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 1/19/2012 - 2/19/2012 - Type Your Description Here

Acres to be Paved: 1.53

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/12/2012 - 4/20/2012 - Type Your Description Here

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

**Urbemis 2007 Version 9.2.4
Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)**

Project Name: CVS-Sebastopol Construction
 Project Location: Bay Area Air District
 On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
 Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10</u>	<u>PM10 Total</u>	<u>PM2.5 Dust</u>	<u>PM2.5</u>	<u>PM2.5 Total</u>	<u>CO2</u>
Time Slice 10/24/2011-	3.32	42.38	17.00	0.05	60.18	1.82	62.00	12.54	1.67	14.21	6,391.72
Demolition 10/24/2011-	3.32	42.38	17.00	0.05	60.18	1.82	62.00	12.54	1.67	14.21	6,391.72
Fugitive Dust	0.00	0.00	0.00	0.00	59.98	0.00	59.98	12.48	0.00	12.48	0.00
Demo Off Road Diesel	1.05	7.22	4.58	0.00	0.00	0.55	0.55	0.00	0.50	0.50	700.30
Demo On Road Diesel	2.24	35.10	11.34	0.05	0.20	1.27	1.46	0.06	1.17	1.23	5,589.44
Demo Worker Trips	0.03	0.06	1.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.97
Time Slice 11/28/2011-	3.42	32.23	15.85	0.01	46.65	1.49	48.14	9.75	1.37	11.12	3,740.10
Mass Grading 11/28/2011-	3.42	32.23	15.85	0.01	46.65	1.49	48.14	9.75	1.37	11.12	3,740.10
Mass Grading Dust	0.00	0.00	0.00	0.00	46.60	0.00	46.60	9.73	0.00	9.73	0.00
Mass Grading Off Road	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Mass Grading On Road	0.56	8.73	2.82	0.01	0.05	0.32	0.36	0.02	0.29	0.31	1,390.80
Mass Grading Worker Trips	0.03	0.06	1.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.97
Time Slice 12/12/2011-	5.40	48.71	25.00	0.01	46.66	2.31	48.97	9.75	2.13	11.88	5,556.71
Mass Grading 11/28/2011-	3.42	32.23	15.85	0.01	46.65	1.49	48.14	9.75	1.37	11.12	3,740.10
Mass Grading Dust	0.00	0.00	0.00	0.00	46.60	0.00	46.60	9.73	0.00	9.73	0.00
Mass Grading Off Road	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Mass Grading On Road	0.56	8.73	2.82	0.01	0.05	0.32	0.36	0.02	0.29	0.31	1,390.80
Mass Grading Worker Trips	0.03	0.06	1.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.97
Trenching 12/12/2011-	1.98	16.48	9.15	0.00	0.00	0.82	0.83	0.00	0.76	0.76	1,816.61
Trenching Off Road Diesel	1.95	16.42	8.07	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,714.64
Trenching Worker Trips	0.03	0.06	1.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.97
Time Slice 12/13/2011-	1.98	16.48	9.15	0.00	0.00	0.82	0.83	0.00	0.76	0.76	1,816.61
Trenching 12/12/2011-	1.98	16.48	9.15	0.00	0.00	0.82	0.83	0.00	0.76	0.76	1,816.61
Trenching Off Road Diesel	1.95	16.42	8.07	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,714.64
Trenching Worker Trips	0.03	0.06	1.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.97
Time Slice 1/2/2012-1/1/2012	1.84	15.30	9.00	0.00	0.00	0.74	0.74	0.00	0.68	0.68	1,816.67
Trenching 12/12/2011-	1.84	15.30	9.00	0.00	0.00	0.74	0.74	0.00	0.68	0.68	1,816.67
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10</u>	<u>PM10 Total</u>	<u>PM2.5 Dust</u>	<u>PM2.5</u>	<u>PM2.5 Total</u>	<u>CO2</u>
Time Slice 1/12/2012-1/12/2012	5.74	<u>46.88</u>	27.99	0.01	20.03	2.36	22.38	4.19	2.17	6.35	5,497.72
Building 01/12/2012-	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.01	0.13	0.12	0.00	0.00	0.01	0.01	0.00	0.00	0.01	33.68
Building Worker Trips	0.04	0.07	1.32	0.00	0.01	0.00	0.01	0.00	0.00	0.01	136.22
Fine Grading 01/12/2012-	2.82	23.50	12.99	0.00	20.01	1.13	21.14	4.18	1.04	5.22	2,617.75
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road	0.10	1.50	0.49	0.00	0.01	0.05	0.06	0.00	0.05	0.05	268.40
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Trenching 12/12/2011-	1.84	15.30	9.00	0.00	0.00	0.74	0.74	0.00	0.68	0.68	1,816.67
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Time Slice 1/13/2012-1/18/2012	3.91	31.58	18.99	0.01	20.02	1.62	21.64	4.18	1.49	5.68	3,681.04
Building 01/12/2012-	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.01	0.13	0.12	0.00	0.00	0.01	0.01	0.00	0.00	0.01	33.68
Building Worker Trips	0.04	0.07	1.32	0.00	0.01	0.00	0.01	0.00	0.00	0.01	136.22
Fine Grading 01/12/2012-	2.82	23.50	12.99	0.00	20.01	1.13	21.14	4.18	1.04	5.22	2,617.75
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road	0.10	1.50	0.49	0.00	0.01	0.05	0.06	0.00	0.05	0.05	268.40
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Time Slice 1/19/2012-1/19/2012	<u>6.52</u>	<u>46.50</u>	<u>30.11</u>	<u>0.01</u>	<u>20.04</u>	<u>2.88</u>	<u>22.92</u>	<u>4.19</u>	<u>2.65</u>	<u>6.84</u>	<u>5,240.15</u>
Asphalt 01/19/2012-	2.62	14.92	11.12	0.00	0.01	1.26	1.28	0.00	1.16	1.17	1,559.11
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.35	8.99	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,272.04
Paving On Road Diesel	0.03	0.46	0.15	0.00	0.00	0.02	0.02	0.00	0.02	0.02	83.00
Paving Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.07
Building 01/12/2012-	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.01	0.13	0.12	0.00	0.00	0.01	0.01	0.00	0.00	0.01	33.68
Building Worker Trips	0.04	0.07	1.32	0.00	0.01	0.00	0.01	0.00	0.00	0.01	136.22
Fine Grading 01/12/2012-	2.82	23.50	12.99	0.00	20.01	1.13	21.14	4.18	1.04	5.22	2,617.75
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road	0.10	1.50	0.49	0.00	0.01	0.05	0.06	0.00	0.05	0.05	268.40
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10</u>	<u>PM10 Total</u>	<u>PM2.5 Dust</u>	<u>PM2.5</u>	<u>PM2.5 Total</u>	<u>CO2</u>
Time Slice 1/20/2012-2/17/2012	3.70	23.00	17.12	0.00	0.02	1.76	1.78	0.01	1.61	1.62	2,622.40
Asphalt 01/19/2012-	2.62	14.92	11.12	0.00	0.01	1.26	1.28	0.00	1.16	1.17	1,559.11
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.35	8.99	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,272.04
Paving On Road Diesel	0.03	0.46	0.15	0.00	0.00	0.02	0.02	0.00	0.02	0.02	83.00
Paving Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.07
Building 01/12/2012-	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.01	0.13	0.12	0.00	0.00	0.01	0.01	0.00	0.00	0.01	33.68
Building Worker Trips	0.04	0.07	1.32	0.00	0.01	0.00	0.01	0.00	0.00	0.01	136.22
Time Slice 2/20/2012-4/20/2012	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building 01/12/2012-	1.09	8.08	6.00	0.00	0.01	0.49	0.50	0.00	0.45	0.46	1,063.29
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.01	0.13	0.12	0.00	0.00	0.01	0.01	0.00	0.00	0.01	33.68
Building Worker Trips	0.04	0.07	1.32	0.00	0.01	0.00	0.01	0.00	0.00	0.01	136.22

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

Phase Assumptions

Phase: Demolition 10/24/2011 - 1/21/2011 - Default Fine Site Grading Description
Building Volume Total (cubic feet): 680400
Building Volume Daily (cubic feet): 142800
On Road Truck Travel (VMT): 1388.33
Off-Road Equipment:
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 1/12/2012 - 1/19/2012 - Default Building Construction Description
Total Acres Disturbed: 2.33
Maximum Daily Acreage Disturbed: 1
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 66.67
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 11/28/2011 - 12/12/2011 - Default Paving Description
Total Acres Disturbed: 2.33
Maximum Daily Acreage Disturbed: 2.33
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 345.45
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 12/12/2011 - 1/12/2012 - Default Architectural Coating Description

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

Off-Road Equipment:

- 2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 1/19/2012 - 2/19/2012 - Type Your Description Here

Acres to be Paved: 1.53

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/12/2012 - 4/20/2012 - Type Your Description Here

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Urbemis 2007 Version 9.2.4
Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

Project Name: CVS-Sebastopol Construction
 Project Location: Bay Area Air District
 On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
 Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10	PM10 Total	PM2.5 Dust	PM2.5	PM2.5 Total	CO2
2011											
Demolition 10/24/2011-	0.07	0.75	0.33	0.00	0.89	0.03	0.92	0.19	0.03	0.22	101.31
Fugitive Dust	0.03	0.44	0.18	0.00	0.63	0.02	0.65	0.13	0.02	0.15	67.11
Demo Off Road Diesel	0.00	0.00	0.00	0.00	0.14	0.00	0.14	0.03	0.00	0.03	0.00
Demo On Road Diesel	0.01	0.08	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	7.35
Demo Worker Trips	0.02	0.37	0.12	0.00	0.00	0.01	0.02	0.00	0.01	0.01	58.69
Mass Grading 11/28/2011-	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07
Mass Grading Dust	0.02	0.18	0.09	0.00	0.26	0.01	0.26	0.05	0.01	0.06	20.57
Mass Grading Off Road	0.00	0.00	0.00	0.00	0.26	0.00	0.26	0.05	0.00	0.05	0.00
Mass Grading On Road	0.02	0.13	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	12.36
Mass Grading Worker	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.65
Mass Grading Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
Trenching 12/12/2011-	0.01	0.12	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	13.62
Trenching Off Road Diesel	0.01	0.12	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	12.86
Trenching Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
2012											
Trenching 12/12/2011-	0.08	0.59	0.42	0.00	0.06	0.04	0.10	0.01	0.04	0.05	71.46
Trenching Off Road Diesel	0.01	0.07	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.18
Trenching Worker Trips	0.01	0.07	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.72
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
Building 01/12/2012-	0.04	0.29	0.22	0.00	0.00	0.02	0.02	0.00	0.02	0.02	38.28
Building Off Road Diesel	0.04	0.28	0.16	0.00	0.00	0.02	0.02	0.00	0.02	0.02	32.16
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.21
Building Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.90
Building Worker Trips	0.01	0.07	0.04	0.00	0.06	0.00	0.06	0.01	0.00	0.02	7.85
Fine Grading 01/12/2012-	0.00	0.00	0.00	0.00	0.06	0.00	0.06	0.01	0.00	0.01	0.00
Fine Grading Dust	0.01	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.74
Fine Grading Off Road	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
Fine Grading On Road	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
Fine Grading Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15
Asphalt 01/19/2012-	0.03	0.16	0.12	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.03	0.16	0.10	0.00	0.00	0.01	0.01	0.00	0.00	0.00	13.99
Paving On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91
Paving Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.24

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

Phase Assumptions

Phase: Demolition 10/24/2011 - 11/21/2011 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 680400

Building Volume Daily (cubic feet): 142800

On Road Truck Travel (VMT): 1388.33

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 1/12/2012 - 1/19/2012 - Default Building Construction Description

Total Acres Disturbed: 2.33

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 66.67

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 11/28/2011 - 12/12/2011 - Default Paving Description

Total Acres Disturbed: 2.33

Maximum Daily Acreage Disturbed: 2.33

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 345.45

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

Phase: Trenching 12/12/2011 - 1/12/2012 - Default Architectural Coating Description

Off-Road Equipment:

- 2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 1/19/2012 - 2/19/2012 - Type Your Description Here

Acres to be Paved: 1.53

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/12/2012 - 4/20/2012 - Type Your Description Here

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: C:\Documents and Settings\mehtas\Application Data\Urbemis\Version9a\Projects\CVS Sebastopol Const.urb924

Project Name: CVS-Sebastopol Construction

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	5.40	48.71	25.00	0.05	60.18	2.31	62.00	12.54	2.13	14.21	6,391.72
2012 TOTALS (lbs/day unmitigated)	6.52	46.88	30.11	0.01	20.04	2.88	22.92	4.19	2.65	6.84	5,497.72

Urbemis 2007 Version 9.2.4

Summary Report for Winter Emissions (Pounds/Day)

File Name: C:\Documents and Settings\mehtas\Application Data\Urbemis\Version9a\Projects\CVS Sebastopol Const.urb924

Project Name: CVS-Sebastopol Construction

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	5.40	48.71	25.00	0.05	60.18	2.31	62.00	12.54	2.13	14.21	6,391.72
2012 TOTALS (lbs/day unmitigated)	6.52	46.88	30.11	0.01	20.04	2.88	22.92	4.19	2.65	6.84	5,497.72

Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Documents and Settings\mehtas\Application Data\Urbemis\Version9a\Projects\CVS Sebastopol Const.urb924

Project Name: CVS-Sebastopol Construction

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (tons/year unmitigated)	0.07	0.75	0.33	0.00	0.89	0.03	0.19	0.03	0.22	101.31
2012 TOTALS (tons/year unmitigated)	0.08	0.59	0.42	0.00	0.06	0.04	0.01	0.04	0.05	71.46

Appendix B

Operation Air Emissions Calculations

Notes for Appendix B

*It is noted that the URBEMIS runs shown in this appendix present "unmitigated" and "mitigated" results. These are terms internal to the URBEMIS model. URBEMIS "mitigations" are project features and other potential add-on measures that result in emission reductions from the assumed "unmitigated" conditions. These project features and add-on measures would be part of the proposed project, and not mitigation measures per CEQA. Therefore, the "mitigated" results from the URBEMIS model run are reported in **Table 2-3, Project Operations Emissions.***

Electronic versions of these files are also on file with the City of Sebastopol and are available upon request.

Table 1 - URBEMIS Input Data

Step 1 - Project Location			
Project Location		BAAQMD	
Step 2 - Land Use Data			
Land Use Type	Gross Area Covered (sq. feet)		Site Acreage (Acres)
Bank Drive-Through	4327		0.51
Pharmacy Drive-Through	16530		1.94
Land Use Type	Primary Trip %	Diverted Trip %	Pass-by Trip %
Bank Drive-Through	35%	45%	20%
Pharmacy Drive-Through	45%	40%	15%
Land Use Type	Trip Rate (Trips/per day/1000 sq. ft)		
Bank Drive-Through	148.15		
Pharmacy Drive-Through	88.16		
Step 3 - Area Emission Sources			
Source	Parameter	Value	Reference
Natural Gas Fuel Combustion	Percent using natural gas	100	URBEMIS default for non-residential
	Natural gas usage rate (cu. ft/sq. ft/month)	2.9	URBEMIS default for retail/shopping
Landscape Fuel Consumption	Length of summer (days)	180	URBEMIS default
	Year being analyzed	2012	
Architectural Coating	Non-residential % surface area repainted each year	10.00	URBEMIS default
Step 4 - Operational Emission Sources			
Characteristics	Parameter	Value	Reference
Vehicle Fleet Characteristics	Percent fleet mix	Total 100	URBEMIS default
	Year being analyzed	2012	
Tript Characteristics	Project type	Urban	URBEMIS default
	Average speed (miles/hour)	35	URBEMIS default
	Trip length (miles)	9.5 for commute and 7.3 for non-work and customer trips	URBEMIS default for commercial-based urban trips
Temperature Data	Ambient winter temperature	40	URBEMIS default
	Ambient summer temperature	85	URBEMIS default
Road Dust	Mode	On	
	Percent on paved roads	100	URBEMIS default
	Percent on unpaved roads	0	URBEMIS default
	Silt loading for paved road dust (g/sq. m)	0.1	URBEMIS default
	Average vehicle weight (Mg)	2.4	URBEMIS default
Pass-by Trips	Mode	On	
Step 5 - Operational Mitigation Measures			
Mix of Uses	Number of housing units	1500	U.S. Census Bureau web site - within a 1/2-mile radius from the project's center, or the entire project, whichever is larger.
	Study area employment	3300	
Presence of Local Serving Retail	YES - Model default trip reduction	2%	URBEMIS default
Transit Service Enhancing Infrastructure Measures	Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site	21	AECOM Transportation Impact Study, November 2010
	Number of Daily Rail or Rapid Transit Buses Stopping Within 1/2 Mile of Site	0	
	Number of Dedicated Daily Shuttles	0	
Bike and Pedestrian Measures	Number of Intersections per Square Mile	130	Based on estimates within a 1/2-mile radius from the project's center. The number of intersections per square mile obtained by manually counting from GOOGLE Earth
	Percent of Streets with Sidewalks on One Side	10%	
	Percent of Streets with Sidewalks on Both Sides	90%	
	Percent of Arterials/Collectors with Bike Lanes, or where suitable, Direct Parallel Routes Exist	0%	
Traffic Demand Management Measures	Measures Selected		
	Secure Bike Parking		
	Information provided on Transportation Alternatives		
	Preferential Carpool/Vanpool Parking		

Summary Report for Summer Emissions (Pounds/Day)

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES

TOTALS (lbs/day, unmitigated)	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
	0.38	0.18	3.21	0.00	0.01	0.01	172.50
TOTALS (lbs/day, mitigated)	0.38	0.18	3.21	0.00	0.01	0.01	172.50
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

TOTALS (lbs/day, unmitigated)	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
	8.40	8.53	85.26	0.08	14.01	2.68	7,985.10
TOTALS (lbs/day, mitigated)	7.39	7.50	74.91	0.07	12.31	2.36	7,015.47
Percent Reduction	12.02	12.08	12.14	12.50	12.13	11.94	12.14

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

TOTALS (lbs/day, unmitigated)	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
	8.78	8.71	88.47	0.08	14.02	2.69	8,157.60
TOTALS (lbs/day, mitigated)	7.77	7.68	78.12	0.07	12.32	2.37	7,187.97
Percent Reduction	11.50	11.83	11.70	12.50	12.13	11.90	11.89

Summary Report for Winter Emissions (Pounds/Day)

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES

TOTALS (lbs/day, unmitigated)	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, mitigated)	0.13	0.14	0.12	0.00	0.00	0.00	166.88
Percent Reduction	0.13	0.14	0.12	0.00	0.00	0.00	166.88
	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

TOTALS (lbs/day, unmitigated)	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, mitigated)	10.78	12.57	100.71	0.07	14.01	2.68	6,914.19
Percent Reduction	9.48	11.03	88.49	0.06	12.31	2.36	6,074.59
	12.06	12.25	12.13	14.29	12.13	11.94	12.14

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

TOTALS (lbs/day, unmitigated)	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, mitigated)	10.91	12.71	100.83	0.07	14.01	2.68	7,081.07
Percent Reduction	9.61	11.17	88.61	0.06	12.31	2.36	6,241.47
	11.92	12.12	12.12	14.29	12.13	11.94	11.86

Summary Report for Annual Emissions (Tons/Year)

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.04	0.03	0.30	0.00	0.00	0.00	30.97
TOTALS (tons/year, mitigated)	0.04	0.03	0.30	0.00	0.00	0.00	30.97
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	1.68	1.80	16.50	0.01	2.55	0.49	1,392.14
TOTALS (tons/year, mitigated)	1.47	1.58	14.50	0.01	2.25	0.43	1,223.08
Percent Reduction	12.50	12.22	12.12	0.00	11.76	12.24	12.14

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	1.72	1.83	16.80	0.01	2.55	0.49	1,423.11
TOTALS (tons/year, mitigated)	1.51	1.61	14.80	0.01	2.25	0.43	1,254.05
Percent Reduction	12.21	12.02	11.90	0.00	11.76	12.24	11.88

Detail Report for Summer Area Source Unmitigated Emissions (Pounds/Day)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.14	0.12	0.00	0.00	0.00	166.88
Hearth - No Summer Emissions							
Landscape	0.25	0.04	3.09	0.00	0.01	0.01	5.62
Consumer Products	0.00						
Architectural Coatings	0.12						
TOTALS (lbs/day, unmitigated)	0.38	0.18	3.21	0.00	0.01	0.01	172.50

Area Source Changes to Defaults

Detail Report for Summer Operational Unmitigated Emissions (Pounds/Day)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Bank (with drive-through)	2.45	2.37	23.68	0.02	3.79	0.73	2,169.68
Pharmacy/drugstore with drive through	5.95	6.16	61.58	0.06	10.22	1.95	5,815.42
TOTALS (lbs/day, unmitigated)	8.40	8.53	85.26	0.08	14.01	2.68	7,985.10

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Bank (with drive-through)		148.15	1000 sq ft	4.33	641.49	2,202.91
Pharmacy/drugstore with drive through		88.16	1000 sq ft	16.53	1,457.28	5,941.70
					2,098.77	8,144.61

Vehicle Type	<u>Vehicle Fleet Mix</u>				Diesel
	Percent Type	Non-Catalyst	Catalyst	Diesel	
Light Auto	53.8	0.7	99.1	0.2	
Light Truck < 3750 lbs	12.8	1.6	95.3	3.1	
Light Truck 3751-5750 lbs	19.8	0.5	99.5	0.0	
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0	
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2	
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0	
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0	
Heavy-Heavy Truck 33,001-60,000 lbs	0.4	0.0	0.0	100.0	
Other Bus	0.1	0.0	0.0	100.0	
Urban Bus	0.1	0.0	0.0	100.0	
Motorcycle	3.2	59.4	40.6	0.0	
School Bus	0.1	0.0	0.0	100.0	
Motor Home	0.6	0.0	83.3	16.7	
<u>Travel Conditions</u>					
Urban Trip Length (miles)	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work
Rural Trip Length (miles)	10.8	7.3	7.5	9.5	7.4
Trip speeds (mph)	16.8	7.1	7.9	14.7	6.6
% of Trips - Residential	35.0	35.0	35.0	35.0	35.0
	32.9	18.0	49.1		

	<u>Travel Conditions</u>					
	<u>Residential</u>			<u>Commercial</u>		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
% of Trips - Commercial (by land use)				2.0	1.0	97.0
Bank (with drive-through)				2.0	1.0	97.0
Pharmacy/drugstore with drive through						

Operational Changes to Defaults

Detail Report for Summer Area Source Mitigated Emissions (Pounds/Day)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.14	0.12	0.00	0.00	0.00	166.88
Hearth - No Summer Emissions							
Landscape	0.25	0.04	3.09	0.00	0.01	0.01	5.62
Consumer Products	0.00						
Architectural Coatings	0.12						
TOTALS (lbs/day, mitigated)	0.38	0.18	3.21	0.00	0.01	0.01	172.50

Area Source Mitigation Measures Selected

Mitigation Description Percent Reduction

Area Source Changes to Defaults

Detail Report for Summer Operational Mitigated Emissions (Pounds/Day)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Bank (with drive-through)	2.15	2.09	20.81	0.02	3.33	0.64	1,906.22
Pharmacy/drugstore with drive through	5.24	5.41	54.10	0.05	8.98	1.72	5,109.25
TOTALS (lbs/day, mitigated)	7.39	7.50	74.91	0.07	12.31	2.36	7,015.47

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Operational Mitigation Options Selected

Residential Mitigation Measures

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

Percent Reduction in Trips is 6.73%

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Nonresidential Mitigation Measures

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 1500.
The employment for the study area (within a 1/2 mile radius of the project) is 3300.

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

Percent Reduction in Trips is 0.24%

Inputs Selected:

The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 21
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 3.15%

Inputs Selected:

Nonresidential Mitigation Measures

The Number of Intersections per Square Mile is 130

The Percent of Streets with Sidewalks on One Side is 10%

The Percent of Streets with Sidewalks on Both Sides is 90%

The Percent of Arterials/Collectors with Bike Lanes or where Suitable,

Direct Parallel Routes Exist is 0%

Non-Residential Other Transportation Demand Measures Mitigation

Percent Reduction in Trips is 1.17%

Note that the above percent is applied ONLY to worker trips.

Inputs Selected:

The 'Secure Bike Parking' measure was selected

The 'Information provided on Transportation Alternatives' measure was selected

The 'Preferential Carpool/Vanpool Parking' measure was selected

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Bank (with drive-through)	130.20	1000 sq ft	1000 sq ft	4.33	563.77	1,935.42
Pharmacy/drugstore with drive through	77.48	1000 sq ft	1000 sq ft	16.53	1,280.72	5,220.24
					1,844.49	7,155.66

<u>Vehicle Fleet Mix</u>		
Vehicle Type	Percent Type	Vehicle Type
Light Auto	53.8	Catalyst
		99.1
	0.7	Diesel
		0.2

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Truck < 3750 lbs	12.8	1.6	95.3	3.1
Light Truck 3751-5750 lbs	19.8	0.5	99.5	0.0
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.4	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	59.4	40.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.6	0.0	83.3	16.7

Travel Conditions

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1		

% of Trips - Commercial (by land use)

Customer

Travel Conditions

	Home-Work	Home-Shop	Home-Other	Commute	Commercial	Customer
Bank (with drive-through)				2.0	1.0	97.0
Pharmacy/drugstore with drive through				2.0	1.0	97.0

Operational Changes to Defaults

Detail Report for Winter Area Source Unmitigated Emissions (Pounds/Day)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.14	0.12	0.00	0.00	0.00	166.88
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.12						
TOTALS (lbs/day, unmitigated)	0.13	0.14	0.12	0.00	0.00	0.00	166.88

Area Source Changes to Defaults

Detail Report for Winter Operational Unmitigated Emissions (Pounds/Day)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Bank (with drive-through)	3.18	3.49	28.51	0.02	3.79	0.73	1,880.03
Pharmacy/drugstore with drive through	7.60	9.08	72.20	0.05	10.22	1.95	5,034.16
TOTALS (lbs/day, unmitigated)	10.78	12.57	100.71	0.07	14.01	2.68	6,914.19

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Temperature (F): 40 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Bank (with drive-through)	148.15	1000 sq ft	4.33	641.49	2,202.91	
Pharmacy/drugstore with drive through	88.16	1000 sq ft	16.53	1,457.28	5,941.70	
				2,098.77	8,144.61	

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.8	0.7	99.1	0.2
Light Truck < 3750 lbs	12.8	1.6	95.3	3.1
Light Truck 3751-5750 lbs	19.8	0.5	99.5	0.0
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0
Life-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2
Life-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.4	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	59.4	40.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.6	0.0	83.3	16.7

Travel Conditions

	Residential				Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

	<u>Travel Conditions</u>					
	Residential		Commercial		Customer	
	Home-Work	Home-Shop	Home-Other	Commute		Non-Work
% of Trips - Commercial (by land use)				2.0	1.0	97.0
Bank (with drive-through)				2.0	1.0	97.0
Pharmacy/drugstore with drive through						

Operational Changes to Defaults

Detail Report for Winter Area Source Mitigated Emissions (Pounds/Day)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Winter Pounds Per Day, Mitigated)

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.14	0.12	0.00	0.00	0.00	166.88
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.12						
TOTALS (lbs/day, Mitigated)	0.13	0.14	0.12	0.00	0.00	0.00	166.88

Area Source Mitigation Measures Selected

Mitigation Description Percent Reduction

Area Source Changes to Defaults

Detail Report for Winter Operational Mitigated Emissions (Pounds/Day)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Bank (with drive-through)	2.80	3.06	25.05	0.02	3.33	0.64	1,651.73
Pharmacy/drugstore with drive through	6.68	7.97	63.44	0.04	8.98	1.72	4,422.86
TOTALS (lbs/day, mitigated)	9.48	11.03	88.49	0.06	12.31	2.36	6,074.59

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Temperature (F): 40 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Operational Mitigation Options Selected

Residential Mitigation Measures

Non-Residential Mitigation Measures

Non-Residential Mix of Uses Mitigation

Percent Reduction in Trips is 6.73%

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Non-Residential Mitigation Measures

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 1500.

The employment for the study area (within a 1/2 mile radius of the project) is 3300.

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

Percent Reduction in Trips is 0.24%

Inputs Selected:

The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 21

The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0

The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 3.15%

Inputs Selected:

Nonresidential Mitigation Measures

The Number of Intersections per Square Mile is 130

The Percent of Streets with Sidewalks on One Side is 10%

The Percent of Streets with Sidewalks on Both Sides is 90%

The Percent of Arterials/Collectors with Bike Lanes or where Suitable,

Direct Parallel Routes Exist is 0%

Non-Residential Other Transportation Demand Measures Mitigation

Percent Reduction in Trips is 1.17%

Note that the above percent is applied ONLY to worker trips.

Inputs Selected:

The 'Secure Bike Parking' measure was selected

The 'Information provided on Transportation Alternatives' measure was selected

The 'Preferential Carpool/Manpool Parking' measure was selected

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Bank (with drive-through)	130.20	1000 sq ft	4.33	563.77	1,935.42	
Pharmacy/drugstore with drive through	77.48	1000 sq ft	16.53	1,280.72	5,220.24	
				1,844.49	7,155.66	

<u>Vehicle Fleet Mix</u>		
Vehicle Type	Percent Type	Diesel
Light Auto	53.8	0.2
	Non-Catalyst	
	99.1	
	0.7	

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Truck < 3750 lbs	12.8	1.6	95.3	3.1
Light Truck 3751-5750 lbs	19.8	0.5	99.5	0.0
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.4	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	59.4	40.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.6	0.0	83.3	16.7

Travel Conditions

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1		

% of Trips - Commercial (by land use)

Travel Conditions

	Home-Work	Home-Shop	Home-Other	Commute	Commercial	Customer
Bank (with drive-through)				2.0	1.0	97.0
Pharmacy/drugstore with drive through				2.0	1.0	97.0

Operational Changes to Defaults

Detail Report for Annual Area Source Unmitigated Emissions (Tons/Year)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.00	0.03	0.02	0.00	0.00	0.00	30.46
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.02	0.00	0.28	0.00	0.00	0.00	0.51
Consumer Products	0.00						
Architectural Coatings	0.02						
TOTALS (tons/year, unmitigated)	0.04	0.03	0.30	0.00	0.00	0.00	30.97

Area Source Changes to Defaults

Detail Report for Annual Operational Unmitigated Emissions (Tons/Year)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Bank (with drive-through)	0.49	0.50	4.62	0.00	0.69	0.13	378.35
Pharmacy/drugstore with drive through	1.19	1.30	11.88	0.01	1.86	0.36	1,013.79
TOTALS (tons/year, unmitigated)	1.68	1.80	16.50	0.01	2.55	0.49	1,392.14

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Bank (with drive-through)	148.15	1000 sq ft	4.33	641.49	2,202.91	
Pharmacy/drugstore with drive through	88.16	1000 sq ft	16.53	1,457.28	5,941.70	
				2,098.77	8,144.61	

Vehicle Type	<u>Vehicle Fleet Mix</u>			Catalyst	Diesel
	Percent Type	Non-Catalyst			
Light Auto	53.8	0.7		99.1	0.2
Light Truck < 3750 lbs	12.8	1.6		95.3	3.1
Light Truck 3751-5750 lbs	19.8	0.5		99.5	0.0
Med Truck 5751-8500 lbs	6.6	0.0		100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0		77.8	22.2
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0		50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0		20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.4	0.0		0.0	100.0
Other Bus	0.1	0.0		0.0	100.0
Urban Bus	0.1	0.0		0.0	100.0
Motorcycle	3.2	59.4		40.6	0.0
School Bus	0.1	0.0		0.0	100.0
Motor Home	0.6	0.0		83.3	16.7

Travel Conditions

	Residential				Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

	<u>Travel Conditions</u>					
	Residential					
	Home-Work	Home-Shop	Home-Other	Commute	Commercial	
% of Trips - Commercial (by land use)				2.0	1.0	97.0
Bank (with drive-through)				2.0	1.0	97.0
Pharmacy/drugstore with drive through						

Operational Changes to Defaults

Detail Report for Annual Area Source Mitigated Emissions (Tons/Year)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Annual Tons Per Year, Mitigated)

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.00	0.03	0.02	0.00	0.00	0.00	30.46
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.02	0.00	0.28	0.00	0.00	0.00	0.51
Consumer Products	0.00						
Architectural Coatings	0.02						
TOTALS (tons/year, mitigated)	0.04	0.03	0.30	0.00	0.00	0.00	30.97

Area Source Mitigation Measures Selected

Mitigation Description Percent Reduction

Area Source Changes to Defaults

Detail Report for Annual Operational Mitigated Emissions (Tons/Year)

File Name: J:\AECOM Projects\60177851 - CVS Sebastopol\URBEMIS Operation - April 6 Version\Not to Include\CVS Sebastopol Operation apr6.urb924

Project Name: CVS-Sebastopol Operation

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Annual Tons Per Year, Mitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Bank (with drive-through)	0.43	0.44	4.06	0.00	0.61	0.12	332.40
Pharmacy/drugstore with drive through	1.04	1.14	10.44	0.01	1.64	0.31	890.68
TOTALS (tons/year, mitigated)	1.47	1.58	14.50	0.01	2.25	0.43	1,223.08

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Operational Mitigation Options Selected

Residential Mitigation Measures

Non-Residential Mitigation Measures

Non-Residential Mix of Uses Mitigation

Percent Reduction in Trips is 6.73%

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Nonresidential Mitigation Measures

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 1500.
The employment for the study area (within a 1/2 mile radius of the project) is 3300.

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

Percent Reduction in Trips is 0.24%

Inputs Selected:

The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 21
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 3.15%

Inputs Selected:

Non-Residential Mitigation Measures

The Number of Intersections per Square Mile is 130

The Percent of Streets with Sidewalks on One Side is 10%

The Percent of Streets with Sidewalks on Both Sides is 90%

The Percent of Arterials/Collectors with Bike Lanes or where Suitable,

Direct Parallel Routes Exist is 0%

Non-Residential Other Transportation Demand Measures Mitigation

Percent Reduction in Trips is 1.17%

Note that the above percent is applied ONLY to worker trips.

Inputs Selected:

The 'Secure Bike Parking' measure was selected

The 'Information provided on Transportation Alternatives' measure was selected

The 'Preferential Carpool/Vanpool Parking' measure was selected

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Bank (with drive-through)	130.20	1000 sq ft	4.33	563.77	1,935.42	
Pharmacy/drugstore with drive through	77.48	1000 sq ft	16.53	1,280.72	5,220.24	
				1,844.49	7,155.66	

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.8	0.7	99.1	0.2

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Truck < 3750 lbs	12.8	1.6	95.3	3.1
Light Truck 3751-5750 lbs	19.8	0.5	99.5	0.0
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.4	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	59.4	40.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.6	0.0	83.3	16.7

Travel Conditions

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1		

% of Trips - Commercial (by land use)

Travel Conditions

	<u>Residential</u>			<u>Commercial</u>		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Bank (with drive-through)				2.0	1.0	97.0
Pharmacy/drugstore with drive through				2.0	1.0	97.0

Operational Changes to Defaults

Appendix C

Operation GHG Emissions Calculations

Notes for Appendix C

Both the URBEMIS and BGM models were used to estimate greenhouse gas (GHG) emissions, as described in Section 3.0. URBEMIS results are shown in Appendix B. The BGM output is not shown here, but is on file electronically with the City of Sebastopol, along with the URBEMIS model results, and is available upon request.

*It is noted that both the URBEMIS and BGM models use the terms “unmitigated” and “mitigated.” These terms are internal to the models and are project features and other potential add-on measures that result in emission reductions from the assumed “unmitigated” conditions. These project features and add-on measures, described on the next page in Table 1, would be part of the proposed project, and not mitigation measures per CEQA. Therefore, the “mitigated” results from these model runs are reported in **Table 3-1, Operational GHG Emissions.***

Table 1 - URBEMIS and BGM Input Data

Step 1 - Project Location			
Project Location		BAAQMD	
Step 2 - Land Use Data			
Land Use Type	Gross Area Covered (sq. feet)		Site Acreage (Acres)
Bank Drive -Through	4327		0.51
Pharmacy Drive -Through	16530		1.94
Land Use Type	Primary Trip %	Diverted Trip %	Pass-by Trip %
Bank Drive -Through	35%	45%	20%
Pharmacy Drive -Through	45%	40%	15%
Land Use Type	Trip Rate (Trips/per day/1000 sq. ft)		
Bank Drive -Through	148.15		
Pharmacy Drive -Through	88.16		
Step 3 - Area Emission Sources			
Source	Parameter	Value	Reference
Natural Gas Fuel Combustion	Percent using natural gas	100	URBEMIS default for non-residential
	Natural gas usage rate (cu. ft/sq. ft/month)	2.9	URBEMIS default for retail/shopping
Landscape Fuel Consumption	Length of summer (days)	180	URBEMIS default
	Year being analyzed	2012	
Architectural Coating	Non-residential % surface area repainted each year	10.00	URBEMIS default
Step 4 - Operational Emission Sources			
Charateristics	Parameter	Value	Reference
Vehicle Fleet Characteristics	Percent fleet mix	Total 100	URBEMIS default
	Year being analyzed	2012	
Tript Characteristics	Project type	Urban	URBEMIS default
	Average speed (miles/hour)	35	URBEMIS default
	Trip length (miles)	9.5 for commute and 7.3 for non-work and customer trips	URBEMIS default for commercial-based urban trips
Temperature Data	Ambient winter temperature	40	URBEMIS default
	Ambient summer temperature	85	URBEMIS default
Road Dust	Mode	On	
	Percent on paved roads	100	URBEMIS default
	Percent on unpaved roads	0	URBEMIS default
	Silt loading for paved road dust (g/sq. m)	0.1	URBEMIS default
Pass-by Trips	Average vehicle weight (Mg)	2.4	URBEMIS default
	Mode	On	
Step 5 - Operational Mitigation Measures			
Mix of Uses	Number of housing units	1500	U.S. Census Bureau web site - within a 1/2 mile radius from the project's center, or the entire project, whichever is larger.
	Study area employment	3300	
Presence of Local Serving Retail	YES - Model default trip reduction	2%	URBEMIS default
Transit Service Enhancing Infrastructure Measures	Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site	21	AECOM Transportation Impact Study, November 2010
	Number of Daily Rail or Rapid Transit Buses Stopping Within 1/2 Mile of Site	0	
	Number of Dedicated Daily Shuttles	0	
Bike and Pedestrian Measures	Number of Intersections per Square Mile	130	Based on estimates within a 1/2 mile radius from the project's center. The number of intersections per square mile obtained by manually counting from GOOGLE Earth
	Percent of Streets with Sidewalks on One Side	10%	
	Percent of Streets with Sidewalks on Both Sides	90%	
	Percent of Arterials/Collectors with Bike Lanes, or where suitable, Direct Parallel Routes Exist	0%	
Traffic Demand Management Measures	Measures Selected		
	Secure Bike Parking		
	Information provided on Transportation Alternatives		
Preferential Carpool/Vanpool Parking			
Sequestration	Planting trees as part of landscaping	62	Armstrong Development Properties Inc
Drought Tolerant Landscaping	Percent reduction in outdoor water use	11%	Armstrong Development Properties Inc



COUNTY OF SONOMA
DEPARTMENT OF HEALTH SERVICES

Rita Scardaci, PHN, MPH - Director
Ruth Lincoln, PHN, MA - Assistant Director
Benta McLarin, MS, MHA - Assistant Director

Environmental Health Division
Walter L. Kruse - Director

July 9, 2009

Harold Pellini Trust
c/o Pete Pellini
6877 Sebastopol Road
Sebastopol, CA 95472

Re: 105 Petaluma Avenue (a.k.a 6877 Sebastopol Road), Sebastopol, CA
Site #00001173, NCRWQCB #1TSO119

Dear Mr. Pellini:

This letter confirms the completion of site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release at the site is required.

This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

WALTER L. KRUSE, R.E.H.S.
Director of Environmental Health

ASBESTOS & LEAD-BASED PAINT INSPECTION REPORT

***Proposed CVS Store No. 9872
6877 Sebastopol Avenue
Southeast Corner of Sebastopol Avenue & Petaluma Avenue
Sebastopol, California 95472***

Shaw Project No. 128720.99000000

June 25, 2009

Prepared for:

Armstrong Development Properties, Inc. and CVS Caremark Corporation,
its affiliates and subsidiaries and their successors, assigns, and grantees

Prepared by:


Shaw® a world of **Solutions**™

3347 Michelson Drive, Suite 200
Irvine, California 92612

ASBESTOS & LEAD-BASED PAINT INSPECTION REPORT

***Proposed CVS Store No. 9872
6877 Sebastopol Avenue
Southeast Corner of Sebastopol Avenue & Petaluma Avenue
Sebastopol, California 95472***

The material and data were prepared under the supervision of the undersigned. This report was prepared consistent with current construction industry standards and environmental consulting principles and practices that are within the limitations provided herein.

Approved by:



Date: June 25, 2009

Rick McKenna
EPA Building Inspector/ Management Planner
Lead Inspector / Assessor

Reviewed by:



Date: June 25, 2009

David S. Martinez, CIH
Western Regional Practice Leader
Industrial Hygiene and Safety

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- Appendix A Laboratory Analysis Results and Chain of Custody Forms
- Appendix B Inspector Certifications
- Appendix C Sample Location Diagrams
- Appendix D Glossary of Asbestos/Lead Regulatory Terms

Executive Summary

Armstrong Development Properties, Inc. (Armstrong) retained Shaw Environmental, Inc. (Shaw) to conduct an asbestos and lead paint survey at the Pellini Chevrolet property located at 6877 Sebastopol Avenue on the southeast corner of Sebastopol Avenue and Petaluma Avenue in Sebastopol, California. The four (4) structures surveyed consisted of a former gas station building (approximately 1,200 SF); a former auto body shop building (approximately 6,000 SF); a vehicle showroom, office, and auto service shop building (approximately 21,000 SF); and a vacant building last used for vehicle storage on the main floor and parts storage on the mezzanine/loft area (approximately 4,000 SF). The single-story structures are presently occupied by Pellini Chevrolet. Mr. Rick McKenna, a State of California Division of Occupational Safety and Health (DOSH) Certified Asbestos Consultant (Certificate No. 92-0683, expiration date February 18, 2010) and California Department of Health Services (DHS) Lead-Based Paint Inspector/Assessor (Certificate # 377, expiration date of February 2, 2010) performed this survey on June 10, 2008.

Mr. McKenna collected 121 bulk samples of suspect Asbestos-Containing Materials (ACM) and 50 samples of suspect Lead-Based Paint (LBP) from the subject structures. Mr. McKenna delivered the collected samples to AmeriSci to be analyzed for asbestos using Polarized Light Microscopy (PLM) in accordance with United States Environmental Protection Agency (USEPA) method EPA-600/R-93/116 (asbestos) and for lead using Atomic Absorption Spectroscopy - Flame in accordance with EPA method 3050/7420 (lead).

As presented in this report, results of our assessment indicate that asbestos fibers were detected in the following sampled materials:

Former Gas Station Building:

- **Roofing Mastic and Window Putty (Glazing)**

Former Auto Body Shop Building:

- **Roofing Mastic, Exterior Stucco Walls, Drywall and Joint Compound Walls & Ceilings**

Showroom, Office & Auto Service Shop Building:

- **Roofing Mastic, Window Putty (Glazing), 9”x 9” Floor Tile and Black Mastic, Sheet Flooring, 12”x 12” “Peel & Stick” Floor Tile, Duct Paper Insulation, Drywall and Joint Compound Walls & Ceilings, and Plaster Walls & Ceilings**

Vacant Vehicle and Parts Storage Building with Loft:

- **Roofing Mastic, Window Putty (Glazing), Drywall and Joint Compound Walls & Ceilings**

Where asbestos is present in a building, action should be taken to minimize exposure of building occupants and maintenance employees to asbestos. In addition, during renovations or demolitions, if any suspect ACM is found in areas that had not been previously sampled, additional sampling should be performed to determine if the materials contain asbestos. Please be advised, the National Emission Standards for Hazardous Air Pollutants (NESHAP), an EPA regulation, requires submittal of a written notification for any regulated renovation or demolition, regardless if asbestos is present or not.

Laboratory analysis detected lead greater than or equal to 0.5% by weight, or 5,000 parts per million (a Housing and Urban Department guideline) in eighteen (18) of the paint chip samples collected by Shaw. The LBP materials identified at the Subject Property included the following:

Former Gas Station Building:

- **White metal ceiling- sales area (poor condition); White metal door casings- garage (poor condition)**

Former Auto Body Shop Building:

- **White exterior stucco wall- exterior- west (good condition); White wood window- exterior- south (good condition); White/brown drywall wall- warehouse (good condition); Blue wood window- office (fair condition); Silver wood door casing- warehouse (good condition)**

Showroom, Office & Auto Service Shop Building:

- **White wood door casing- exterior- east (fair condition); Yellow concrete floor- exterior- west (poor condition); Beige metal siding, roof joists, and roof- mezzanine (fair to poor condition); Gray wood column- garage (good condition)**

Vacant Vehicle and Parts Storage Building with Loft:

- **White wood window casing- exterior- north (good condition); White metal window- exterior- north (fair condition); Silver wood column- interior (good condition); Gray drywall wall- restroom (poor condition); Gray metal pipe- restroom (fair condition)**

The U.S. Consumer Products Safety Commission established the level of 0.06% (600 ppm) by weight, as the recommended maximum level of lead in most paints. Results of an additional thirteen (13) paint chip samples (observed to be in good to poor condition) contained a lead concentration of greater than 0.06% (600 ppm) by weight at the following locations:

Former Gas Station Building:

- **White Metal Siding-Exterior-North; Blue Metal Trim-Exterior- North; White Wood Door-Exterior- West; and White Wood Cabinets- Sales Area**

Former Auto Body Shop Building:

- **White Wood Door Casing- Exterior- South; and Light Green Drywall Ceiling- Restroom**

Showroom, Office & Auto Service Shop Building:

- **White Wood Window- Exterior- East; White Wood Door- Show Room; White Wood Wall- Restroom; Tan Plaster Wall- Vault; White Wood Window Casing- Office Restroom; and Gray Concrete Floor- Garage**

Vacant Vehicle and Parts Storage Building with Loft:

- **Silver Metal Siding- Interior -West**

Where lead is present in a building, action should be taken to minimize exposure of building occupants and maintenance employees to lead. In addition, during renovations or demolitions, if any suspect LBP and Lead-Containing Materials (LCM) are found, additional sampling should be performed to determine if the materials contain lead.

Flame torch cutting, burning or abrasive blasting methods are not recommended for LBP/LCM unless the LBP/LCM is removed in accordance with the federal, state, and local regulations prior to these activities.



Vision That Moves Your Community

Transportation
Consultants

March 24, 2011

William R. McDermott
Regional Director of Entitlements & Construction
Armstrong Development Properties Inc
1375 Exposition Blvd. Suite 101
Sacramento, CA 95815
Via Email (wmcdermott@AGOC.com)

**Subject: 6877 Sebastopol Avenue Transportation Impact Study Final Report
Peer Review (Project No. 062-020)**

Dear Mr. William R. McDermott

TJKM Transportation Consultants has completed our independent analysis of the subject Report focused on the project's trip generation and associated traffic impacts to the intersection of Main Street/Bodega Avenue/Sebastopol Avenue. TJKM's analysis was based on the project details contained in the Transportation Impact Study (TIS) Final Report prepared for the CVS/pharmacy and Chase bank planned for the southeast corner of Sebastopol Avenue and Petaluma Avenue in the City of Sebastopol. AECOM, on behalf of the City of Sebastopol, completed the TIS dated November 12, 2010, for which the peer review was performed. This letter documents the findings and recommendations of the TIS peer review and independent analysis.

Trip Generation

A review of the trip generation reveals that AECOM developed trip generation rates from the latest edition of the ITE Trip Generation reference manual. However, the TIS report does not take into account reasonable internal capture or pass-by rates. Furthermore, the proposed CVS/pharmacy will be relocated from another site within the City of Sebastopol. The existing CVS/pharmacy is located at 788 Gravenstein Highway approximately 1.5 miles from the proposed project site. Given that the CVS/pharmacy will be relocated, it is reasonable to assume that a good percentage of the existing CVS/pharmacy customers will continue patronizing the CVS/pharmacy upon relocation. However, for purposes of this peer review TJKM does not take into account any net trip reductions related to the relocation of the CVS/pharmacy, which in itself yields a conservative trip generation. For the reasons stated herein, the TIS prepared by AECOM is overly conservative in its estimation of net new project trips as it does not account for the project's internal capture trips, pass-by trip reductions or the relocation of the existing CVS/pharmacy.

As part of this peer review TJKM does not propose to reduce the net new project trips by the patrons of the existing CVS/pharmacy; however, internal capture reductions for a.m. and p.m. peak hours and pass-by trip reductions for p.m. peak hour were accounted for. The proposed project's internal capture and pass-by trips, pursuant to the *ITE Trip Generation Handbook, Second Edition*, have been calculated in order to determine the net new project trips to and from the adjacent roadways. TJKM also ensured that the proposed use of pass-by rates was evaluated based on the existing traffic volumes on Sebastopol Avenue and Petaluma Avenue. In all cases the proposed pass-by trips were found to be less than two percent of existing traffic volumes adjacent to the project site.

Table I below provides the trip generation for the proposed project before internal capture or pass-by rate reductions are taken into account. Table II provides the project's internal capture trips between the office and retail. Table III provides the net new project trips after the pass-by

Pleasanton
3875 Hopyard Road
Suite 200
Pleasanton, CA
94588-8526
925.463.0611
925.463.3690 fax

Fresno
516 W. Shaw Avenue
Suite 200
Fresno, CA
93704-2515
559.325.7530
559.221.4940 fax

Sacramento
980 Ninth Street
16th Floor
Sacramento, CA
95814-2736
916.449.9095

Santa Rosa
1400 N. Dutton Avenue
Suite 21
Santa Rosa, CA
95401-4643
707.575.5800
707.575.5888 fax

tjkm@tjkm.com
www.tjkm.com

rates for the pharmacy and bank are account for. The ITE Trip Generation Handbook Tables 5-18 and 5-20 provide p.m. peak hour pass-by trip rates for Pharmacy/Drugstore with Drive-Through Window and Drive-in Bank land uses respectively. Based on these tables the minimum observed pass-by rate reduction for these land uses are 41 percent for Pharmacy/Drugstore with Drive-Through Window and 15 percent for Drive-in Bank. Therefore, TJKM recommends using these minimum pass-by reduction rates during the p.m. peak hour. This is a conservative approach because the observed average pass-by rates for a Pharmacy/Drugstore with Drive-Through Window is 49 percent and 47 percent for a Drive-in Bank. Furthermore, p.m. peak hour pass-by reductions up to 58% for Pharmacy/Drugstores with Drive-Though Windows and 64% for Drive-in Banks have been observed and documented in ITE's Trip Generation Handbook. As ITE does not provide specific data on daily or a.m. pass-by rates; no pass-by rate reductions for the daily or a.m. peak hour are used in the calculation of the project net new trips.

Table I - Project Trip Generation before Internal Capture and Pass-by Reductions

Land Use (ITE CODE)	Size	Unit	Daily		AM Peak Hour					PM Peak Hour						
			Rate	Total	Trip Rate	In : Out %	In	Out	Total	Trip Rate	In : Out %	In	Out	Total		
Pharmacy with Drive-Thru Window (881)	14.576	k.s.f.	88.16	1,285	2.66	57	43	22	17	39	10.35	50	50	76	75	151
Drive-in Bank (912)	4.327	k.s.f.	148.15	641	12.35	56	44	30	24	54	25.82	50	50	56	56	116
Total Project Trips Before Internal Capture and Pass-By Reduction				1,926				52	41	93				132	131	263

Notes: k.s.f. = Thousand Square Feet

Table II – Internal Capture Trip Reduction

Land Use (ITE CODE)	Daily		AM Peak Hour			PM Peak Hour		
	Total		In	Out	Total	In	Out	Total
See Exhibit A	-59		-2	-2	-4	-4	-4	-8
Total Project Driveway Trips	1,867		50	39	89	128	127	255

Table III – Pass-By Trip reduction

Land Use (ITE CODE)	Daily		AM Peak Hour			PM Peak Hour				
	Rate	Total	Trip Rate	In	Out	Total	Trip Rate	In	Out	Total
Pass-By Trip Reduction for Pharmacy with Drive Thru Window (881)	-0%	0	-0%	-0	-0	-0	-41%	-30	-30	-60
Pass-By Trip Reduction for Drive-in Bank (912)	-0%	0	-0%	-0	-0	-0	-15%	-9	-8	-17
Total Pass-by Trips		0		0	0	0		-39	-38	-77

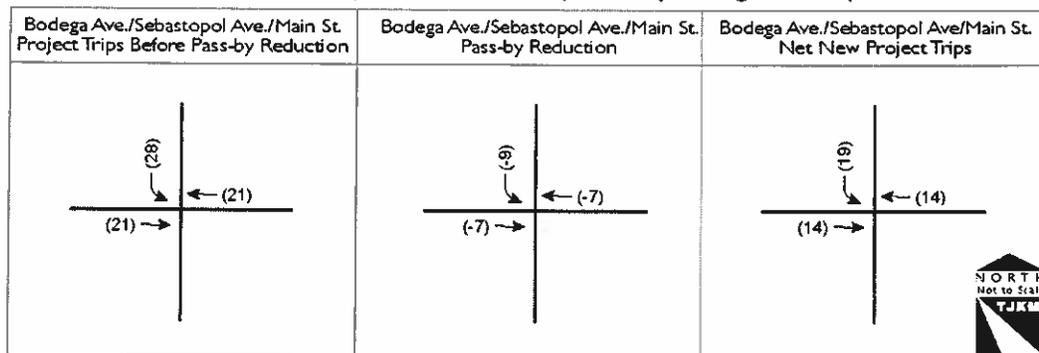
Table IV – Net New Project Trips

Trip Generation	Daily		AM Peak Hour			PM Peak Hour		
	Total		In	Out	Total	In	Out	Total
Base Project Trips	1,926		52	41	93	132	131	263
Internal Capture Trip Reduction	-59		-2	-2	-4	-4	-4	-8
Pass-by Trip Reduction	-0		-0	-0	-0	-39	-38	-77
Total Net New Project Trips	1,867		50	39	89	89	89	178

Trip Distribution and Assignment

A review of the trip distribution reveals that AECOM developed its trip distribution based on existing travel patterns and traffic volumes at the study intersections. Based on a review of the project's trip distribution, TJKM concurs with AECOM's methodology; however, TJKM recommends the use of internal capture and pass-by rate reductions be applied to determine the project's true impacts to the circulation network. Illustration 1 provides AECOM's p.m. peak hour trip assignment to the intersection of Main Street/Bodega Avenue/Sebastopol Avenue as well as TJKM's recommended pass-by rate reduction and resulting net new p.m. peak hour project trips at this intersection.

Illustration 1 – Project Only - Net New Project Trip Assignment (PM Peak Hour)



Cumulative Year 2030 No Project Traffic Forecasting

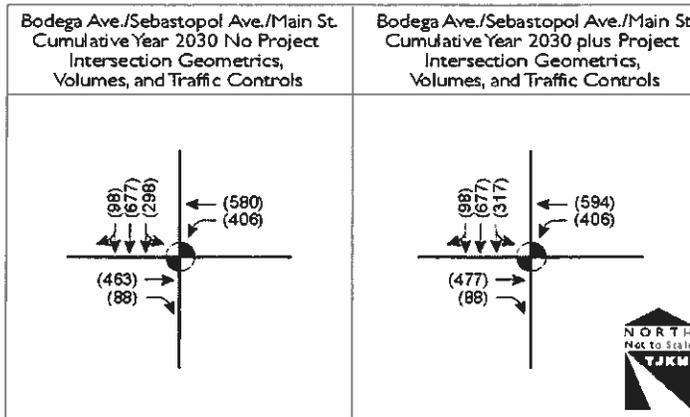
A review of the Cumulative Year 2030 No Project traffic forecasting reveals that AECOM developed annual growth rates for traffic volumes derived from link volumes from the Sonoma County Transportation Authority Model. The growth rates were then subsequently applied to the existing conditions traffic counts collected for the project to derive the Cumulative Year 2030 No Project traffic forecasting. TJKM's concurs with the methodology utilized to determine the Cumulative Year 2030 No Project traffic forecasting.

Traffic Impacts and Level of Service Calculations

While TJKM concurs with the Cumulative year 2030 No Project traffic forecasting methodologies, we find minor issues with the LOS rates presented in AECOM's TIS for the Year 2030 No Project conditions. A review of AECOM's LOS worksheets shows that the signal timing for the intersection of Main Street/Bodega Avenue/Sebastopol Avenue that the effective cycle lengths for each of its phases are always maxed out without regard to traffic volume demand. As a result, TJKM has recalculated the LOS results for the Cumulative Year 2030 No Project conditions under the assumption that the same overall cycle length of 115 seconds is retained.

Since the TIS prepared by AECOM does not take into account the effects of internal capture and pass-by trip rate reductions, TJKM used the Cumulative Year 2030 No Project traffic volumes (presented in the TIS prepared by AECOM) and added the net new project trips (to the intersection of Main Street/Bodega Avenue/Sebastopol Avenue) to derive at the Year 2030 plus Project Traffic Volumes. Illustration 2 provides the Cumulative Year 2030 No Project and the Cumulative Year 2030 plus Project Intersection Geometrics, p.m. Peak Hour Volumes and Traffic Controls. The LOS worksheets for the Year 2030 plus Project are included in Attachment B.

Illustration 2 – Year 2030 - Geometrics, Volumes, and Controls (PM Peak Hour)



As can be seen in Table V, when the effects of internal capture and pass-by trip reductions are taken into account, the LOS at the intersection of Main Street/Bodega Avenue/Sebastopol Avenue remains at LOS D during the p.m. peak hour which is below the City's threshold of significance. As a result, no mitigation is necessary for the intersection of Main Street/Bodega Avenue/Sebastopol Avenue.

Table V: Summary of Intersection Level of Service Analysis

ID	Intersection	Scenario Description	Intersection Control	P.M. Peak Hour	
				Average Delay (sec/veh)	LOS
I	Main Street/Bodega Avenue/Sebastopol Avenue	Cumulative Year 2030 No Project	Signalized	48.6	D
		Year 2030 plus Project	Signalized	50.9	D

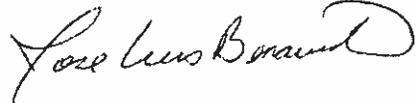
Conclusions and Recommendations

Conclusions and recommendations regarding TJKM's peer review of AECOM's TIS, its trip generation and the independent analyses of the Project's traffic impacts to the intersection of Main Street/Bodega Avenue/Sebastopol Avenue are provided below:

- The TIS prepared by AECOM is overly conservative in its estimation of net new project trips as it does not account for the project's internal capture trips, pass-by trip reductions or the relocation of the existing CVS/pharmacy.
- TJKM recommends applying conservative internal capture and pass-by rate methodologies to the project's trip generation before the project only trips are assigned to the study intersections.
- TJKM concurs with the methodology utilized in establishing the project's trip distribution to the study intersections.
- TJKM's concurs with the methodology utilized to determine the Cumulative Year 2030 No Project traffic forecasting.
- Once the effects of internal capture and pass-by trip reductions are taken into account the LOS at the intersection of Main Street/Bodega Avenue/Sebastopol Avenue remains at LOS D during the p.m. peak hour.
- In conclusion, once internal capture and pass-by rate reduction methodologies are incorporated, no mitigation is necessary for the intersection of Main Street/Bodega Avenue/Sebastopol Avenue.

If you have any questions, regarding the peer review or our independent analyses of the Project's traffic impacts please contact or me at (559) 325-7530 or by email at jbenavides@tjkm.com respectively.

Sincerely,



Jose Luis Benavides, P.E.
Sr. Associate and Fresno Branch Manager

Attachments A and B

Attachment A – Internal Capture Rates

	Total		Internal				Internal	
	AM	PM	IN	OUT	IN	OUT	AM	PM
	Residential	0	0	0	0	0	0	0
Office	53	112	1	1	2	2	2	4
Retail	39	151	1	1	2	2	2	4
	92	263	2	2	4	4	4	8

Midday/AM

Retail			
	Total	Internal	External
Enter	22	0	22
Exit	17	0	17
Total	39	0	39
%	100%	0%	100%

7%	1	5%	1
0		0	
37%	0	34%	0

Residential

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100%	#DIV/0!	#DIV/0!

PM

Retail			
	Total	Internal	External
Enter	75	0	75
Exit	75	0	75
Total	151	0	151
%	100%	0%	100%

12%	9	9%	7
0		0	
31%	0	53%	0

Residential

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100%	#DIV/0!	#DIV/0!

Midday

Residential			
	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100%	#DIV/0!	#DIV/0!

2%	0	0%	0
0		0	
0%	0	0%	0

Office

	Total	Internal	External
Enter	30	0	30
Exit	24	0	24
Total	53	0	53
%	100%	0%	100%

PM

Residential			
	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100%	#DIV/0!	#DIV/0!

0%	0	2%	0
0		0	
0%	0	2%	1

Office

	Total	Internal	External
Enter	56	0	56
Exit	56	0	56
Total	112	0	112
%	100%	0%	100%

Midday

Office			
	Total	Internal	External
Enter	30	1	29
Exit	24	1	23
Total	53	2	51
%	100%	4%	96%

20%	5	38%	11
1		1	
4%	1	3%	1

Retail

	Total	Internal	External
Enter	22	1	21
Exit	17	1	16
Total	39	2	37
%	100%	5%	95%

PM

Office			
	Total	Internal	External
Enter	56	2	54
Exit	56	2	54
Total	112	4	108
%	100%	3%	97%

23%	13	31%	17
2		2	
2%	2	3%	2

Retail

	Total	Internal	External
Enter	75	2	74
Exit	75	2	73
Total	151	4	147
%	100%	3%	98%

Attachment B – LOS Worksheets

HCM Signalized Intersection Capacity Analysis
 3: Bodega Avenue & Main Street

2030 No Project PM Peak
 3/22/2011

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑						↑↑↑	
Volume (vph)	0	463	88	406	580	0	0	0	0	298	677	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00						0.91	
Frbp, ped/bikes		1.00	0.95	1.00	1.00						0.99	
Flpb, ped/bikes		1.00	1.00	1.00	1.00						0.98	
Frt		1.00	0.85	1.00	1.00						0.98	
Flt Protected		1.00	1.00	0.95	1.00						0.99	
Satd. Flow (prot)		1660	1347	1577	1660						4299	
Flt Permitted		1.00	1.00	0.95	1.00						0.99	
Satd. Flow (perm)		1660	1347	1577	1660						4299	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	503	96	441	630	0	0	0	0	324	736	121
RTOR Reduction (vph)	0	0	32	0	0	0	0	0	0	0	12	0
Lane Group Flow (vph)	0	503	64	441	630	0	0	0	0	0	1169	0
Confl. Peds. (#/hr)			20							20		20
Turn Type			Perm	Prot						Perm		
Protected Phases		4		3	8							6
Permitted Phases			4							6		
Actuated Green, G (s)		35.7	35.7	33.0	72.7						34.0	
Effective Green, g (s)		35.7	35.7	33.0	72.7						34.0	
Actuated g/C Ratio		0.31	0.31	0.29	0.63						0.30	
Clearance Time (s)		4.0	4.0	4.0	4.0						4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)		517	419	454	1052						1274	
v/s Ratio Prot		c0.30		c0.28	0.38							
v/s Ratio Perm			0.05								0.27	
v/c Ratio		0.97	0.15	0.97	0.60						0.92	
Uniform Delay, d1		39.0	28.6	40.4	12.4						39.0	
Progression Factor		1.00	1.00	1.00	1.00						1.00	
Incremental Delay, d2		32.5	0.2	34.7	0.9						10.5	
Delay (s)		71.5	28.7	75.1	13.3						49.5	
Level of Service		E	C	E	B						D	
Approach Delay (s)		64.7			38.7			0.0			49.5	
Approach LOS		E			D			A			D	

Intersection Summary			
HCM Average Control Delay	48.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	114.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
 3: Bodega Avenue & Main Street

2030 plus Project PM Peak
 3/23/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↑						↕	
Volume (vph)	0	477	88	406	594	0	0	0	0	317	677	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00						0.91	
Frbp, ped/bikes		1.00	0.95	1.00	1.00						0.99	
Flpb, ped/bikes		1.00	1.00	1.00	1.00						0.98	
Fr _t		1.00	0.85	1.00	1.00						0.99	
Fl _t Protected		1.00	1.00	0.95	1.00						0.99	
Satd. Flow (prot)		1660	1347	1577	1660						4304	
Fl _t Permitted		1.00	1.00	0.95	1.00						0.99	
Satd. Flow (perm)		1660	1347	1577	1660						4304	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	518	96	441	646	0	0	0	0	345	736	107
RTOR Reduction (vph)	0	0	31	0	0	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	518	65	441	646	0	0	0	0	0	1178	0
Confl. Peds. (#/hr)			20							20		20
Turn Type			Perm	Prot						Perm		
Protected Phases		4		3	8							6
Permitted Phases			4							6		
Actuated Green, G (s)		36.8	36.8	33.0	73.8							33.0
Effective Green, g (s)		36.8	36.8	33.0	73.8							33.0
Actuated g/C Ratio		0.32	0.32	0.29	0.64							0.29
Clearance Time (s)		4.0	4.0	4.0	4.0							4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0							3.0
Lane Grp Cap (vph)		532	432	453	1067							1237
v/s Ratio Prot		c0.31		c0.28	0.39							
v/s Ratio Perm			0.05									0.27
v/c Ratio		0.97	0.15	0.97	0.61							0.95
Uniform Delay, d ₁		38.5	27.8	40.5	12.0							40.1
Progression Factor		1.00	1.00	1.00	1.00							1.00
Incremental Delay, d ₂		32.1	0.2	35.2	1.0							15.5
Delay (s)		70.6	28.0	75.6	13.0							55.6
Level of Service		E	C	E	B							E
Approach Delay (s)		64.0			38.4			0.0				55.6
Approach LOS		E			D			A				E
Intersection Summary												
HCM Average Control Delay			50.9			HCM Level of Service					D	
HCM Volume to Capacity ratio			0.97									
Actuated Cycle Length (s)			114.8			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			87.6%			ICU Level of Service					E	
Analysis Period (min)			15									
c Critical Lane Group												