City Council
Mayor Patrick Slayter
Vice Mayor Una Glass
Michael Carnacchi
Sarah Glade Gurney
Neysa Hinton

Planning Director
Kari Svanstrom
Associate Planner
Alan Montes
Senior Administrative Assistant
Rebecca Mansour

City of Sebastopol
Planning Commission Staff Report

Meeting Date:	September 22, 2020
Agenda Item:	7A
To:	Planning Commission
From:	Kari Svanstrom, Planning Director David Hogan, Contract Planner
Subject:	Benedetti Car Wash - Conditional Use Permit, Variance, Tentative Parcel Map, Mitigated Negative Declaration (CEQA)
Recommendation:	Recommend Project Approval with Conditions to the City Council
Applicant/Owner:	Mark Reece
File Number:	2019-27
Address:	6809 Sebastopol Avenue
CEQA Status:	Mitigated Negative Declaration
General Plan:	Central Core
Zoning:	Downtown Core (CD)

Introduction:

In March 2019, the City received an application from Mark Reece proposing the construction of a car wash with an office on an undeveloped area at the rear of the commercial property located at 6809 Sebastopol Avenue. The project applications for consideration by the Planning Commission include a Use Permit, Variance, and Tentative Parcel Map; along with a Mitigated Negative Declaration to address California Environmental Quality Act requirements (CEQA). As the project includes a subdivision act (Tentative Parcel Map), the application will need to be approved by City Council. The Planning Commission's recommendations on the projects will be forwarded to the City Council.

Use Permit

The Project involves the construction of a new building to contain an automated car wash and office. Table 17.25-1 (Permitted and Conditionally Permitted Uses in the Commercial, Office and Industrial Zones) of the Zoning Ordinance indicates that Automotive sales, service and repair uses are permittable in the CD Zoning District with the approval of a Use Permit. The proposed office use is permitted in the CD Zoning District. The project plans are included in Attachment 2.

Variance

Table 17.25-2 (Development Standards in the Commercial, Office and Industrial Zones) indicates that the minimum floor area ratio (FAR) in the CD Zone for a new building is 1.0. FAR is calculated by dividing the gross floor area of the building into the lot area. The proposed Variance is required because the tentative parcel map creates an undeveloped parcel which

would normally be required to achieve the minimum floor area ratio. The FAR for the proposed car wash office building is only 0.20. The applicant's justification for a variance is in Attachment 3.

Tentative Parcel Map

The applicant proposes to subdivide the existing 1.51-acre lot into 3 new parcels. Each new parcel would accommodate one of the three buildings. The size and proposed use of each parcel is summarized below.

Proposed Parcel	Parcel Area	Land/Building Use
1	0.62 ac	Existing Tire Shop
2	0.36 ac	Existing Oil Change/Lube
3	0.52 ac	Proposed Car Wash/Office

The applicant has indicated that the proposed subdivision is intended to facilitate project financing. However, because the subdivision would create legal parcels that could, in theory, be sold to different owners, there is a need to address the issues associated with shared ownership of the related commercial parcels. As a result, staff is recommending that the project be conditioned to record a maintenance/access agreement. This agreement would provide for shared use of the three sites including access, shared parking, shared landscape maintenance, and joint use of the new trash enclosure. The proposed tentative parcel map is included in Attachment 4.

Mitigated Negative Declaration

After the project was determined to be complete for processing, an Initial Study was prepared for the Project. The results of the Initial Study indicated that the proposed project could have potentially significant noise and vibration impacts on adjacent properties. In response, the Initial Study identified mitigation measures that will mitigate or reduce the project impacts to a less than significant level. The mitigation measures have been incorporated into the conditions of approval. No other potentially significant impacts were identified. The Initial Study/Mitigated Negative Declaration is in Attachment 5.

Multiple Project Approvals

The project consists of three different City decisions which would normally require hearings by different bodies. According to Section 17.400.040.A.1 of the Sebastopol Municipal Code, "*If more than one planning approval is required for a single project, the applications may be processed concurrently, with all the permits being considered and acted upon by the highest applicable review authority, with the exception of the Design Review Board and Tree Board which will act separately on permits*." Since the approval of a tentative parcel map requires the approval of the City Council, these approval actions will ultimately be considered by Council, based upon a recommendation from the Planning Commission.

Previous Planning Commission

The Planning Commission reviewed an initial project plan at its September 12, 2017, meeting. Following the applicants' presentation, four members of the public addressed the Commission. After receiving public testimony, the Commission shared their comments and concerns with the project. The Commission's primary concerns and how they were addressed are summarized below.

Commission Comments	Project Modifications/Responses
Left Turns onto Barnes Avenue (from Sebastopol Avenue)	The project will be conditioned to provide access to the car wash from onsite locations (without having to exit the site via Sebastopol Avenue).
Noise concerns and proximity to residential uses	A study was prepared to assess the effects of car wash-related noise. With the addition of the proposed blower silencing equipment and the sound barrier along the property line near the exit from the car wash, the project will comply with City noise limitations. No noise impacts were identified to nearby residences.
Increased traffic on Sebastopol Avenue	The Traffic Impact Assessment did not identify a substantial increase in traffic on Sebastopol or Petaluma Avenues. Providing additional site access via Barnes Avenue/Abbot Avenue will reduce the amount of traffic accessing site from Sebastopol Avenue.
Reduce water use.	The car wash system will reuse about 80% of the car wash water.

Project Description:

The project is located in the downtown commercial area on the south side of Sebastopol Avenue immediately east of Barnes Avenue. The car wash will be added to an existing auto service center which includes a tire shop and oil change/maintenance business. The project would not alter the existing uses. The proposed two-story building would contain an automated car wash on the ground floor with business-supporting offices upstairs. The architecture and materials proposed for the new building will be similar to the existing onsite buildings.

The southern portion of the site will be reconfigured to allow direct access from Barnes Avenue. The new driveway will lead to queueing lanes for the car wash and will provide a second access point to the auto service center. The vehicle interior cleaning stations are located on the west side of building after the exit from the car wash. These spaces contain vacuum stations.

The project includes a new trash enclosure south of the existing tire shop. The trash enclosure will be used by all of the onsite businesses. Following the Commission's recommendation to approve the project, the Design Review Board will review the design of the new building and site.

Additional landscaping will be provided between the vacuuming area and the drive aisle connecting the new driveway with the existing businesses. The project will also include additional trees along the Sebastopol Avenue frontage. Following the Commission's recommendation on the project, the Sebastopol Tree Board will review the removal and replacement of the trees affected by the project.

The proposed tentative parcel map would subdivide the existing 1.51-acre site into three parcels. The subdivision would locate each of the three buildings on its own parcel (with shared access and parking). Notwithstanding the intent of the applicant, the created parcels could (in theory) be sold off individually. As a result, the tentative map will be conditioned to record a

shared use agreement covering access, parking, trash disposal, and landscape maintenance concurrently with the recordation of the final map.

The proposed variance would waive the requirement that the Parcel 3 project would provide a minimum floor area ratio of 100%. The proposed parcel has an area of 22,676 square feet. To comply with the code any future building would need to include at least 22,676 square feet. The proposed project includes a building with approximately 4,400 square feet. This square footage includes the car wash bay and related mechanical equipment, staff and storage areas, and the associated second floor office space.

General Plan Consistency:

A review of the adopted General Plan identified a number of items that the proposed project was consistent with, these items are listed below. No inconsistencies were identified during this review.

Land Use Map

The General Plan Land Use Plan indicates that the project site is designated as Central Core. The Land Use Element describes Central Core as the following: "*This designation applies to portions of Sebastopol's downtown and nearby areas. The Central Core designation allows office, commercial and retail uses, as well as mixed-use residential developments*."

The proposed project involves an additional commercial and office use on a site already used for commercial purposes. The project is consistent with the land uses depicted on the Land Use Map.

Goals and Policies

Land Use Element

Policy LU 1-3*: Require new development to occur in a logical and orderly manner, focusing growth on infill locations and areas designated for urbanization on the Land Use Map (see Figure 2.1), and be subject to the ability to provide urban services, including paying for any needed extension of services.*

The project involves an additional auto-serving use in an existing auto service facility and is consistent with this policy.

Policy LU 1-7*: Encourage new development to be contiguous to existing development, wherever possible.*

The project is contiguous to existing commercial land uses.

Circulation

Policy CIR 1-18*: Consider the impacts of traffic and land use growth on the road network, especially in downtown Sebastopol, when evaluating proposals for new development.*

Potential traffic impacts were evaluated as part of the review of this project. A focused traffic study evaluated three intersections around the project. As shown below, none of the evaluated intersections showed a violate of the City's Level of Service (LOS) requirement of LOS D. The

only change was at the intersection of Sebastopol Avenue at Morris Street where the LOS changed from B to C during the morning peak hour.

Study Intersections	Existing Conditions		Existing plus Project	
	AM Peak	PM Peak	AM Peak	PM Peak
Sebastopol Ave at Petaluma Ave	LOS B	LOS C	LOS B	LOS C
Sebastopol Ave at Morris St	LOS B	LOS C	***LOS C***	LOS C
Petaluma Ave at Abbott Ave	LOS A	LOS A	LOS A	LOS A
Westbound Approach from Abbott Ave	*LOS B*	*LOS B*	*LOS B*	*LOS B*

Policy CIR 2-14*: Provide secure bicycle racks in places such as the Downtown, at commercial areas, park and ride transit facilities, schools, multiple unit residential developments, and other locations where there is a concentration of residents, visitors, students, or employees.*

The project includes bicycle racks consistent with the municipal code.

Conservation and Open Space Element

Policy COS 6-5*: Require new development to incorporate trees in landscape plans.*

The project includes the planting of additional landscape and replacement trees.

Policy COS 9-11*: Promote the use of reclaimed water and other non-potable water sources.*

The project proposes to use 80% recycled water in the car washing process.

Noise Element

Policy N 1-1*: Ensure the noise compatibility of existing and future development when making land use planning decisions.*

Project noise was considered in the application processing and consideration processes.

Policy N 1-2*: Require development and infrastructure projects to be consistent with the Land Use Compatibility for Community Noise Environments standards indicated in Table N-1 to ensure acceptable noise levels for existing and future development.*

The project approval incorporates conditions of approval and design elements to comply with the acceptable noise levels identified in Table N-1.

Safety Element

Policy SA 2-8*: Require all development projects to demonstrate how storm water runoff will be detained or retained on-site, treated, and/or conveyed to the nearest drainage facility as part of the development review process. Project applicants shall demonstrate that project implementation would not result in increases in the peak flow runoff to adjacent lands or drainage facilities that would exceed the design capacity of the drainage facility or result in an increased potential for offsite flooding.*

The project incorporated measures to retain onsite stormwater runoff consistent with regulatory requirements.

Policy SA 2-9*: Prohibit development in the 100-year flood zone unless requirements of the City's Flood Damage Protection Ordinance criteria are met.*

The project is located within the 100-year flood zone and will be conditioned to comply with this requirement.

Zoning Ordinance Consistency:

Use
The Central Core (CD) Zoning District is intended to create, preserve, and enhance the downtown area as the historic retail core of Sebastopol. This district provides for a range of uses, including office, retail, restaurant, service, and other commercial uses, while allowing for residential growth. The proposed auto-related service use is allowed with the approval of a conditional use permit in the zone. If the Use Permit is approved, the project will comply with the use provisions of Table 17.25-1.

Development Standards
Table 17.25-1 contains the development standards for the CD Zoning District. The Project complies with all of the development standards in Table 17.25-2, except for minimum floor area ratio. The need to comply with the minimum floor area ratio requirement was created by the request to subdivide the property, as this requirement is not appliable to sites with existing buildings that are being maintained or added to. Prior to that, the carwash represented an expansion of the existing auto service center which means that the minimum floor area ratio requirement would not apply. If the City Council ultimately approves the variance, the project would be allowed to develop with less than the minimum required floor area ratio. The approval of the variance would make the project consistent with the Zoning Ordinance.

Car Wash Requirements
Municipal Code Section 17.345.020 contains additional requirements relating to car washes. These requirements are in addition to other use and development standards in Title 17. The requirements are highlighted below along with an evaluation of how the project complies with these requirements.

A. *The site layout and design shall ensure that there is adequate room for the queuing and drying areas and vehicles will not queue in the adjoining walkways and streets.*

   Evaluation: Table 17.110-2 requires that the amount of car wash queueing needs to be at least six-times the capacity of the car wash. The car wash has a capacity of two vehicles (one in the wash location and one at the dryer). Consequently, the site plan includes onsite queueing laned with an area for approximately twelve vehicles between the Barnes Avenue driveway and the entrance to the car wash. Additional queueing is available in the drive aisle leading to the other onsite auto service uses.

B. *All washing and automatic drying facilities shall be completely within an enclosed building.*

   Evaluation: According to the architectural plans, all of the washing and drying equipment is located within the proposed building.

C. *Vacuuming facilities shall not be located along public or private streets and shall be screened from adjacent residential properties. Mechanical equipment for powering vacuuming shall be located within an enclosed structure.*

Evaluation: The vacuum stations are located onsite along the west side of the car wash building. There are no residential properties adjacent to the site which would require additional screening. All of the car wash mechanical equipment is located inside the proposed building.

D. *Any noise from car washing activities, loudspeakers, and vacuuming shall meet the noise standards in the SMC and General Plan.*

Evaluation: A noise study was prepared to assess noise levels from the operation of the car wash. The noise study concluded that the dryer blower silencing equipment combined with the additional sound wall near the exit of the car wash, there would be no offsite noise conflicts.

E. *Car washes shall use recycled water whenever feasible.*

Evaluation: The applicant has committed to using recycled water in the washing operation. The preliminary estimates are that at least 80% of the water used in the washing operation will be recycled and use in the operation of the car wash. As a result, the project proposes to incorporate the use of recycled water.

Parking

Chapter 17.110 contains automobile and bicycle parking requirements. According to the municipal code, the standard parking ratio in the downtown is 1 parking space for every 500 square feet of net floor area. The required and provided parking is shown below. For the purpose of this analysis, service bays and car wash lanes are not counted as required parking spaces. The car wash is required to provide queueing locations and clean-up staging for vehicles, these spaces are also not counted as required parking. The project also provides queueing spaces for 12 vehicles in front of the car wash and 16 vacuum/clean up spaces after the car wash. As depicted below, there is adequate onsite parking.

Parcel/Land Uses	Gross Floor Area	Net Floor Area	Required Parking	Provided Parking
1. Tire Store Retail	6,700 SF	5,695 SF		17
2. Oil Change/	1,400 SF	1,180 SF		11
3. Car Wash/Office	3,950 SF	3,358 SF		0
PROJECT TOTAL	**12,050 SF**	**10,233 SF**	**20**	**28**

The code requires that bicycle parking, equivalent to 20% of the required parking spaces, be provided onsite. With this ratio the project will need to provide 4 bicycle parking spaces. There are currently two spaces on site. The project will be conditioned provide two more bicycle spaces somewhere on the property. The exact location is flexible since the required shared use agreement will ensure that all parking spaces are useable by all three businesses.

City Department Comments:

The following departments reviewed the project application: Building and Safety, City Manager, Fire, Police Services, Engineering, Public Works, along with the Sonoma County Health Departments. The following comments were received during the application review process.

Building and Safety Department comments:

- Will require a Floodplain Development Permit.

Engineering Comments:

- Above-grade backflow prevention devices shall be installed on the existing domestic and fire service laterals.
- A separate irrigation service shall be installed with an above-grade backflow prevention device.
- The applicant shall patch the failed areas of the asphalt parking lot, and slurry seal the entire lot.
- The handicap-accessible parking spaces shall be re-striped after the slurry seal to conform with current State standards.

Environmental Review:

An Initial Study (IS) was prepared to evaluate the environmental impacts of the Project as required by the California Environmental Quality Act (CEQA). This evaluation was supported by two independently prepared technical studies (noise and traffic). The IS concluded that the project would not have significant impacts on the environment with the implementation of the identified mitigation measures and recommended the approval of a Mitigated Negative Declaration (MND). Also, the City provided project consultation notices to the tribal representatives identified by the Native American Heritage Commission. None of the tribal representatives contacted requested a consultation on the project.

The following mitigation measures are incorporated into the conditions of approval.

- **CR-1: Inadvertent Discovery of Cultural Resources**. In the event that any prehistoric or historic-period subsurface archaeological features or deposits, including darkened soil (midden), that could conceal cultural deposits, animal bone, obsidian and/or mortar are discovered during earth-moving activities, all ground-disturbing activity within 50 feet of the discovery shall be halted immediately and the Planning and Building Divisions notified within 12 hours. Impacts on any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the City and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. If Native American archaeological, ethnographic, or spiritual resources are discovered, all identification and treatment of the resources shall be conducted by a qualified archaeologist and Native American representatives who are approved by the local Native American community as experts of their cultural traditions.

- **NOI-1: Reduce Offsite Noise Effects**. Prior to the issuance of a building permit, the applicant shall submit evidence that the proposed car wash drying system incorporates a silencer to achieve operational noise levels no greater than 77 dBA at a distance of 10 feet and 63 dBA at a distance of 50 feet from the entrance and exit to the car wash. Installation of the approved silencer system shall be completed prior to final inspection.

- **NOI-2: Additional Noise Mitigation**: Prior to the issuance of a building permit, the applicant shall submit evidence that a noise reducing barrier six feet in height or other method to reduce offsite noise levels to meet City noise criteria along the east property line (south from the adjacent commercial building) to a point at least perpendicular to the northern exit of the proposed car wash, are incorporated into the project. Installation of the approved noise reducing barriers shall be completed prior to final inspection.

- **NOI-3: Reduce Vibration Impacts**. Prior to the issuance of a building permit, the applicant shall identify all heavy construction equipment to be used for this project that have the potential to produce high vibration levels (tracked vehicles, vibratory compaction, jackhammers, hoe rams, etc.). This information shall be submitted to the City during the building permit process. If the applicant proposes the use of heavy construction equipment with the potential to generate excessive vibration, the applicant shall submit a plan documenting how the use of this equipment will not occur within 18 feet of existing structures.

The IS/MND was circulated for public review and comment from August 20, 2020 to September 20, 2020. As of the date of this staff report, one comment was received. The comment letter expressed concern with existing noise levels impacts in the area and questioned why interior noise levels in their upstairs office were not included in Table 8 (on page 24 of the noise impact technical study). The commenter also suggested that the City should have stricter noise requirements for car washes and businesses with drive thru's.

Based upon the commenter's stated address and the tenant information in building lobby, the commenter appears to be located in the upstairs office over the Chimera art facility. Chimera is a non-profit co-op where local artists can share tools, knowledge, and workspace and located east of the Benedetti Auto Center. The upstairs offices were constructed in 2016 and the commenter's office is connected to the Chimera workspace by both shared atria and internal stairs.

Table 8 identifies potential noise impacts on sensitive exterior receptors around the project. The analysis was not intended to evaluate building interior noise levels or noise impacts from existing noise sources. These sensitive outdoor receptors included the outdoor pool at the Sebastopol Inn, the outdoor patio at Peet's Coffee, hikers on the Joe Rodota trail, and the nearest residence. Unlike activities in enclosed buildings, noise levels in these locations are buffered only by distance.

It is important to note that the purpose of CEQA is to evaluate the impact of a project (in this case the conditional use permit for the car wash) on the environment. The law does not require the effects of existing activities (such as noise from tire shop) be evaluated since the existing business use is not subject to a discretionary governmental decision. It is the discretionary governmental decision that trigger CEQA compliance. The project includes noise mitigation features that are expected to meet the noise requirements contained in the municipal code. Once the project is completed, the current noise ordinance will be used to ensure land use compatibility. A copy of the comment letter is included in Attachment 6.

Staff will provide any updated information to the Commission during staff's presentation at the public hearing.

Required Findings/Analysis:

To recommend approval of the proposed applications to the City Council, the Commission will need to support findings for each application. The findings for each application are provided below.

Conditional Use Permit
Chapter 17.415 of the Sebastopol Municipal Code (SMC) indicates that Conditional use permits are discretionary and shall be granted only when the use or activity complies with the following.

- **The Project is consistent with the General Plan.**

  The proposed commercial use is consistent with the Central Core area which is intended to support office, commercial and retail uses and mixed-use residential developments in the downtown area. The proposed project involves an additional commercial and office use on a site already used for commercial purposes. While automotive uses are not always compatible with downtowns, the site is north of industrially zoned areas along Abbott Avenue and already has automotive uses on the site. Additionally, a car wash is primarily a local-serving use that will support those visiting the downtown area. The project is consistent with applicable General Plan policies and is not inconsistent with any of the policies. Consequently, the project is consistent with the General Plan.

- **The Project is consistent with the Zoning Ordinance.**

  The expansion of the existing auto service use is allowable (i.e. conditionally permitted) within the Downtown Core (CD) Zoning District. Until the applicant requested a minor subdivision, the project complied with the applicable development standards. However, the creation of a new undeveloped parcel resulted in the need for development on the site to comply with the minimum floor area ratio requirements in Table 17.25-2. The applicant is requesting a variance to waive the minimum floor area ratio requirements. If the requested variance is approved, the project will comply with the Zoning Ordinance.

- **The establishment, maintenance, and operation of the use applied for will not, under the circumstances of the particular case (location, size, design, and operating characteristics), be detrimental to the health, safety, peace, morals, comfort, or general welfare of persons residing or working in the area of such use or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the City.**

  The proposed commercial use is consistent with surrounding commercial uses and has been conditioned to fit into the surrounding area. The operational conditions include the following:

  - Access to the site from Sebastopol Avenue via Barnes Avenue shall not include left turns onto Barnes Avenue.

  - The car wash and vacuums shall operate only between the hours of 7:00 a.m. and 7:00 p.m.

  - Parking spaces and required drive aisles shall not be occupied by storage trailers, containers, sheds, etc.

- Employees shall be allowed to park onsite.

Staff is also recommending that the project be conditioned to provide a Good Neighbor Policy plan to the Planning Director for approval. The Policy would identify how car wash would operate and how future noise conflicts would be resolved.

As conditioned, the establishment and operation of the use will not be detrimental to the health, safety, peace, morals, comfort, or general welfare of persons residing or working in the area and will not be detrimental or injurious to property and improvements.

Variance
The purpose of a variance is to allow for the occasional relaxation of development standards on a site-specific basis, to allow the development of the property consistent with other properties in the same zoning district while protecting the public welfare. Section 17.420.020 of SMC identifies the findings necessary to approve a variance. These requirements are as follows:

- **There are exceptional or extraordinary circumstances or conditions applying to the land, building or use which circumstances or conditions do not apply generally to land, buildings, and/or uses in the same district.**

  In the justification the applicant stated that, *"The proposed project is the expansion of an existing business specializing in automobile service and repair. The existing tire and service business has been located in this location since 1992 and the express lube was constructed in 1998, both operating under on existing Conditional Use Permit. It is logical to continue the existing land use into the area where the new car wash facility is proposed. The nature of this type of business does not lend itself to mixed use, which would be required in order to satisfy the required floor area ratio minimum of 1.0. For the proposed use, the parking areas are accurately defined as an extension of the business area without vehicles, the reason for the land use ceases to exist. In retail and office developments, parking is an accessory use. In this instance, the vehicles present are the primary reason for the business."*

  The unusual situation is created by the combination of the existing auto service center and the requested parcel map. It is this unusual combination that necessitates the need for the variance. Auto service centers normally have very low floor area ratios (less than 0.25) because of the amount of the site dedicated to parking, storage, and queueing of vehicles. While the Zoning Ordinance provisions envision future multi-story mixed use development in downtown in general, requiring the carwash to comply with a high floor area ratio of 1.0 would result in the need for a building five times larger than what is proposed. Additionally, staff concurs with the applicant that automotive uses, while not generally compatible with mixed use development containing residential uses would not incompatible in this location given the adjacent commercial land uses. Requiring additional office or residential uses to meet the required floor area ratio would create a more substantial land use conflict. This requirement would create an unreasonable hardship.

- **Granting the application is necessary for the preservation and enjoyment of a substantial property right.**

In the justification the applicant stated that, *"the initial design of this project as well as the Planning Commission preliminary review was accomplished prior to the current, General Plan and Zoning Ordinance update. General support for the proposed project was indicated at that time with the understanding that a variance would likely be required.*

A variance would allow the intent of the Zoning District to be preserved. The intent of the Central Core district is to provide a range of uses, including office, retail, restaurant, service, and other commercial uses such as the existing business and the proposed expansion.

The variance will not create a substantial detriment to adjacent properties and will not materially impair or be contrary to the spirit, purpose and intent of the district, or the public interest."

In their discussion on September 12, 2017, the Planning Commission recognized that automotive uses would be found in the downtown even though they are now what would be expected in a mixed use setting. The approval of the variance to allow the expansion of the auto service center into the undeveloped portion of the site, will preserve existing property rights, and complete the development of the center.

- **Granting the application will not materially adversely affect the health or safety of persons residing or working in the neighborhood of the property and will not be materially detrimental to the public welfare or injurious to property or improvements in said neighborhood.**

In the justification the applicant stated that, *"The location of the proposed project is not in a residential district, the nearest residential uses are 700 feet to the south and 900 feet to the east, therefore the project would not adversely affect the health and safety of any resident. The proposed project is an extension of and consistent with an existing land use on the property; there are no existing adverse or injurious detriments to the public welfare under the existing use. There is no reason this pattern would not continue."*

The approval of the variance to facilitate the expansion of the auto service center in this location, combined with the operational conditions for the use permit, will ensure that the project will not adversely affect the health or safety of the public. The closest residential uses are about 700 feet to the south (along Eleanor and Fannen Avenues) and the Sebastopol Inn located 300 feet to the east. It will also not be materially detrimental to the public welfare or injurious to property or improvements.

Tentative Parcel Map

Section 16.24.040 SMC specifies that the findings spelled out in Section 16.28.070 SMC shall apply to all minor subdivisions. These findings are:

- **That the proposed subdivision, together with the provisions for its design and improvement, is consistent with the General Plan, any applicable specific plan, and other applicable provisions of this code.**

The design of the subdivision is consistent with the General Plan and Zoning Ordinance. The subdivision is also typical with similar commercial subdivisions in terms of its shared access and project components. The subdivision is consistent with this finding.

- **That the design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the State Subdivision Map Act and any guidelines promulgated by the City Council.**

  The design of the subdivision will facilitate and not obstruct future passive/natural heating or cooling opportunities since the subdivision is facilitating a building that will not be tall enough to obstruct future passive heating and cooling on this site or on adjacent sites. In addition, the subdivision is typical with other similar commercial subdivisions and is consistent with this requirement/finding.

Noticing and Public Comment:

As prescribed by Section 17.460 of the Zoning Ordinance, the Planning Department completed the following: (1) Provided written notice to all property owners within 600 feet of the external boundaries of the subject property; (2) provided a written notice that was published in the Sonoma West Times; and (3) posted three written notices publicly on and within vicinity of the subject property.

The Planning Department has received several public comments in support of the project. These are included in Attachment 7. The previously discussed comment on the initial study/mitigated negative declaration is contained in Attachment 6. Any additional comments received after the distribution of this staff report will be provided to the Commission at the public hearing.

Recommendation:

Staff recommends that the Planning Commission consider the following items and approve the resolution, with findings and conditions of approval, substantially in the form contained in Exhibit A to recommend that the City Council:

- Certify the Mitigated Negative Declaration;
- Approve the Conditional Use Permit, subject to the attached conditions;
- Approve the Variance; and
- Approve the Tentative Parcel Map, subject to the attached conditions.

Exhibits

Exhibit A. Draft PC Resolution including Findings and Conditions of Approval

Attachments:

1) Application Materials
   - Master Planning Application Form
   - Written Project Statement

2) Conditional Use Permit and Architectural Project Plans

3) Tentative Parcel Map

4) Applicant’s Variance Justification

5) Initial Study/Mitigated Negative Declaration and Appendices

6) Comments on Initial Study

7) Public Comments on Project

EXHIBIT A

PLANNING COMMISSION RESOLUTION 20-__
Planning File No. 2019-27

USE PERMIT, VARIANCE, and TENTATIVE PARCEL MAP
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
Benedetti Car Wash Project
6809 Sebastopol Avenue (APN 004-063-029)
CD: Downtown Core Zoning District

Whereas, the Benedetti Tire & Express Lube consists of a tire shop and oil change/ maintenance operation; and

Whereas, the project involves additional development as part of the Benedetti Tire & Express Lube, including the construction and operation of an automated car wash with second floor office space on a vacant portion of the site (the "Project"); and

Whereas, the Zoning Code requires a conditional use permit to operate a car wash in the CD: Downtown Core Zoning District; and

Whereas, the Zoning Code requires a minimum floor area ratio of 1.0 in the Downtown Core Zoning District on vacant parcels; and

Whereas, the project applicant is proposing to subdivide the existing lot into three parcels; each lot will accommodate a single building and related landscaping, parking and access; and

Whereas, the subdivision of the existing lot requires that development on the vacant lot is required to comply with the minimum floor area ratio requirement of 1.0 in the Downtown Zoning District in the Zoning Code; and

Whereas, the approval of Project will require the approval of a Variance pursuant to the provisions of the Zoning Code; and

Whereas, the Project was the subject of an Initial Study and Mitigated Negative Declaration prepared in compliance with the California Environmental Quality Act (CEQA), which was circulated for public comment consistent with local and State CEQA requirements, which the Planning Commission has reviewed and considered, as well as comments made on it during its public review period; and the Commission has further considered additional cultural resources information provided in the staff report, and included conditions of approval relating to that topic; and

Whereas, the Mitigated Negative Declaration identifies two potentially significant impacts regarding cultural resources and noise/vibration. However, available and feasible mitigation measures will reduce these impacts below a level of significance; and

Whereas, as conditioned, the City finds that the proposed Project is compatible with the character of this part of Sebastopol, and will not impair the desirability of investment or occupation in the downtown; and

Whereas, site access will be improved with the opening of a driveway onto Barnes Avenue which will allow access to the carwash. The carwash will also have access from the tire

shop and car maintenance building, which will reduce the number of vehicle turning movements onto and from Sebastopol Avenue; and

Whereas, the Project is consistent with a number of policies of the General Plan, including but not limited to the following:

Policy LU 1-3: *Require new development to occur in a logical and orderly manner, focusing growth on infill locations and areas designated for urbanization on the Land Use Map (see Figure 2.1), and be subject to the ability to provide urban services, including paying for any needed extension of services.*

The Project is consistent in that it involves an additional auto-serving use in an existing auto service facility.

Policy LU 1-7: *Encourage new development to be contiguous to existing development, wherever possible.*

The Project is contiguous to existing commercial land uses and is consistent with this policy.

Policy CIR 1-18: *Consider the impacts of traffic and land use growth on the road network, especially in downtown Sebastopol, when evaluating proposals for new development.*

Potential traffic impacts were evaluated as part of the review of this Project. A focused traffic study evaluated three intersections around the project. The resulting traffic volumes do not exceed the City's Level of Service (LOS) "D" standard.

Policy CIR 2-14: *Provide secure bicycle racks in places such as the Downtown, at commercial areas, park and ride transit facilities, schools, multiple unit residential developments, and other locations where there is a concentration of residents, visitors, students, or employees.*

The Project includes bicycle racks consistent with the municipal code.

Policy COS 6-5: *Require new development to incorporate trees in landscape plans.*

The Project includes the planting of additional landscape and replacement trees.

Policy COS 9-11: *Promote the use of reclaimed water and other non-potable water sources.*

The Project proposes to reuse approximately 80% of the water from the car wash operation.

Policy N 1-1: *Ensure the noise compatibility of existing and future development when making land use planning decisions.*

Project noise was considered in the application processing and consideration processes.

Policy N 1-2: *Require development and infrastructure projects to be consistent with the Land Use Compatibility for Community Noise Environments standards indicated in Table N-1 to ensure acceptable noise levels for existing and future development.*

The Project approval incorporates conditions of approval and design elements to comply with the acceptable noise levels identified in Table N-1.

Policy SA 2-8: *Require all development projects to demonstrate how storm water runoff will be detained or retained on-site, treated, and/or conveyed to the nearest drainage facility as part of the development review process. Project applicants shall demonstrate that project implementation would not result in increases in the peak flow runoff to adjacent lands or drainage facilities that would exceed the design capacity of the drainage facility or result in an increased potential for offsite flooding.*

The Project incorporated measures to retain onsite stormwater runoff consistent with regulatory requirements.

Policy SA 2-9: *Prohibit development in the 100-year flood zone unless requirements of the City's Flood Damage Protection Ordinance criteria are met.*

The Project is located within the 100-year flood zone and will be conditioned to comply with this requirement.

USE PERMIT

Whereas, Zoning Code Section 17.345.020 contains additional requirements relating to car washes; and

Whereas, Subsection A of Section 17.345.020 requires that adequate queuing and drying areas be provided so that vehicles will not block adjacent walkways and streets. The project provides for queueing for at least a dozen vehicles and will not block site access onto Barnes Avenue; and

Whereas, Subsection B of Section 17.345.020 requires that all washing and automatic drying facilities shall be completely within an enclosed building. The project plans show that all of the washing and drying equipment is enclosed within the proposed building; and

Whereas, Subsection C of Section 17.345.020 requires that any vacuuming facilities shall not be located along public or private streets and shall be screened from adjacent residential properties. The proposed vacuum stations are located onsite on private property along the west side of the car wash building and there are no residential properties adjacent to the site which would require additional screening; and

Whereas, Subsection D of Section 17.345.020 requires compliance with the City's noise standards. The project includes noise reduction equipment and is conditioned to comply with City standards; and

Whereas, Subsection E of Section 7.345.020 requires that car washes use recycled water whenever feasible. The design of the car wash will re-use approximately 80% of the water used in the car wash operation; and

Whereas, the proposed use will not, under the circumstances of this particular case, be detrimental to the health, safety, comfort, or general welfare of persons residing or working in the neighborhood or within close proximity in that it will contain an auto-oriented use in an existing auto service center and will not have a detrimental impact or created significant quality of life issues; and

Whereas, the project is an infill development that will not physically divide an established community, and is expected to have positive connectivity impacts on the area by providing direct access to Barnes Avenue and ultimately Petaluma Avenue; and

Whereas, the project will be subject to an extensive list of conditions of approval to ensure that its construction and subsequent operation will not have substantial detrimental impacts on persons working and residing in the area or the environment.

VARIANCE

Whereas, the purpose of a Variance is to establish a procedure for the relaxation of the provisions of the Zoning Code so that the public welfare is secured and that substantial justice done in accordance with the intent of the General Plan and Zoning Code; and

Whereas, the project does not currently comply with the minimum floor area ratio identified for the downtown area; and

Whereas, the minimum floor area ratio requirements were established to facilitate the development mixed use development which includes residential uses; and

Whereas, the inclusion of a residential use in an auto service center would create a land use conflict inconsistent with the intent of the General Plan; and

Whereas, the expansion of the existing auto center is consistent with the intent of the City to retain existing local serving businesses; and

Whereas, the proposed Variance is consistent with the intent and provisions of the General Plan in that there are unusual circumstances applying to the land, building or use which circumstances or conditions do not apply generally to land, buildings, and/or uses in the same district, in that the site is an infill development project within an automotive uses, and the use itself, a car wash, is compatible with the other uses on the site but not compatible with other mixed-uses such as office and residential uses. The location of the site is

Whereas, that granting the application is necessary for the preservation and enjoyment of a substantial property right consistent with other auto service uses in an auto service center; and

Whereas, that granting the application as conditioned, will not materially adversely affect the health or safety of persons residing or working in the neighborhood of the property and will not be materially detrimental to the public welfare or injurious to property or improvements in said neighborhood in that the project will comply with established performance standards and is not located adjacent to a sensitive land use.

TENTATIVE PARCEL MAP

Whereas, the project application requests approval to subdivide the existing lot into three parcels; and

Whereas, the proposed subdivision, together with the provisions for its design and improvement, and subject to the Conditions of Approval, will be consistent with the General Plan and other provisions of the Sebastopol Municipal Code; and

Whereas, the design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the State Subdivision Map Act and any guidelines promulgated by the City Council; and

Whereas, the project proposes that the three parcels share access, parking, landscape maintenance, and trash collection; and

Whereas, the project has been conditioned to record a maintenance and access agreement over all three parcels.

PUBLIC PROCESS

Whereas, the project applicant, in advance of their formal application, undertook a voluntary Preliminary Review by the Planning Commission; and prior to the public hearing complied with public noticing requirements; and

Whereas, the applicant made adjustments to the proposal based on community and Planning Commission comments; and

Whereas, on September 22, 2020, the Sebastopol Planning Commission conducted a duly-noticed public hearing on the application, considering the written submittals, including but not limited to the Mitigated Negative Declaration, staff report, resolutions, application materials, plans, and a number of public comments, receiving a staff report at the hearing, receiving a presentation from the applicants, and providing an opportunity for public comments; all of which the Commission duly considered; and

Now, therefore, the Planning Commission hereby recommends that the City Council:

1) Certify the Mitigated Negative Declaration, and

2) Approve the Use Permit, Variance, and Tentative Parcel Map applications for the Benedetti Car Wash project located at 6809 Sebastopol Avenue, subject to the following mitigation measures and conditions of approval:

MITIGATION MEASURES

The following mitigation measures constitute a mitigation program for the project. These measures are incorporated into the condition of approval. The Planning Department, Building Official, and City Engineer shall monitor the project for compliance with the four mitigation measures and shall verify compliance prior issuance of a Certificate of Occupancy.

CR-1: Inadvertent Discovery of Cultural Resources. In the event that any prehistoric or historic-period subsurface archaeological features or deposits, including darkened soil (midden), that could conceal cultural deposits, animal bone, obsidian and/or mortar are discovered during earth-moving activities, all ground-disturbing activity within 50 feet of the discovery shall be halted immediately and the Planning and Building Divisions notified within 12 hours. Impacts on any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the City and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. If Native American archaeological,

ethnographic, or spiritual resources are discovered, all identification and treatment of the resources shall be conducted by a qualified archaeologist and Native American representatives who are approved by the local Native American community as experts of their cultural traditions.

NOI-1: Reduce Offsite Noise Effects. Prior to the issuance of a building permit, the applicant shall submit evidence that the proposed car wash drying system incorporates a silencer to achieve operational noise levels no greater than 77 dBA at a distance of 10 feet and 63 dBA at a distance of 50 feet from the entrance and exit to the car wash. Installation of the approved silencer system shall be completed prior to final inspection.

NOI-2: Additional Noise Mitigation: Prior to the issuance of a building permit, the applicant shall submit evidence that a noise reducing barrier six feet in height or other method to reduce offsite noise levels to meet City noise criteria along the east property line (south from the adjacent commercial building) to a point at least perpendicular to the northern exit of the proposed car wash, are incorporated into the project. Installation of the approved noise reducing barriers shall be completed prior to final inspection.

NOI-3: Reduce Vibration Impacts. Prior to the issuance of a building permit, the applicant shall identify all heavy construction equipment to be used for this project that have the potential to produce high vibration levels (tracked vehicles, vibratory compaction, jackhammers, hoe rams, etc.). This information shall be submitted to the City during the building permit process. If the applicant proposes the use of heavy construction equipment with the potential to generate excessive vibration, the applicant shall submit a plan documenting how the use of this equipment will not occur within 18 feet of existing structures.

CONDITIONS OF APPROVAL

Conditions of Approval – Conditional Use Permit:

1. Approval is granted for the Conditional Use Permit described in the application and the following project plans: Architectural plan set (2 sheets) dated 3-21-19, by Patrick Slayter Architect, and Civil plan set (4 sheets) dated 8-12-20, by Adobe Associates, except as modified by these conditions of approval, and is valid for a period of three (3) years during which time the rights granted must be exercised.

Development Conditions

City Planning Department

2. All construction shall conform to the approved plans. The applicant shall obtain a Building Permit prior to the commencement of construction activities.

3. All exterior mechanical equipment shall be screened to the satisfaction of the Planning Department.

4. The project shall comply with the following mitigation measures from the Mitigated Negative Declaration.

    a. In the event that any prehistoric or historic-period subsurface archaeological features or deposits, including darkened soil (midden), that could conceal cultural deposits, animal bone, obsidian and/or mortar are discovered during earth-moving

activities, all ground-disturbing activity within 50 feet of the discovery shall be halted immediately and the Planning and Building Divisions notified within 12 hours. Impacts on any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the City and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. If Native American archaeological, ethnographic, or spiritual resources are discovered, all identification and treatment of the resources shall be conducted by a qualified archaeologist and Native American representatives who are approved by the local Native American community as experts of their cultural traditions. (Mitigation Measure CR-1)

b. Prior to the issuance of a building permit, the applicant shall submit evidence that the proposed car wash drying system incorporates a silencer to achieve operational noise levels no greater than 77 dBA at a distance of 10 feet and 63 dBA at a distance of 50 feet from the entrance and exit to the car wash. Installation of the approved silencer system shall be completed prior to final inspection. (Mitigation Measure NOI-1)

c. Prior to the issuance of a building permit, the applicant shall submit evidence that a noise reducing barrier six feet in height or other method to reduce offsite noise levels to meet City noise criteria along the east property line (south from the adjacent commercial building) to a point at least perpendicular to the northern exit of the proposed car wash, are incorporated into the project. Installation of the approved noise reducing barriers shall be completed prior to final inspection. (Mitigation Measure NOI-2)

d. Prior to the issuance of a building permit, the applicant shall identify all heavy construction equipment to be used for this project that have the potential to produce high vibration levels (tracked vehicles, vibratory compaction, jackhammers, hoe rams, etc.). This information shall be submitted to the City during the building permit process. If the applicant proposes the use of heavy construction equipment with the potential to generate excessive vibration, the applicant shall submit a plan documenting how the use of this equipment will not occur within 18 feet of existing structures. (Mitigation Measure NOI-3)

5. This approval does not include any commercial business signs. Any new commercial signs that will identify the use of this property are subject to the prior approval of the Design Review Board or City staff, as appropriate.

6. Two bicycle parking space is required and shall be installed prior to the issuance of the Certificate of Occupancy.

7. The existing storage trailers shall be removed prior to final inspection.

8. A business license is required and shall be obtained prior to operation of the use.

9. Prior to final inspection the applicant shall submit, and the Planning Director approve, a Good Neighbor Policy Plan describing how the car wash operation will be a good neighbor to adjacent businesses. The Good Neighbor Policy shall be posted at the site in a location visible by employees.

<u>City Building Department:</u>

10. For the building permit submittal, 5 sets of plans are required along with 2 sets of calculations and reports.

11. The accessible parking stall shall be relocated to the front of the building as it's required "to be located on the shortest accessible route from parking to an accessible entrance." CBC 11B-208.3.1.

12. A Floodplain Development Permit application, along with supporting documentation, shall be submitted with the Building Permit application. The Base Flood Elevation (BFE) is 78' and there is a 2' freeboard requirement on top of that for an adjusted BFE of 80'. The finish slab is shown at 78'.

13. All construction and construction related activities shall be in conformance with the 2019 California Building, Residential, Electrical, Mechanical, Plumbing, Fire, Energy and Green Building Codes, and the City of Sebastopol Municipal Code.

14. Authorized Construction Hours:

    a. Monday through Friday – 7:00 a.m. to 6:00 p.m.

    b. Saturday and Sunday – 8:00 a.m. to 5:00 p.m.

    c. Includes warm-up or servicing of equipment and any preparation for construction.

15. The Planning Conditions of Approval shall be printed on plan sheets in the plan set.

16. A geotechnical report is required for this project.

17. The project is required to comply with CalGreen at the Tier I level excluding Division A4.2 Energy Efficiency, as adopted and amended by the City. The worksheets can be located on the City's website on the building department page. The worksheets are to be printed on plan sheets in the plan set.

18. Before approval of the foundation inspection: A licensed Land Surveyor or Civil Engineer with proper certification shall conduct a survey of all property lines and install property line markers that can be readily verified by Building Inspection staff to verify setbacks and submit a written (stamped) confirmation to the Building Department that the staking of the property lines has been completed.

19. Before approval of the foundation inspection: The project Geotechnical Engineer shall inspect all foundation excavations and submit a written (stamped) verification that all is in conformance with the approved Construction Documents.

20. Before approval of the foundation inspection: The project Structural Engineer, Architect, or Special Inspector shall inspect all foundation reinforcing and related hardware and submit a written (stamped) verification that all is in conformance with the approved Construction Documents.

21. Before approval of the framing inspection: The project Structural Engineer, Architect, or Special Inspector shall inspect all lateral force resisting elements of the structure and

submit a written (stamped) verification that all is in conformance with the approved Construction Documents.

City Fire Department

22. The entire building shall install a fully automatic sprinkler system and fire alarm protection system that shall be monitored 24-7-365 basis.

City Public Works/Engineering Department:

23. Submittals for Engineering Plan Check shall be made at the Public Works Department. Plan Check Deposit shall be paid at the time of submittal. Call (707) 823-2151 for information.

24. Any exceptions or variances from these conditions will require the written approval of the City Engineer or approval of the City Council if required by City Code.

Site Improvement Plans

25. Improvement Plans prepared by a Registered Civil Engineer shall be submitted for the review and approval of the City Engineer showing grading, paving, utilities and drainage. The improvements plans shall include street and utility information including all concrete curb and gutter, sidewalk, striping and signing, paving, water lines and sewer lines, erosion control and any necessary transitions for the portion of the public street fronting the development. All improvements shall be in accordance with the City of Sebastopol Standard Improvement Details. Improvement Plans shall include a Storm Water Pollution Prevention Plan including winterization and erosion protection.

26. The improvement plans for work in the State right of way shall also be submitted to Caltrans for Encroachment Permit review. The developer shall obtain an Encroachment Permit for the work within the State right of way prior to approval of the improvement plans by the City. The developer's contractor shall obtain an Encroachment Permit to perform the work in the State right of way prior to beginning that work.

27. The improvement plans must be evaluated by an arborist to assess the impact of the development on any existing trees and develop a site specific Tree Protection Plan. Improvement Plans shall include the location and size of all existing trees to be removed, and trees to remain. Trees on adjacent property which overhang the project boundary shall be afforded equal protection. Improvement plans shall show all measures identified in the Tree Protection Plan as needed, to protect trees during construction.

28. The project shall include post-construction stormwater BMPs in accordance with the City's Low Impact Development manual and Section 15.78 of the Municipal Code.

29. The following notes shall appear on the improvement plan cover sheet: "During construction, the Developer shall be responsible for controlling noise, odors, dust and debris to minimize impacts on surrounding properties and streets."

30. The Sebastopol Avenue drive approach to the site shall be reconstructed to current Caltrans standards. Any failed portions of the sidewalk along Sebastopol Ave shall be removed and replaced.

31. The connection to Barnes Ave at the southwest corner of the site shall be constructed with a 15 ft radius curb return on the northeast corner. Modification of the existing infiltration trench along Barnes Ave will be required. The developer shall provide proof that the adjacent property owner agrees to the construction.

    The developer shall provide a flow dissipator at the storm drain outlet at the southeast corner of the site.

    The drive aisle at the exit of the carwash shall slope back to the car wash for the first 15 feet. A slot drain shall be installed at the exit of the carwash that connects to the wash water recycling system

Soils

32. The applicant shall submit to the City of Sebastopol for review and approval, a detailed Soils Report certified by a Civil 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. The report shall also include pavement recommendations based on anticipated subgrade soils and traffic loads. The grading and improvement plans shall incorporate the recommendations of the approved Soils Report.

    The developer shall submit percolation tests for the areas designated for bioretention basins.

Undergrounding

33. During construction all utility distribution facilities on site shall be placed underground, except surface-mounted transformers, pedestal mounted terminal boxes, meter cabinets, and fire hydrants. Appropriate easements shall be provided to facilitate these installations.

Streets, Traffic & Circulation

34. No pervious paving or stamped concrete shall be installed in the existing or future public right of way.

35. Any additional proposed pavement removal and re-paving will be subject to the review and approval of the City Engineer.

Grading

36. The applicant shall submit to the City of Sebastopol for review and approval, a grading plan prepared by a Registered Civil Engineer; shall obtain a Grading Permit; and shall post sufficient surety guaranteeing completion.

37. The grading plan shall clearly show all existing survey monuments and property corners and shall state that they shall be protected and preserved.

38. The grading plan shall clearly show areas of possible soil contamination, along with the appropriate steps to deal with contaminated soils.

39. Both temporary and permanent erosion control plans shall be submitted for review and approval along with the grading plan. Permanent erosion control measures shall include hydroseeding of all graded slopes within 60 days of completion of grading.

40. If the site will require import or export of dirt, the applicant shall submit in writing the proposed haul routes for the trucks and equipment. The haul routes must be approved by the City prior to import/export work commencing.

Storm Drain

41. The applicant shall submit to the City of Sebastopol for review and approval, drainage plans, hydrologic, and hydraulic calculations prepared by a Registered Civil Engineer. The drainage plans and calculations shall indicate the following conditions before and after development:

    a. Quantities of water, water flow rates, drainage areas and patterns and drainage courses. Hydrology shall be per current Sonoma County Water Agency Standards.

    b. Project drainage shall be designed using the 10-year storm average flow and 100-year peak flow.

42. No drainage may discharge across sidewalks. Roof leaders shall be piped to the adjacent gutter or paved area.

43. Any proposed bioswales must be wholly contained outside of the existing or proposed public right of way.

44. All storm drain inlets shall be permanently marked using a permanent polyurethane marker with the legend, “No Dumping – Drains To Creek.”

45. The applicant shall demonstrate for each building pad to the satisfaction of the City of Sebastopol as follows:

    a. Feasible access during a 10-year frequency storm.

Water

46. The developer shall install new domestic, irrigation and fire service laterals to serve the new building. All water mains shall be sized to provide adequate fire flows to the buildings. All water services shall be provided with backflow prevention devices in accordance with State and City standards.

47. New water laterals shall be constructed in accord with City Standards. Meter locations shall be subject to approval by the Sebastopol Public Works Department. The improvement plans shall show water services to each building.

48. Fire protection shall be in accord with the requirements of Sebastopol Fire Department. With the submittal of the improvement plans, calculations shall be provided to the City and the Sebastopol Fire Department to ensure that adequate water pressures are available to supply hydrant flows and sprinkler flows.

49. New water mains and fire hydrants must be constructed and functional prior to the issuance of the building permit.

50. All hydrants shall be covered with bags indicating that the hydrant is not active until flow tests are completed by the City and the hydrants are approved.

51. All aboveground backflow hardware shall be screened with an architectural screen compatible with the adjacent building.

Wastewater (sanitary sewer)

52. A sanitary sewer application shall be submitted to the Building Department for review and approval. Discharge permits for individual uses shall be subject to the requirements of the City of Santa Rosa Utilities Department, Environmental Compliance Division, for Sewer Use Permits.

Miscellaneous

53. The improvement plans shall include detailed landscape construction drawings for work proposed in the public right of way.

54. Any trees planted within 10 feet of a public street curb shall include a root barrier acceptable to the City Engineer and the City Arborist.

55. The improvement plans shall include an onsite signing and striping plan which clearly delineates traffic control and parking restriction requirements.

56. No construction shall be initiated until the Improvement Plans have been approved by the City, all applicable fees have been paid, an encroachment permit and/or grading permit has been issued and a project schedule has been submitted to the City Engineer and a pre-construction conference has been held with the City Engineer or his designee.

57. Developer shall secure encroachment permits from the City and from Caltrans prior to performing any work within the City or State right of way or constructing a City facility within a City easement.

58. Applicant must file a **Notice of Intent To Comply With the Terms of General Permit to Discharge Storm Water Associated with Construction Activity** (NOI) with the State of California Water Resources Control Board, and obtain a permit, prior to commencement of any construction activity.

During Construction, the Following Conditions Shall Apply:

59. All construction shall conform to the City Standard Details and Specifications dated July, 1998, all City Ordinances and State Map Act and the approved plans.

60. The developer shall complete all water and wastewater improvements, including pressure and bacterial testing and raising manholes and cleanouts to grade prior to connection of any buildings to the City water or wastewater systems.

61. All tree protection fencing must be installed and inspected prior to commencement of grading operations. Fencing shall be maintained throughout the construction period.

62. If any hazardous waste is encountered during the construction of this project, all work shall be immediately stopped and the Sonoma County Environmental Health

Department, the Fire Department, the Police Department, and the City Inspector shall be notified immediately. Work shall not proceed until clearance has been issued by all of these agencies.

63. Prior to placing of asphalt, all underground utilities shall be installed and service connections stubbed out behind the sidewalk. Public utilities, Cable TV, sanitary sewers, and water lines, shall be installed in a manner which will not disturb the street pavement, curb, gutter and sidewalk, when future service connections or extensions are made.

64. Prior to placing the final lift of asphalt, all sanitary sewer lines shall be video inspected at the expense of the contractor/developer. All video tapes shall be submitted to the City. If any inadequacies are found, they shall be repaired prior to the placement of the final lift of asphalt.

65. The Contractor shall be responsible to provide erosion and pollution control in accordance with the approved plans and permits.

66. The developer shall keep adjoining public streets free and clean of project dirt, mud, materials, and debris during the construction period, as is found necessary by the City Engineer.

67. Where soil or geologic conditions encountered in grading operations are different from that anticipated in the soil and/or geologic investigation report, or where such conditions warrant changes to the recommendations contained in the original soil investigation, a revised soil or geologic report shall be submitted for approval by the City Engineer. It shall be accompanied by an engineering and geological opinion as to the safety of the site from hazards of land slippage, erosion, settlement, and seismic activity.

68. Hours of work for both public improvements and private improvements shall be limited to the hours of 7 a.m. to 7 p.m. Monday through Saturday. Work on Sunday will only be permitted with written permission from the City. Violation of these working hours shall be deemed an infraction and upon conviction thereof, shall be punishable as prescribed by law.

69. Throughout the construction of the project, dust control shall be maintained to the satisfaction of the City and the contractor shall be responsible to implement reasonable measure to cure any problems that may occur.

70. If the existing public streets are damaged during construction, the contractor/developer shall be responsible for repair at no cost to the City.

71. If, during construction, the contractor damages any existing facilities on the neighboring properties (i.e. fences, gates, landscaping, walls, etc.) contractor shall be responsible to replace all damaged facilities.

Prior to Occupancy, the Following Conditions Shall be Satisfied:

72. Prior to acceptance of improvements or occupancy of building, existing curb, gutter and sidewalk to remain shall be inspected by the City Engineer. Any curb, gutter and sidewalk which is not in accord with City standards or is damaged before or during construction, shall be replaced.

73. All streets shall be paved, all public utilities installed and all signage relating to traffic control (stop signs, etc.) shall be installed.

74. All improvements shown in the improvement plans for any individual parcel deemed necessary for the health, safety and welfare of the occupant and general public shall be completed prior to occupancy of that parcel.

75. The civil engineer/land surveyor shall file an Elevation Certificate for the new building.

76. Prior to acceptance of public improvements, a complete set of **As-Built** or Record, improvement plans on the standard size sheets will be certified by the Civil Engineer and returned to the City Engineer's office prior to final acceptance of the public improvement. In addition, the plans shall be submitted on a CD-ROM in pdf format. These plans shall show all constructive changes from the original plans including substantial changes in the size, alignment, grades, etc. during construction, and any existing utilities that were unknown on the original plans but discovered during construction. The Contractor shall pay a fee for having the improvements put into the City Base Map.

Operational Conditions

77. The use shall be in substantial conformance with the proposed operations as described in the application materials and on file at the City of Sebastopol Planning Department, except as modified herein.

78. The car wash operation shall comply with the following operational requirements.

    a. The car wash and vacuums shall operate only between the hours of 7:00 a.m. and 7:00 p.m.

    b. Vehicles leaving the site shall not make left turns from Sebastopol Avenue onto Barnes Avenue.

    c. Parking spaces and required drive aisles shall not be occupied by storage trailers, containers, sheds, etc.

    d. Employees shall be allowed to park onsite.

General Conditions

79. The City of Sebastopol and its agents, officers and employees shall be defended, indemnified, and held harmless from any claim, action or proceedings against the City, or its agents, officers and employees to attach, set aside, void, or annul the approval of this application or the environmental determination which accompanies it, or which otherwise arises out of or in connection with the City's action on this application, including but not limited to, damages, costs, expenses, attorney's fees, or expert witness fees.

80. The Planning Director shall interpret applicable requirements in the event of any redundancy or conflict in conditions of approval.

81. Unless otherwise provided for in conditions of this conditional use permit, all conditions must be completed prior to or concurrently with the establishment of the granted use.

82. Failure to comply with the conditions specified herein as the basis for approval of application and issuance of this conditional use permit, constitutes cause for the revocation of said permit in accordance with the procedures set forth in this title.

83. Minor changes may be approved administratively by the Planning Director or their respective designee upon receipt of a substantiated written request by the applicant. Prior to such approval, verification shall be made by each relevant Department or Division that the modification is consistent with the application fees paid and environmental determination as conditionally approved. Changes deemed to be major or significant in nature shall require a formal application or amendment.

84. The use granted by this conditional use permit must be in operation within three years of the delivery of the signed permit to the Permittee. The applicant may request one (1) one-year extension of this Use Permit from the Planning Director, pursuant to Zoning Ordinance §17.400.100. If any use for which a conditional use permit has been granted is not in operation within three years of the date of receipt of the signed permit by the Permittee and no extension has been granted, the permit shall become null and void and re-application and a new permit shall be required to establish the use.

85. The terms and conditions of this conditional use permit shall run with the land and shall be binding upon and be to the benefit of the heirs, legal representatives, successors and assigns of the Permittee.

86. The Use Permit shall be in effect unless it is abandoned or closed for 12 months or longer.

Conditions of Approval – Parcel Map:

1. A Parcel Map prepared by a licensed surveyor or civil engineer, shall be prepared and submitted for the review and approval of the City Engineer. The map shall conform to the requirements of the Subdivision Map Act and local ordinances. Upon recording of the map, the subdivision is valid.

2. All property corners of lots within the subdivision shall be monumented with no less than 3' long by 1/2" diameter galvanized steel pipe imbedded no less than 24" into the earth, except as expressly permitted in writing by the City Engineer.

3. The Parcel Map shall state:
    a. The assessor’s parcel number
    b. Total area of land being subdivided (in acres)
    c. Total number of lots being created

4. Developer shall either complete the required construction prior to recordation of the map or enter into an Improvement Agreement and post security with the City of Sebastopol prior to the filing of the Final Map, agreeing to complete the required construction within 24 months after the filing of the map. The Improvement Agreement shall be recorded with the map.

5. The applicant shall transmit by certified mail a copy of the conditionally approved Tentative Map together with a copy of Section 66436 of the State Subdivision Map Act to

each public entity or public utility that is an easement holder of record. Written compliance shall be submitted to the City of Sebastopol.

6. The applicant shall execute a covenant running with the land on behalf of itself and its successors, heirs, and assigns agreeing to annex this subdivision into the existing City of Sebastopol Lighting Assessment District.

7. Concurrently with the recordation of the final map the applicant shall record a maintenance and access agreement allowing all three parcels complete and unrestricted access to the other parcels as well as to Barnes and Sebastopol Avenues, onsite parking, and use of the trash enclosure, and define maintenance responsibilities for all shared facilities, including stormwater maintenance. The agreement shall be approved by the City Engineering and Planning Departments prior to recordation.

Adopted by the Planning Commission on September 22, 2020 by the following vote:

AYES:
NOES:
ABSTAIN: None
ABSENT: None

_____
Certified: Kari Svanstrom, Planning Director

City of Sebastopol

Planning Department
7120 Bodega Avenue
Sebastopol, CA 95472
(707) 823-6167 (Phone) or (707) 823-1135 (Fax)
www.ci.sebastopol.ca.us

MASTER PLANNING APPLICATION FORM

PROJECT INFORMATION:

ADDRESS:	6809 Sebastopol Avenue
PARCEL #:	004-063-029
PARCEL AREA:	CD

FOR CITY USE ONLY

PLANNING FILE #: 2019 / 27

DATE FILED: 03-26-19

TOTAL FEES PAID: $ 8,470-

RECEIVED BY:

DATE APPLICATION DEEMED COMPLETE:

APPLICANT OR AGENT:

Name: Mark Reece

Email Address: btsinc@sbcglobal.net

Mailing Address: 6809 Sebastopol Avenue

City/State/Zip: Sebastopol CA 95472

Phone: 707-829-3884

Fax: 707-829-1205

Business License #:

Signature:

Date: 03/26/19

OWNER OF PROPERTY *IF OTHER THAN APPLICANT*:

Name: Benedetti-Madsen-Polley Trust

Email Address:

Mailing Address: P.O. Box 280

City/State/Zip: Sebastopol, CA 95473-0280

Phone:

Fax:

Business License #:

Signature:

I certify that this application is being made with my consent.

Date: 03/26/19

OTHER PERSONS TO BE NOTIFIED: (Include Agents, Architects, Engineers, etc.).

Name: Adobe Associates, Inc.
James Jensen & Justin Rodden

Email Address: jjensen@adobeinc.com
jrodden@adobeinc.com

Mailing Address: 1220 N. Dutton Avenue

City/State/Zip: Santa Rosa, CA 95401

Phone: 707-541-2300

Fax: 707-541-2301

Name: Patrick Slayter

Email Address: ps@slayterarchitect.com

Mailing Address: PO Box 941

City/State/Zip: Sebastopol

Phone: 707-829-9090

Fax:

RECEIVED
MAR 26 2019
BY:

PROJECT DESCRIPTION:

DESCRIBE IN DETAIL, the proposed project and permit request. (Attach additional pages, if needed):

Minor Three Lot Subdivision- Please see attached Written Statement

This application includes the checklist for the type of application requested: ☒ Yes ☐ No

Please indicate the type(s) of application that is being requested (example: Use Permit, Design Review, Variance, Planned Community Rezone, etc.):

Tenative Map

Please describe existing uses (businesses, residences, etc.) and other structures on the property:

Commercial/Business : Automotive

Benedetti Tire Service & Benedetti Xpress Lube

DEVELOPMENT DATA:

SQUARE FEET BUILDING EXISTING:	Xpress Lube: 1,417sf Tire Shop: 6,872sf	☐ N / A
SQUARE FEET BUILDING DEMOLISHED:		☒ N / A
SQUARE FEET BUILDING NEW:		☒ N / A
NET CHANGE IN BUILDING SQUARE FEET:		☒ N / A
NUMBER OF DWELLING UNITS EXISTING:	☐ 0 Bedrooms ☐ 2 Bedrooms ☐ 4+ Bedrooms	☐ 1 Bedrooms ☐ 3 Bedrooms ☒ N / A
NUMBER OF DWELLING UNITS PROPOSED:	☐ 0 Bedrooms ☐ 2 Bedrooms ☐ 4+ Bedrooms	☐ 1 Bedrooms ☐ 3 Bedrooms ☒ N / A
NET CHANGE IN DWELLING UNITS:		☒ N / A
SETBACKS:	**Existing:** ☐ Front Yard 0 ☐ Side Yard 0 ☐ Rear Yard 0 ☐ N / A	**Proposed:** ☐ Front Yard 0 ☐ Side Yard 0 ☐ Rear Yard 0 ☐ N / A

RECEIVED
MAR 2 6 2019
BY:

EXISTING LOT DIMENSIONS:	Front: _____ Rear: _____ Left: _____ Right: _____ See attached Exhibit "Existing Parcel"		☐ N / A
PROPOSED LOT DIMENSIONS:	Front: _____ Rear: _____ Left: _____ Right: _____ See attached Exhibit "Proposed Parcels"		☐ N / A
EXISTING LOT AREA:	65,734 Square Feet		☐ N / A
PROPOSED LOT AREA:	_____ Square Feet See attached Exhibit "Proposed Parcels"		☐ N / A
BUILDING HEIGHT:	Existing: _____	Proposed: _____	☒ N / A
NUMBER OF STORIES:	Existing: _____	Proposed: _____	☒ N / A
PARKING SPACE (S):	Existing: _____	Proposed: _____	☒ N / A
ZONING	Existing: _____	Proposed: _____	☒ N / A

Will the project involve a new curb cut or driveway? ☐ Yes ☒ No

Are there existing easements on the property? ☒ Yes ☐ No

Will Trees be removed? ☐ Yes ☒ No

*If yes, please describe (**Example:** Type, Size, Location on property, etc.)*

N/A

Will Existing Landscaping be revised? ☐ Yes ☒ No

If yes, what is square footage of new or revised landscaping?

N/A

Will Signs be Changed or Added? ☐ Yes ☒ No

Business: Hours of Operation? Open: N/A Close: N/A

Is alcohol service proposed? ☐ Yes ☒ No

If yes, what type of State alcohol license is proposed? N/A

If yes, have you applied to the State Alcoholic Beverage Control for a license? ☐ Yes ☐ No

If this is a restaurant, café or other food service, bar, or nightclub, please indicate total number of seats: N/A

Is any live entertainment proposed? N/A ☐ Yes ☐ No

If yes, please describe: _____

RECEIVED
MAR 26 2019
BY: .....

INDEMNIFICATION AGREEMENT

As part of this application, applicant agrees to defend, indemnify, release and hold harmless the City, its agents, officers, attorneys, employees, boards and commissions from any claim, action or proceeding brought against any of the foregoing individuals or entities, the purpose of which is to attack, set aside, void or annul the approval of this application or the adoption of the environmental document which accompanies it or otherwise arises out of or in connection with the City's action on this application. This indemnification shall include, but not be limited to, damages, costs, expenses, attorney fees or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the City's action on this application, whether or not there is concurrent passive or active negligence on the part of the City.

If, for any reason any portion of this indemnification agreement is held to be void or unenforceable by a court of competent jurisdiction, the remainder of the agreement shall remain in full force and effect.

Applicant's Signature	Date Signed	Planning File Number
		2019-27

NOTE: The purpose of the indemnification agreement is to allow the City to be held harmless in terms of potential legal costs and liabilities in conjunction with permit processing and approval.

NOTICE OF MAILING:

Email addresses or facsimiles will be used for sending out staff reports and agendas to applicants, their representatives, property owners, and others to be notified.

Please sign and acknowledge you have been notified of the Notice of Mailing for applications and have provided an email address or fax number.

Signature	Printed Name
	Mark Reece

NOTE: It is the responsibility of the applicant and their representative to be aware of an abide by City laws and policies. City staff, Boards, Commissions, and the City Council will review applications as required by law; however the applicant has responsibility for determining and following applicable regulations.

RECEIVED
MAR 26 2019
BY:

NEIGHBOR NOTIFICATION

In the interest of being a good neighbor, it is highly recommended that you contact those homes or businesses directly adjacent to, or within the area of your project. Please inform them of the proposed project, including construction activity and possible impacts such as noise, traffic interruptions, dust, larger structures, tree removals, etc.

Many projects in Sebastopol are remodel projects which when initiated bring concern to neighboring property owners, resident and businesses. Construction activities can be disruptive, and additions or new buildings can affect privacy, sunlight or landscaping. Some of these concerns can be alleviated by neighbor-to-neighbor contacts early in the design and construction process.

It is a "good neighbor policy" to inform your neighbors so that they understand your project. This will enable you to begin your construction with the understanding of your neighbors and will help promote good neighborhood relationships.

Many times development projects can have an adverse effect on the tranquility of neighborhoods and tarnish relationships along the way. If you should have questions about who to contact or need property owner information in your immediate vicinity, please contact the Building and Safety Department for information at (707) 823-8597, or the Planning Department at (707) 823-6167.

I have informed site neighbors of my proposed project: ☐ Yes ☐ No

If yes, or if you will inform neighbors in the future, please describe outreach efforts:

The neighbors were notified prior to the preliminary review. New notifications are currently underway.

WEBSITE REQUIRED FOR MAJOR PROJECTS

Applicants for major development projects (which involves proposed development of 25,000 square feet of new floor area or greater, or 25 or more dwelling units), are required to create a project website in conjunction with submittal of an application for Planning approval (including but not limited to Subdivisions, Use Permits, Rezoning's, and Design Review). Required information may be provided on an existing applicant web site.

The website address shall be provided as part of the application. The website shall be maintained and updated, as needed until final discretionary approvals are obtained for the project.

Such website shall include, at a minimum, the following information:

- √ Project description
- √ Contact information for the applicant, including address, phone number, and email address
- √ Map showing project location
- √ Photographs of project site
- √ Project plans and drawings

RECEIVED
MAR 2 6 2019
BY:

Exemption Questionnaire
STORM WATER LOW IMPACT DEVELOPMENT

PURPOSE: This questionnaire will determine *whether* or *not* you need to submit the 'Storm Water Low Impact Development Determination Worksheet' as part of this application. Any application that does not contain this questionnaire OR the Determination Worksheet will be deemed incomplete.

PROJECT ADDRESS:

6809 Sebastopol Avenue; APN 004-063-029

TYPE OF APPLICATION

Your project is exempt from the 'Determination Worksheet' submittal requirement, if it falls under any of the below listed application categories. However, the City Staff may require the submittal of a 'Determination Worksheet', as determined on a case-by-case basis.

- ☐ Administrative Review (Interior Improvements or Use)
- ☐ Sign Review
- ☐ Temporary Use Permit
- ☐ Time Extension Request
- ☐ Tree Removal Permit
- ☐ Zoning Determination or Interpretation

The project is exempt from the 'Storm Water Low Impact Development Determination Worksheet' submittal requirement as determined by City Staff.

I certify this information:

APPLICANT SIGNATURE | Mark Reece PRINTED NAME | DATE

RECEIVED
MAR 26 2019
BY:

City of Sebastopol

ENVIRONMENTAL INFORMATION/ASSESSMENT FORM

(To be completed by applicant)

The submittal information shall be provided to the Planning Department.

Date Filed: March 25, 2019

General Information:

1. Name of developer or project sponsor: Mark Reece, Benedetti Tire and Express Lube, Owner
   Address of developer or project sponsor: 6809 Sebastopol Avenue, Sebastopol, CA 95472

2. Address of project: 6809 Sebastopol Avenue, Sebastopol, CA 95472

   Assessor's Block and Lot Number: 004 - 063 - 029

3. Name of person to be contacted concerning this project:: Patrick Slayter Architect
   Address of person to be contacted concerning this project: P.O. Box 941, Sebastopol, CA 95473
   Telephone Number of person to be contacted concerning this project: 707 - 829 - 9090

4. Indicate number of the permit application for the project to which this form pertains:

   _____

5. List and describe any other related permits and other public approvals required for this project, including those required by City, Regional, State and Federal Agencies:

   Subdivision, Conditional Use Permit, Environmental Review as determined by Staff, no regional, State or Federal review required

6. Existing Zoning District: CD Existing General Plan Designation: CC - Central Core

7. Propose Use of Site (Project for which this form is filed):

   Expansion of an existing automotive service and repair business in the form of a new automatic car wash and related site improvements.

RECEIVED
MAR 26 2019
BY:

PROJECT DESCRIPTION:

8. Site Size: 22,675 square feet (proposed), see proposed lot configuration in subdivision submittal

9. Square Footage: 4,295 square feet (building), 15,300 square feet (total site use for the proposed project, including vacuum stations)

10. Number of floors of construction: Two

11. Amount of off-street parking: See attached tabulation

12. Attach plans: Attached

13. Proposed scheduling: As expedient as possible

14. Associated project: No associated project is considered

15. Anticipated incremental development: None

16. If residential, include the number of units, schedule of unit sizes, range of sale prices or rents, and type of household size expected.
Not residential

17. If commercial, indicate the type, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities. Primarily a city oriented business, with a moderate regional reach; the use is service based and does not require a traditional sales area; no loading facilities.

18. If industrial, indicate type, estimated employment per shift, and loading facilities.
Not industrial

19. If institutional, indicate the major function, estimated employment per shift, estimated occupancy, loading facilities, and community benefits to be derived from the project.
Not institutional

20. If the project involves a variance, conditional use or rezoning application, state this and indicate clearly why the application is required.
A Floor Area Ratio variance has been applied for as part of this application.

Are the following items applicable to the project or its effects? Discuss below all items checked yes (attach additional sheets as necessary).

21.	Change in existing features of any bays, tidelands, beaches or hills, or substantial alternation of ground contour.	Yes ❑	No ■
22.	Change in scenic views or vistas from existing residential areas or public lands or roads.	Yes ❑	No ■
23.	Change in pattern, scale or character of general area of project.	Yes ❑	No ■
24.	Significant amounts of solid waste or litter.	Yes ❑	No ■
25.	Change in dust, ash, smoke, fumes or odors in vicinity.	Yes ❑	No ■
26.	Change in ocean, bay, lake, stream or ground water quality or	Yes	No

RECEIVED
MAR 26 2019
BY:

	quantity, or alteration of existing drainage patterns.	❑	■
27.	Substantial change in existing noise or vibration levels in the vicinity.	Yes ❑	No ■
28.	Site on filled land or on slope of 10 percent or more.	Yes ❑	No ■
30.	Substantial change in demand for municipal services (police, fire, water, sewage, etc).	Yes ❑	No ■
31.	Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc).	Yes ❑	No ■
32.	Relationship to a larger project or series of projects.	Yes ❑	No ■

Environmental Setting:

33. Describe the project site as it exists before the project, including information on topography, soil stability, plants and animals, and any cultural, historical or scenic aspects. Describe any existing structures on the site, and the use of the structures. Attach photographs of the site. Snapshots or Polaroid photos will be accepted.

Topography:	Very shallow existing slope, see site plan for contours.
Soil Stability:	Adjacent structures indicate appropriate soil stability for the proposed project.
Plants:	Other than a proposed tree removal as noted, no significant plants currently exist at the project location.
Animals:	None
Cultural Aspects:	None
Historical Aspects:	None
Scenic Aspects:	None
Existing Structures:	Two buildings currently exist; a 6,100 square foot sales and automobile repair building and a 1,400 square foot automobile service building.

Photographs are attached.

RECEIVED
MAR 26 2019
BY:

34. Describe the surrounding properties, including information on plant and animals and any cultural historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc), intensity of land use (one-family, apartment houses, shops, department stores, etc), and scale of development (height, frontage, set-back, rear yard, etc). Attach photographs of the site. Snapshots or Polaroid photos will be accepted.

Adjacent Properties

Land Use:	A variety of existing commercial uses surround the project site. The closest building, to the east, is in use as retail, office and shop space with a metal working area outside at the south end, in direct adjacency to the proposed project.
Land Use Intensity:	Low land use intensity in comparison with allowed densities.
Development Scale:	One and two story buildings surround the proposed project site with a variety of setbacks.
Plants:	No significant plants currently exist on adjacent parcels.
Animals:	None
Cultural Aspects:	None
Historical Aspects:	None
Scenic Aspects:	None

Photographs are attached.

	YES	NO
A. Does the Project involve any of the following?		
1. No change in the square footage to the existing structure?	■	
2. An addition of more than 50% of square footage to the existing structure?		■
3. An addition of more than 2500 square feet to the existing structure?		■
4. An addition of more than 10,000 square feet to the existing structure?		■
5. Demolition of the existing structure?		■
	YES	NO
B. Does the Project involve the replacement or reconstruction of existing structures or facilities at the site which:		
1. Will have substantially the same purpose and capacity as existing structures at the site?		■
2. Will result in an increase in square footage or capacity as compared to the existing structure?		■



	YES	NO
C. Does the Project involve new construction of:		
1. 35 or more dwelling units?		■
2. More than 15,000 square feet of commercial, industrial, governmental, or institutional floor area?		■
3. Stores, motels, offices, restaurants, and similar structures designed for an occupant load of more than 30 persons?		■
	YES	NO
D. Does the Project involve division of property into more than four parcels or consolidation of more than four parcels?		■
	YES	NO
E. Will the Project require issuance of a Variance, Use Permit, Zoning Ordinance Amendment, Zoning Map Amendment, or General Plan Amendment?	■	
	YES	NO
F. Will the Project result in a change in use at the site (for example: from residential to commercial or from office to restaurant?)		■
	YES	NO
G. Is this Project:		
1. Similar to the other projects for which you have received permits in the last two years in the City of Sebastopol?		■
2. Similar to other projects, which you are planning to develop within two years in the City of Sebastopol?		■
	YES	NO
H. Does the Project involve changes to an official City landmark?		■
	YES	NO
I. Does the Project involve use of disposal of potentially hazardous materials, such as toxic substances, flammables, or explosives?		■
	YES	NO
J. If the Project is located within 500 feet of a residential zone or noise-sensitive land uses, will the construction of the project involve the use of pile driving, night time track hauling, blasting, 24 hour pumping, or other equipment that creates high noise levels and or vibrations?	Not Applicable	
	YES	NO
K. Does the Project involve the construction, substantial remodel, or 50% or more addition to the following types of uses?		
Mobile home, amphitheater, concert hall, auditorium, meeting hall, hospital, church, library, school classrooms, or day care?		■

I certify that the information in this form is correct to the best of my knowledge.

Applicant Signature

March 25, 2019
Date

RECEIVED
MAR 26 2019
BY:

Certification:

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information represented are true and correct to the best of my knowledge and belief.

Date: March 25, 2019

Signature: Patrick Slayter

Printed Name: Patrick Slayter, Architect

For: Mark Reece, Benedetti Tire & Express Lube, Owner

RECEIVED
MAR 26 2019
BY:

PATRICK SLAYTER ARCHITECT
CALIFORNIA REGISTRATION NUMBER C30700
POST OFFICE BOX 941
SEBASTOPOL CALIFORNIA 95473
TELEPHONE: 707 . 829 . 9090
FACSIMILE: 707 . 829 . 9095
ELECTRONIC MAIL: PS AT SLAYTERARCHITECT . COM
INTERNET: SLAYTERARCHITECT . COM

May 28, 2019

Job# 19.07

RE: City of Sebastopol Planning Department letter dated April 25, 2019
Benedetti Tire and Express Lube
Proposed New Carwash Facility
6809 Sebastopol Avenue
Sebastopol, CA 95472

1. *Is the proposed location in the LOMR FEMA approved for the site? If not, project must comply with the Flood Ordinance. Please contact the Building Official with questions. The current plan show the car wash structure is within the Regulatory Floodway, and the structure is at the 78' BFE, not 2' above BFE or flood proofed.*

The proposed project is partially located in the AE flood zone as noted on the Use Permit application site plan. The planned type of construction is integrated concrete formwork (ICF) which is flood damage resistant and fireproof. The planned construction type has been informally discussed with the Building Official and compliance with the Flood Ordinance will be provided per 15.16.170(2)(b).

2. *Ensure that all trees proposed for removal are indicated on the site plan.*

Please see the included preliminary tree plan for the location of all trees to be removed as well as proposed locations for replacement trees.

3. *Provide an Acoustic Report which should outline the decibel levels both at the vacuum hoses and the carwash structure.*

An acoustic report and equipment specifications for a project currently under construction in Rohnert Park has been included in this package. While the existing site conditions may differ between Rohnert Park and Sebastopol, significant similarities exist between the equipment planned in each facility. The equipment manufacturers continually improve their equipment, and the data provided should be considered a worse-case-scenario.

4. *Provide parking calculations for each individual lot created by the subdivision.*

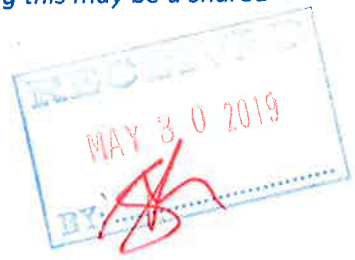
Parking calculations have been provided for each of the three proposed lots; please see included attachment.

5. *Provide bike parking calculations for each individual lot and please call out their locations on the site plan.*

Bicycle parking calculations have been provided for each of the three proposed lots; please see included attachment.

6. *Identify EV parking spaces (required for new use, per pre-application meeting this may be a shared parking easement area).*

EV parking locations have been noted; please see the site plan.



7. *While you address the fact that the carwash will have a water reclamation system, which uses 80% reclaimed water; please provide information regarding the treatment of any waste water produced.*

The noted 80% figure should be considered a minimum. Manufacturer improvements continually make this equipment more efficient.

Regarding the wastewater: a full access 2000 gallon sand and grease separator will be installed that includes a flow meter for monitoring the equipment efficacy, allowing for testing purposes.

8. *Provide information regarding the use of the trash enclosure:*

- *Will this trash enclosure service all 3 lots?*

The indicated trash enclosure is intended to service all three proposed lots.

- *If it is intended to serve all three lots, will there be an easement to allow for use by all businesses.*

The trash enclosure will be shared by all three lots via a shared use and maintenance agreement.

- *If it is only intended for the one use, please provide details on the locations for the trash enclosures for the other two lots/uses.*

Please see above. A single trash enclosure for all three lots will continue the existing functional condition as well as being the most space-efficient layout.

9. *Please confirm and revise written statement to address the following:*

- *Per 16.40.010 (G): Provide details regarding shared maintenance obligations for any shared amenities (parking, driveway, EV charging stations, sidewalks/walkways, trash enclosures/service, storm drainage, etc.). Will this include easements? How will maintenance be handled once each parcel is under separate ownership? Note, the formal maintenance agreements will be required at the time of Final Map submittal.*

An agreement will be entered into that clearly delineates maintenance obligations for shared site improvements and amenities. The agreement will assign proportionate costs and responsibilities as agreed to by the parcel and/or business owner(s). The project team acknowledges the requirement for this agreement to be in place at the time Final Map submittal.

- *Per Table 17.110-2: Automatic car washes parking requirements — Queuing space equal to six times the capacity of the washing facility.*

This standard has been met; please see the provided parking calculation.

- *Per 17.345.010 (A): The site shall have at least 150 ft. of frontage on an arterial or collector street. In this case, please confirm that there will be an access easement from a property which does have at least 150 ft. of frontage.*

An access easement will be provided from a parcel having 150 linear feet of frontage on an arterial or collector street.

- *Per 17.345.010(E)(3): Vapor processing units and propane tanks shall be located behind or on the side of the main building, where possible, or screened within a landscaped area. Tanks shall be installed pursuant to State, County, and local requirements and shall be orientated in a horizontal position.*

All equipment for the proposed car wash will be fully contained within the proposed building. Please note there will be no propane or vapor processing tanks for this project.

- *Per 17.345.010 (F)(1): All merchandise, including but not limited to periodicals, vending machines, and other items offered for purchase, shall be contained within the buildings at all times.*

All merchandise will be contained within the proposed building.

- *Per 17.345.020 (B): All washing and automatic drying facilities shall be completely within an enclosed building.*

All washing and drying equipment for the proposed car wash will be fully contained within the proposed building.

- *Per 17.345.020 (B): Mechanical equipment for powering vacuuming shall be located within an enclosed structure.*

All equipment, including the mechanical system for the vacuum stations, for the proposed car wash will be fully contained within the proposed building.

The following items are approvability items, not completeness items. They are listed here for your information and should be resolved as part of your resubmittal:

1. *Unless queuing will be impacted, please revise plans so that the dividing isle at the southwest corner is moved east. The goal is have enough room for the exit drive while preserving the two redwood trees located at the southwest corner (currently proposed for removal).*

The area at the southwest corner of the site has been revised in order to better accommodate fire department access. Removal of the two redwood trees in this location is planned as this is a poor species choice for urban trees. The existing pavement edge is haphazard and does not feature a curb; reconsidering the shape of this planting area will allow for a permanent curb and provide an increase in landscape area with appropriate urban plant material as well as provide the requested fire department access.

2. *Provide likely locations for replacement trees.*

The business owner is planning a complete re-landscaping of the entire site, including the frontage at Sebastopol Avenue to include new street trees per the City standard. Replacement trees will be located throughout the site. Please see the included diagram indicating likely replacement tree locations.

3. *The 2nd floor contains a number of windows as well as mechanical equipment, how will this impact noise? Please provide details regarding noise attenuation features for the 1st floor and 2nd floor of the car wash (may be included in the acoustic report).*

The windows shown on the second floor, where needed, are planned to be triple glazed sound-attenuation windows. The planned type of construction is integrated concrete formwork (ICF) which, due to the mass, is largely soundproof.

4. *Please confirm, that upon exiting the vacuum area, cars will have the option to leave via Barnes Ave as well as Sebastopol Ave.*

The Barnes Avenue exit is planned as the primary exit route for the new facility, minimizing traffic impacts at the Sebastopol Avenue location.

5. *Will the proposed project include the alteration of, or the addition of, fencing for the car wash lot?*

There is no fencing planned for the interior of the site. The existing perimeter fence is planned to remain, with repairs and replacement as needed.

Please contact my office should additional items require clarification.

PHS

Patrick Slayter, Architect

BENEDETTI TIRE & EXPRESS LUBE
6809 SEBASTOPOL AVENUE
SEBASTOPOL, CALIFORNIA 95472
PROPOSED NEW CARWASH FACILITY



PROJECT STATEMENT

05/18/19

For an existing automotive service business, the proposed project is the construction of a new automatic car wash facility. The existing business has been in operation in this location since 1992 and in 1999 an express lube was added. The proposed project consists of site improvements to include the construction of a new building to house the car wash, an outdoor area with vacuum stations and related driveway and landscaping improvements. Primary access to and egress from the car wash facility is proposed at the southwest corner of the parcel from Abbott Avenue and Barnes Avenue with additional internal site circulation provided. The ability to access the parcel from Barnes Avenue and Abbott Avenue will reduce traffic impacts to Sebastopol Avenue.

A subdivision is planned for the existing single parcel, creating three parcels with one structure per parcel. This process will simplify the business and property ownership into the future and provide distinct Conditional Use Permits for the businesses to the benefit of the City. This property is in the Central Core zone and requires a Conditional Use Permit for the proposed use. The existing business has operated in this location since 1992 with a Conditional Use Permit and the proposed automatic car wash is an expansion of the existing automotive service business. The parcel is not adjacent to any residential zones or residential uses. Parking requirements for the three proposed lots are individually met, with electric vehicle and bicycle parking intended as shared amenities by the parcels; sharing these facilities will allow for optimal placement and ease of installation.

The proposed location is the south end of the existing single parcel which is currently unimproved. The project will require the removal of seven 18"-24" redwood trees. Extensive new landscaping throughout the site, including the Sebastopol Avenue frontage, is proposed. City-approved replacement trees will be used throughout the site. The installation of the new City standard street trees is being considered along Sebastopol Avenue, which will add continuity to the eastern part of the downtown. Please see the included preliminary tree removal and replacement plan for locations.

A shared maintenance agreement will be entered into that clearly delineates maintenance obligations for shared site improvements and amenities (parking, drive aisles, EV charging stations, trash enclosure and service, storm drainage, etcetera). The agreement will assign proportionate costs and responsibilities as agreed to by the parcel and/or business owner(s). The project team acknowledges the requirement for this agreement to be in place at the time Final Map submittal. Access easements between the three proposed parcels will also be provided prior to Final Map submittal.

It is estimated the facility will initially serve between 125 to 150 customers daily with an upper ceiling of around 200 customers per day. The car wash facility will require two to three employees during operation and is proposed to operate between the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday.

The provided building elevations and plans are preliminary and indicate the general architecture and massing of the proposed structures. Building forms, colors and architectural features of the proposed building will be similar to the existing structures on the site and compatible with structures on adjacent parcels. Insulated concrete form construction is planned, which will significantly reduce noise and provide a durable, appropriate building form.

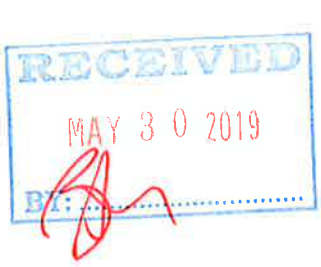
A water reclamation system will be installed which reclaims a minimum of 80% of the water used in the facility. The proposed wash equipment uses approximately 5 gallons of water per wash cycle, although newly developed equipment may lower this figure to 3-4 gallons per cycle.

The wash equipment will be state of the art with low noise levels, contaminate collection systems and other environmental protection measures. All of the mechanical equipment, including the vacuum station machinery, will be fully enclosed within the building. A full access 2,000 gallon sand and grease separator will be installed, including a flow meter to monitor the equipment efficacy.

The existing buildings feature a 50,000kw photovoltaic system which provides 85% of the business' current electrical needs. The proposed building will include a photovoltaic system that will produce approximately 40,000kw to supply the demands of the car wash equipment.

PATRICK SLAYTER ARCHITECT
POST OFFICE BOX 941 SEBASTOPOL CALIFORNIA 95473 707.829.9090

BENEDETTI TIRE & EXPRESS LUBE
6809 SEBASTOPOL AVENUE
SEBASTOPOL, CALIFORNIA 95472
PROPOSED NEW CARWASH FACILITY



PARKING CALCULATION - LOT 1 - EXISTING AUTOMOTIVE SERVICE BUILDING

05/18/19

PER THE ZONING ORDINANCE, REQUIRED PARKING FOR THE DOWNTOWN CORE ZONE (CS):
ONE (1) SPACE PER 500 SQUARE FEET OF NET BUILDING AREA.
NET FLOOR AREA SHALL BE THE EXTERIOR GROSS FLOOR AREA OF THE BUILDING MINUS 15 PERCENT OF THE TOTAL AREA.

EXISTING BUILDING GROSS AREA:	6,700 SQUARE FEET
EXISTING BUILDING NET AREA:	6,700 SQUARE FEET (0.85) = 5,695 SQUARE FEET
PARKING REQUIRED:	5,695 SQUARE FEET / 500 SQUARE FEET PER SPACE = 11 SPACES REQUIRED
PARKING PROVIDED:	9 SPACES IN THE SHOP WORKBAYS + 12 SURFACE = 17 SPACES PROVIDED
BICYCLE PARKING = 20% OF VEHICLE PARKING REQUIREMENT:	11 SPACES (0.20) = 2 BICYCLE SPACES REQUIRED
BICYCLE PARKING PROVIDED:	2 SPACES

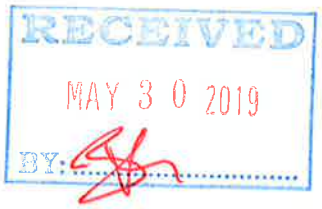
PARKING CALCULATION - LOT 2 - EXISTING EXPRESS LUBE BUILDING

PER THE ZONING ORDINANCE, REQUIRED PARKING FOR THE DOWNTOWN CORE ZONE (CS):
ONE (1) SPACE PER 500 SQUARE FEET OF NET BUILDING AREA.
NET FLOOR AREA SHALL BE THE EXTERIOR GROSS FLOOR AREA OF THE BUILDING MINUS 15 PERCENT OF THE TOTAL AREA.

EXISTING BUILDING GROSS AREA:	1,400 SQUARE FEET
EXISTING BUILDING NET AREA:	1,400 SQUARE FEET (0.85) = 1,190 SQUARE FEET
PARKING REQUIRED:	1,190 SQUARE FEET / 500 SQUARE FEET PER SPACE = 21 SPACES REQUIRED
PARKING PROVIDED:	2 SPACES IN THE EXPRESS LUBE WORKBAYS + 11 SURFACE = 13 SPACES PROVIDED
BICYCLE PARKING = 20% OF VEHICLE PARKING REQUIREMENT:	2 SPACES (0.20) = 0 BICYCLE SPACES REQUIRED
BICYCLE PARKING PROVIDED:	0 SPACES

PATRICK SLAYTER ARCHITECT
POST OFFICE BOX 941 SEBASTOPOL CALIFORNIA 95473 707.829.9090

BENEDETTI TIRE & EXPRESS LUBE
6809 SEBASTOPOL AVENUE
SEBASTOPOL, CALIFORNIA 95472
PROPOSED NEW CARWASH FACILITY



PARKING CALCULATION - LOT 3 - PROPOSED CAR WASH

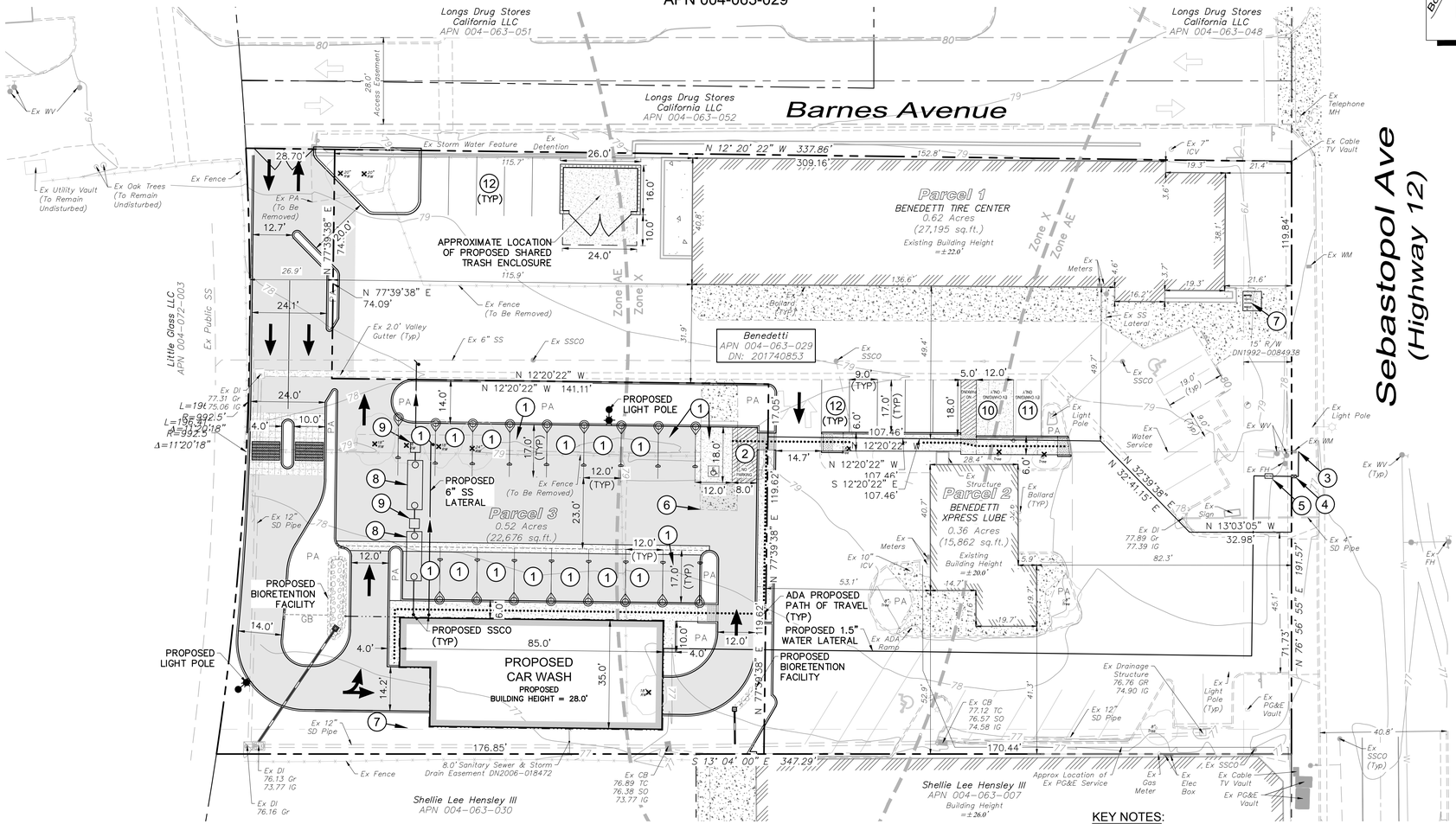
05/18/19

PER THE ZONING ORDINANCE, REQUIRED PARKING FOR AN AUTOMATIC CAR WASH FACILITY: SPACES EQUAL TO (6) TIMES THE CAPACITY OF THE WASHING FACILITY ARRANGED TO PROVIDE BOTH WAITING AND DRYOFF/CLEANUP AREAS:		
PROPOSED AUTOMATIC CAR WASH CAPACITY:		2 CARS
REQUIRED SPACES DEDICATED TO THE CAR WASH, ARRANGED TO PROVIDE BOTH WAITING AND DRYOFF/CLEANUP AREAS:	2 CARS (6) = 12 SPACES REQUIRED	
PROPOSED CAR WASH PARKING PROVIDED:		
PROPOSED VACUUM STATION / CLEANUP / EMPLOYEE SPACES:		17 SPACES
PROPOSED CAR WASH CUSTOMER STAGING SPACES:		14 SPACES
TOTAL PROPOSED CAR WASH PARKING PROVIDED:	17 + 13 =	31 SPACES
BICYCLE PARKING = 20% OF VEHICLE PARKING REQUIREMENT:	12 SPACES (0.20) = 2 BICYCLE SPACES REQUIRED	
BICYCLE PARKING PROVIDED:		2 SPACES
ELECTRIC VEHICLE PARKING = 20% OF VEHICLE PARKING REQUIREMENT:	12 SPACES (0.20) = 2 ELECTRIC VEHICLE SPACES REQUIRED	
ELECTRIC VEHICLE PARKING PROVIDED (VIA AN ACCESS EASEMENT):		2 SPACES

PATRICK SLAYTER ARCHITECT
POST OFFICE BOX 941 SEBASTOPOL CALIFORNIA 95473 707.829.9090

USE PERMIT
FOR PARCEL 3
OF THE BENEDETTI MINOR SUBDIVISION

6809 Sebastopol Avenue
Sebastopol, California
APN 004-063-029



LOCATION MAP
NTS

DEMOLITION LEGEND:

⊗ 12" LO — EX TREE TO BE REMOVED

ADA LEGEND

→ • • • • · ADA ACCESSIBLE PATH OF TRAVEL (POT)

THE PATH OF TRAVEL (POT) IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. PATHS OF TRAVEL MUST BE: (1) CONTINUOUSLY ACCESSIBLE; (2) HAVE A MAXIMUM 1/2" CHANGES IN ELEVATION OR PROVIDE CURB RAMPS COMPLYING WITH CBC 11B-406; (3) ARE A MINIMUM 48" IN WIDTH; AND (4) WHERE NECESSARY TO CHANGE ELEVATION AT A SLOPE EXCEEDING 5% (i.e., 20:1), SHALL HAVE PEDESTRIAN RAMPS COMPLYING WITH CBC 11B-405, CBC 11B-202.4, 11B-206.2.2, 11B-303.1, 11B-403.5, AND 11B-406.

PURPOSE STATEMENT

TO OUTLINE PRELIMINARY DESIGN CONCERNING PARCEL 3 & THE IMPACT TO THE ADJACENT PARCELS & BUSINESSES.

SEE THE BENEDETTI MINOR SUBDIVISION TENTATIVE MAP APPLICATION FOR MORE DETAILS. (UNDER SEPARATE PERMIT).

OVERALL SITE PLAN

20' 10' 0 10' 20' 40' 60'
Graphic Scale: 1" = 20'

KEY NOTES:

1. 16 PROPOSED VACUUM PARKING STALL
2. 1 PROPOSED ADA VACUUM PARKING STALL
3. MANIFOLD PROPOSED WATER SERVICE FROM EXISTING LATERAL CONNECTION
4. PROPOSED WATER METER FOR NEW DEVELOPMENT
5. PROPOSED REVERSE PRESSURE BACKFLOW PREVENTOR FOR NEW DEVELOPMENT
6. DEMO EXISTING TRASH ENCLOSURE AND RELOCATE
7. PROPOSED SHARED BICYCLE STORAGE AREA
8. 2000-GOLLON JENSEN PRECAST MODEL #JP2000EE-SO SAND AND GREASE INTERCEPTOR/CLARIFIER (USP)
9. CONTROL SAMPLING MANHOLE
10. ELECTRIC VEHICLE PARKING STALL & SHARED CHARGING STATION (STALL TO BE GRADED FOR ACCESSIBILITY)
11. ELECTRIC VEHICLE PARKING STALL & SHARED CHARGING STATION
12. PROPOSED SHARED STANDARD PARKING STALL

Revisions			
No.	Date	Description	Approved

adobe associates, inc.
civil engineering | land surveying | wastewater
1220 N. Dutton Ave., Santa Rosa, CA 95401
P. (707) 541-2300 F. (707) 541-2301
Website: www.adobeinc.com
"A Service You Can Count On!"

PROFESSIONAL ENGINEER ★ REGISTERED ★ TIMOTHY LEE SCHRAM ★ No. 067890 ★ Exp.6/30/2021 ★ CIVIL ★ STATE OF CALIF

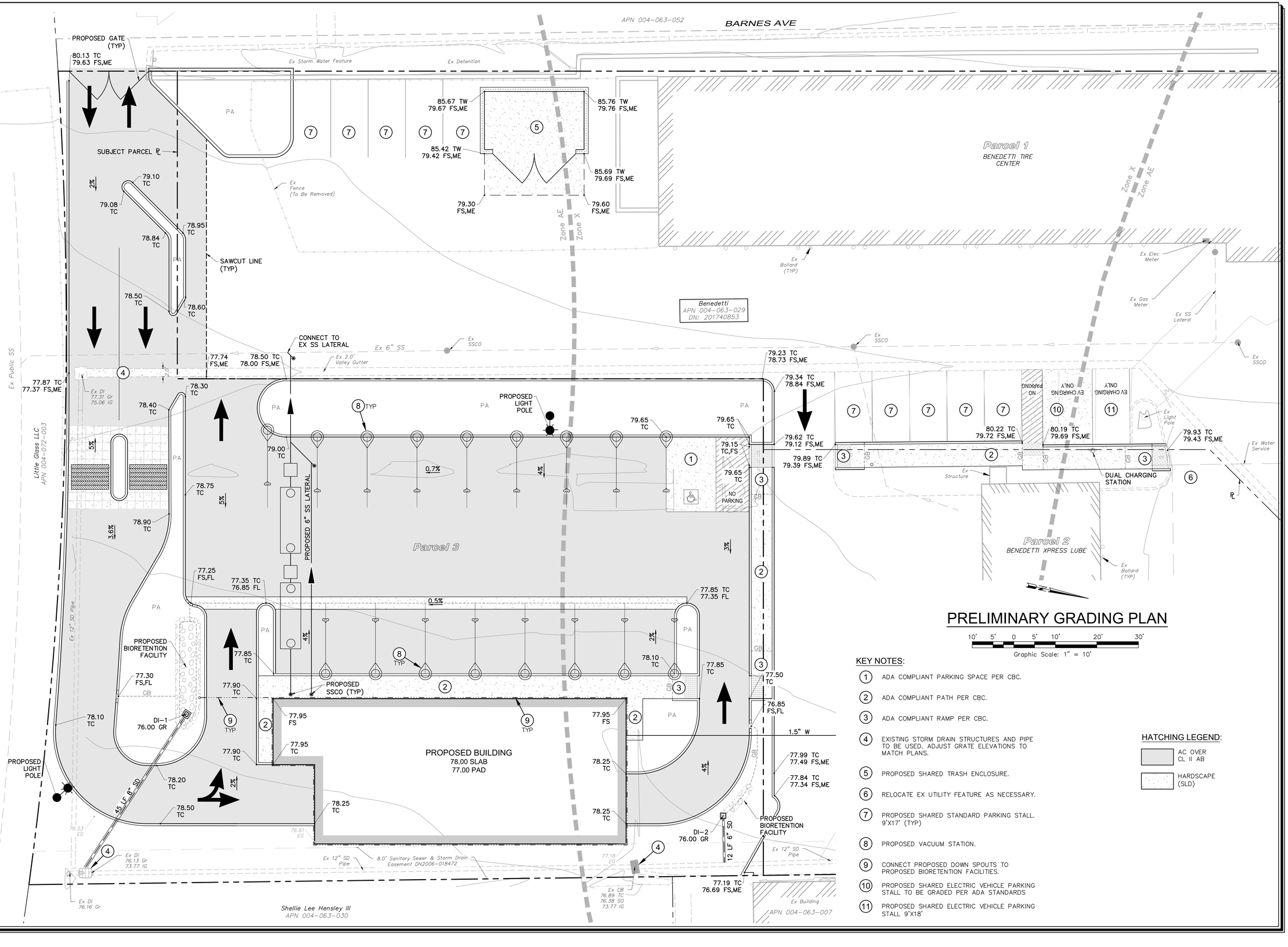
Timothy L. Schram, RCE 67890
My license expires 6/30/2021

Use Permit
for Parcel 3 of the
Benedetti Minor Subdivision
6809 Sebastopol Avenue
Sebastopol, California
APN 004-063-029

SCALE: AS NOTED
Date: August 12, 2020
Design by: ZR/TRG
Drawn by: TRG
Checked by: JR

Sheet
C1.0
1 of 2 Sheets
Job 18267

P:\2018 PROJECTS\18267\dwg\Adobe-Design\Use Permit\18267-C1.0_Site Plan.dwg, Zachary Rule, 8/12/2020 3:16:11 PM



PRELIMINARY GRADING PLAN

10' 5' 0 5' 10' 20' 30'

Graphic Scale: 1" = 10'

KEY NOTES:

1. ADA COMPLIANT PARKING SPACE PER CBC.
2. ADA COMPLIANT PATH PER CBC.
3. ADA COMPLIANT RAMP PER CBC.
4. EXISTING STORM DRAIN STRUCTURES AND PIPE TO BE USED. ADJUST GRATE ELEVATIONS TO MATCH PLANS.
5. PROPOSED SHARED TRASH ENCLOSURE.
6. RELOCATE EX UTILITY FEATURE AS NECESSARY.
7. PROPOSED SHARED STANDARD PARKING STALL. 9'X17' (TYP)
8. PROPOSED VACUUM STATION.
9. CONNECT PROPOSED DOWN SPOUTS TO PROPOSED BIORETENTION FACILITIES.
10. PROPOSED SHARED ELECTRIC VEHICLE PARKING STALL TO BE GRADED PER ADA STANDARDS
11. PROPOSED SHARED ELECTRIC VEHICLE PARKING STALL 9'X18'

HATCHING LEGEND:

- AC OVER CL II AB
- HARDSCAPE (SLD)

No.	Date	Revisions	Approved

adobe associates, inc.
civil engineering | land surveying | wastewater
1220 N. Dutton Ave., Santa Rosa, CA 95401
P. (707) 541-2300 F. (707) 541-2301
Website: www.adobeinc.com
"A Service You Can Count On!"

REGISTERED PROFESSIONAL ENGINEER TIMOTHY LEE SCHRAM No. 067890 Exp.6/30/2021 CIVIL STATE OF CALIFORNIA

Timothy L. Schram, RCE 67890
My license expires 6/30/2021

Preliminary Grading & Drainage Plan for Parcel 3 of the Benedetti Minor Subdivision

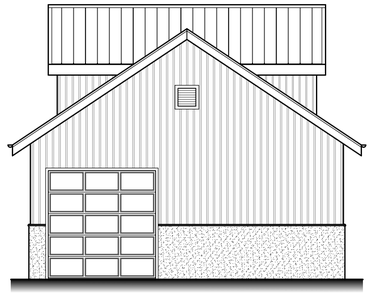
6809 Sebastopol Avenue
Sebastopol, California
APN 004-063-029

SCALE: AS NOTED
Date: August 12, 2020
Design by: ZR/TRG
Drawn by: TRG
Checked by: JR

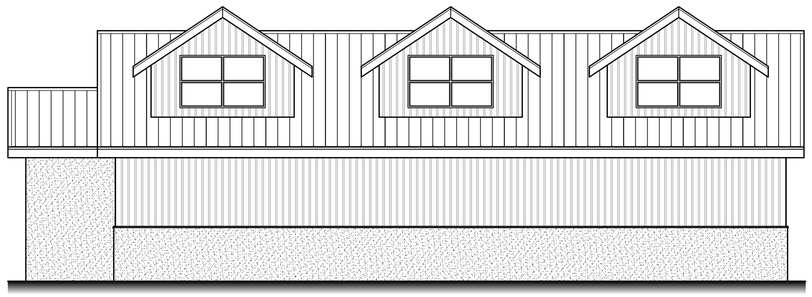
Sheet
C2.0
2 of 2 Sheets
Job 18267

T:\2018 PROJECTS\18267\dwg\Adobe-Design\Use Permit\18267-C2.0_Prelim Grading Plan.dwg, Zachary Ruiz, 8/12/2020 3:18:32 PM

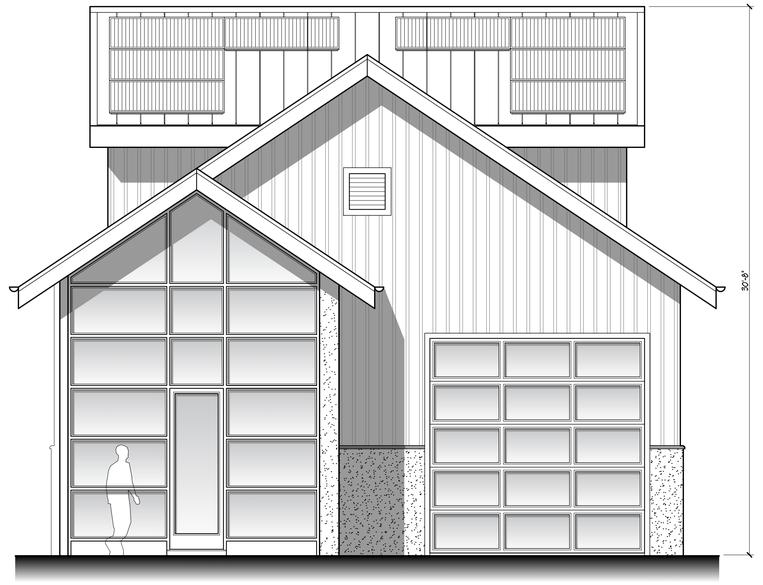
THESE DRAWINGS CONSTITUTE THE ORIGINAL UNPUBLISHED WORK OF PATRICK SLAYTER ARCHITECT AND MAY NOT BE DUPLICATED, REPRODUCED IN ANY WAY OR USED FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF PATRICK SLAYTER ARCHITECT



NORTH ELEVATION
1/8" = 1'-0"
2 4 6 8 16 32
SCALE IN FEET



EAST ELEVATION
1/8" = 1'-0"
2 4 6 8 16 32
SCALE IN FEET



SOUTH ELEVATION
1/4" = 1'-0"
1 2 3 4 8 16
SCALE IN FEET



WEST ELEVATION
1/4" = 1'-0"
1 2 3 4 8 16
SCALE IN FEET

PATRICK SLAYTER ARCHITECT
POST OFFICE BOX 941
SEBASTOPOL
CALIFORNIA 95473
707.829.9090

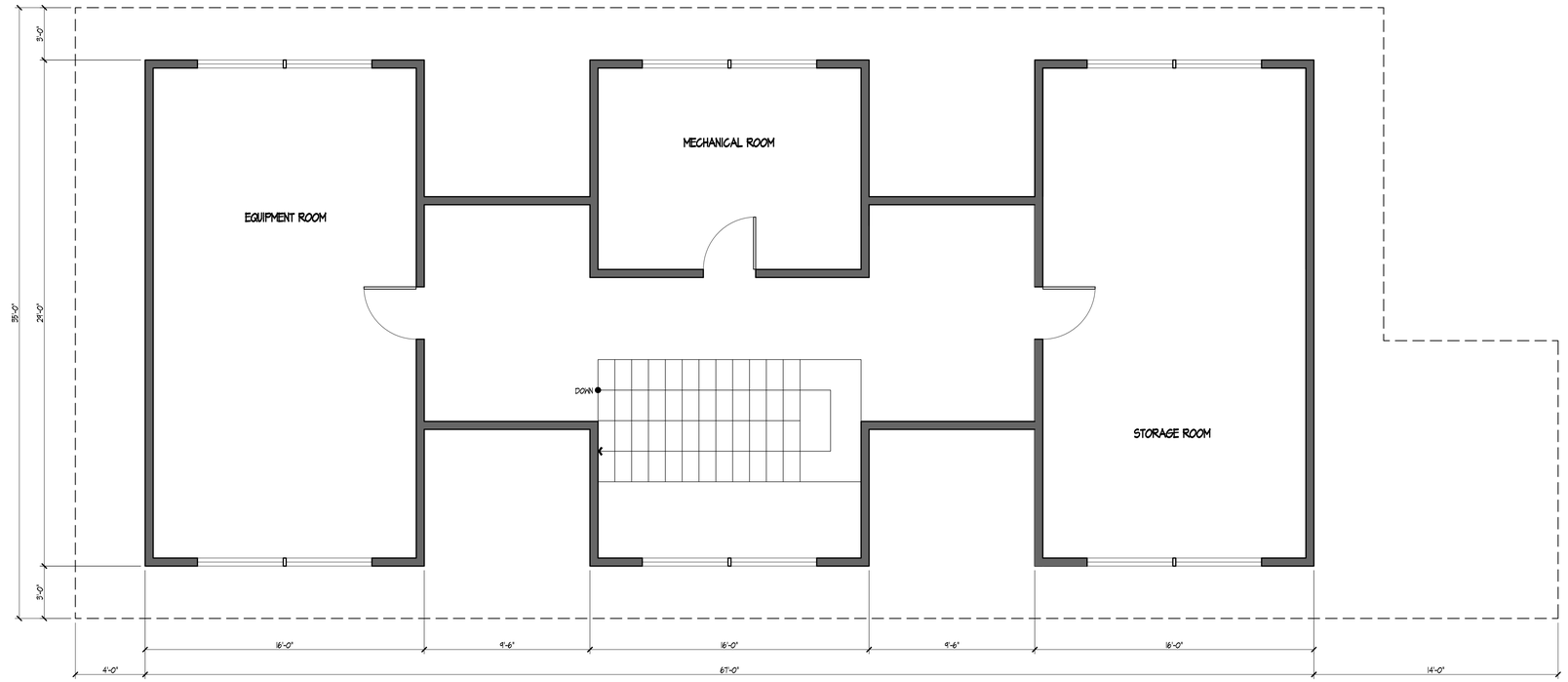
PRINT DATES
PLANNING APPLICATION 03/21/19

REVISIONS

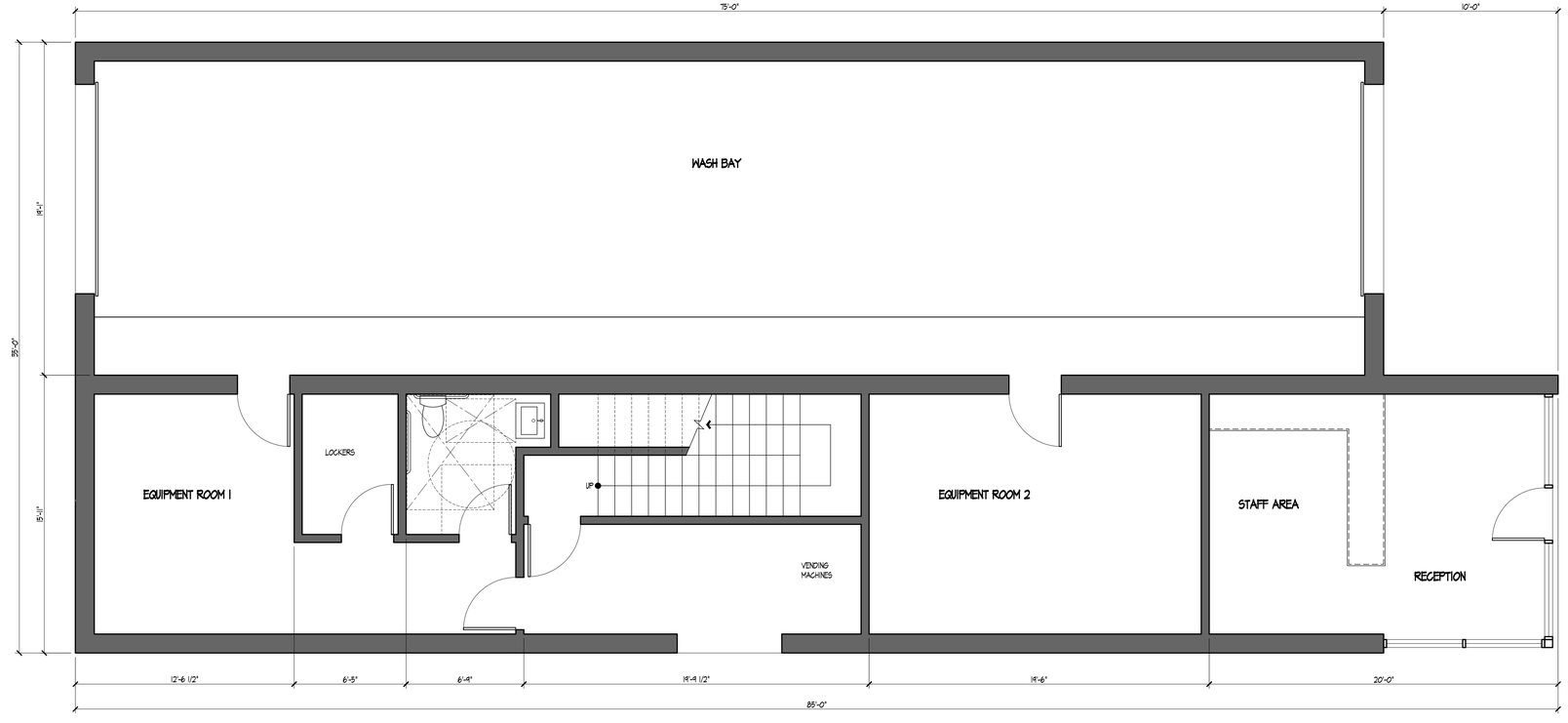
BENEDETTI TIRE & EXPRESS LUBE
6809 SEBASTOPOL AVENUE
SEBASTOPOL, CALIFORNIA 95472
PROPOSED NEW CARWASH FACILITY

JOB NUMBER 17-02
COPYRIGHT 2019
SHEET NUMBER
A1
OF SHEETS

THESE DRAWINGS CONSTITUTE THE ORIGINAL UNPUBLISHED WORK OF PATRICK SLAYTER ARCHITECT AND MAY NOT BE DUPLICATED, REPRODUCED IN ANY WAY OR USED FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF PATRICK SLAYTER ARCHITECT



SECOND FLOOR PLAN
1/4" = 1'-0"
TRUE PROJECT
SCALE IN FEET 2 3 4 8 16



FIRST FLOOR PLAN
1/4" = 1'-0"
TRUE PROJECT
SCALE IN FEET 2 3 4 8 16

AREA TOTALS

FIRST FLOOR:	2775 SQUARE FEET
SECOND FLOOR:	1520 SQUARE FEET
TOTAL:	4295 SQUARE FEET

FLOOR AREA RATIO

GROSS FLOOR AREA	4295 SQUARE FEET		
TOTAL LOT AREA	= 22675 SQUARE FEET	=	0.19

PATRICK SLAYTER ARCHITECT
POST OFFICE BOX 941
SEBASTOPOL
CALIFORNIA 95473
707.829.9090

PRINT DATES
PLANNING APPLICATION 03/21/19

REVISIONS

BENEDETTI TIRE & EXPRESS LUBE

6809 SEBASTOPOL AVENUE
SEBASTOPOL, CALIFORNIA 95472
PROPOSED NEW CARWASH FACILITY

JOB NUMBER 17-02
COPYRIGHT 2019
SHEET NUMBER
A2
OF SHEETS

JUSTIFICATION FOR VARIANCE

Prepared by: PATRICK SLAYTER ARCHITECT

Property Address: 6809 SEBASTOPOL AVENUE, SEBASTOPOL, CA

APN: 004 - 063 - 029

Please give your written response for each of the findings listed below. Used added pages if necessary:

1. Explain what exceptional or extraordinary circumstances or conditions apply to the land, building or use referred to in the application; which circumstances or conditions do not apply generally to land, buildings and/or uses in the same zoning district.

The proposed project is the expansion of an existing business specializing in automobile service and repair. The existing tire and service business has been located in this location since 1992 and the express lube was constructed in 1998, both operating under an existing Conditional Use Permit. It is logical to continue the existing land use into the area where the new car wash facility is proposed. The nature of this type of business does not lend itself to mixed use, which would be required in order to satisfy the required floor area ratio minimum of 1.0. For the proposed use, the parking areas are accurately defined as an extension of the business area; without vehicles, the reason for the land use ceases to exist. In retail and office developments, parking is an accessory use. In this instance, the vehicles present are the primary reason for the business.

2. Explain why granting of the variance is necessary for the preservation and enjoyment of a substantial property right of the applicant.

The initial design of this project as well as the Planning Commission preliminary review was accomplished prior to the current General Plan and Zoning Ordinance update. General support for the proposed project was indicated at that time with the understanding that a variance would likely be required.

A variance would allow the intent of the zoning district to be preserved. The intent of the Central Core district is to provide a range of uses, including office, retail, restaurant, service, and other commercial uses such as the existing business and the proposed expansion.

The variance will not create substantial detriment to adjacent properties and will not materially impair or be contrary to the spirit, purpose and intent of the district, or the public interest.



3. Explain why granting of the variance will not, in this case, affect adversely the health or safety of persons residing in the neighborhood or will not be detrimental to the public welfare or injurious to property or improvements in this neighborhood.

The location of the proposed project is not in a residential district; the nearest residential uses are 700 feet to the south and 900 feet to the east, therefore the project would not adversely affect the health and safety of any resident. The proposed project is an extension of and consistent with an existing land use on the property; there are no existing adverse or injurious detriments to the public welfare under the existing use. There is no reason this pattern would not continue.

VARIANCE STATEMENT

The proposed project is intended to maximize density on an existing parcel, clustering similar, compatible and complimentary uses together. It is anticipated that many customers of one of the existing services on the site will avail themselves of the new use. The existing business owner reports a car wash has been the most customer-requested service for many years and this is an opportunity to provide customers with the highest quality wash service, with the lowest energy and water use.

The proposed project will be required to receive approval from the Design Review Board. As such, a deferral for architectural details, lighting, signage and landscape design is requested.

Please see the project statement located in the tentative map and conditional use applications for a complete description of the proposed project.

RECEIVED
MAR 2 6 2019
BY:

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

BENEDETTI CAR WASH

6809 SEBASTOPOL AVENUE

CITY OF SEBASTOPOL
PLANNING DEPARTMENT
CITY HALL
7120 BODEGA AVENUE
SEBASTOPOL, CALIFORNIA 95472

AUGUST 18, 2020

I. Environmental Checklist Forms - Mitigated Negative Declaration

1. Project Title	Benedetti Car Wash
2. Lead Agency Name and Address	City of Sebastopol – Planning Department 7120 Bodega Avenue Sebastopol, CA 95472
3. Contact Person and Phone Number	Kari Svanstrom (707) 823-6167
4. Project Location	6809 Sebastopol Avenue Sebastopol, CA 95472 APN. 004-063029
5. Project Sponsor's Name and Address	Mark Reece 6809 Sebastopol Avenue Sebastopol, CA 95472
6. General Plan Designation	Central Core
7. Zoning	CD - Downtown Core
8. Description of Project	The project involves the addition of an automated car wash facility (including internal equipment and storage areas) along with vehicle waiting and parking areas into an existing auto service center containing a tire shop and oil change facility. The project includes the subdivision of an existing lot into three parcels.
9. Surrounding Land Uses and Setting	The project site is located in downtown Sebastopol, the surrounding land uses are as follows: North – Commercial (across Sebastopol Avenue) East – Commercial South – Vacant (Zoned Industrial) West – Commercial (across Barnes Avenue)
10. Other public agencies whose approval is required (Permits, financing approval, or participation agreement.)	None.
11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?	Ten tribal representatives were notified of the project, no consultations were requested (as of the date of this Initial Study).

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist that follows for additional information.

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

DETERMINATION: On the basis of this initial evaluation:

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

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

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

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

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

Kari Svanstrom, CEQA Coordinator

August 18, 2020

II. Project Description

The Benedetti Car Wash Project involves five planning applications/entitlements. The first is a Use Permit to operate a car wash; the second is for a Variance to allow new development with a floor area ratio below the amount required by the Zoning Code, and the third, is a Tentative Parcel Map to create three commercial parcels. The last two applications are the Design Review Permit to approve the design and materials of the new building and Tree Removal Permit to approve the removal and replacement of the trees.

The Project is located at the southeast corner of Sebastopol Avenue and Barnes Avenue. Access to the site will be provided through the existing driveway from Sebastopol Avenue and a new driveway from Barnes Avenue which will provide direct access to the new car wash. The Project site contains an auto service center consisting of a tire shop and oil change/lube operation.

Figure 1 outlines the project location. The area outlined in orange is the location of the proposed parcel map (the entire site) while the location of the new carwash is outlined in green.

Figure 1. Project Location



Use Permit

The element of the Project that has the greatest potential to affect the environment is the construction and operation of an automated car wash. This building includes approximately 1,300+/- square feet of office use on the second floor. The new car wash and office building will be located on an unpaved parking area in the rear portion of the site (in the southeast corner). The carwash includes both washing and drying machinery. The project includes staging/waiting lanes between the entrance to the car wash and 14 vacuum stations/clean up spaces after the drying machinery. The architecture of the new building will incorporate elements from the existing buildings. These elements include a standing seam metal roof and the form of the dormers and

eaves. The color palette for the new building will be consistent with the colors and materials used on the other two buildings.

Variance

In the CD Zoning District, the Zoning Ordinance set a minimum floor area ratio at 1.0. The current floor area ratio for the entire property (including the unpaved parking area in the rear) is 0.16. The proposed project would increase the floor area ratio to 0.24. Because the project would not comply with the required floor area ratio, the project would require the approval of a variance. The requirement to comply with the floor area ratio provisions from Chapter 17.25 of the Sebastopol Municipal Code was triggered by the proposed tentative parcel map which would create a new lot for development purposes.

Tentative Parcel Map

The proposed Tentative Parcel Map would subdivide the existing lot into three parcels. The subdivision would result in each building being located on its own parcel. The sizes and buildings are described below. The project includes a shared access use agreement. The size of the proposed parcels and the land uses is provided below.

Proposed Parcel	Parcel Area	Land/Building Use	Floor Area Ratio
1	0.624 ac	Existing Tire Shop	0.25
2	0.364 ac	Existing Oil Change/Lube	0.09
3	0.523 ac	Proposed Car Wash/Office	0.19
Total Site	1.51 ac		0.19

Design Review Permit

The architectural design, including colors and materials, of the proposed building will include architectural detailing, materials, and colors consistent with the rest of the auto service center. The Design Review Permit would approve the new car wash/office building. Key building elevations are included in Figure 3.

Tree Removal Permit

The project proposes to remove between 4 and 6 existing redwood trees that are all located near the rear of the site. The project would replace these trees with between 6 and trees that are more appropriate to serve a commercial site landscaping. The Project includes additional trees adjacent to the Sebastopol Avenue. The location of the existing trees is provided in Figure 2.

Figure 2. Site Plan

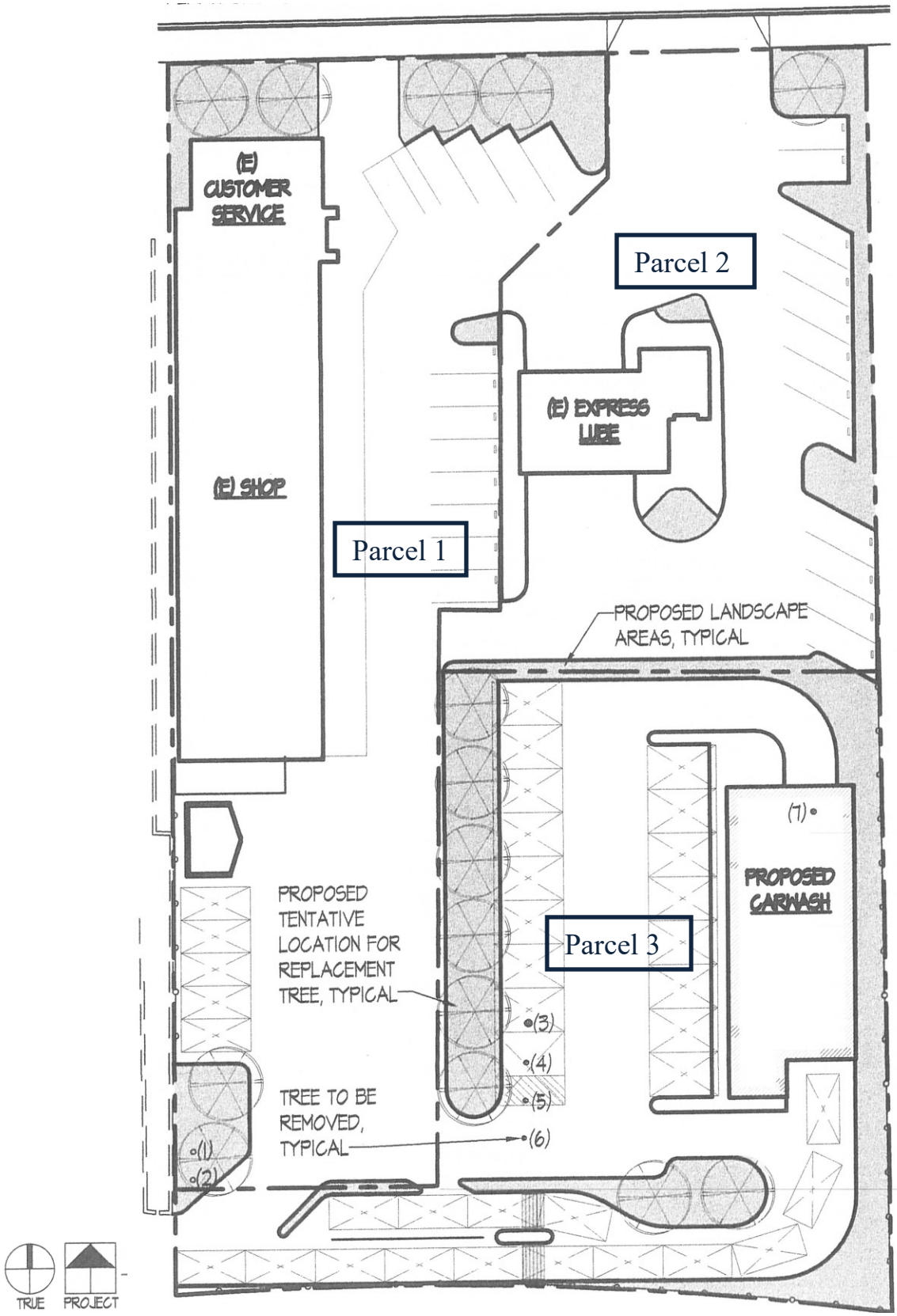
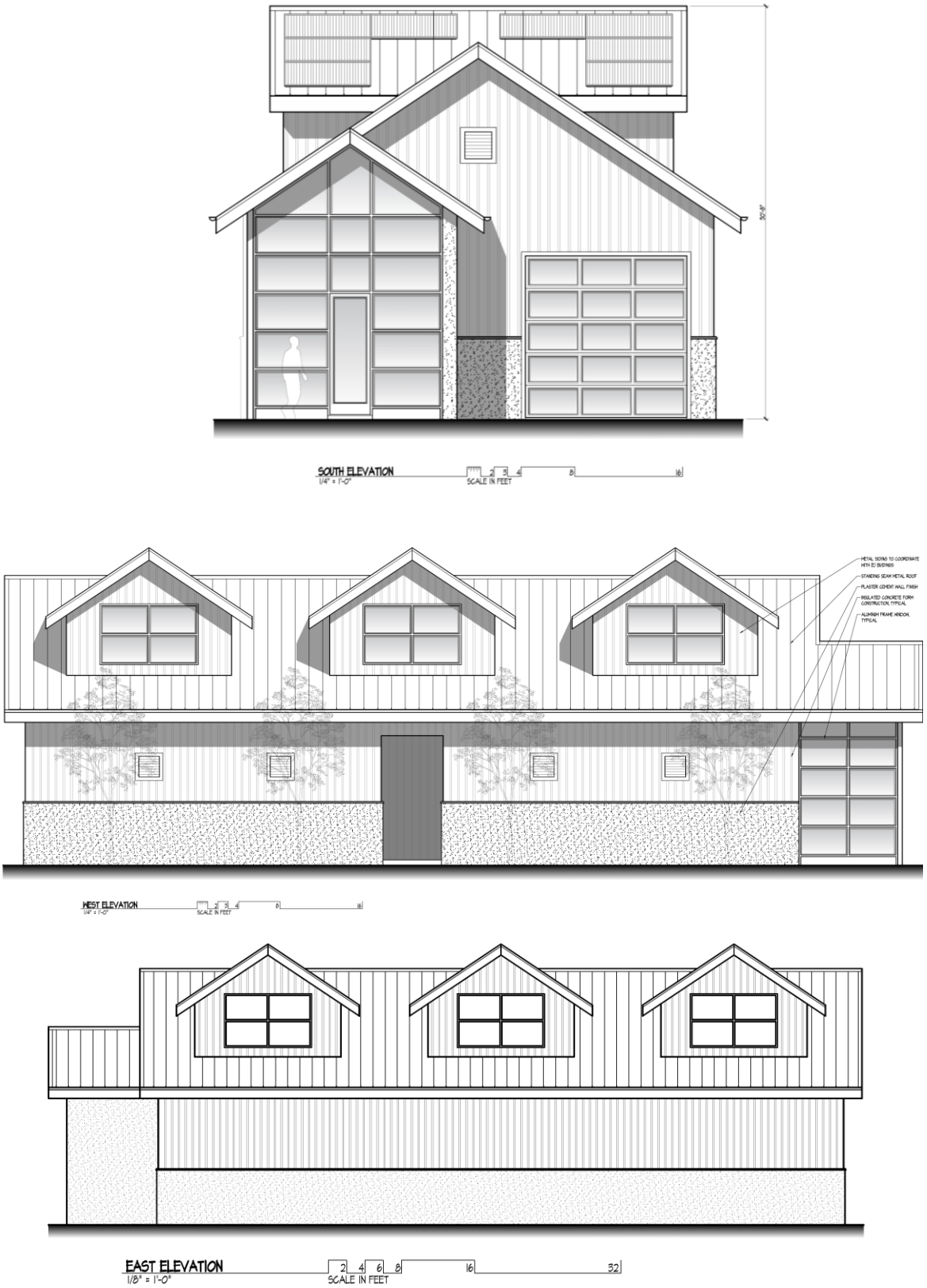


Figure 3. Building Elevations



III. Evaluation of Potential Environmental Impacts

I. AESTHETICS: Would the project:

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

Discussion:

Item a: **No Impact**. The site is located in a developed commercial corridor comprised of streets, buildings and parking lots. The project consists of the addition of an automated car wash on a developed site which will be located near the rear of the site and will not be highly visible from the adjacent streets. The colors and materials of the proposed car wash will contain similar design elements (materials and colors, etc.) with the existing onsite structures.

Item b: **No Impact**. The site contains no scenic resources or historic structures.

Item c: **No Impact**. The site is located in an urban setting and is surrounded by other urban uses. The addition of a car wash to an auto service complex will not degrade the visual character of the area.

Item d: **Less Than Significant Impact**. The project will include additional security and parking area lighting. This additional lighting is located in a developed commercial corridor. The proposed exterior lighting 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 impacts on the night sky. Adherence with the requirements of the Design Review Board will prevent substantial light or glare. As a result, any impacts will be less than significant.

II. AGRICULTURE AND FOREST 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. In determining whether impacts to forest resources, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy

Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion:

Items a - e: **No Impact**. The site is located in an urban setting and is surrounded by other urban uses. The site contains no agricultural use or forest lands.

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:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion:

The project is located within the Bay Area Air Quality Management District (BAAQMD). Regional air quality is a non-attainment area for both federal and State ozone and PM2.5 standards and State PM10 standards. BAAQMD prepares air quality management plans that include projected emissions inventories and emission reductions strategies to improve ambient air quality. Regional air quality management plans are based upon the land uses contained in city and county general plans. This evaluation is based upon the guidelines of the BAAQMD.

Item a: **Less Than Significant Impact**. The project is consistent with the adopted General Plan. In addition, the project does not exceed size thresholds for potential significance provided by BAAQMD. Consequently, the project will not obstruct the implementation or accomplishment air quality management plans and any air quality impacts will be less than significant.

Items b - c: **Less Than Significant Impact**. During project construction, the use of coatings, adhesives, and construction equipment will result in the minor emissions of volatile and reactive organic gases, particulate matter, and oxides of nitrogen. Because of its small scale, combined with the requirements of the BAAQMD, any project impacts will be minimal, temporary, and of short duration. When the project is completed, a mechanical car wash with solar panels will not generate materials regulated by the BAAQMD. As a result, any impacts will be less than significant.

Item d: **Less than Significant Impact**. During project grading there is the potential to generate particulate matter (PM) emissions. However, because the site is level and construction will require only minimum amounts of grading, there is little potential to generate substantial amounts of particulate matter that could affect sensitive receptors. In addition, the requirements of grading and building permits require the implementation of measures (such as site watering and the restriction of grading on excessively windy days) that will also minimize the generation of particulate matter. During project operation, the primary emission from the operation of the car wash will be water vapor. Water vapor is a common component of the atmosphere and is not considered to be a pollutant. As a result, the project will have no significant impacts.

Item e: **Less than Significant Impact**. During project construction the use of coatings, adhesives, and the operation of construction equipment will result in minor odor emissions. However, these emissions will be minimal and of short duration. Once the project is in operation no discernable odors will be emitted from the car wash. As a result, the project will have no significant odor impacts.

IV. BIOLOGICAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion:

Items a - d, f: **No Impact**. The project site is developed and contains no wildlife habitat, riparian areas, or areas for special status species.

Item e: **Less Than Significant Impact**. The site contains several redwood trees in a landscaped setting that will be removed if the project is approved and constructed. Redwood trees are not indigenous to Sebastopol and are not considered to be appropriate for use in landscaped areas. Pursuant to the Municipal Code (https://sebastopol.municipal.codes/SMC/8.12), replacement trees can either be made onsite or with a contribution to the City tree fund. The Sebastopol Tree Board will evaluate the tree removal and replacement requirements for the project prior to the issuance of a building permit. Adherence with these standard requirements will reduce any impacts to a less than significant level.

V. CULTURAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion:

Item a: **No Impact**. The site contains no historic resources.

Items b - d: **Less Than Significant Impact**. The contains no known archeological or paleontological resources or known human remains. Given the limited amount of excavation needed to construct the project, it is unlikely that these resources would be encountered during trenching or excavation. However, if these cultural resources are identified, the requirements of Mitigation Measure CR-1 will reduce any impacts to a less than significant level.

Mitigation Measures:

CR-1: Inadvertent Discovery of Cultural Resources. In the event that any prehistoric or historic-period subsurface archaeological features or deposits, including darkened soil (midden), that could conceal cultural deposits, animal bone, obsidian and/or mortar are discovered during earth-moving activities, all ground-disturbing activity within 50 feet of the discovery shall be halted immediately and the Planning and Building Divisions notified within 12 hours. Impacts on any significant resources shall be mitigated to a less-than-significant level through data recovery or

other methods determined adequate by the City and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. If Native American archaeological, ethnographic, or spiritual resources are discovered, all identification and treatment of the resources shall be conducted by a qualified archaeologist and Native American representatives who are approved by the local Native American community as experts of their cultural traditions.

VI. GEOLOGY AND SOILS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
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? See to DMG Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion:

Item a.i: **No Impact**. The site is not located with fault zone mapped as part of the Alquist-Priolo Earthquake Fault Zoning program.

Item a.ii: **Less Than Significant Impact**. The site is located in a seismically active area in northern California. The Healdsburg-Rodgers Creek and the San Andreas Faults are located approximately 8 miles northeast and 12 miles southeast of Sebastopol, respectively. The Project Site will be subjected to very strong ground-shaking during earthquakes along these nearby faults; as well along other faults located farther the site. Adherence to the standard requirements contained in the Building Code will reduce potential impacts from seismic activity to a less than significant level.

Item a.iii: **Less Than Significant Impact**. The site is located in an area with a low to moderate susceptibility to liquefaction according to the 'Liquefaction Hazard Map' as published by the Association of Bay Area Governments. The new buildings will be developed to address potential impacts from seismic-related ground failure/liquefaction. Adherence to the standard requirements contained in the Building Code will reduce potential impacts from liquefaction to a less than significant level.

Item a.iv: **No impact**. The site consists of flat terrain with no identified landslide hazards.

Item b: **No impact**. The site was been previously developed and covered with an engineered surface and no longer contains erodible topsoil

Items c - d: **Less than Significant Impact**. The site does not contain known unstable soils conditions. The standard requirement to provide a detailed soils report will identify the specific soil conditions. Adherence to the recommendations of the engineer and compliance with the standard requirements contained in the Building Code will reduce potential impacts from unstable soils to a less than significant level.

Item e: **No Impact**. The Project is not proposing to install an onsite wastewater disposal system.

VII. GREENHOUSE GAS EMISSIONS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion:

Item a: **Less Than Significant Impact**. The emissions of greenhouse gases anticipated by the implementation of the General Plan and this project fall below the Bay Area Air Quality Management District (BAAQMD) thresholds of significance for greenhouse gas emissions (GHGs). However, during project construction, the use of coatings and adhesives and the operation of construction equipment will result in the emissions of insignificant levels of volatile and reactive organic gases. Because any emissions will comply with the requirements of the BAAQMD, any impacts will be temporary and less than significant. When the project is constructed, the mechanical car wash with solar panels will not result in the generation of greenhouse gas emissions. As a result, any impacts will be less than significant.

Item b: **Less Than Significant Impact**. The City has partnered with the Sonoma County Regional Climate Protection Authority to reduce greenhouse gases as part of the Climate Action Plan 2020 (CAP). The policies in the CAP work to achieve GHG reduction objectives related to transportation, green buildings, energy efficiency, and renewable energy. The project is consistent with these policies. In addition, BAAQMD guidance on greenhouse gas emissions establish significance thresholds for land use projects. Only when a project is larger than the threshold, a detailed analysis of GHGs is required. The size and scale of the car wash project is well below those significance thresholds. As a result, any greenhouse gas emissions will be less than significant.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Discussion:

Items a - b: **Less Than Significant Impact**. The Project involves the limited use of cleaning materials as part of the car wash operation. Some of these materials may be toxic or hazardous if consumed or inhaled. However, the amounts are minimal and will not create a significant hazard.

Item c: **No Impact**. The site is not located within a quarter mile of a school site.

Item d: **No Impact**. According to the State Department of Toxic Substance Control, there are no hazardous waste or cleanup locations near the site.

Items e - f: **No Impact**. The site is not located in the vicinity of an airport.

Item g: **No Impact**. The Project will not affect an emergency response or evacuation plan.

Item h: **Less Than Significant Impact**. The site located with a developed commercial area adjacent to vacant and open space areas along the Joe Rodota Trail open space corridor. As a result, there is a potential for wildfires to affect the site. Neither this site, nor surrounding sites, is in a high wildfire area or Wildlife Urban Interface (WUI) zone. However, the scale of the project is small and in a developed area so there is no potential for a significant loss of life or property.

IX. HYDROLOGY AND WATER QUALITY: Would the project:

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion:

Items a and f: **No Impact**. The Project will connect to the local sanitary sewer network and does not propose to discharge water that could violate water quality standards.

Item b: **No Impact**. The project will connect to the existing potable and recycled water systems and will not deplete existing groundwater supplies. The project will also not substantially interfere with groundwater recharge.

Items c - d: **No Impact**. The Project will not alter the existing drainage pattern and will not alter the drainage pattern in the surrounding area.

Item e: **Less Than Significant**. The Project will be result in a minor increase in the amount of impervious area, though most of the site is either developed or covered with a compacted gravel surface. Adherence with the provisions of Chapter 15.78 (Storm Water Low Impact Development Technical Design Manual) will reduce runoff volumes and minimize potential impacts to the stormwater drainage system. Adherence with these requirements and implementation of the best management practices to reduce future stormwater runoff to currently volumes. This will reduce any impacts to a less than significant level.

Item g: **No Impact**. The project does not contain any residential units.

Item h: **Less Than Significant Impact**. The site is designated by the Federal Emergency Management Agency (FEMA) as Zone AE (areas with a 1% annual chance of flooding and where base flood elevations are provided). The Base Food Elevation for the area is 78 feet; while portions of the site are above this level, the area of the proposed car wash is located within the regulatory flood plain. Adherence with the provisions of Chapter 15.16 (Flood Damage Protection) and 15.90 (Placement of Fill and Elevated Structures in Special Flood Hazard Areas) will be required. The approval of a Flood Development Permit will reduce any impacts to a less than significant level .

Item i: **No Impact**. The site is not protected from flooding by a levee.

Item j: **No Impact**. The site is not located in an area affected by seiche, tsunami or mudflow.

X. LAND USE AND PLANNING: Would the project:

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

Discussion:

Item a: **No Impact**. The Project involves an addition to an existing commercial site in a commercial area consistent with local land use plans and will not divide a community.

Item b: **Less Than Significant Impact**. Automobile repair and service uses require the approval of a use permit in the Commercial Core Zoning District. The purpose of a use permit is to minimize or prevent any potential land use conflicts. The existing auto-service center and proposed car wash are also not consistent with the floor area ratio requirements established in Chapter 17.25 (Commercial, Office, and Industrial Districts) of the Sebastopol Municipal Code. Table 17.25-2 requires a minimum floor area ratio of 1.0 in the Downtown Core Zoning District. This requirement is approximately five or six -times the existing and proposed floor area ratios for the property. Approval of the project will require the approval of a variance.

To approve a variance the City will need to find that there is a unique situation regarding the buildings or uses located there (e.g. there are already other existing automobile oriented businesses onsite); that the variance is necessary to preserve a substantial property right (e.g. the car wash is proposed for a vacant area of the existing auto service center); and that approving the variance will not adversely affect the public health or safety (e.g. the car wash will not create a hazardous situation). If the City makes these findings to approve the variance, any impacts will be less than significant.

Item c: **No Impact**. The Project involves an addition to an existing commercial site in a commercial area that is not in an area regulated by a habitat conservation plan.

XI. MINERAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion:

Items a - b: **No Impact**. The site contains no mineral resources.

XII. NOISE: Would the project result in:

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

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

Discussion:

Illingworth and Rodkin prepared a noise and vibration assessment (dated June 25, 2020) and a supplemental memorandum (dated August 14, 2020), which are attached and incorporated by this reference into this Initial Study. The study reviewed the existing noise environment and evaluated future project noise from the project.

Items a, c: **Less Than Significant Impact with Mitigation Incorporated**. The City General Plan and Municipal Code contain policies, actions and requirements which regulate noise generated by project construction and operation. Specifically, Chapter 8.25 (Noise Control Ordinance) of the Municipal Code establishes acceptable noise levels of 55 dBA during the day and 45 dBA during the night in commercial zones. However, the proposed car wash has the potential to increase off-site noise levels in excess of City standards. According to the noise and vibration assessment, when the drying equipment system is in operation, offsite noise levels in excess of 80 dBA near the entrance and exit from the car wash. Offsite noise levels will occur along the east and south edges of the property. The loudest off-site noise will occur east of the site adjacent to the exit of the car wash. To reduce offsite noise impacts to a less than significant level, noise mitigation measures are required. Mitigation Measure NOI-1 requires the installation of noise silencing equipment to reduce off-site noise impacts. Mitigation Measure NOI-2 requires the installation of a six-foot high noise reducing barrier along portions of the east property line north and south of the car wash. With the implementation of these two mitigation measures, any noise impacts will be reduced to a less than significant level.

Item b: **Less Than Significant Impact with Mitigation Incorporated**. The project has the potential to result in groundborne vibration during construction. According to the noise and vibration assessment, the use of a vibratory roller within 18 feet of another structure has the potential to significantly affect/damage the structure. The northeastern portion of the site is within 18 feet of an existing off-site structure. To reduce vibration impacts to a less than significant level, Mitigation Measure NOI-3 requires that the use of heavy equipment, such as a vibratory roller, be avoided within 18 feet of an existing structure.

Item d: **Less Than Significant Impact**. As previously discussed, project construction has the potential to generate temporary noise. The compliance with local construction noise requirements and mitigation measure NOI-3 will reduce any impacts to a less that significant level.

Items e - f: **No Impact**. The closest airport to the project is the Charles M. Schultz- Sonoma County Airport which is located approximately seven miles north of the site. The project is not located within the airport influence area and is in an area where airport-related noise will not be excessive. No airport-related noise impacts are expected.

Mitigation Measures:

NOI-1: Reduce Offsite Noise Effects. Prior to the issuance of a building permit, the applicant shall submit evidence that the proposed car wash drying system incorporates a silencer to achieve operational noise levels no greater than 77 dBA at a distance of 10 feet and 63 dBA at a distance of 50 feet from the entrance and exit to the car wash. Installation of the approved silencer system shall be completed prior to final inspection.

NOI-2: Additional Noise Mitigation: Prior to the issuance of a building permit, the applicant shall submit evidence that a noise reducing barrier six feet in height or other method to reduce offsite noise levels to meet City noise criteria along the east property line (south from the adjacent commercial building) to a point at least perpendicular to the northern exit of the proposed car wash, are incorporated into the project. Installation of the approved noise reducing barriers shall be completed prior to final inspection.

NOI-3: Reduce Vibration Impacts. Prior to the issuance of a building permit, the applicant shall identify all heavy construction equipment to be used for this project that have the potential to produce high vibration levels (tracked vehicles, vibratory compaction, jackhammers, hoe rams, etc.). This information shall be submitted to the City during the building permit process. If the applicant proposes the use of heavy construction equipment with the potential to generate excessive vibration, the applicant shall submit a plan documenting how the use of this equipment will not occur within 18 feet of existing structures.

XIII. POPULATION AND HOUSING: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion:

Items a - c: **No Impact**. The Project site is vacant and includes no residential units. The addition of a car wash will not induce population growth.

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Fire protection?	☐	☐	☐	☒
b. Police protection?	☐	☐	☐	☒
c. Schools?	☐	☐	☐	☒
d. Parks?	☐	☐	☐	☒
e. Other public facilities?	☐	☐	☐	☒

Discussion:

Items a – b, e: **No Impact**. The Project may result in a small increment in the demand for municipal services. However, the scale of project prevents any significant impacts.

Items c - d: **No Impact**. The Project is commercial will not result in an increase demand for educational and recreation services.

XV. RECREATION: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion:

Items a - b: **No Impact**. The Project will not increase the use of existing parks and does not involve the construction of new facilities.

XVI. TRANSPORTATION/TRAFFIC: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e. Result in inadequate emergency access?	☐	☐	☐	☒
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Discussion:

W-Trans, prepared a traffic impact study (dated July 17, 2020), which is attached and incorporated by this reference into this Initial Study. The study reviewed the existing setting and transportation network (including vehicular, bicycle, pedestrian, and transit issues), evaluated

future and cumulative impacts of the project on the transportation network, and provided recommendations to minimize or mitigate possible impacts. The study was prepared utilizing City standards, policies, and methodologies for local impacts and Guidance of the Governor's Office of Planning and Research (OPR) for evaluating changes to vehicle miles travelled.

Item a: **Less Than Significant Impact**. The traffic impact study evaluated potential project impacts at three key intersections. The key study intersections are: Sebastopol Avenue (SR12) at Petaluma Avenue (SR116), Sebastopol Avenue (SR12) at Morris Street, and Petaluma Avenue (SR116) at Abbott Avenue. The study conservatively estimated that the addition of a carwash facility to the existing oil change and tire sales and service businesses could generate an additional 300 (one-way) vehicle trips per day.

Vehicle Miles Traveled: The guidance by OPR uses a screening threshold of 50,000 square feet as the dividing line between potentially regional businesses and local-serving businesses. Land uses involving less than 50,000 square feet are presumed to be local-serving businesses. Local serving businesses generally reduce vehicle miles travelled. In addition to the size criteria, car washes are local-serving businesses (i.e. patrons do not drive long distances to use them since these facilities are located in or adjacent to virtually all communities). The proposed car wash will add approximately 3,000 square feet to the site. Since the project is less than 50,000 square feet in size and involves a local-serving business, any impacts to vehicle miles travelled will be less than significant.

Non-Automotive Impacts: The traffic impact study also evaluated the impacts of the project on pedestrian facilities (e.g. sidewalks and crosswalks), bicycle facilities (e.g. bike lanes), and transit services. The site already has access to the existing sidewalk network and the project includes the installation of on-site bicycle parking facilities. With these elements the study concluded that the project would not adversely affect the existing facilities and would not require additional improvements to implement local plans.

The adopted General Plan contains a number of policies, actions and programs which provide criteria and guidance on the circulation system within the City. Specifically, General Plan Policy CIR 1-7 requires the preparation of a circulation impact report for projects with the potential to affect the circulation system. General Plan Program 16.1 establishes a minimum operational standard of LOS D for all intersections in the downtown as well as for all unsignalized intersections citywide. As described above, the project complies with the requirements of the General Plan. Since the project is consistent with local plans and ordinances relating to the operation of the circulation system, any impacts will be less than significant.

Item b: **Less Than Significant Impact**. The Sonoma County Transportation Authority is the countywide transportation planning and programming agency and is responsible for maintaining the County's Comprehensive Transportation Plan (CTP). The CTP prioritizes transportation needs in Sonoma County in conjunction with the Association of Bay Area Government's Regional Transportation Plan. The CTP includes goals and programs to improve vehicular traffic flows, bicycle and pedestrian facilities, and transit service and facilities. The size and scope of the project does not require the preparation of a transportation demand management plan. In addition, the City General Plan provides policies and programs to ensure the efficient operation of the transportation system to accommodate all forms of travel and transport. The project is consistent with the requirements of the applicable congestion management program and will not have a significant impact.

Item c: **No Impact**. The closest airport to the project is the Charles M. Schultz- Sonoma County Airport which is located approximately seven miles north of the site. The project is not located within the airport influence area and does not involve components that could affect airport operations. No impacts are anticipated.

Item d: **No Impact**. The project is not proposing any changes to the road network which would create additional traffic hazards, such as sharp curves or dangerous intersections, or introduce incompatible non-urban land uses. The project includes an additional site access via a driveway onto Barnes Avenue. This additional driveway has the potential to reduce possible future traffic conflicts along Sebastopol Avenue by providing a second site access. No significant impacts are anticipated.

Item e: **No Impact**. The project will not affect or impair emergency access to the site and the surrounding vicinity. As discussed under Item d above, the project will add an additional driveway onto Barnes Avenue which will improve future emergency access to the site while not impairing emergency access in the surrounding area.

Item f: **Less Than Significant Impact**. As described above, the General Plan contains policies and actions to encourage and protect public transit and bicycle and pedestrian facilities. The project site has existing sidewalks along Sebastopol and Barnes Avenues. There are no bike lanes adjacent to the site. The General Plan does not identify any future bike lanes adjacent to the project site. According to Sonoma County Transit, there are no existing bus or shuttle routes along Sebastopol Avenue or Barnes Avenue adjacent to the project site. The project is consistent with the local requirements for public transit, bicycle, and pedestrian circulation and no significant impacts are anticipated.

Non-CEQA Local Impacts: The traffic impact study also evaluated the operational impacts of the project using Level of Service (LOS) to assess local operating conditions. Using the locally adopted criteria that levels of service within the downtown should maintain LOS D or better. As depicted below, the only change in LOS for the studied locations is at the intersection of Sebastopol Avenue and Morris Street during the AM peak hour. The Level of Service for unsignalized intersections citywide (such as the westbound approach of Abbott Avenue to Petaluma Avenue) is also LOS D. As demonstrated below, none of the proximal intersections will violate local operating conditions.

Study Intersections	Existing Conditions		Existing plus Project	
	AM Peak	PM Peak	AM Peak	PM Peak
Sebastopol Ave at Petaluma Ave	LOS B	LOS C	LOS B	LOS C
Sebastopol Ave at Morris St	LOS B	LOS C	**LOS C**	LOS C
Petaluma Ave at Abbott Ave	LOS A	LOS A	LOS A	LOS A
Westbound Approach from Abbott Ave	*LOS B*	*LOS B*	*LOS B*	*LOS B*

XVII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, as defined in Public Resources Code Section 21074 as either a site, feature, place cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Listed or eligible for a listing in the California Register of Historic Resources, or in a local register of historic resources as defined in Public Resources Code Section 5020.1(k)?	☐	☐	☐	☒
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 (In applying the criteria asset fort in this Section, the lead agency shall consider the significance of the resource to a California Native American Tribe)?	☐	☐	☐	☒

Discussion:

Items a - b: **No Impact**. The Native American Heritage Commission (NAHC) did not identify any tribal cultural sites on site and none of the contacted NAHC identified tribal governments requested a consultation pursuant to Public Resources Code Section 21080.3.1. The site does not contain any known historic or tribal cultural resources. However, the implementation of Cultural Resource mitigation measure CR-1 will ensure the appropriate treatment of any previously unknown tribal cultural resources.

XVIII. UTILITIES AND SERVICE SYSTEMS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
effects?				
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project' s projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion:

Items a, b, e: **Less Than Significant Impact**. The Project is very small and will result not require the construction of new water or wastewater facilities and will not exceed treatment requirements. Based on the 2019 annual Level of Service Report (incorporated by reference) presented to the City Council in May of this year, there is ample capacity remains in the City of Sebastopol's wastewater treatment allocation to serve this development and meet applicable requirements of the Regional Water Quality Control Board. The Level of Service Report indicates that there is approximately 45% of treatment capacity remaining. This figure includes allowances for known undeveloped projects. The proposed car wash project is also included as part of the future planned growth identified in the General Plan. Finally, any incremental impacts to the collection system network will be addressed through the payment of required connection fees.

Item c: **No Impact**. The Project will not require or involve the construction of new storm water facilities.

Item d: **Less Than Significant Impact**. The Project is very small and will result not require the construction of new water facilities. Based on the 2019 annual Level of Service Report provided to the City Council (incorporated by reference), Sebastopol obtains its municipal water supply from groundwater in the Wilson Creek Formation. This groundwater basin is managed as part of the Santa Rosa Plain Basin and a regional Groundwater Sustainability Agency. According Level of Service Report, water use within the City reduced by about 3% in 2019 and there is ample capacity in the City of Sebastopol's water system to serve the proposed development. The proposed car wash project is also included as part of the future planned growth identified in the General Plan. Any incremental impacts to the distribution system will be addressed through the

payment of required connection fees. The car wash will also use/recycle approximately 80% of its water use further reducing its impact on the water system.

Items f - g: **Less Than Significant Impact**. The Project will add a small incremental increase of solid waste and recyclable materials. However, this small increment will not result in a significant impact.

XIX. WILDFIRES: If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Discussion:

Items a - d: **No Impact**. The site is not located in a high wildfire hazard severity zone or Wildland Urban Interface zone. Additionally, the site is located within an area of local responsibility.

XX. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion:

Items a - c: **Less Than Significant**. Based upon the analysis provided with this initial study the Project will result a minor change to the environment and will contribute a very small incremental increase to environmental change. The project is occurring within an existing urban context and is not located on a site with substantial environmental resources. As a result, the Project will not create a significant cumulative impact.

FIGURES

Figure 1. Project Location

Figure 2. Site Plan.

Figure 3. Building Elevations

EXHIBITS INCORPORATED BY REFERENCE

1. Adobe Associates, Inc., Initial Storm Water Low Impact Development Submittal for The Use Permit for Parcel 3 of the Benedetti Subdivision.

2. Illingworth & Rodkin, Benedetti Car Wash – Noise and Vibration Assessment, June 25, 2020.

3. Illingworth and Rodkin, Results of Noise Wall Analysis, Benedetti Car Wash, Sebastopol, CA, August 14, 2020.

4. Patrick Slayer Architect, Project Plans, February 20, 2019.

5. W-Trans, Traffic Impact Study for the Benedetti Car Wash Project, July 15, 2020.

DOCUMENTS INCORPORATED BY REFERENCE

6. City of Sebastopol General Plan and EIR – adopted November, 2016 [State Clearinghouse #2016032001]

7. City of Sebastopol Zoning Ordinance

8. Climate Action Plan 2020 and Beyond, Sonoma County Regional Climate Protection Authority – July 2016.

9. BAAQMP Air Quality Plan – May 2017

10. City of Sebastopol Annual Level of Service Report – 2017

Documents available for review at the Sebastopol Planning Department,7120 Bodega Avenue, Sebastopol, CA 95472 (by appointment only during Covid-19 local emergency declaration, please call 707-823-6167 for further information)

Documents are also available on the City's website, www.ci.sebastopol.org

Documents 1-5 are available and https://ci.sebastopol.ca.us/City-Government/Departments-Services/Planning/Projects

Documents 6 and 7 are available: http://sebastopol.generalplan.org/ and https://sebastopol.municipal.codes/, respectively

BENEDETTI CAR WASH
NOISE AND VIBRATION ASSESSMENT

Sebastopol, California

June 25, 2020

Prepared for:

Aaron Hollister
Contract Planner
City of Sebastopol Planning Department
7120 Bodega Avenue
Sebastopol, CA 95472

Prepared by:

Steve J. Deines
Dana M. Lodico, PE, INCE Bd. Cert.

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
429 East Cotati Avenue
Cotati, CA 94931
(707) 794-0400

Project: 20-022

INTRODUCTION

The project proposes to construct an automated car wash and office space at 6809 Sebastopol Avenue in downtown Sebastopol, California. The car wash would be located on the ground level of the proposed two-story building and have a two-vehicle capacity. Office space would be located on the ground and second level of the building. Seventeen self-service vacuum stations would occupy the western portion of the site. The car wash and vacuum stations would operate between 7 a.m. and 7 p.m., Monday through Saturday. The site is adjacent to the existing Benedetti Tire Center and Express Lube.

This report evaluates the project's potential to result in significant noise and vibration impacts with respect to applicable California Environmental Quality Act (CEQA) guidelines. The report is divided into two sections: 1) the Setting Section provides a brief description of the fundamentals of environmental noise, summarizes applicable regulatory criteria, and discusses the results of the ambient noise monitoring survey completed to document existing noise conditions; 2) the General Plan Consistency section discusses land use compatibility utilizing noise policies in the City's General Plan; and 2) the Impacts and Mitigation Measures Section describes the significance criteria used to evaluate project impacts, provides a discussion of each project impact, and presents measures, where necessary, to mitigate the impacts of the project on sensitive receptors in the vicinity.

SETTING

Fundamentals of Environmental Noise

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

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A *decibel (dB)* is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level (dBA).* This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA

are shown in Table 2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This *energy-equivalent sound/noise descriptor* is called L_{eq}. The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

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

Effects of Noise

Sleep and Speech Interference

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA L_{dn}. Typically, the highest steady traffic noise level during the daytime is about equal to the L_{dn} and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12 to 17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and speech interference is therefore possible when exterior noise levels are about 57 to 62 dBA L_{dn} with open windows and 65 to 70 dBA L_{dn} if the windows are closed. Levels of 55 to 60 dBA are common along collector streets and secondary arterials, while 65 to 70 dBA is a typical value for a primary/major arterial. Levels of 75 to 80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed; those facing major roadways and freeways typically need special glass windows.

Annoyance

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The L_{dn} as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 50 dBA L_{dn}. At an L_{dn} of about 60 dBA, approximately 12 percent of the population is highly annoyed. When the L_{dn} increases to 70 dBA, the percentage of the population highly annoyed increases to about 25 to 30 percent of the population. There is, therefore, an increase of about 2 percent per dBA between an L_{dn} of 60 to 70 dBA. Between an L_{dn} of 70 to 80 dBA, each decibel increase increases by about 3 percent the percentage of the population highly annoyed. People appear to respond more adversely to aircraft noise. When the L_{dn} is 60 dBA, approximately 30 to 35 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 3 percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 4 percent increase in the percentage of the population highly annoyed.

Fundamentals of Groundborne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. In this report, a PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 3 displays the reactions of people and the effects on buildings that continuous or frequent intermittent vibration levels produce. The guidelines in Table 3 represent syntheses of vibration criteria for human response and potential damage to buildings resulting from construction vibration.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to cause damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as paint flaking or minimal extension of cracks in building surfaces; minor, including limited surface cracking; or major, that may threaten the structural integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher. The damage criteria presented in Table 3 include several categories for ancient, fragile, and historic structures, the types of structures most at risk to damage. Most buildings are included within the categories ranging from “Historic and some old buildings” to “Modern industrial/commercial buildings”. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

The annoyance levels shown in Table 3 should be interpreted with care since vibration may be found to be annoying at lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

TABLE 1 Definition of Acoustical Terms Used in this Report

Term	Definition
Decibel, dB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e. g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
L_{max}, L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	
		Broadcast/recording studio
	10 dBA	
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

TABLE 3 Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels

Category	Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
1	0.01	Barely perceptible	No effect
2	0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
3	0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
4	0.1	Strongly perceptible	Threshold at which there is a risk of damage to fragile buildings with no risk of damage to most buildings
5	0.25	Strongly perceptible to severe	Threshold at which there is a risk of damage to historic and some old buildings.
6	0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential structures
7	0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to new residential and modern commercial/industrial structures

Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, September 2013.

Regulatory Background - Noise

The State of California and the City of Sebastopol have established regulatory criteria that are applicable in this assessment. The State CEQA Guidelines, Appendix G, California Building Code, and the City of Sebastopol General Plan are used to assess the potential significance of impacts. A summary of the applicable regulatory criteria is provided below.

State CEQA Guidelines. CEQA contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. Under CEQA, noise impacts would be considered significant if the project would result in:

(a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local General Plan or Noise Ordinance, or applicable standards of other agencies;

(b) Generation of excessive groundborne vibration or groundborne noise levels; or

(c) For a project located within the vicinity of a private airstrip or 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, if the project would expose people residing or working in the project area to excessive noise levels.

2019 California Building Code, Title 24, Part 2. The current version of the California Building Code (CBC) requires interior noise levels attributable to exterior environmental noise sources to be limited to a level not exceeding 45 dBA L_{dn} in any habitable room.

2019 California Green Building Standards Code (Cal Green Code). The State of California established exterior sound transmission control standards for new non-residential buildings as set forth in the 2019 California Green Building Standards Code (Section 5.507.4.1 and 5.507.4.2). Section 5.507 states that either the prescriptive (Section 5.507.4.1) or the performance method (Section 5.507.4.2) shall be used to determine environmental control at indoor areas. The prescriptive method is very conservative and not practical in most cases; however, the performance method can be quantitatively verified using exterior-to-interior calculations. For the purposes of this report, the performance method is utilized to determine consistency with the Cal Green Code. The sections that pertain to this project are as follows:

> **5.507.4.1 Exterior noise transmission, prescriptive method.** Wall and roof-ceiling assemblies exposed to the noise source making up the building envelope shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the building falls within the 65 dBA L_{dn} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway noise source, as determined by the local general plan noise element.
>
> **5.507.4.2 Performance method.** For buildings located, as defined by Section 5.507.4.1, wall and roof-ceiling assemblies exposed to the noise source making up the building envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level ($L_{eq\ (1\text{-}hr)}$) of 50 dBA in occupied areas during any hour of operation.

The performance method, which establishes the acceptable interior noise level, is the method typically used when applying these standards.

City of Sebastopol General Plan. Chapter 6 of the Sebastopol General Plan sets forth policies with the goal of addressing major noise sources and promoting safe and comfortable noise levels throughout the City of Sebastopol. The following policies are applicable to the proposed project:

N 1-1 Ensure the noise compatibility of existing and future developments when making land use planning decisions.

N 1-2 Require development and infrastructure projects to be consistent with the Land Use Compatibility for Community Noise Environments standards indicated in Table N-1 to ensure acceptable noise levels for existing and future development.

N 1-3 Require new development to mitigate excessive noise through best practices, including building location and orientation, building design features, placement of

noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-reducing materials.

N 1-6 Require acoustical studies for new developments, projects seeking use permits related to activities that would increase noise levels, and transportation improvements that affect noise-sensitive uses such as schools, hospitals, libraries, group care facilities, convalescent homes, and residential areas.

N 1-7 For projects that are required by the California Environmental Quality Act (CEQA) to analyze noise impacts, the following criteria shall be used to determine the significance of those impacts:

Stationary and Non-Transportation Noise Sources

A significant impact will occur if the project results in an exceedance of the noise level standards contained in this element, or the project will result in an increase in ambient noise levels by more than 3 dB, whichever is greater. This does not apply to construction activities which are conducted according to the best practices outlined in Action N 1f. Compliance with the requirements outlined in Action N 1f shall be sufficient to reduce construction-related noise impacts to a less than significant level.

Transportation Noise Sources

Where existing traffic noise levels are less than 60 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +5 dB L_{dn} increase in roadway noise levels will be considered significant; and

Where existing traffic noise levels range between 60 and 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +3 dB L_{dn} increase in roadway noise levels will be considered significant; and

Where existing traffic noise levels are greater than 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +1.5 dB L_{dn} increase in roadway noise levels will be considered significant.

N 1-8 Support noise-compatible land uses along existing and future roadways, including County, State, and Federal routes.

N 1-11 Ensure that existing development is protected, to the greatest extent feasible, from noise impacts due to construction on adjacent or nearby properties through implementation of best practices, as outlined in Action N 1f.

N 1-13 Control non-transportation related noise from site specific noise sources to the standards shown in Table N-2.

N 1-15 Require construction activities to comply with standard best practices (see Action N 1f).

N 1-18 Ensure that an acceptable noise environment is maintained in residential areas and areas with sensitive uses by ensuring that uses, operations, and fixed equipment maintain compliance with City standards and by providing for the regulation of short-term increases in non-transportation noise levels through the Municipal Code.

N 1-19 Ensure that indoor noise levels at public and community buildings do not reach harmful levels, generally considered to be 100 dB or higher.

Action N 1f Require construction projects that may generate excessive noise impacts to implement the following types of standard best practices, as applicable, to reduce construction noise impacts to the extent feasible:

- Noise-generating construction activities, including truck traffic coming to and from the construction site for any purpose, shall be limited as specified in the Noise Ordinance.

- All equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.

- The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.

- At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.

- Unnecessary idling of internal combustion engines shall be prohibited.

- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.

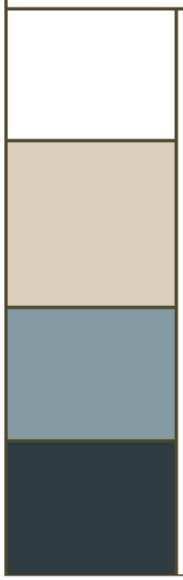
- Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.

- The construction contractor shall designate a "noise disturbance coordinator" who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to

correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.

TABLE N-1 LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENT

Land Use Category	Exterior Noise Exposure (Ldn) 55 60 65 70 75 80 90
Residential	
Transient Lodging; Motel, Hotel	
School, Library, Church, Hospital, Nursing Home	
Auditorium, Concert Hall, Amphitheater, Sports Arena	
Playground, Recreational Open Space, Park	
Golf Course, Stables, Water Recreation, Cemetery	
Office Buildings, Business, Commercial	
Industrial, Utilities, Manufacturing, Agriculture	



NORMALLY ACCEPTABLE
Specified land use is satisfactory, assuming that any buildings involved are of conventional construction without any special insulation requirements.

CONDITIONALLY ACCEPTABLE
Specified land use may be permitted only after detailed analysis of the noise reduction requirements and noise insulation features included in the design.

UNACCEPTABLE
New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and needed noise insulation features included in the design.

CLEARLY UNACCEPTABLE
New construction or development generally should not be undertaken.

TABLE N-2 STATIONARY (NON-TRANSPORTATION) NOISE SOURCE STANDARDS

Land Use Receiving the Noise	Hourly Noise-Level Descriptor	Exterior Noise-Level Standard (dBA)	
		Daytime (7am-10pm)	Nighttime (10pm-7am)
Residential	L_{eq} L_{max}	55 70	45 65

Notes:

a) The residential standards apply to all properties that are zoned for residential use. The exterior noise level standard is to be applied at the property line of the receiving land use or at a designated outdoor activity area (at the discretion of the Planning Director) of the new development. For mixed-use projects, the exterior noise level standard may be waived (at the discretion of the Planning Director) if the project does not include a designated activity area and mitigation of property line noise for on-site uses is not practical. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings). The City can impose standards that are more restrictive than specified above based upon determination of existing low ambient noise levels.

b) Each of the noise levels specified above shall be lowered by 5 dBA for tonal noises characterized by a whine, screech, or hum, noises consisting primarily of speech or music, or recurring impulsive noises. In no case shall mitigation be required to a level that is less than existing ambient noise levels, as determined through measurements conducted during the same operational period as the subject noise source.

c) In situations where the existing noise level exceeds the noise levels indicated in the above table, any new noise source must include mitigation that reduces the noise level of the noise source to the existing level plus 3 dB.

City of Sebastopol Municipal Code. Section 8.25 of the Sebastopol Municipal Code sets forth policies to prohibit unnecessary, excessive, and annoying noises. The following policies are applicable to the proposed project:

8.25.060 Noise Levels

A. It shall be unlawful for any person to emit or cause to be emitted any noise beyond the boundaries of his/her premises in excess of the noise levels established in these regulations.

B. Noise Level Standards

2. No person in a commercial zone shall emit noise beyond the boundary of his/her premises exceeding the levels stated herein and applicable to adjacent residential, commercial, or industrial zones. Noise levels shall not exceed:

a. Daytime hours: 55 dBA

b. Nighttime hours: 45 dBA

Regulatory Background – Vibration

City of Sebastopol General Plan. Chapter 6 of the Sebastopol General Plan sets forth policies to achieve the goal of minimizing vibration impacts on people, residences, and business operations in the City of Sebastopol. The following policies are applicable to the proposed project:

N 1-16 Require new development to minimize vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, a vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to the building. A vibration limit of 0.30 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction.

Existing Noise Environment

The 1.5-acre project site is located at 6809 Sebastopol Avenue in downtown Sebastopol, California. Existing uses in the site vicinity are primarily commercial and include automotive shops and repair centers, retail stores, restaurants, and a commercial creative space. The site is bounded by Sebastopol Avenue to the north, Barnes Avenue to the west, undeveloped lands and segments of the Joe Rodota Trail to the south and southeast, and commercial uses and parking to the east. Noise-sensitive uses nearest the site include the Joe Rodota Trail, the nearest residence approximately 600 feet to the south, and the Sebastopol Inn approximately 250 feet to the east.

A noise monitoring survey was performed in the project vicinity between Thursday, June 4, 2020 and Tuesday, June 9, 2020 to quantify and characterize ambient noise levels at the site and in the surrounding area. The survey included two long-term measurements and three short-term measurements at the locations shown in Figure 1. The predominant sources of noise in the project vicinity were traffic along Sebastopol Avenue and Petaluma Avenue and localized activities taking place on the adjacent commercial properties.

On June 4, 2020, between 12:20 p.m. and 1 p.m., three attended, short-term (10-minute) measurements, ST-1, ST-2a, and ST-2b were made to quantify existing ambient noise levels at the Sebastopol Inn, the closest noise sensitive use to the project site, and traffic noise levels generated along Petaluma Avenue. Measurement ST-1 was located at 220 Petaluma Avenue. The primary source of noise at this location was traffic along Petaluma Avenue. Measurements ST-2a and ST-2b were located at the pool area of the Sebastopol Inn. The primary sources of noise at this location were distant traffic along Sebastopol Avenue and vehicular activity in parking lots adjacent to the site. A summary of short-term noise measurement data is presented below in Table 4.

Long-term measurements LT-1 and LT-2 were made starting on Thursday June 4, 2020 and concluding on Tuesday, June 9, 2020. Measurement LT-1 was made to quantify the ambient noise level at the project site. Hourly average noise levels at this location typically varied between 49 and 60 dBA L_{eq} during the day, and between 39 and 56 dBA L_{eq} at night. Local activities occurring on the project site or the adjacent commercial property occasionally resulted in elevated noise

levels ranging from 61 to 67 dBA L_{eq}. The day-night average noise level, including existing local commercial noise, was 57 to 58 dBA L_{dn} on weekdays, 56 dBA L_{dn} on Saturday, and 54 dBA L_{dn} on Sunday. Measurement LT-2 was made to quantify the ambient noise level at the nearest residence to the site, approximately 600 feet to the south. Hourly average noise levels at this location varied between 44 and 58 dBA L_{eq} during the day, and between 35 and 57 dBA L_{eq} at night. The day-night average noise level was 54 dBA L_{dn} on weekdays and 53 dBA L_{dn} on Sunday. On Saturday, June 6, 2020, a localized noise source, such as truck idling or landscaping type activities, generated relatively steady state noise levels of 53 to 56 dBA L_{eq} from 5:00 am to 6:30 am, resulting in an elevated day-night noise level of 56 dBA L_{dn}. The daily trend in long-term measurement noise levels is shown in Appendix Figures A1 – A12.

TABLE 4 Summary of Short-Term Noise Measurement Data

ID	Measurement Location	Measured Noise Levels (dBA)						Primary Noise Source
		L_{10}	L_{50}	L_{90}	L_{eq}	Weekday L_{dn}*	Saturday L_{dn}*	
ST-1	220 Petaluma Avenue, Thursday, 6/4/20, 12:20 p.m. – 12:30 p.m.	68	63	57	65	70	68	Traffic along Petaluma Avenue
ST-2	Sebastopol Inn Outdoor Pool, Thursday, 6/4/20, 12:40 p.m. – 1:00 p.m.	51	45	42	48	51	49	Distant traffic, parking lot activities
		46	44	42	44			

*L_{dn} levels for short-term measurements are calculated through comparison with corresponding long-term noise measurements.

FIGURE 1 Noise Measurement Locations



Source: Google Earth, 2020

GENERAL PLAN CONSISTENCY ANALYSIS

The impacts of site constraints such as exposure of the proposed project to excessive levels of noise and vibration are not considered under CEQA. This section addresses Noise and Land Use Compatibility for consistency with the policies set forth in the City's General Plan and Cal Green Code.

Noise and Land Use Compatibility

Chapter 6 of the Sebastopol General Plan sets forth policies with the goal of addressing major noise sources and promoting safe and comfortable noise levels throughout the City of Sebastopol. The applicable General Plan policies were presented in detail in the Regulatory Background section and are summarized below for the proposed project:

- For the proposed commercial/office land use, the City's "normally acceptable" exterior noise level standard is 70 dBA L_{dn} or less.

- The Cal Green Code standards specify an interior noise environment attributable to exterior sources not to exceed an hourly equivalent noise level of 50 dBA $L_{eq\ (1\text{-}hr)}$ in occupied areas of non-residential uses during any hour of operation.

The future noise environment at the project site would continue to result primarily from vehicular traffic along Sebastopol Avenue and Petaluma Avenue. Noise from parking lots and operations of surrounding uses will also contribute to the future noise environment.

Future Exterior Noise Environment

The exterior noise threshold established in the City's General Plan for new commercial or office uses is 70 dBA L_{dn} at usable outdoor activity areas. According to site plans dated February 20, 2019, there will be no usable outdoor spaces at the project site. Vacuum stalls include their own self-generating noise sources and would not be considered noise sensitive spaces. The future exterior noise environment would be compatible with City General Plan standards.

Future Interior Noise Environment

The Cal Green Code specifies that interior noise attributable to exterior sources not exceed 50 dBA $L_{eq\ (1\text{-}hr)}$ in non-residential uses during any hour of operation. Hours of operation for the proposed use would be 7 a.m. to 7 p.m., Monday through Saturday. This would be applicable to office uses inside the proposed building. Peak hour noise levels measured at the project site reached 67 dBA $L_{eq\ (1\text{-}hr)}$. The project's traffic study[1] indicates an increase in future traffic volumes on nearby roads that would result in an increase of traffic noise in the site vicinity of 1 to 2 dBA L_{dn}. Considering a future noise increase of 2 dBA as a result of increased traffic volumes, peak hour noise levels at the proposed building would reach 69 dBA $L_{eq\ (1\text{-}hr)}$. Standard commercial construction with windows closed provides approximately 25 dBA of noise reduction in interior spaces. As a result,

[1] W-Trans, *Traffic Impact Study for the Benedetti Car Wash*, June 3, 2020

peak hour interior noise levels attributable to exterior sources would reach 44 dBA $L_{eq\ (1\text{-}hr)}$. The future interior noise environment would be compatible with the Cal Green Code standard.

NOISE IMPACTS AND MITIGATION MEASURES

This section describes the significance criteria used to evaluate project impacts under CEQA, provides a discussion of each project impact, and presents mitigation measures, where necessary, to reduce project impacts to less-than-significant levels.

Significance Criteria

The following criteria were used to evaluate the significance of environmental noise and vibration resulting from the project:

- **Temporary or Permanent Noise Increases in Excess of Established Standards.** A significant noise impact would be identified if the project would generate a substantial temporary or permanent noise level increase in ambient noise levels at existing noise-sensitive receptors in excess of the applicable noise standards presented in the General Plan or Municipal Code, as follows:

    - Temporary Noise Increase. A significant noise impact would be identified if construction-related noise would temporarily increase ambient noise levels at sensitive receptors. City General Plan Policies N 1-11, and N 1-15 require that the construction best practices outlined in Action N 1f be followed to reduce the impact of construction noise on adjacent or nearby properties to a less-than-significant level.

    - Permanent Noise Increase. General Plan Policy N 1-7 states that a significant permanent noise level increase would occur if project traffic would result in: a noise level increase of 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn} at outdoor activity areas of noise-sensitive uses; a noise level increase of 3 dBA L_{dn} or greater, with a future noise level of 60 to 65 dBA L_{dn} at outdoor activity areas of noise sensitive uses; or a noise level increase of 1.5 dBA L_{dn} or greater, with a future noise level of 65 dBA L_{dn} or greater at outdoor activity areas of noise-sensitive uses.

    - Operational Noise in Excess of Standards. General Plan Policies N 1-3, N 1-7, N 1-13, N 1-18, and City Municipal Code Section 8.25.060 establish impact criteria for operational noise. A significant impact would occur if project operational noise exceeds these standards or if the project would result in an increase in ambient noise levels of greater than 3 dBA.

- **Generation of Excessive Groundborne Vibration.** General Plan Policy N 1-16 requires new development to minimize vibration impacts to adjacent uses during demolition and construction. A vibration limit of 0.08 in/sec PPV is used for sensitive historic structures,

and a vibration limit of 0.30 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction.

- **Excessive Aircraft Noise Levels.** A significant noise impact would be identified if the project would expose people residing or working in the project area to excessive aircraft noise levels.

Impact 1a: **Temporary Construction Noise.** Existing noise-sensitive land uses would be exposed to a temporary increase in ambient noise levels due to project construction activities. The incorporation of construction best management practices, as outlined in the General Plan, would result in a **less-than-significant** temporary noise impact.

Temporary noise increases resulting from construction vary depending upon the noise levels generated by various pieces of construction equipment, the timing and duration of noise-generating activities, the distance between construction noise sources and noise-sensitive areas, and the presence of intervening shielding features such as buildings or terrain. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

Project construction is anticipated to occur in one phase with a duration of ten months. Minimal demolition would be required outside of tree and fence removal. Pile driving would not be used as a method of construction. Typical construction noise levels at a distance of 50 feet are shown in Tables 5 and 6. Table 5 shows average noise level ranges by construction phase, and Table 6 shows maximum noise level ranges for different construction equipment. Most demolition and construction noise falls with the range of 80 to 90 dBA at a distance of 50 feet from the source.

TABLE 5 Construction Equipment 50-Foot Noise Emission Limits

Equipment Category	L_{max} Level (dBA)[1,2]	Impact/Continuous
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Bar Bender	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor[3]	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous
Concrete Vibrator	80	Continuous
Crane	85	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Gradall	85	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Rock Drill	85	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous

Notes:

[1] Measured at 50 feet from the construction equipment, with a "slow" (1 sec.) time constant.

[2] Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.

[3] Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

Source: Mitigation of Nighttime Construction Noise, Vibrations and Other Nuisances, National Cooperative Highway Research Program, 1999.

TABLE 6 Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA)

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

I - All pertinent equipment present at site.
II - Minimum required equipment present at site.

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

Construction noise modeling was conducted using the list of construction equipment provided. The Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) was used to calculate a credible 'worst-case' scenario of hourly average noise levels, assuming every piece of equipment would operate simultaneously. Based on noise modeling, construction noise levels would reach 83 dBA L_{eq} and 84 dBA L_{max} at a distance of 50 feet.

Land uses surrounding the site include commercial uses just northeast of the project site, the Sebastopol Inn to the east, commercial uses to the north across Sebastopol Avenue, the existing Benedetti Tire Center and Express Lube just north of the project site, segments of the Joe Rodota Trail to the southeast, and additional commercial uses to the west and southwest. Hourly average and maximum construction noise levels assuming all equipment operating simultaneously are shown in Table 7 for each of the nearby noise sensitive land uses relative to the center of the active construction site. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Noise levels in shielded areas would be anticipated to be 5 to 20 dBA lower.

TABLE 7 Calculated Construction Noise Levels at Nearby Land Uses

Location	Distance from Center of Construction (feet)	Calculated Noise Levels (dBA)	
		Hourly Average Noise Level (L_{eq})	Maximum Noise Level (L_{max})
Attico Furniture Store, Chimera Arts and Maker Space	80	79	80
Benedetti Tire Center	115	76	77
Benedetti Express Lube	125	75	76
The Feed Store	245	69	70
Sebastopol Inn	300	68	68
Goodwill – Redwood Empire	315	67	68
Peet's Coffee	330	67	68
Joe Rodota Trail	470	64	65
Nearest Residence	700	60	61

Project construction would result in a temporary increase in the ambient noise level at the nearest land uses. Based on General Plan Policies N 1-11 and N-15, construction-related noise impacts would be reduced to a less-than-significant level through implementation of construction best practices outlined in General Plan Action N 1f, as follows:

- Noise-generating construction activities, including truck traffic coming to and from the construction site for any purpose, shall be limited as specified in the Noise Ordinance.

- All equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.

- The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.

- At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.

- Unnecessary idling of internal combustion engines shall be prohibited.

- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.

- Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.
- The construction contractor shall designate a "noise disturbance coordinator" who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise

complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.

With implementation of the above best practices, noise resulting from project construction would result in a **less-than-significant impact**.

Mitigation Measure 1a: No additional measures required.

Impact 1b: Permanent Noise Level Increase. The proposed project is not expected to cause a substantial permanent noise level increase at the existing residential or commercial land uses in the project vicinity. **This is a less-than-significant impact.**

General Plan Policy N 1-7 establishes that where existing traffic noise levels are less than 60 dBA L_{dn} at the outdoor activity areas of noise-sensitive uses, a 5 dBA L_{dn} increase in roadway noise levels will be considered significant. Where existing traffic noise levels are between 60 and 65 dBA L_{dn} at the outdoor activity areas of noise-sensitive uses, a 3 dBA L_{dn} increase in roadway noise level will be considered significant. Where existing traffic noise levels are greater than 65 dBA L_{dn} at the outdoor activity areas of noise-sensitive uses, a 1.5 dBA L_{dn} increase in roadway noise levels would be considered significant.

The traffic study prepared for the proposed project by W-Trans included peak hour turning movements for three intersections in the project vicinity. By comparing future cumulative traffic levels with and without the project, the project's contribution to the future noise level increase was determined to be 1 dBA L_{dn} or less along all studied roadway segments. Project-generated traffic would not result in a significant increase in noise levels at any noise-sensitive uses. This is a **less-than-significant impact**.

Mitigation Measure 1b: None required.

Impact 1c: Noise Levels in Excess of Standards. The proposed project would generate noise in excess of standards established in the City's General Plan at nearby sensitive receptors. Installation of a silencer system to the car wash blower dryer would reduce noise levels below limits. **This is a potentially significant impact.**

General Plan Policy N 1-7 states that a noise impact resulting from stationary and non-transportation sources would occur if noise levels resulting from the project would exceed General Plan standards or increase the ambient noise level by greater than 3 dB, whichever is greater. Table N-2 establishes a daytime limit of 55 dBA from stationary noise sources measured at residential uses. Although the project is not located in a 'commercial zone', this analysis also applies the daytime limit to noise sensitive commercial uses and the trail, based on Municipal Code 8.25.060.

The proposed project would construct an automated drive-through car wash and 17 self-service vacuum stations. The car wash and vacuums would be operational Monday through Saturday from 7:00 a.m. to 7:00 p.m. Vehicles would enter the car wash through a door along the southern façade of the building and exit through a door along the northern façade.

Existing noise sensitive land uses in the vicinity include the Sebastopol Inn, located approximately 300 feet to the east, Peet's Coffee outdoor patio, located 340 feet to the west, Joe Rodota Trail, located 360 feet to the southeast, and residences, located approximately 600 feet to the south. Other land uses in the vicinity, such as the Benedetti Tire Center, Benedetti Express Lube, Attico Furniture Store, Chimera Arts and Maker Space, Goodwill Redwood Empire, and CVS Drug Store do not include any noise sensitive outdoor use areas. Based on the noise monitoring survey, existing ambient noise levels are between 53 and 56 dBA L_{dn} at the nearest residences, with daytime hourly average noise levels of 44 to 58 dBA L_{eq}. Existing ambient noise levels at the outdoor pool area of the Sebastopol Inn are between 47 and 51 dBA L_{dn}, with daytime hourly average noise levels of 42 to 53 dBA L_{eq}. Existing ambient noise levels at the patio area of Peet's Coffee are between 66 and 70 dBA L_{dn}, with daytime hourly average noise levels of 61 to 72 dBA L_{eq}. Based on the project's traffic study, increased traffic volumes under future conditions would result in a traffic noise increase of about 1 dBA L_{dn} in these areas.

The primary noise source at the site would be the blower dryer used in the automated drive-through car wash. A Proto-Vest S130 drying system is proposed to be used. Noise data provided indicates the system produces noise levels of 91 dBA at a distance of 10 feet, and 77 dBA at a distance of 50 feet. An optional silencer would reduce noise levels by 14 dBA. Based on the relative difference in overall sound power level at the entrance and exit doors of other car wash studies, the entrance door is assumed to have 3 dB lower overall sound power level than at the exit door. Manufacturer data used for vacuum stations in other studies indicate that an individual vacuum station when in use generates a noise level of about 66 dBA at a distance of 3 feet. Minimal noise is generated when vacuum hoses are hooked.

Noise resulting from the proposed car wash and vacuum station operations was evaluated using SoundPLAN 8.2, a 3-dimensional noise modeling software which considers characteristics of noise sources and project geometry. Noise levels were modeled under two scenarios, with and without the inclusion of the car wash silencer. Both scenarios assume a worst-case of continuous use of the car wash and all vacuum stalls for the full 12-hour period they are proposed to be operational. Realistically, levels of car wash use would vary throughout the day, and the blower dryer system would not be in continuous operation. Based on past car wash studies, peak hour use of the automated drive-through would see around 50 to 60 vehicles, with 250 to 350 total vehicles per day. Results of the noise model are summarized in Table 8. Maps of the noise exposure generated by the project on the surrounding area are shown in Figures 2 and 3.

TABLE 8 Predicted Car Wash Noise Levels at Nearby Receivers

Receiving Location	Calculated Noise Level (dBA)			
	Without Silencer		With Silencer	
	Peak Hour (L_{eq})	Day-night Average (L_{dn})	Peak Hour (L_{eq})	Day-night Average (L_{dn})
Sebastopol Inn Pool	60	58	46	44
Peet's Coffee Outdoor Patio	47	45	40	38
Joe Rodota Trail	47 – 54	45 – 52	36 – 42	34 – 40
Nearest Residence	43	41	31	29

FIGURE 2 Noise Exposure Resulting from Car Wash Operations – No Silencer

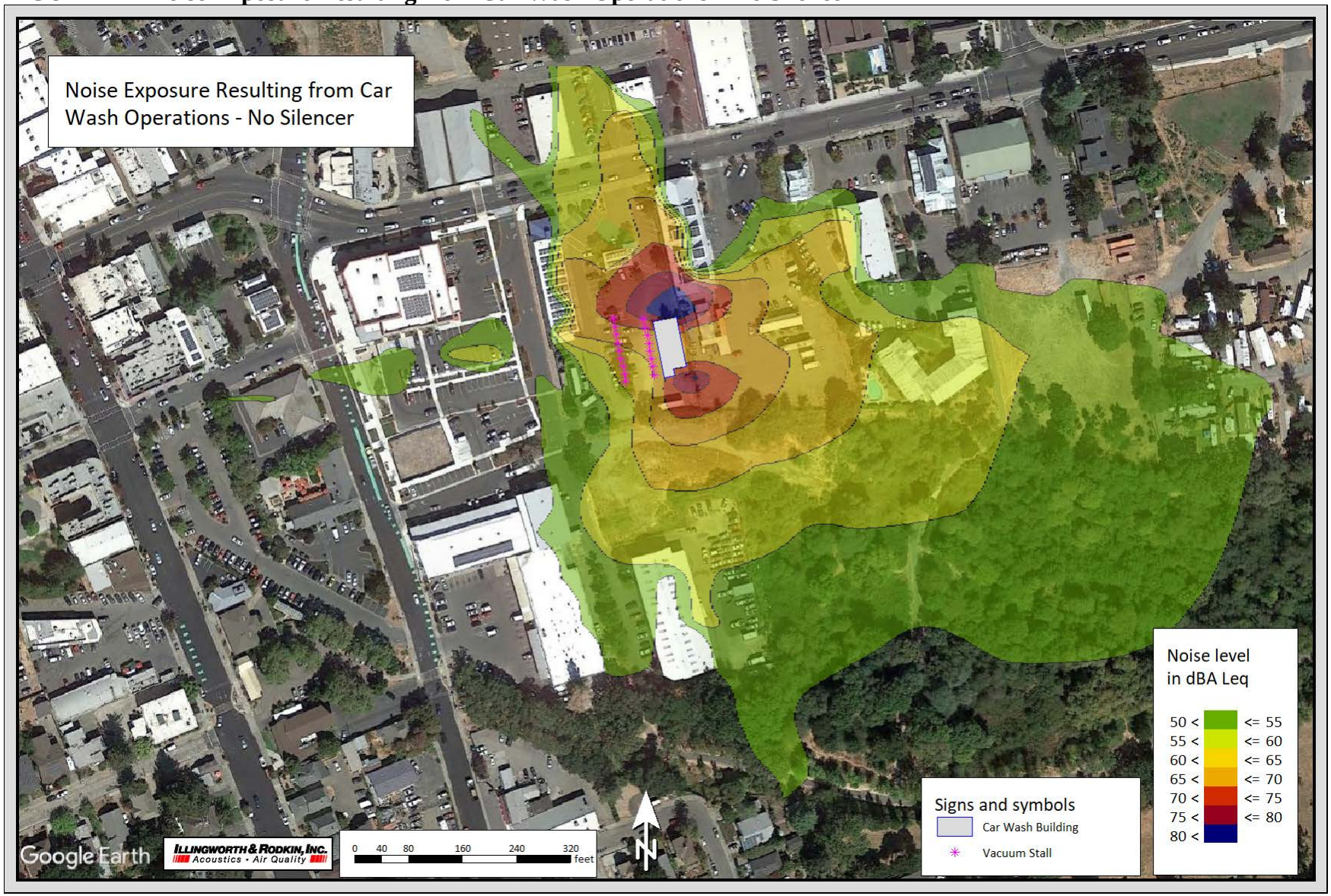


FIGURE 3 Noise Exposure Resulting from Car Wash Operations – With Silencer



As indicated in Table 8, hourly average L_{eq} noise levels generated by the car wash and vacuum system operations would exceed projected future daytime ambient levels in the site vicinity and the 55 dBA L_{eq} daytime noise threshold at the Sebastopol Inn. Without installation of the silencer, noise levels at the pool area of the Sebastopol Inn would reach 60 dBA L_{eq}. Noise generated by the project would exceed existing ambient noise levels at the pool area by 12 to 16 dBA L_{eq}. Installation of the blower dryer silencer would result in project-generated noise levels at the pool area to 46 dBA L_{eq}, which would not exceed measured existing ambient levels by more than 3 dBA and would also meet the daytime 55 dBA L_{eq} noise limit. Noise levels at the nearest residences, the Joe Rodota Trail, and at other noise sensitive commercial land uses in the vicinity (Peet's Coffee) would meet the criteria with or without the use of the silencer. Installation of the blower dryer system silencer would also lower project-generated noise levels at adjoining non-noise sensitive commercial land uses to 64 to 65 dBA L_{eq} and would not result in an exceedance of the City of Sebastopol General Plan's "normally acceptable" limit of 70 dBA L_{dn} for commercial uses.

All other noise-generating equipment associated with the project would be stored within the second level of the proposed building and would not be anticipated to generate substantial noise outside of the building. This is a **potentially significant impact**.

Mitigation Measure 1c: To reduce noise generated by project operations to levels that would be in compliance with the City of Sebastopol General Plan and Municipal Code, the proposed Proto-Vest S130 Drying System shall be equipped with the silencer. The silencer should mitigate the dryer system noise as specified to result in noise levels of 77 dBA at 10 feet and 63 dBA at 50 feet. Installation of the silencer would reduce project-generated noise levels at sensitive uses in the surrounding vicinity to below General Plan limits and would result in a **less-than-significant impact**.

Impact 2: Exposure to Excessive Groundborne Vibration due to Construction. Construction-related vibration levels are expected to potentially exceed applicable vibration thresholds at a nearby structures. **This is a potentially significant impact.**

Demolition and construction activities required for construction often generate perceptible vibration levels and levels that could affect nearby structures when heavy equipment or impact tools (e.g. jackhammers, pile drivers, hoe rams) are used in the vicinity of nearby sensitive land uses. Building damage generally falls into three categories. Cosmetic damage (also known as threshold damage) is defined as hairline cracking in plaster, the opening of old cracks, the loosening of paint or the dislodging of loose objects. Minor damage is defined as hairline cracking in masonry or the loosening of plaster. Major structural damage is defined as wide cracking or the shifting of foundation or bearing walls.

Policy N 1-16 of the City of Sebastopol General Plan establishes a vibration limit of 0.08 in/sec PPV to minimize the potential for cosmetic damage to sensitive historic structures, and a vibration limit of 0.3 in/sec PPV to minimize damage at buildings of normal conventional construction. The vibration limits contained in this policy designed to provide the ultimate level of protection for existing buildings in Sebastopol and are more conservative that the California Department of

Transportation vibration criteria, as shown in Table 3 of the Setting section. One historic structure exists in the project vicinity, located approximately 330 feet west of the project site at 238 – 258 Petaluma Avenue.

Construction activities associated with the project would include minimal demolition such as tree and fence removal, site preparation, new building framing and finishing, and paving. Pile driving would not be used as a method of construction. Table 9 presents typical vibration levels from construction equipment at 25 feet. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. Table 9 also presents construction vibration levels at representative distances from the construction equipment located at the closest property line to the nearest structures. Calculations were made to estimate vibration levels at distances of 18 feet from the site to represent the distance between the site and the commercial building at 6791 Sebastopol Avenue, at distances of 30 and 50 feet from the site to represent distances to the Benedetti Tire Center and Benedetti Express Lube buildings, and at 330 feet to represent the distance between the site and the historic building at 238 – 258 Petaluma Avenue. Vibration levels are highest close to the source, and then attenuate with increasing distance at the rate $(D_{ref}/D)^{1.1}$, where D is the distance from the source in feet and D_{ref} is the reference distance of 25 feet.

TABLE 9 Vibration Levels for Construction Equipment at Various Distances

Equipment		PPV at 18 ft. (in/sec)	PPV at 25 ft. (in/sec)	PPV at 30 ft. (in/sec)	PPV at 50 ft. (in/sec)	PPV at 330 ft. (in/sec)
Clam shovel drop		0.290	0.202	0.165	0.094	0.012
Hydromill (slurry wall)	in soil	0.011	0.008	0.007	0.004	0.000
	in rock	0.024	0.017	0.014	0.008	0.001
Vibratory Roller		**0.301**	0.210	0.172	0.098	0.012
Hoe Ram		0.128	0.089	0.073	0.042	0.005
Large bulldozer		0.128	0.089	0.073	0.042	0.005
Caisson drilling		0.128	0.089	0.073	0.042	0.005
Loaded trucks		0.109	0.076	0.062	0.035	0.004
Jackhammer		0.050	0.035	0.029	0.016	0.002
Small bulldozer		0.004	0.003	0.002	0.001	0.000

Source: Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, May 2006 as modified by Illingworth & Rodkin, Inc., June 2020.

As indicated in Table 9, heavy vibration generating construction equipment, such as vibratory rollers, would have the potential to produce vibration levels greater than the General Plan threshold of 0.3 in/sec PPV within about 18 feet of construction. The commercial uses at 6791 Sebastopol Avenue are located within 18 feet of construction. Vibration levels would not exceed the historic building threshold of 0.08 in/sec PPV at any historic buildings in the vicinity.

The US Bureau of Mines has analyzed the effects of blast-induced vibration on buildings in USBM RI 8507[2], and these findings have been applied to vibrations emanating from construction equipment on buildings[3]. Figure 4 presents the damage probability as reported in USBM RI 8507 and reproduced by Dowding assuming a maximum vibration level of 0.4 in/sec PPV. As shown on Figure 4, these studies indicate a less than 5% probability of "threshold damage" (referred to as cosmetic damage elsewhere in this report) at vibration levels of 0.4 in/sec PPV or less and no observations of "minor damage" or "major damage" at vibration levels of 0.4 in/sec PPV or less. Based on these data, cosmetic or threshold damage would be manifested in the form of hairline cracking in plaster, the opening of old cracks, the loosening of paint or the dislodging of loose objects. However, minor damage (e.g., hairline cracking in masonry or the loosening of plaster) or major structural damage (e.g., wide cracking or shifting of foundation or bearing walls) to the residential and commercial structures adjacent to the site would not be anticipated to occur assuming a maximum vibration level of 0.4 in/sec PPV.

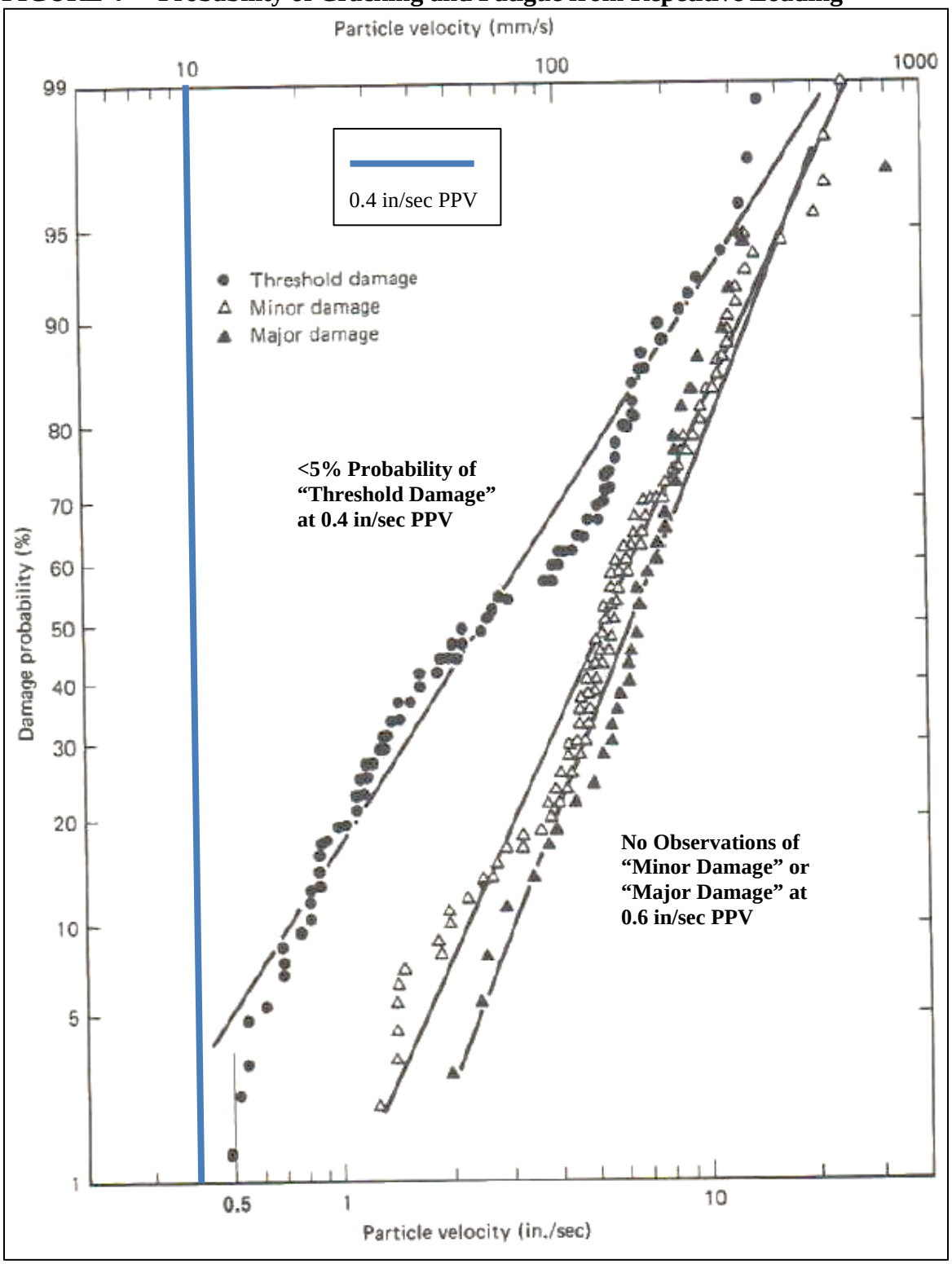
Groundborne vibration levels from project construction would be anticipated to exceed 0.3 in/sec PPV when heavy construction, such as the use of vibratory rollers, is located within 18 feet existing structures. Vibration levels may still be perceptible in areas further from the site during periods of heavy construction but would not be expected to cause structural damage. This is a **potentially significant impact**.

Mitigation Measure 2: The following measures are recommended to reduce vibration impacts from construction activities to a less-than-significant impact:

- Avoid the use of vibratory rollers within 18 feet of existing structures.
- Place operating equipment on the construction site as far as possible from vibration-sensitive receptors.
- Use smaller equipment to minimize vibration levels below the limits.
- Select demolition methods not involving impact tools.
- Avoid dropping heavy objects or materials near vibration sensitive locations.
- A list of all heavy construction equipment to be used for this project known to produce high vibration levels (tracked vehicles, vibratory compaction, jackhammers, hoe rams, etc.) shall be submitted to the City by the contractor. This list shall be used to identify equipment and activities that would potentially generate substantial vibration and to define the level of effort required for continuous vibration monitoring.

[2] Siskind, D.E., M.S. Stagg, J.W. Kopp, and C.H. Dowding, Structure Response and Damage Produced by Ground Vibration form Surface Mine Blasting, RI 8507, Bureau of Mines Report of Investigations, U.S. Department of the Interior Bureau of Mines, Washington, D.C., 1980.
[3] Dowding, C.H., Construction Vibrations, Prentice Hall, Upper Saddle River, 1996.

FIGURE 4 Probability of Cracking and Fatigue from Repetitive Loading



Source: Dowding, C.H., Construction Vibrations, Prentice Hall, Upper Saddle River, 1996 as modified by Illingworth & Rodkin, Inc., June 2020.

Implementation of these measures would reduce the impact to a **less-than-significant** level.

Impact 3: **Excessive Aircraft Noise.** The project site is located approximately 7 miles from a public airport or public use airport and would not expose people residing or working in the project area to excessive aircraft noise levels. **This is a less-than-significant impact.**

Charles M. Schulz Sonoma County Airport is a public-use airport located approximately 7 miles north of the project site. The project site is not located within the established aircraft noise contours of the Sonoma County Airport or any other public or private airport. Future exterior noise levels due to aircraft would not be excessive. This would be a **less-than-significant** impact.

Mitigation Measure 3: **None required.**

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
429 E Cotati Avenue
Cotati, California 94931

Memo

Date: August 14, 2020

To: David Hogan, AICP
M-Group

From: Steve J. Deines
Staff Consultant
Illingworth & Rodkin, Inc.

Dana M. Lodico, PE, INCE Bd. Cert
Senior Consultant
Illingworth & Rodkin, Inc.

RE: Results of Noise Wall Analysis, Benedetti Car Wash, Sebastopol, CA

A detailed analysis was conducted to determine the potential noise reduction provided by a noise wall for the proposed Benedetti Car Wash project in Sebastopol, California. The analysis was completed using SoundPLAN 8.2, a three-dimensional noise modeling software that considers site geometry, the characteristics of the noise sources, and shielding from structures and barriers. Four heights were analyzed for a barrier located along the eastern property line of the project site, extending from the southwest corner of the 6791 Sebastopol Avenue building to the northern end of the car wash building.

Summary of Regulations and Previous Conclusions

In June 2020, Illingworth & Rodkin, Inc. completed a noise and vibration assessment (ENA) of the project[1]. In the assessment, it was determined that equipping the car wash blower dryer system with the specified silencer would reduce noise levels at surrounding sensitive uses to a less-than-significant level. Further analysis was requested to determine the effectiveness of a noise wall along the eastern property line with the goal of preventing noise originating from the project site from reaching a level of 70 dBA L_{eq} or greater at the neighboring property to the east.

[1] Benedetti Car Wash Noise and Vibration Assessment, Illingworth & Rodkin, Inc., June 25, 2020

Results of Detailed Barrier Analysis

As seen in Figure 3 of the ENA shown below, the noise model shows that a small segment of the neighboring property to the east would experience noise levels exceeding 70 dBA L_{eq} during periods of heavy, sustained car wash operation, even with the use of the silencer. A sound wall was introduced into the model and calculations were made to determine its effectiveness in preventing operational noise from reaching or exceeding 70 dBA L_{eq} at the neighboring property. Figures 5, 6, 7, and 8 show the calculated noise exposure resulting from the project with introduction of a wall along a segment of the eastern property line with heights of four, six, eight, and ten feet, respectively. Table 10 summarizes the noise reduction at the southern façade of the 6791 Sebastopol Avenue building resulting from construction of a noise wall at the specified heights. Noise levels at this location are representative of the overall noise exposure of the neighboring property and demonstrate the effectiveness of construction of a noise wall.

TABLE 10 Results of Noise Wall Modeling (dBA L_{eq})

Barrier Height	Noise Level at Southern Façade of 6791 Sebastopol Avenue (with Silencer)	Reduction in Noise Level Resulting from Noise Wall
No Barrier	62 to 63	--
4 feet	62 to 63	0
6 feet	61	1 to 2
8 feet	59	3 to 4
10 feet	57	5 to 6

FIGURE 3 Noise Exposure Resulting from Car Wash Operations – With Silencer



FIGURE 5 Noise Exposure Resulting from Car Wash Operations – With Silencer and 4ft Noise Wall



FIGURE 6 Noise Exposure Resulting from Car Wash Operations – With Silencer and 6ft Noise Wall



FIGURE 7 Noise Exposure Resulting from Car Wash Operations – With Silencer and 8ft Noise Wall



FIGURE 8 Noise Exposure Resulting from Car Wash Operations – With Silencer and 10ft Noise Wall



Results of the noise model show that use of the silencer and construction of a barrier with a minimum height of six feet would reduce noise exposure at the neighboring property to the east below 70 dBA L_{eq}. As seen in Table 10 and Figure 5, a four foot high noise wall is not anticipated to provide substantial noise reduction. As the noise wall height increases and approaches the height of the car wash exit, greater noise reduction is provided. As seen in Table 10 and Figures 6 and 7, a noise wall reaching six feet or eight feet in height would provide a measurable noise reduction and noise levels resulting from project operations would not reach or exceed 70 dBA L_{eq} at any location on the neighboring property to the east. Construction of a ten foot noise wall would provide for further noise reduction, as seen in Table 10 and Figure 8.

Recommendations

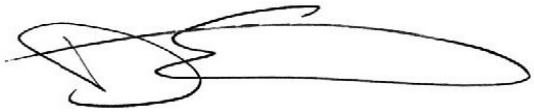
To reduce noise exposure on the neighboring property to the east resulting from project operations to a level not reaching or exceeding 70 dBA L_{eq}, the car wash blower dryer system should be equipped with the specified silencer and a noise wall with a minimum height of six feet should be constructed along the shared property line, extending from the southwest corner of the 6791 Sebastopol Avenue building to the northern façade of the proposed car wash building.

♦ ♦ ♦

Please feel free to contact us with any questions on the analysis or if we can be of further assistance.

Sincerely,





Steve J. Deines
Illingworth & Rodkin, Inc.

Dana M. Lodico, PE, INCE Bd. Cert
Illingworth & Rodkin, Inc.

I&R Job: 20-022

Traffic Impact Study for the Benedetti Car Wash Project



Prepared for the City of Sebastopol

Submitted by
W-Trans

July 15, 2020

TRAFFIC ENGINEERING
TRANSPORTATION PLANNING
Balancing Functionality and Livability since 1995
w-trans.com



This page intentionally left blank

Table of Contents

Executive Summary 1

Introduction 2

Transportation Setting 4

Capacity Analysis 8

Alternative Modes 17

Access and Circulation 18

Conclusions and Recommendations 19

Study Participants and References 20

Figures

1. Study Area and Existing Lane Configurations 3
2. Existing Traffic Volumes 11
3. Site Plan 12
4. Project Traffic Volumes 16

Tables

1. Collision Rates at the Study Intersections 5
2. Bicycle Facility Summary 7
3. Intersection Level of Service Criteria 8
4. Existing Peak Hour Intersection Levels of Service 10
5. Trip Generation Summary 13
6. Trip Distribution Assumptions 14
7. Existing and Existing plus Project Peak Hour Intersection Levels of Service 15

Appendices

A. Collision Rate Calculations
B. Intersection Level of Service Calculations



This page intentionally left blank

Executive Summary

The proposed Benedetti Car Wash project would be located on the southern half of the existing Benedetti Tire Center and Express Lube property at 6809 Sebastopol Avenue (SR 12) in the City of Sebastopol. As proposed, a new car wash facility of approximately 3,000 square feet and 16 vacuum parking stalls would be developed on-site; no changes are proposed to the existing tire center or express lube facilities. As part of the project, a new connection would be made to Abbott Avenue and Barnes Avenue at the southwest corner of the property.

The proposed project would be expected to generate an average of 400 trips per day, including 43 trips during each of the a.m. and p.m. peak hours. After pass-by trip deductions are taken into account, the project would be expected to result in 300 new daily trips to the surrounding roadway network, including 32 trips during each peak hour.

The project's characteristics are consistent with a local-serving retail use. The project would be expected to result in no increase to regional vehicle miles traveled, and therefore may be presumed to have a less than significant VMT impact.

The study area includes the intersections of Sebastopol Avenue (SR 12)/Morris Street, Sebastopol Avenue (SR 12)/Petaluma Avenue (SR 116), and Petaluma Avenue/Abbott Avenue. Analysis indicates that under Existing Conditions the study intersections are all operating acceptably at LOS D or better during both peak periods and would continue to operate acceptably upon the addition of project-related traffic.

Existing pedestrian, bicycle, and transit facilities are generally adequate to serve the project site so employees could reach the site without a vehicle, though all customer trips would be expected to be made by vehicles since the project is a car wash.

Site access would be expected to operate acceptably as proposed and the provision of a new connection to Abbott Avenue-Barnes Avenue would be a benefit as it would allow motorists to make a right turn onto Petaluma Avenue when exiting the site as opposed to a left turn onto Sebastopol Avenue, which is typically a less challenging maneuver during peak periods.

Adequate stopping sight distance is available at both of the project driveways to accommodate all turns into and out of the site and the circulation layout shown in the site plan would be expected to function acceptably. It is recommended that any new project signage be installed outside of the vision triangles at the project driveways to preserve existing sight lines.

Introduction

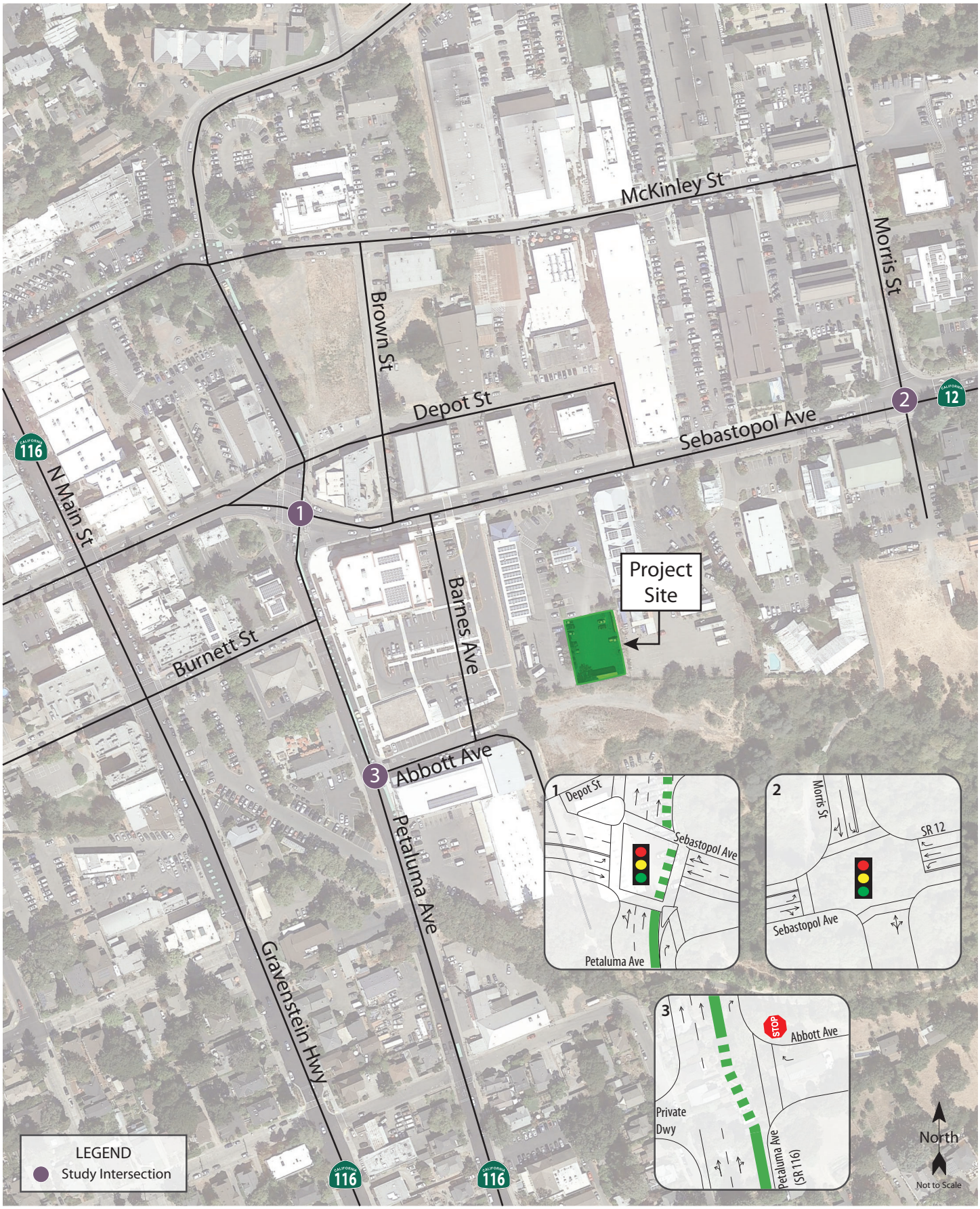
This report presents an analysis of the potential traffic impacts that would be associated with development of a car wash facility at the existing Benedetti Tire Center and Express Lube property at 6809 Sebastopol Avenue (SR 12) in the City of Sebastopol. The traffic study was completed in accordance with the criteria established by the City of Sebastopol, reflects a scope of work approved by City staff, and is consistent with standard traffic engineering techniques.

Prelude

The purpose of a traffic impact study is to provide City staff and policy makers with data that they can use to make an informed decision regarding the potential traffic impacts of a proposed project, and any associated improvements that would be required in order to mitigate these impacts to a level of insignificance as defined by the City's General Plan or other policies. Vehicular traffic impacts are typically evaluated by determining the number of new trips that the proposed use would be expected to generate, distributing these trips to the surrounding street system based on existing travel patterns or anticipated travel patterns specific to the proposed project, then analyzing the impact the new traffic would be expected to have on critical intersections or roadway segments. Impacts relative to access for pedestrians, bicyclists, and to transit are also addressed.

Project Profile

The proposed project includes a new car wash facility of approximately 3,000 square feet and 16 vacuum parking stalls on the southern half of the existing Benedetti Tire Center Express Lube property at 6809 Sebastopol Avenue (SR 12) in the City of Sebastopol. No changes are proposed to the existing tire center or lube facilities, which would continue operating in the same capacity. As part of the project, a new access connection would be made to Abbott Avenue and Barnes Avenue at the southwest corner of the property. The project site is shown in Figure 1.



seb057.ai 5/20

Traffic Impact Study for the Benedetti Car Wash Project

Figure 1 – Study Area and Existing Lane Configurations

W-Trans

Transportation Setting

Operational Analysis

Study Area and Periods

The study area consists of the section of Sebastopol Avenue fronting the project site and the following intersections:

1. Sebastopol Avenue (SR 12)/Petaluma Avenue (SR 116)
2. Sebastopol Avenue (SR 12)/Morris Street
3. Petaluma Avenue (SR 116)/Abbott Avenue

Operating conditions during the weekday a.m. and p.m. peak periods were evaluated to capture the highest potential impacts for the proposed project as well as the highest volumes on the local transportation network. The morning peak hour occurs between 7:00 and 9:00 a.m. and reflects conditions during the home to work or school commute, while the p.m. peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute.

Study Intersections

Sebastopol Avenue/Petaluma Avenue is a signalized four-legged intersection with the north and south legs composed of SR 116 and the east and west legs SR 12. Protected left-turn phasing is provided on the eastbound approach and the northbound approach has a channelized right-turn lane. Marked crosswalks are provided on all four legs and across the channelized right-turn lane; curb ramps are lacking truncated domes, except for the ramp on the recently improved CVS property frontage. It should be noted that Caltrans is in the process of reconstructing the intersection to eliminate the northbound free right-turn and the pedestrian crosswalk across the channelized right-turn lane.

Sebastopol Avenue/Morris Street is a signalized intersection with protected left-turn phasing on the eastbound and westbound Sebastopol Avenue approaches and split phasing on the northbound and southbound Morris Street approaches. There are marked crosswalks on the north, south, and west legs of the intersection.

Petaluma Avenue/Abbott Avenue is a two-way stop-controlled tee-intersection with Abbott Avenue terminating. Petaluma Avenue is a one-way northbound street and Abbott Avenue is an east-west street that becomes Barnes Avenue approximately 250 feet east of Petaluma Avenue. A crosswalk is marked on the east leg.

The locations of the study intersections and the existing lane configurations and controls are shown in Figure 1.

Study Roadway

Sebastopol Avenue is SR 12 and runs in a generally east-west alignment within the City of Sebastopol. The section along the project frontage has one travel lane in each direction along with a center two-way left-turn lane (TWLTL). The roadway has a total paved width of approximately 40 feet and a posted speed limit of 25 miles per hour (mph). Based on count data posted on the Caltrans website, the roadway has an average daily traffic (ADT) volume of about 23,000 vehicles near the eastern City portion of the City.

Collision History

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The most current five-year period available is September 1, 2014 through August 31, 2019.

As presented in Table 1, the calculated collision rates for the study intersections were compared to average collision rates for similar facilities statewide, as indicated in *2016 Collision Data on California State Highways*, California Department of Transportation (Caltrans). All three study intersections had collision rates higher than the Statewide average for similar intersections, which warranted further review. The collision rate calculations are provided in Appendix A.

Table 1 – Collision Rates at the Study Intersections

Study Intersection	Number of Collisions (2014-2019)	Calculated Collision Rate (c/mve)	Statewide Average Collision Rate (c/mve)
1. Sebastopol Ave/Petaluma Ave	24	**0.53**	0.24
2. Sebastopol Ave/Morris St	10	**0.41**	0.24
3. Petaluma Ave/Abbott Ave	5	**0.26**	0.08

Note: c/mve = collisions per million vehicles entering; **bold** text denotes collision rate above statewide average

The predominant crash types at Sebastopol Avenue/Petaluma Avenue were broadsides and sideswipe collisions, with the primary causes being right-of-way violations, traffic signals and signs violations, and improper turning. The remaining crashes were four rear-end collisions, three vehicle-pedestrian collisions and two hit object collisions. It should be noted that the majority of the data analysis period occurred prior to the reconfiguration of Petaluma Avenue with bike lanes so the results of the collision analysis do not fully reflect current conditions. Also, the City previously studied the intersections on Sebastopol Avenue to improve the signal timing and possible coordination within the downtown core. Those modifications have yet to be installed. The reported vehicle-pedestrian collisions had a primary collision factor of pedestrian right-of-way violation. With the planned signal timing improvements, an emphasis should be placed on considering pedestrian safety. It should also be noted that Caltrans is in the process of reconstructing the Petaluma Avenue intersection to eliminate the northbound free right-turn and the pedestrian crosswalk across the channelized right-turn lane which will help to address pedestrian safety concerns.

Further review of the collisions recorded at Sebastopol Avenue/Morris Street indicates that nine of the 14 collisions were rear-end collisions, all which occurred on the east and west legs of the intersection. This type of crash is common at signalized intersections where there is congestion during peak periods, and especially at transition points from a rural high-speed setting into an urban environment. The Sebastopol Avenue/Morris Street intersection acts as a gateway between the higher-speed section of SR 12 and the urban section within the City. Three hit object crashes occurred due to unsafe speed and a vehicle-pedestrian collision and broadside collision were a result of right-of-way violations. The planned signal timing improvements would help to reduce congestion and ultimately the frequency of rear-end collisions and increased enforcement may help to reduce the number of collisions attributed to unsafe speeds.

All five of the collisions recorded at Petaluma Avenue/Abbott Avenue were sideswipe collisions. These incidents occurred when vehicles were changing lanes or making a left turn into the Hopmonk Tavern driveway. Sideswipe collisions are common at locations with multiple lanes such as the subject intersection, though it should be noted that all five of the collisions occurred prior to completion of the SR 116 bike lane project. As part of the project, the northbound right-turn lane at the adjacent Sebastopol Avenue/Petaluma Avenue intersection was extended

further south to the Abbott Avenue intersection, which has reduced the potential for lane changes in the vicinity as motorists wishing to turn right at Sebastopol Avenue/Petaluma Avenue now maneuver into the correct position prior to entering the Petaluma Avenue/Abbott Avenue intersection.

Alternative Modes

Pedestrian Facilities

Pedestrian facilities generally include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, a network of sidewalks, crosswalks, traffic signals, and curb ramps provide access for pedestrians in the vicinity of the project site.

- **Petaluma Avenue** – Along the project frontage there is sidewalk coverage on both sides of Petaluma Avenue between Fannen Avenue and Sebastopol Avenue. Pedestrians can cross the street using the enhanced crosswalk with pedestrian-activated warning lights at Burnett Street or at the Joe Rodota Trail crossing.

- **Sebastopol Avenue** – Sebastopol Avenue is the main connector between the City's eastern edge and the Barlow area and the Downtown core with nearby neighborhoods and schools. Along the northern project frontage there is sidewalk coverage on both sides of Sebastopol Avenue between Petaluma Avenue and approximately 900 feet east of Morris Street.

- **Morris Street** – Complete sidewalk coverage is provided on the eastern side of Morris Street between Sebastopol Avenue and Eddie Lane. Partial sidewalk coverage is provided on the western side of Morris Street, with gaps in sidewalk coverage between Laguna Park Way and Eddie Lane.

Bicycle Facilities

The *Highway Design Manual*, Caltrans, 2017, classifies bikeways into four categories:

- **Class I Multi-Use Path** – a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane** – a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route** – signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway** – also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

In the project area there are several Class I multi-use paths, including the Joe Rodota Trail, which connects Sebastopol with Santa Rosa; the Railroad Forest Path, which connects the intersection of Sebastopol Avenue/Morris Street with the Joe Rodota Trail; and the West County Trail, which runs between Eddie Lane and Occidental Road to the north. There are existing bicycle lanes along Morris Street between Sebastopol Avenue and Eddie Lane and along the entirety of SR 116 within City Limits between Mill Station Road and Cooper Road. According to the *City of Sebastopol Bicycle and Pedestrian Master Plan* (2011), a bike route is planned along Sebastopol Avenue-Bodega Avenue between Petaluma Avenue and Dutton Avenue and bike lanes are planned on Bodega Avenue between Dutton Avenue and Ragle Road. Table 2 summarizes the existing and planned bicycle facilities in the project vicinity.

Table 2 – Bicycle Facility Summary				
Status **Facility**	**Class**	**Length (miles)**	**Begin Point**	**End Point**
Existing				
Railroad Forest Bike path	I	0.20	Sebastopol Ave	Joe Rodota Trail
Joe Rodota Trail*	I	6.30	Petaluma Ave	Santa Rosa Trail
West County Trail*	I	0.34	N Main St	Dufranc Ave
Morris St	II	0.42	Sebastopol Ave	Eddie Ln
SR 116	II	2.43	Mill Station Rd	Cooper Rd
Sebastopol Ave	III	0.19	Morris St	Petaluma Ave
Planned				
Bodega Ave	II	0.87	Dutton Ave	Ragle Rd
Sebastopol Ave-Bodega Ave	III	0.32	Petaluma Ave	Dutton Ave

Notes: * Portions of these bikeways are located within adjacent jurisdictions
Source: *City of Sebastopol Bicycle and Pedestrian Master Plan*, Sonoma County Transportation Authority, 2011

Transit Facilities

Sonoma County Transit (SCT) provides fixed route bus service in Sonoma County. Routes 20 and 24 provide regional service between Sebastopol and surrounding communities. Each route stops at the Petaluma Avenue/Abbott Avenue intersection about 500 feet southwest of the project site.

Route 20 runs between the Russian River area and Santa Rosa and operates Monday through Friday, serving regional commuters to Santa Rosa with one-and-one-half to two-hour headways between 6:00 a.m. and 9:30 p.m. On the weekends, Route 20 runs from 8:00 a.m.to 8:15 p.m. with approximately three-hour headways.

Route 24 provides service within Sebastopol, operating on weekdays with headways of about 45 minutes between 9:00 a.m. and 3:30 p.m., and on Saturdays with headways of about 45 minutes between 9:00 a.m. and 3:00 p.m.

Two bicycles can be carried on most SCT buses. Bike rack space is on a first-come, first-served basis. Additional bicycles are allowed on SCT buses at the discretion of the driver.

Dial-a-ride, also known as paratransit, or door-to-door service, is available for those who are unable to independently use the transit system due to a physical or mental disability. Volunteer Wheels, the Americans with Disabilities Act (ADA) paratransit operator for Sonoma County Transit, is designed to serve the needs of individuals with disabilities within the incorporated areas of Sonoma County and between the County's nine incorporated cities.

Capacity Analysis

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

The study intersections of Sebastopol Avenue/Petaluma Avenue and Sebastopol Avenue/Morris Street were analyzed using the "Signalized" methodology published in the *Highway Capacity Manual* (HCM), Transportation Research Board, 2010. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle. The signalized methodology uses factors including traffic volumes, green time for each movement, phasing, whether the signals are coordinated or not, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology.

The study intersection of Sebastopol Avenue/Abbott Avenue was analyzed using the "Two-Way Stop-Controlled" intersection capacity method from the HCM. This methodology determines a level of service for each minor turning movement by estimating the level of average delay in seconds per vehicle. Results are presented for individual movements together with the weighted overall average delay for the intersection.

The ranges of delay associated with the various levels of service are indicated in Table 3.

Table 3 – Intersection Level of Service Criteria

LOS	Two-Way Stop-Controlled	Signalized
A	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
B	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
C	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
D	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
E	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop and drivers consider the delay excessive.
F	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.

Reference: *Highway Capacity Manual,* Transportation Research Board, 2010

Traffic Operation Standards

All study intersections are located within the City of Sebastopol's City Limits and are therefore subject to the City's LOS standards. The *City of Sebastopol General Plan*, last updated in 2016, adopted Level of Service standards in Program 16.1 and as implemented by the City as follows:

- **At signalized intersections**: At signalized intersections, levels of service shall be determined for the overall intersection.

- Intersection queuing shall be evaluated in tandem with LOS. Projected queues at signalized intersections shall not extend through upstream signalized intersections.

- In evaluating circulation improvement needs at downtown intersections, mitigations should be avoided which increase capacity by widening that causes impacts to right-of-way and/or historical structures.

- Allow a minimum operation of LOS D for signalized intersections within the Downtown; a LOS C for all signalized intersections outside of the Downtown; and LOS D for all side street movements at unsignalized intersections.

The following significance criteria which the City has used in other traffic studies was also considered in this analysis:

> *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.*
>
> *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) seconds or more for intersections already operating at unacceptable LOS E or LOS F under the no project conditions.*

Existing Conditions

The Existing Conditions scenario provides an evaluation of current operation based on existing traffic volumes during the weekday a.m. and p.m. peak periods. This condition does not include project-generated traffic volumes. Traffic counts collected in December 2018 were used for the Sebastopol Ave/Petaluma Avenue and Sebastopol Avenue/Morris Street intersections. Volume data for Petaluma Avenue/Abbott Avenue was collected in February 2020 while local schools were in session and during typical traffic conditions prior to the shelter-in-place directives associated with the COVID-19 pandemic. Peak hour factors (PHF's) were calculated based on the counts obtained at each intersection and used in the analysis.

Intersection Levels of Service

Under Existing Conditions, all study intersections are operating acceptably at LOS C or better during each peak hour. A summary of the intersection level of service calculations is contained in Table 4, and copies for all evaluated scenarios are provided in Appendix B. The Existing traffic volumes are shown in Figure 2.

Table 4 – Existing Peak Hour Intersection Levels of Service

	Study Intersection *Approach*	**AM Peak**		**PM Peak**	
		Delay	**LOS**	**Delay**	**LOS**
1.	Sebastopol Ave/Petaluma Ave	16.0	B	20.5	C
2.	Sebastopol Ave/Morris St	19.1	B	23.7	C
3.	Petaluma Ave/Abbott Ave	0.4	A	0.6	A
	Westbound (Abbott Ave) Approach	*13.6*	*B*	*12.9*	*B*

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics*

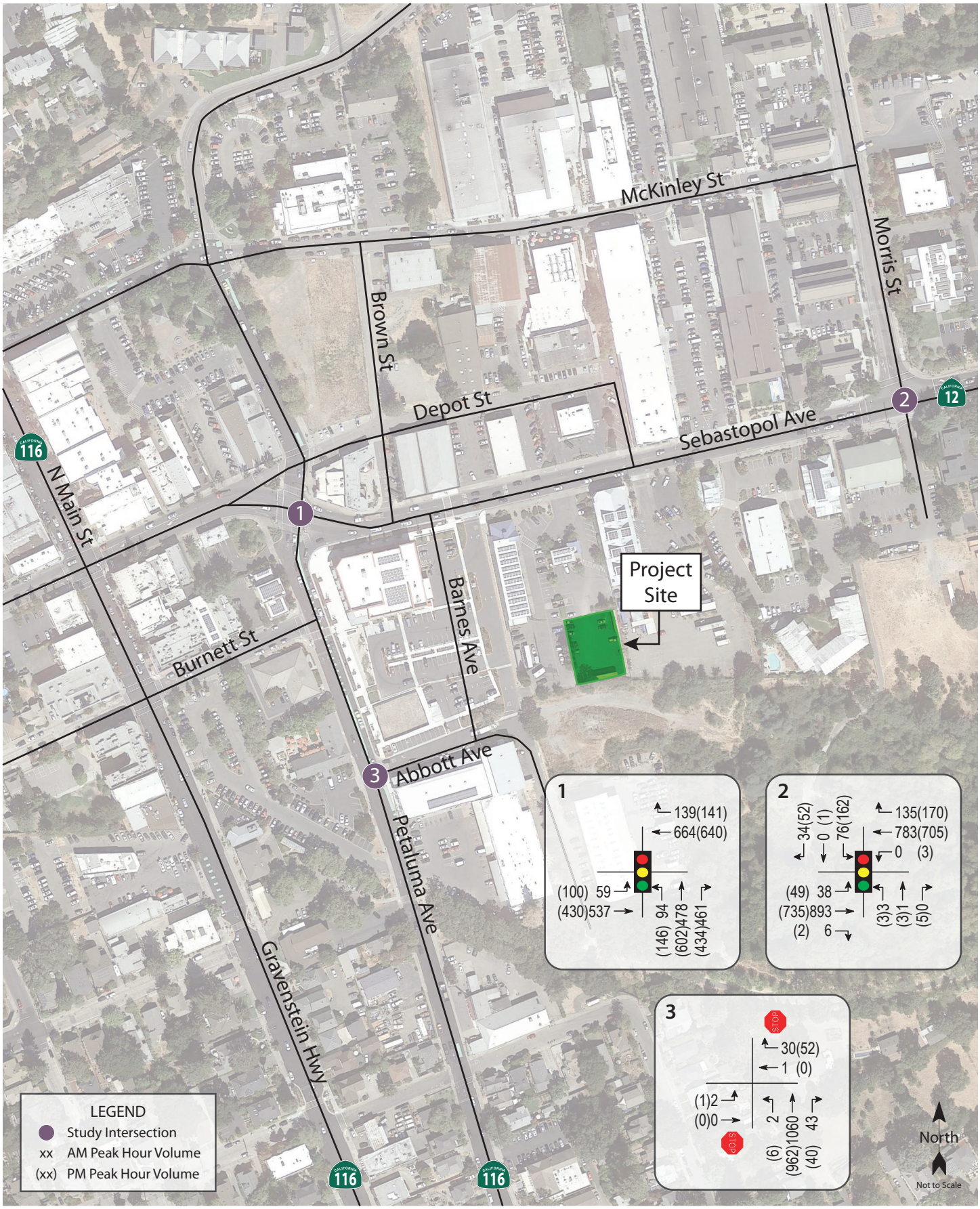
Future Conditions

The City of Sebastopol is working with Caltrans to improve signal timing at multiple intersections along SR 12 and SR 116 within the downtown core. Signal coordination at several of the studied intersections was previously recommended and is now being considered by Caltrans, along with re-evaluating the existing cycle lengths. Two of the intersections included in this analysis are part of the signal improvement study, Sebastopol Avenue/Petaluma Avenue and Sebastopol Avenue/Morris Street. In addition, Caltrans is in the process of modifying the Petaluma Avenue intersection to improve pedestrian safety. These future modifications along with the current COVID-19 situation will result in changes to Future traffic conditions. Because the project traffic generation is small in comparison with existing traffic and since the planned improvements have yet to be installed, a future conditions scenario was not analyzed.

Project Description

The proposed project would be located on the southern half of the existing Benedetti Tire Center and Express Lube property at 6809 Sebastopol Avenue (SR 12) in the City of Sebastopol. As proposed, a new car wash facility of approximately 3,000 square feet and 16 vacuum parking stalls would be developed on-site; no changes are proposed to the existing tire center or express lube facilities. The primary access would be located on Sebastopol Avenue at the current facility driveway. As part of the project, a new access connection would be made to Abbott Avenue and Barnes Avenue at the southwest corner of the property. The car wash facility would require two to three employees and would operate between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday.

The project site plan is shown in Figure 3.

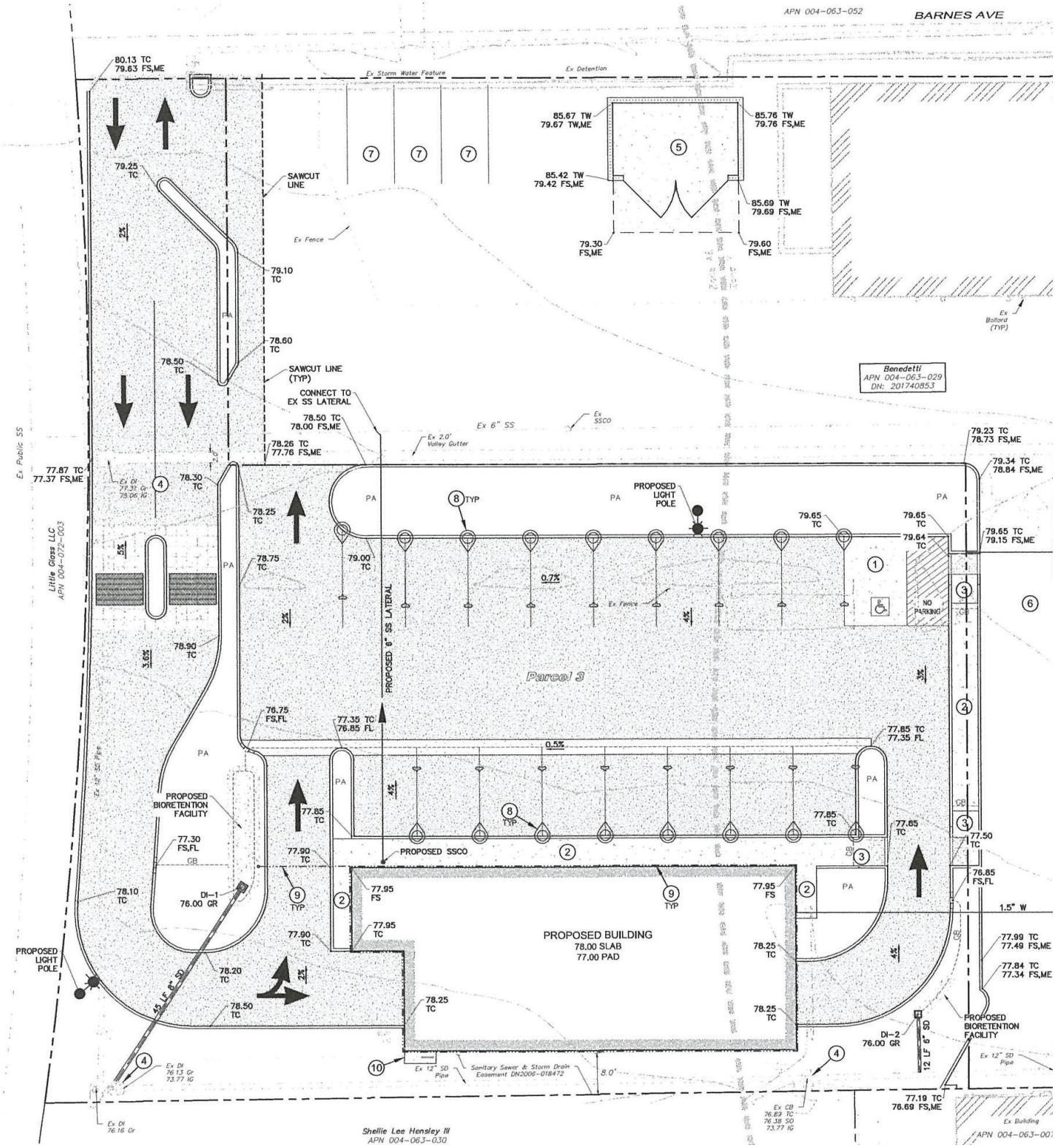


seb057.ai 5/20

Traffic Impact Study for the Benedetti Car Wash Project

Figure 2 – Existing Traffic Volumes

W-Trans



Source: Adobe Associates, Inc. 02/2019 seb057.ai 5/20

Traffic Impact Study for the Benedetti Car Wash Project

Figure 3 – Site Plan

Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in Trip Generation Manual, 10th Edition, 2017 for Automated Car Wash (Land Use #948), as this description most closely matches the proposed project. The Trip Generation Manual does not include daily or a.m. peak hour rates so the daily rate was calculated based on customer projections provided by the applicant and the a.m. peak hour rate was assumed to be the same as the p.m. peak hour rate to provide a conservative analysis, even though car wash facilities are typically busier in the evening than in the morning. The applicant anticipates serving an average of 125 to 150 customers per day, with 200 customers on a peak day. In order to provide conservative results, the trip generation numbers were based on the anticipated peak demand. Also, since some customers to the carwash may also utilize the services of the tire and lube center, there may be a sharing of trips. However, to be conservative, this sharing of trips was not included in the calculations.

Pass-by Trips

A portion of the project trips associated with the car wash would be drawn from existing traffic on nearby streets. These vehicle trips, known as pass-by trips, are not considered new trips since they consist of drivers who are already driving on the adjacent street and choose to make an interim stop. The percentage of these pass-by trips was based on information provided in the Trip Generation Handbook, 3rd Edition, Institute of Transportation Engineers, 2017. Since the Handbook does not provide a pass-by trip percentage for the Automated Car Wash land use, the pass-by trip percentages for Gasoline Service Station (Land Use #944) were used as a reference. However, because a car wash is not a necessity, the pass-by trip percentage would likely be lower than that of a gasoline service station, which is about 60 percent during each peak hour. It is estimated that approximately 25 percent of the car wash trips would be pass-by trips.

Total Project Trip Generation

Based on application of these rates and assumptions, the proposed project would be expected to generate an average of 400 trips per day, including 43 trips during each of the a.m. and p.m. peak hours. After pass-by trip deductions are taken into account, the project would be expected to result in 300 new trips to the surrounding roadway network, including 32 trips during each peak hour. These results are summarized in Table 5.

Table 5 – Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Automated Car Wash	3 ksf	133.33	400	14.20	43	21	22	14.20	43	21	22
Pass-by		*-25%*	*-100*	*-25%*	*-11*	*-5*	*-6*	*-25%*	*-11*	*-5*	*-6*
Net New Trips			**300**		**32**	**16**	**16**		**32**	**16**	**16**

Note: ksf = 1,000 square feet

Trip Distribution

The pattern used to allocate new project trips to the street network was determined by reviewing existing turning movements at the study intersections as well as anticipated travel patterns for patrons of the car wash. Because Petaluma Avenue is one-way northbound, it was assumed that trips leaving the site to destinations to the south would utilize the new access to Abbott Avenue, turning right onto Petaluma Avenue, then left onto Burnett Street to gain access to southbound South Main Street. The applied distribution assumptions approved by City staff are shown in Table 6.

Table 6 – Trip Distribution Assumptions	
Route	**Percent**
Sebastopol Ave (East of Morris St)	25%
Sebastopol Ave (West of Petaluma Ave)	45%
Morris St (North of Sebastopol Ave)	5%
Petaluma Ave/Gravenstein Hwy S (South of Abbott Ave)	25%
TOTAL	**100%**

Vehicle Miles Traveled

Senate Bill (SB) 743 established a change in the metric to be applied for determining traffic impacts associated with development projects. Rather than the delay-based criteria associated with a Level of Service analysis, the increase in Vehicle Miles Traveled (VMT) as a result of a project is now the basis for determining impacts. Because the City of Sebastopol has not yet adopted a standard of significance for evaluating VMT, guidance provided by the California Governor's Office of Planning and Research (OPR) in the publication *Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory*, 2018, was used (referred to herein as the Technical Advisory). OPR's guidance for retail land uses, which is the classification under which the proposed project would fall, were applied.

The OPR Technical Advisory indicates that retail projects should generally be analyzed by examining total VMT, with an increase in total regional VMT being considered a potentially significant impact. In the Technical Advisory, OPR indicates that *local-serving* retail may generally be presumed by lead agencies to have a less-than-significant VMT impact (see Technical Advisory pages 16-17). OPR bases this presumption on substantial evidence and research demonstrating that adding local-serving retail uses typically improves destination accessibility to customers, often reducing trip distances (i.e., the, "miles" in vehicle miles traveled) since customers need to travel shorter distances than they previously did. The total demand for retail in a region, or in this case for car wash facilities, also tends to hold steady; adding new local-serving retail typically shifts trips away from another provider rather than adding entirely new trips to the region. OPR cites a size of 50,000 square feet or greater as being a potential indicator of regional-serving retail (versus local-serving) that would typically require a quantitative VMT analysis. At 3,000 square feet, the proposed project would be well below the 50,000 square foot size referenced by OPR.

Further consideration was given to the project type and its potential to draw traffic that is regional, versus local, in nature. Car wash facilities tend to be convenience-based uses; customers are generally unwilling to travel substantially out of their way to visit such outlets and tend to visit the closest location to their home or along their route. The proposed project would be expected to attract some of its customers from drivers already traveling on Sebastopol Avenue; these customers would result in no new vehicle miles traveled as this would be an interim stop on a trip that was already being made. In addition to drivers already passing by the site, customers would likely be drawn from the surrounding area. Based on a review of online mapping tools it appears that there are currently two car wash facilities in Sebastopol, one located at a gas station approximately 0.5 miles north of the proposed project on Healdsburg Avenue and one self-service location approximately 0.7 miles to the south on Gravenstein Highway South. By adding another car wash facility to the urban fabric, the average trip length driven by Sebastopol residents to such facilities would be expected to decrease, leading to a modest reduction in regional VMT.

Based on this assessment, the proposed project would function as a local-serving retail use, and based on guidance provided by OPR, may be presumed to result in a less-than-significant VMT impact.

Finding – The project is anticipated to result in a less-than-significant impact on vehicle miles traveled.

Intersection Operation

Existing plus Project Conditions

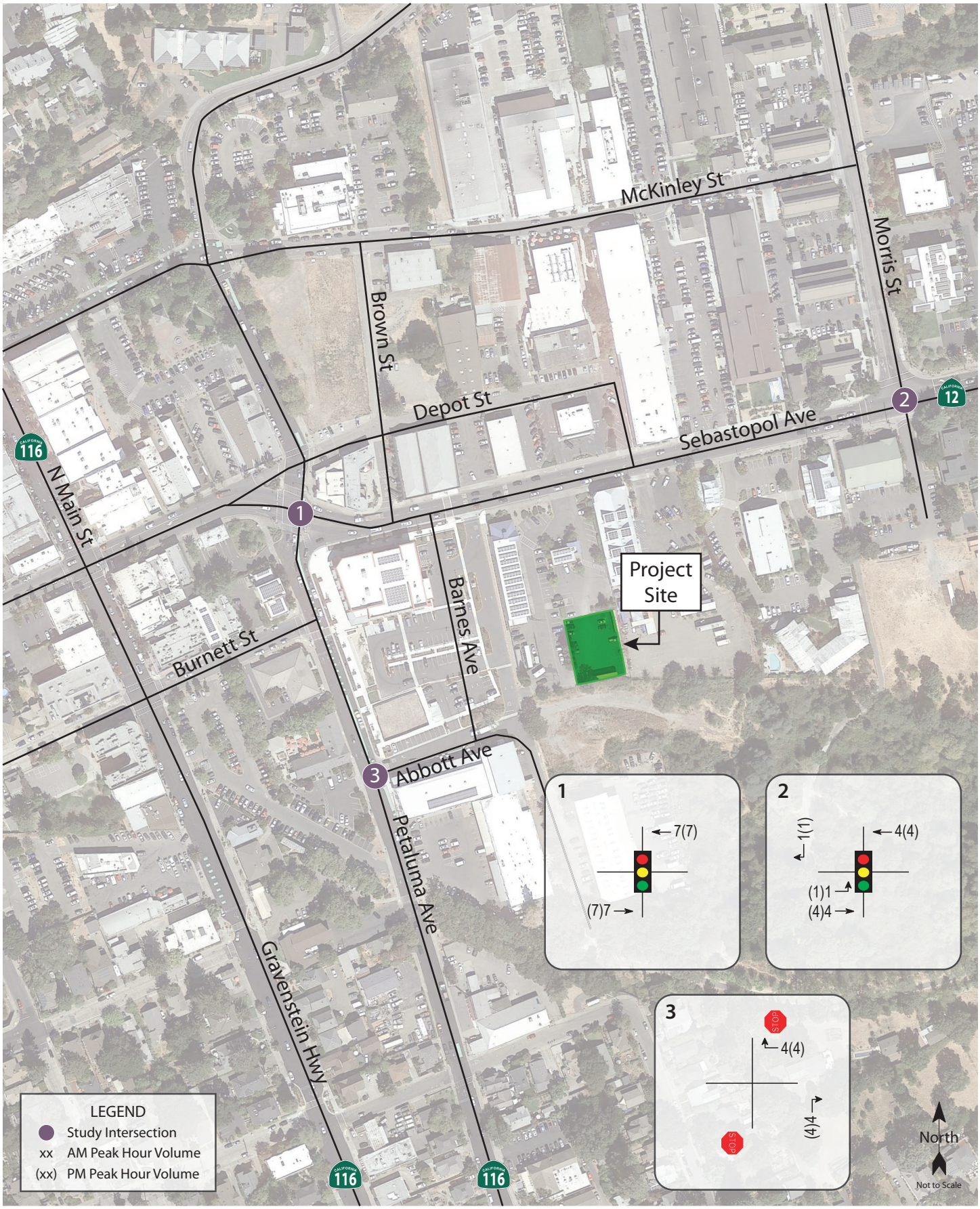
Upon the addition of project-related traffic to the Existing volumes, the study intersections are expected to operate at the same service levels as without project-related traffic. These results are summarized in Table 7. Project only traffic volumes are shown in Figure 4.

Table 7 – Existing and Existing plus Project Peak Hour Intersection Levels of Service

Study Intersection *Approach*	Existing Conditions				Existing plus Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Sebastopol Ave/Petaluma Ave	16.0	B	20.5	C	16.1	B	20.5	C
2. Sebastopol Ave/Morris St	19.1	B	23.7	C	20.3	C	25.1	C
3. Petaluma Ave/Abbott Ave	0.4	A	0.6	A	0.4	A	0.7	A
Westbound (Abbott Ave) Approach	*13.6*	*B*	*12.9*	*B*	*13.8*	*B*	*13.0*	*B*

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics*

Finding – Upon the addition of project traffic volumes to Existing volumes, the study intersections are expected to continue operating acceptably and at the same Levels of Service as without project-generated traffic with a maximum of only 1.0 to 1.5 seconds increase in average delay.



seb057.ai 5/20

Traffic Impact Study for the Benedetti Car Wash Project

Figure 4 – Project Traffic Volumes

Alternative Modes

Given the proximity to Sebastopol's Downtown area, the Barlow district, the Laguna open space, and transit stops near the site, it is reasonable to assume that some employees would want to walk, bicycle, and/or use transit to travel to and from the project site, though because the project is a car wash customers would travel to the site in a vehicle.

Pedestrian Facilities

Sebastopol Avenue connects to the Barlow District and the Downtown from the east entrance point into the City of Sebastopol. Morris Street and Petaluma Avenue connect neighborhoods to the Barlow District, Analy High School, the Community Center, and the Laguna Skate Park. These roads would serve as the primary path of travel for pedestrian activity. Sidewalk connectivity between the project site and destinations surrounding the project site is generally adequate.

Pedestrians would be able to use the existing sidewalk on Sebastopol Avenue to reach the site or would be able to reach the site from Petaluma Avenue using the sidewalk that was installed north of Abbott Avenue as part of the CVS project. As shown on the site plan, an ADA accessible path of travel would be provided through the site from Petaluma Avenue to the car wash facility.

Finding – Pedestrian facilities serving the project site would be adequate.

Bicycle Facilities

Existing and planned bicycle facilities in the surrounding vicinity, per the *City of Sebastopol Bicycle and Pedestrian Master Plan*, would provide adequate access for bicyclists. The City of Sebastopol Ordinance 17.110.030 requires car washes to provide one bicycle parking space for every four employees. Based on three employees that would operate the car wash as proposed, the project is required to provide a minimum of one bicycle parking space. As shown on the site plan, a bicycle rack would be located on-site near the southeast corner of the car wash facility, which would be adequate to satisfy City requirements.

Finding – Bicycle facilities serving the project site are adequate.

Transit

Existing transit routes are adequate to accommodate project-generated transit trips and existing stops are within acceptable walking distance of the site.

Finding – Transit facilities serving the project site are adequate.

Access and Circulation

Site Access

The proposed carwash facility would have two access points, an existing driveway on Sebastopol Avenue and a new secondary connection to Barnes Avenue-Abbott Avenue near the southwest corner of the site. There is an existing two-way left-turn lane (TWLTL) on Sebastopol Avenue that facilitates left turns into the project site from destinations to the east. It can be challenging to make left turns out of the project driveway onto Sebastopol Avenue during peak hours so the provision of a new connection to Abbott Avenue-Barnes Avenue would be a benefit as it would allow motorists to make a right turn onto Petaluma Avenue as opposed to a left turn onto Sebastopol Avenue, which is typically a less challenging maneuver during peak periods.

Finding – Site access would be expected to operate acceptably and the provision of a new connection to Abbott Avenue-Barnes Avenue would allow motorists the ability to make a right-turn when exiting to reach destinations west of the site during peak periods.

Sight Distance

Sight distances along Sebastopol Avenue at the existing driveway and along Barnes Avenue at the new driveway were evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distance for driveway approaches is based on stopping sight distance and uses the approach travel speed as the basis for determining the recommended sight distance.

Sebastopol Avenue, which has a posted speed of 25 mph, requires a minimum stopping sight distance of 150 feet. The minimum stopping sight distance on Barnes Avenue, which has a posted speed limit of 20 mph, is 125 feet. Available sight lines were field measured and exceed 150 feet and 125 feet at the existing and proposed driveways, respectively so are adequate to meet the applicable Caltrans sight distance requirements.

Finding – Based on a review of filed conditions, sight distances along Sebastopol Avenue and Barnes Avenue are adequate to accommodate all turns into and out of the project driveways.

Recommendation – Any new signage for the carwash should be placed outside of the vision triangle at the project driveways to preserve existing sight lines.

On-site Circulation

As shown on the site plan, the new drive aisle connection to Barnes Avenue would be 24 feet-wide which would be adequate width for two-way traffic. The one-way loop through the car wash facility would vary between 12 and 14 feet-wide, which is expected to be adequate for car wash circulation. No changes are proposed to the existing drive aisles and parking stalls serving the Benedetti Tire Center and Express Lube facilities, which have perpendicular and angled parking spaces. The drive aisles would connect internally, allowing access to the existing facilities and the proposed car wash.

Finding – On-site circulation is anticipated to function acceptably.

Conclusions and Recommendations

Conclusions

- The proposed project is expected to generate an average of 300 new daily trips to the surrounding roadway network, including 32 trips during each peak hour. These estimates are conservatively high since they do not account for shared trips between the carwash and the existing tire and lube facilities.
- The project is anticipated to result in a less-than-significant impact on vehicle miles traveled.
- The study intersections are currently operating acceptably at LOS D or better overall during both peak hours. With anticipated project related traffic added, the intersections are expected to continue operating at the same service levels as without project trips with little change in delay.
- Existing pedestrian, bicycle, and transit facilities are generally adequate to serve the project site, though the vast majority of project trips would be made by passenger vehicles being a car wash.
- Sight distances are adequate along Sebastopol Avenue and Barnes Avenue at the project driveways.
- Site access and on-site circulation are anticipated to function acceptably.

Recommendations

- Any new project signage should be installed outside of the vision triangles at the project driveways to preserve existing sight lines.

Study Participants and References

Study Participants

Principal in Charge	Steve Weinberger, PE, PTOE
Associate Engineer	Cameron Nye, EIT
Assistant Engineer	Kimberly Tellez
Graphics	Hannah Yung-Boxdell
Editing/Formatting	Alex Scrobonia
Quality Control	Dalene J. Whitlock, PE, PTOE

References

2016 Collision Data on California State Highways, California Department of Transportation, 2018
City of Sebastopol Bicycle and Pedestrian Master Plan, Sonoma County Transportation Authority, 2011
City of Sebastopol General Plan, City of Sebastopol, 2008
Highway Capacity Manual, Transportation Research Board, 2010
Highway Design Manual, 6th Edition, California Department of Transportation, 2017
Statewide Integrated Traffic Records System (SWITRS), California Highway Patrol, 2014-2019
Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory, California Governor's Office of Planning and Research (OPR), 2018
Trip Generation Manual, 10th Edition, Institute of Transportation Engineers, 2017

SEB057



Appendix A

Collision Rate Calculations



This page intentionally left blank

Intersection Collision Rate Calculations

SEB057 Benedetti Car Wash

Intersection # 1: Sebastopol Avenue & Petaluma Avenue
Date of Count: Wednesday, December 5, 2018

Number of Collisions: 24
Number of Injuries: 10
Number of Fatalities: 0
ADT: 24900
Start Date: September 1, 2014
End Date: August 31, 2019
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Urban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{24 \times 1{,}000{,}000}{24{,}900 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.53 c/mve**	**0.0%**	**41.7%**
Statewide Average*	**0.24 c/mve**	**0.5%**	**44.6%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 2: Sebastopol Avenue & Morris Street
Date of Count: Wednesday, December 5, 2018

Number of Collisions: 14
Number of Injuries: 10
Number of Fatalities: 0
ADT: 18900
Start Date: September 1, 2014
End Date: August 31, 2019
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Urban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{14 \times 1{,}000{,}000}{18{,}900 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.41 c/mve**	**0.0%**	**71.4%**
Statewide Average*	**0.24 c/mve**	**0.5%**	**44.6%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

SEB057 Benedetti Car Wash

Intersection # 3: Petaluma Avenue & Abbott Avenue
Date of Count: Thursday, February 27, 2020

Number of Collisions: 5
Number of Injuries: 4
Number of Fatalities: 0
ADT: 10600
Start Date: September 1, 2014
End Date: August 31, 2019
Number of Years: 5

Intersection Type: Tee
Control Type: Stop & Yield Controls
Area: Urban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{5 \times 1{,}000{,}000}{10{,}600 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.26 c/mve**	**0.0%**	**80.0%**
Statewide Average*	**0.08 c/mve**	**1.0%**	**45.1%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 4: &
Date of Count: Saturday, January 0, 1900

Number of Collisions: 0
Number of Injuries: 0
Number of Fatalities: 0
ADT: 0
Start Date: January 0, 1900
End Date: January 0, 1900
Number of Years: 0

Intersection Type: 0
Control Type: No Controls
Area: 0

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{0 \times 1{,}000{,}000}{0 \times 365 \times 0}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.00 c/mve**	**0.0%**	**0.0%**
Statewide Average*	**0.22 c/mve**	**1.0%**	**34.6%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Appendix B

Intersection Level of Service Calculations



This page intentionally left blank

HCM 2010 Signalized Intersection Summary
1: Petaluma Ave & Sebastopol Ave

04/01/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	537	0	0	664	139	94	478	461	0	0	0
Future Volume (veh/h)	59	537	0	0	664	139	94	478	461	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1700	1700	0	0	1700	1700	1700	1700	1700			
Adj Flow Rate, veh/h	61	554	0	0	685	143	97	493	0			
Adj No. of Lanes	1	1	0	0	2	0	0	2	1			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	138	941	0	0	1035	216	147	792	413			
Arrive On Green	0.09	0.55	0.00	0.00	0.39	0.39	0.29	0.29	0.00			
Sat Flow, veh/h	1619	1700	0	0	2746	555	516	2773	1445			
Grp Volume(v), veh/h	61	554	0	0	416	412	315	275	0			
Grp Sat Flow(s),veh/h/ln	1619	1700	0	0	1615	1601	1674	1615	1445			
Q Serve(g_s), s	2.1	12.9	0.0	0.0	12.6	12.6	9.8	8.8	0.0			
Cycle Q Clear(g_c), s	2.1	12.9	0.0	0.0	12.6	12.6	9.8	8.8	0.0			
Prop In Lane	1.00		0.00	0.00		0.35	0.31		1.00			
Lane Grp Cap(c), veh/h	138	941	0	0	628	623	478	461	413			
V/C Ratio(X)	0.44	0.59	0.00	0.00	0.66	0.66	0.66	0.60	0.00			
Avail Cap(c_a), veh/h	334	1141	0	0	1084	1075	1248	1204	1077			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	25.9	8.8	0.0	0.0	15.0	15.0	18.7	18.3	0.0			
Incr Delay (d2), s/veh	0.8	0.6	0.0	0.0	1.7	1.7	1.9	1.5	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	6.2	0.0	0.0	5.8	5.8	4.8	4.1	0.0			
LnGrp Delay(d),s/veh	26.7	9.4	0.0	0.0	16.7	16.7	20.6	19.8	0.0			
LnGrp LOS	C	A			B	B	C	B				
Approach Vol, veh/h		615			828			590				
Approach Delay, s/veh		11.1			16.7			20.2				
Approach LOS		B			B			C				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		38.0			9.8	28.2		21.6				
Change Period (Y+Rc), s		5.0			* 4.7	5.0		4.6				
Max Green Setting (Gmax), s		40.0			* 12	40.0		44.4				
Max Q Clear Time (g_c+I1), s		14.9			4.1	14.6		11.8				
Green Ext Time (p_c), s		4.1			0.0	8.5		5.1				

Intersection Summary	
HCM 2010 Ctrl Delay	16.0
HCM 2010 LOS	B

Notes

HCM 2010 Signalized Intersection Summary
2: Sebastopol Ave & Morris St

04/01/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	893	6	0	783	135	3	1	0	76	0	34
Future Volume (veh/h)	38	893	6	0	783	135	3	1	0	76	0	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adj Flow Rate, veh/h	40	940	6	0	824	142	3	1	0	80	0	36
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	129	1171	7	2	948	804	13	4	0	196	0	168
Arrive On Green	0.08	0.69	0.69	0.00	0.56	0.56	0.01	0.01	0.00	0.12	0.00	0.12
Sat Flow, veh/h	1619	1687	11	1619	1700	1442	1229	410	0	1619	0	1385
Grp Volume(v), veh/h	40	0	946	0	824	142	4	0	0	80	0	36
Grp Sat Flow(s),veh/h/ln	1619	0	1698	1619	1700	1442	1639	0	0	1619	0	1385
Q Serve(g_s), s	1.9	0.0	32.0	0.0	34.6	4.0	0.2	0.0	0.0	3.8	0.0	1.9
Cycle Q Clear(g_c), s	1.9	0.0	32.0	0.0	34.6	4.0	0.2	0.0	0.0	3.8	0.0	1.9
Prop In Lane	1.00		0.01	1.00		1.00	0.75		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	129	0	1178	2	948	804	17	0	0	196	0	168
V/C Ratio(X)	0.31	0.00	0.80	0.00	0.87	0.18	0.23	0.00	0.00	0.41	0.00	0.21
Avail Cap(c_a), veh/h	526	0	1178	429	1064	902	315	0	0	682	0	583
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.1	0.0	8.8	0.0	15.8	9.0	40.8	0.0	0.0	33.8	0.0	33.0
Incr Delay (d2), s/veh	1.3	0.0	4.7	0.0	8.4	0.2	6.6	0.0	0.0	1.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	16.2	0.0	18.2	1.6	0.1	0.0	0.0	1.8	0.0	0.8
LnGrp Delay(d),s/veh	37.4	0.0	13.4	0.0	24.2	9.2	47.3	0.0	0.0	35.1	0.0	33.6
LnGrp LOS	D		B		C	A	D			D		C
Approach Vol, veh/h		986			966			4			116	
Approach Delay, s/veh		14.4			22.0			47.3			34.7	
Approach LOS		B			C			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	62.8		14.8	11.3	51.4		5.6				
Change Period (Y+Rc), s	4.7	5.1		* 4.7	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	12.3	45.0		* 35	* 27	52.0		16.0				
Max Q Clear Time (g_c+I1), s	10.6	34.0		5.8	3.9	36.6		2.2				
Green Ext Time (p_c), s	0.0	7.9		0.4	0.1	9.8		0.0				

Intersection Summary	
HCM 2010 Ctrl Delay	19.1
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	0	0	1	30	2	1060	43	0	0	0
Future Vol, veh/h	2	0	0	0	1	30	2	1060	43	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	65536	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	0	0	1	32	2	1140	46	0	0	0

Major/Minor	Minor1			Major1			
Conflicting Flow All	-	1167	593	0	0	0	
Stage 1	-	1167	-	-	-	-	
Stage 2	-	0	-	-	-	-	
Critical Hdwy	-	6.54	6.94	4.14	-	-	
Critical Hdwy Stg 1	-	5.54	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	
Follow-up Hdwy	-	4.02	3.32	2.22	-	-	
Pot Cap-1 Maneuver	0	192	449	-	-	-	
Stage 1	0	266	-	-	-	-	
Stage 2	0	-	-	-	-	-	
Platoon blocked, %					-	-	
Mov Cap-1 Maneuver	-	0	449	-	-	-	
Mov Cap-2 Maneuver	-	0	-	-	-	-	
Stage 1	-	0	-	-	-	-	
Stage 2	-	0	-	-	-	-	

Approach	WB	NB
HCM Control Delay, s	13.6	
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	-	449
HCM Lane V/C Ratio	-	-	-	0.072
HCM Control Delay (s)	-	-	-	13.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	430	0	0	640	141	146	602	434	0	0	0
Future Volume (veh/h)	100	430	0	0	640	141	146	602	434	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1667	1667	0	0	1667	1700	1700	1667	1667			
Adj Flow Rate, veh/h	103	443	0	0	660	145	151	621	0			
Adj No. of Lanes	1	1	0	0	2	0	0	2	1			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	155	871	0	0	925	203	206	898	486			
Arrive On Green	0.10	0.52	0.00	0.00	0.36	0.36	0.34	0.34	0.00			
Sat Flow, veh/h	1587	1667	0	0	2663	566	602	2618	1417			
Grp Volume(v), veh/h	103	443	0	0	405	400	411	361	0			
Grp Sat Flow(s),veh/h/ln	1587	1667	0	0	1583	1563	1637	1583	1417			
Q Serve(g_s), s	4.5	12.3	0.0	0.0	15.7	15.7	15.7	13.8	0.0			
Cycle Q Clear(g_c), s	4.5	12.3	0.0	0.0	15.7	15.7	15.7	13.8	0.0			
Prop In Lane	1.00		0.00	0.00		0.36	0.37		1.00			
Lane Grp Cap(c), veh/h	155	871	0	0	568	561	561	543	486			
V/C Ratio(X)	0.66	0.51	0.00	0.00	0.71	0.71	0.73	0.67	0.00			
Avail Cap(c_a), veh/h	274	936	0	0	889	878	1020	987	883			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	31.0	11.1	0.0	0.0	19.7	19.7	20.5	19.9	0.0			
Incr Delay (d2), s/veh	1.8	0.5	0.0	0.0	2.4	2.4	2.2	1.7	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.0	5.8	0.0	0.0	7.2	7.2	7.4	6.3	0.0			
LnGrp Delay(d),s/veh	32.8	11.5	0.0	0.0	22.1	22.1	22.8	21.6	0.0			
LnGrp LOS	C	B			C	C	C	C				
Approach Vol, veh/h		546			805			772				
Approach Delay, s/veh		15.5			22.1			22.2				
Approach LOS		B			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		42.2			11.7	30.5		29.0
Change Period (Y+Rc), s		5.0			* 4.7	5.0		4.6
Max Green Setting (Gmax), s		40.0			* 12	40.0		44.4
Max Q Clear Time (g_c+I1), s		14.3			6.5	17.7		17.7
Green Ext Time (p_c), s		3.1			0.1	7.8		6.7

Intersection Summary	
HCM 2010 Ctrl Delay	20.5
HCM 2010 LOS	C

Notes

HCM 2010 Signalized Intersection Summary
2: Sebastopol Ave & Morris St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	735	2	3	705	170	3	3	5	162	1	52
Future Volume (veh/h)	49	735	2	3	705	170	3	3	5	162	1	52
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adj Flow Rate, veh/h	53	799	2	3	766	185	3	3	5	176	1	57
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	147	1025	3	13	887	753	11	11	19	230	3	195
Arrive On Green	0.09	0.60	0.60	0.01	0.52	0.52	0.03	0.03	0.03	0.14	0.14	0.14
Sat Flow, veh/h	1619	1695	4	1619	1700	1442	416	416	694	1619	24	1374
Grp Volume(v), veh/h	53	0	801	3	766	185	11	0	0	176	0	58
Grp Sat Flow(s),veh/h/ln	1619	0	1699	1619	1700	1442	1526	0	0	1619	0	1398
Q Serve(g_s), s	2.7	0.0	31.0	0.2	34.5	6.2	0.6	0.0	0.0	9.2	0.0	3.3
Cycle Q Clear(g_c), s	2.7	0.0	31.0	0.2	34.5	6.2	0.6	0.0	0.0	9.2	0.0	3.3
Prop In Lane	1.00		0.00	1.00		1.00	0.27		0.45	1.00		0.98
Lane Grp Cap(c), veh/h	147	0	1027	13	887	753	41	0	0	230	0	199
V/C Ratio(X)	0.36	0.00	0.78	0.23	0.86	0.25	0.27	0.00	0.00	0.77	0.00	0.29
Avail Cap(c_a), veh/h	497	0	1027	405	1006	853	278	0	0	645	0	557
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.5	0.0	13.0	43.3	18.3	11.5	41.9	0.0	0.0	36.3	0.0	33.7
Incr Delay (d2), s/veh	1.5	0.0	4.5	8.7	8.4	0.4	3.5	0.0	0.0	5.3	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	15.5	0.1	18.0	2.5	0.3	0.0	0.0	4.4	0.0	1.3
LnGrp Delay(d),s/veh	39.0	0.0	17.5	52.1	26.7	11.9	45.4	0.0	0.0	41.5	0.0	34.5
LnGrp LOS	D		B	D	C	B	D			D		C
Approach Vol, veh/h		854			954			11			234	
Approach Delay, s/veh		18.9			23.9			45.4			39.8	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	58.2		17.2	12.7	51.0		7.1
Change Period (Y+Rc), s	4.7	5.1		* 4.7	* 4.7	5.1		4.7
Max Green Setting (Gmax), s	23	45.0		* 35	* 27	52.0		16.0
Max Q Clear Time (g_c+I1), s	2.2	33.0		11.2	4.7	36.5		2.6
Green Ext Time (p_c), s	0.0	7.3		0.9	0.1	9.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.7
HCM 2010 LOS	C

Notes

HCM 2010 TWSC
3: Petaluma Ave & Abbott Ave

04/01/2020

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	0	52	6	962	40	0	0	0
Future Vol, veh/h	1	0	0	0	0	52	6	962	40	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	3407872		-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	0	0	53	6	982	41	0	0	0

Major/Minor	Minor1			Major1		
Conflicting Flow All	-	-	512	0	0	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	2.22	-	-
Pot Cap-1 Maneuver	0	0	507	-	-	-
Stage 1	0	0	-	-	-	-
Stage 2	0	0	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	-	0	507	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-
Stage 1	-	0	-	-	-	-
Stage 2	-	0	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	12.9	
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	-	507
HCM Lane V/C Ratio	-	-	-	0.105
HCM Control Delay (s)	-	-	-	12.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3

HCM 2010 Signalized Intersection Summary
1: Petaluma Ave & Sebastopol Ave

04/01/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	544	0	0	671	139	94	478	461	0	0	0
Future Volume (veh/h)	59	544	0	0	671	139	94	478	461	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1700	1700	0	0	1700	1700	1700	1700	1700			
Adj Flow Rate, veh/h	61	561	0	0	692	143	97	493	0			
Adj No. of Lanes	1	1	0	0	2	0	0	2	1			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	138	943	0	0	1042	215	147	790	412			
Arrive On Green	0.09	0.55	0.00	0.00	0.39	0.39	0.29	0.29	0.00			
Sat Flow, veh/h	1619	1700	0	0	2751	551	516	2773	1445			
Grp Volume(v), veh/h	61	561	0	0	419	416	315	275	0			
Grp Sat Flow(s),veh/h/ln	1619	1700	0	0	1615	1601	1674	1615	1445			
Q Serve(g_s), s	2.1	13.1	0.0	0.0	12.8	12.8	9.9	8.8	0.0			
Cycle Q Clear(g_c), s	2.1	13.1	0.0	0.0	12.8	12.8	9.9	8.8	0.0			
Prop In Lane	1.00		0.00	0.00		0.34	0.31		1.00			
Lane Grp Cap(c), veh/h	138	943	0	0	631	626	477	460	412			
V/C Ratio(X)	0.44	0.60	0.00	0.00	0.66	0.66	0.66	0.60	0.00			
Avail Cap(c_a), veh/h	333	1136	0	0	1079	1070	1242	1198	1072			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	26.0	8.9	0.0	0.0	15.0	15.0	18.8	18.4	0.0			
Incr Delay (d2), s/veh	0.8	0.6	0.0	0.0	1.7	1.7	1.9	1.5	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	6.2	0.0	0.0	5.9	5.8	4.8	4.1	0.0			
LnGrp Delay(d),s/veh	26.9	9.5	0.0	0.0	16.7	16.7	20.7	20.0	0.0			
LnGrp LOS	C	A			B	B	C	B				
Approach Vol, veh/h		622			835			590				
Approach Delay, s/veh		11.2			16.7			20.4				
Approach LOS		B			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		38.2			9.8	28.4		21.7
Change Period (Y+Rc), s		5.0			* 4.7	5.0		4.6
Max Green Setting (Gmax), s		40.0			* 12	40.0		44.4
Max Q Clear Time (g_c+I1), s		15.1			4.1	14.8		11.9
Green Ext Time (p_c), s		4.1			0.0	8.6		5.1

Intersection Summary	
HCM 2010 Ctrl Delay	16.1
HCM 2010 LOS	B

Notes

HCM 2010 Signalized Intersection Summary
2: Sebastopol Ave & Morris St

04/01/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	897	6	0	787	135	3	1	0	76	0	34
Future Volume (veh/h)	39	897	6	0	787	135	3	1	0	76	0	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1667	1700	1667	1667	1667	1700	1700	1700	1667	1700	1700
Adj Flow Rate, veh/h	41	944	6	0	828	142	3	1	0	80	0	36
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	0	2	0	0
Cap, veh/h	130	1154	7	2	935	794	13	4	0	190	0	166
Arrive On Green	0.08	0.70	0.70	0.00	0.56	0.56	0.01	0.01	0.00	0.12	0.00	0.12
Sat Flow, veh/h	1619	1654	11	1587	1667	1417	1229	410	0	1587	0	1385
Grp Volume(v), veh/h	41	0	950	0	828	142	4	0	0	80	0	36
Grp Sat Flow(s),veh/h/ln	1619	0	1665	1587	1667	1417	1639	0	0	1587	0	1385
Q Serve(g_s), s	2.0	0.0	33.9	0.0	36.5	4.1	0.2	0.0	0.0	3.9	0.0	2.0
Cycle Q Clear(g_c), s	2.0	0.0	33.9	0.0	36.5	4.1	0.2	0.0	0.0	3.9	0.0	2.0
Prop In Lane	1.00		0.01	1.00		1.00	0.75		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	130	0	1161	2	935	794	17	0	0	190	0	166
V/C Ratio(X)	0.31	0.00	0.82	0.00	0.89	0.18	0.23	0.00	0.00	0.42	0.00	0.22
Avail Cap(c_a), veh/h	519	0	1161	415	1030	875	312	0	0	660	0	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.5	0.0	9.0	0.0	16.1	9.0	41.3	0.0	0.0	34.3	0.0	33.5
Incr Delay (d2), s/veh	1.4	0.0	5.3	0.0	9.9	0.2	6.6	0.0	0.0	1.5	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	17.0	0.0	19.1	1.7	0.1	0.0	0.0	1.8	0.0	0.8
LnGrp Delay(d),s/veh	37.9	0.0	14.3	0.0	26.0	9.2	47.9	0.0	0.0	35.8	0.0	34.1
LnGrp LOS	D		B		C	A	D			D		C
Approach Vol, veh/h		991			970			4			116	
Approach Delay, s/veh		15.2			23.6			47.9			35.3	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	63.8		14.8	11.5	52.3		5.6
Change Period (Y+Rc), s	4.7	5.1		* 4.7	* 4.7	5.1		4.7
Max Green Setting (Gmax), s	12.3	45.0		* 35	* 27	52.0		16.0
Max Q Clear Time (g_c+I1), s	10.6	35.9		5.9	4.0	38.5		2.2
Green Ext Time (p_c), s	0.0	6.8		0.4	0.1	8.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.3
HCM 2010 LOS	C

Notes

HCM 2010 TWSC
3: Petaluma Ave & Abbott Ave 04/01/2020

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	0	0	1	34	2	1060	47	0	0	0
Future Vol, veh/h	2	0	0	0	1	34	2	1060	47	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	65536	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	0	0	1	37	2	1140	51	0	0	0

Major/Minor	Minor1			Major1			
Conflicting Flow All	-	1170	596	0	0	0	
Stage 1	-	1170	-	-	-	-	
Stage 2	-	0	-	-	-	-	
Critical Hdwy	-	6.54	6.94	4.14	-	-	
Critical Hdwy Stg 1	-	5.54	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	
Follow-up Hdwy	-	4.02	3.32	2.22	-	-	
Pot Cap-1 Maneuver	0	192	447	-	-	-	
Stage 1	0	265	-	-	-	-	
Stage 2	0	-	-	-	-	-	
Platoon blocked, %					-	-	
Mov Cap-1 Maneuver	-	0	447	-	-	-	
Mov Cap-2 Maneuver	-	0	-	-	-	-	
Stage 1	-	0	-	-	-	-	
Stage 2	-	0	-	-	-	-	

Approach	WB	NB
HCM Control Delay, s	13.8	
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	NBRWBLn1
Capacity (veh/h)	-	-	- 447
HCM Lane V/C Ratio	-	-	- 0.082
HCM Control Delay (s)	-	-	- 13.8
HCM Lane LOS	-	-	- B
HCM 95th %tile Q(veh)	-	-	- 0.3

HCM 2010 Signalized Intersection Summary
1: Sebastopol Rd & Petaluma Ave 04/01/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	437	0	0	647	141	146	602	434	0	0	0
Future Volume (veh/h)	100	437	0	0	647	141	146	602	434	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1667	1667	0	0	1667	1700	1700	1667	1667			
Adj Flow Rate, veh/h	103	451	0	0	667	145	151	621	0			
Adj No. of Lanes	1	1	0	0	2	0	0	2	1			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	155	873	0	0	932	202	206	896	485			
Arrive On Green	0.10	0.52	0.00	0.00	0.36	0.36	0.34	0.34	0.00			
Sat Flow, veh/h	1587	1667	0	0	2669	561	602	2618	1417			
Grp Volume(v), veh/h	103	451	0	0	408	404	411	361	0			
Grp Sat Flow(s),veh/h/ln	1587	1667	0	0	1583	1564	1637	1583	1417			
Q Serve(g_s), s	4.5	12.7	0.0	0.0	15.9	15.9	15.8	13.9	0.0			
Cycle Q Clear(g_c), s	4.5	12.7	0.0	0.0	15.9	15.9	15.8	13.9	0.0			
Prop In Lane	1.00		0.00	0.00		0.36	0.37		1.00			
Lane Grp Cap(c), veh/h	155	873	0	0	571	564	560	542	485			
V/C Ratio(X)	0.67	0.52	0.00	0.00	0.72	0.72	0.73	0.67	0.00			
Avail Cap(c_a), veh/h	273	932	0	0	885	874	1015	982	879			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	31.2	11.1	0.0	0.0	19.7	19.7	20.7	20.1	0.0			
Incr Delay (d2), s/veh	1.8	0.5	0.0	0.0	2.4	2.4	2.3	1.7	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.1	5.9	0.0	0.0	7.3	7.2	7.4	6.3	0.0			
LnGrp Delay(d),s/veh	33.0	11.6	0.0	0.0	22.1	22.2	22.9	21.8	0.0			
LnGrp LOS	C	B			C	C	C	C				
Approach Vol, veh/h		554			812			772				
Approach Delay, s/veh		15.6			22.1			22.4				
Approach LOS		B			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		42.5			11.7	30.8		29.1
Change Period (Y+Rc), s		5.0			* 4.7	5.0		4.6
Max Green Setting (Gmax), s		40.0			* 12	40.0		44.4
Max Q Clear Time (g_c+I1), s		14.7			6.5	17.9		17.8
Green Ext Time (p_c), s		3.1			0.1	7.9		6.7

Intersection Summary	
HCM 2010 Ctrl Delay	20.5
HCM 2010 LOS	C

Notes

HCM 2010 Signalized Intersection Summary
2: Sebastopol Ave & Morris St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	739	2	3	709	170	3	3	5	162	1	52
Future Volume (veh/h)	50	739	2	3	709	170	3	3	5	162	1	52
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1667	1700	1667	1667	1667	1700	1685	1700	1667	1700	1700
Adj Flow Rate, veh/h	54	803	2	3	771	185	3	3	5	176	1	57
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	0	2	0	0
Cap, veh/h	147	1009	3	13	874	743	11	11	19	227	3	197
Arrive On Green	0.09	0.61	0.61	0.01	0.52	0.52	0.03	0.03	0.03	0.14	0.14	0.14
Sat Flow, veh/h	1619	1662	4	1587	1667	1417	420	420	700	1587	24	1375
Grp Volume(v), veh/h	54	0	805	3	771	185	11	0	0	176	0	58
Grp Sat Flow(s),veh/h/ln	1619	0	1666	1587	1667	1417	1540	0	0	1587	0	1399
Q Serve(g_s), s	2.8	0.0	32.8	0.2	36.6	6.4	0.6	0.0	0.0	9.6	0.0	3.3
Cycle Q Clear(g_c), s	2.8	0.0	32.8	0.2	36.6	6.4	0.6	0.0	0.0	9.6	0.0	3.3
Prop In Lane	1.00		0.00	1.00		1.00	0.27		0.45	1.00		0.98
Lane Grp Cap(c), veh/h	147	0	1012	13	874	743	41	0	0	227	0	200
V/C Ratio(X)	0.37	0.00	0.80	0.24	0.88	0.25	0.27	0.00	0.00	0.77	0.00	0.29
Avail Cap(c_a), veh/h	489	0	1012	390	969	824	276	0	0	621	0	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.2	0.0	13.3	44.1	18.8	11.6	42.7	0.0	0.0	36.9	0.0	34.2
Incr Delay (d2), s/veh	1.5	0.0	5.1	9.1	10.1	0.4	3.4	0.0	0.0	5.6	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	16.4	0.1	19.2	2.5	0.3	0.0	0.0	4.6	0.0	1.3
LnGrp Delay(d),s/veh	39.8	0.0	18.5	53.2	28.9	12.0	46.1	0.0	0.0	42.5	0.0	35.0
LnGrp LOS	D		B	D	C	B	D			D		D
Approach Vol, veh/h		859			959			11			234	
Approach Delay, s/veh		19.8			25.7			46.1			40.6	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	59.4		17.5	12.8	52.0		7.1
Change Period (Y+Rc), s	4.7	5.1		* 4.7	* 4.7	5.1		4.7
Max Green Setting (Gmax), s	23	45.0		* 35	* 27	52.0		16.0
Max Q Clear Time (g_c+I1), s	2.2	34.8		11.6	4.8	38.6		2.6
Green Ext Time (p_c), s	0.0	6.4		0.9	0.1	8.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	25.1
HCM 2010 LOS	C

Notes

HCM 2010 TWSC
3: Petaluma Ave & Abbott Ave

04/01/2020

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	0	56	6	962	44	0	0	0
Future Vol, veh/h	1	0	0	0	0	56	6	962	44	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	0	0	57	6	982	45	0	0	0

Major/Minor	Minor1			Major1		
Conflicting Flow All	-	-	514	0	0	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	2.22	-	-
Pot Cap-1 Maneuver	0	0	505	-	-	-
Stage 1	0	0	-	-	-	-
Stage 2	0	0	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	-	0	505	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-
Stage 1	-	0	-	-	-	-
Stage 2	-	0	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	13	
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	-	505
HCM Lane V/C Ratio	-	-	-	0.113
HCM Control Delay (s)	-	-	-	13
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.4

HCM 2010 Signalized Intersection Summary
1: Petaluma Ave & Sebastopol Ave

04/08/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	656	0	0	895	196	152	586	580	0	0	0
Future Volume (veh/h)	143	656	0	0	895	196	152	586	580	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1700	1700	0	0	1700	1700	1700	1700	1700			
Adj Flow Rate, veh/h	143	656	0	0	895	196	152	586	0			
Adj No. of Lanes	1	1	0	0	2	0	0	2	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	173	981	0	0	1093	239	200	816	447			
Arrive On Green	0.11	0.58	0.00	0.00	0.41	0.41	0.31	0.31	0.00			
Sat Flow, veh/h	1619	1700	0	0	2720	577	646	2637	1445			
Grp Volume(v), veh/h	143	656	0	0	548	543	392	346	0			
Grp Sat Flow(s),veh/h/ln	1619	1700	0	0	1615	1597	1668	1615	1445			
Q Serve(g_s), s	7.3	22.5	0.0	0.0	25.4	25.5	18.0	15.9	0.0			
Cycle Q Clear(g_c), s	7.3	22.5	0.0	0.0	25.4	25.5	18.0	15.9	0.0			
Prop In Lane	1.00		0.00	0.00		0.36	0.39		1.00			
Lane Grp Cap(c), veh/h	173	981	0	0	670	662	516	500	447			
V/C Ratio(X)	0.83	0.67	0.00	0.00	0.82	0.82	0.76	0.69	0.00			
Avail Cap(c_a), veh/h	235	981	0	0	764	755	876	848	759			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	37.0	12.3	0.0	0.0	21.9	21.9	26.4	25.7	0.0			
Incr Delay (d2), s/veh	11.9	1.8	0.0	0.0	6.8	6.9	2.8	2.1	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.8	10.9	0.0	0.0	12.5	12.4	8.7	7.4	0.0			
LnGrp Delay(d),s/veh	48.9	14.1	0.0	0.0	28.8	28.9	29.2	27.7	0.0			
LnGrp LOS	D	B			C	C	C	C				
Approach Vol, veh/h		799			1091			738				
Approach Delay, s/veh		20.3			28.8			28.5				
Approach LOS		C			C			C				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		53.8			13.7	40.1		30.8				
Change Period (Y+Rc), s		5.0			* 4.7	5.0		4.6				
Max Green Setting (Gmax), s		40.0			* 12	40.0		44.4				
Max Q Clear Time (g_c+I1), s		24.5			9.3	27.5		20.0				
Green Ext Time (p_c), s		4.3			0.1	7.6		6.2				

Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

Notes

HCM 2010 Signalized Intersection Summary
2: Sebastopol Ave & Morris St

04/08/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	1092	7	1	1071	185	3	1	3	85	0	38
Future Volume (veh/h)	44	1092	7	1	1071	185	3	1	3	85	0	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1667	1700	1667	1667	1667	1700	1686	1700	1667	1700	1700
Adj Flow Rate, veh/h	44	1092	7	1	1071	185	3	1	3	85	0	38
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	0	2	0	0
Cap, veh/h	132	1081	7	4	958	814	12	4	12	181	0	158
Arrive On Green	0.08	0.65	0.65	0.00	0.57	0.57	0.02	0.02	0.02	0.11	0.00	0.11
Sat Flow, veh/h	1619	1654	11	1587	1667	1417	658	220	658	1587	0	1382
Grp Volume(v), veh/h	44	0	1099	1	1071	185	7	0	0	85	0	38
Grp Sat Flow(s),veh/h/ln	1619	0	1665	1587	1667	1417	1536	0	0	1587	0	1382
Q Serve(g_s), s	2.3	0.0	59.1	0.1	52.0	5.8	0.4	0.0	0.0	4.5	0.0	2.3
Cycle Q Clear(g_c), s	2.3	0.0	59.1	0.1	52.0	5.8	0.4	0.0	0.0	4.5	0.0	2.3
Prop In Lane	1.00		0.01	1.00		1.00	0.43		0.43	1.00		1.00
Lane Grp Cap(c), veh/h	132	0	1088	4	958	814	27	0	0	181	0	158
V/C Ratio(X)	0.33	0.00	1.01	0.23	1.12	0.23	0.26	0.00	0.00	0.47	0.00	0.24
Avail Cap(c_a), veh/h	483	0	1088	386	958	814	272	0	0	614	0	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.3	0.0	15.7	45.0	19.2	9.4	43.8	0.0	0.0	37.5	0.0	36.5
Incr Delay (d2), s/veh	1.5	0.0	29.9	24.8	67.3	0.3	4.8	0.0	0.0	1.9	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	35.6	0.1	41.6	2.3	0.2	0.0	0.0	2.1	0.0	0.9
LnGrp Delay(d),s/veh	40.7	0.0	45.6	69.9	86.6	9.7	48.7	0.0	0.0	39.4	0.0	37.3
LnGrp LOS	D		F	E	F	A	D			D		D
Approach Vol, veh/h		1143			1257			7			123	
Approach Delay, s/veh		45.4			75.2			48.7			38.8	
Approach LOS		D			E			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.9	64.2		15.0	12.1	57.1		6.3				
Change Period (Y+Rc), s	4.7	5.1		* 4.7	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	12.3	45.0		* 35	* 27	52.0		16.0				
Max Q Clear Time (g_c+I1), s	2.1	61.1		6.5	4.3	54.0		2.4				
Green Ext Time (p_c), s	0.0	0.0		0.5	0.1	0.0		0.0				

Intersection Summary	
HCM 2010 Ctrl Delay	59.9
HCM 2010 LOS	E

Notes

HCM 2010 TWSC
3: Petaluma Ave & Abbott Ave

04/08/2020

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	0	0	1	34	2	1203	48	0	0	0
Future Vol, veh/h	2	0	0	0	1	34	2	1203	48	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	65536	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	0	0	1	34	2	1203	48	0	0	0

Major/Minor	Minor1			Major1			
Conflicting Flow All	-	1231	626	0	0	0	
Stage 1	-	1231	-	-	-	-	
Stage 2	-	0	-	-	-	-	
Critical Hdwy	-	6.54	6.94	4.14	-	-	
Critical Hdwy Stg 1	-	5.54	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	
Follow-up Hdwy	-	4.02	3.32	2.22	-	-	
Pot Cap-1 Maneuver	0	176	427	-	-	-	
Stage 1	0	248	-	-	-	-	
Stage 2	0	-	-	-	-	-	
Platoon blocked, %					-	-	
Mov Cap-1 Maneuver	-	0	427	-	-	-	
Mov Cap-2 Maneuver	-	0	-	-	-	-	
Stage 1	-	0	-	-	-	-	
Stage 2	-	0	-	-	-	-	

Approach	WB	NB
HCM Control Delay, s	14.2	
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	NBRWBLn1
Capacity (veh/h)	-	-	- 427
HCM Lane V/C Ratio	-	-	- 0.08
HCM Control Delay (s)	-	-	- 14.2
HCM Lane LOS	-	-	- B
HCM 95th %tile Q(veh)	-	-	- 0.3

HCM 2010 Signalized Intersection Summary
1: Sebastopol Rd & Petaluma Ave

04/08/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	637	0	0	947	292	239	896	604	0	0	0
Future Volume (veh/h)	178	637	0	0	947	292	239	896	604	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1667	1667	0	0	1667	1700	1700	1667	1667			
Adj Flow Rate, veh/h	178	637	0	0	947	292	239	896	0			
Adj No. of Lanes	1	1	0	0	2	0	0	2	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	177	864	0	0	867	266	255	1014	559			
Arrive On Green	0.11	0.52	0.00	0.00	0.36	0.36	0.39	0.39	0.00			
Sat Flow, veh/h	1587	1667	0	0	2467	732	647	2570	1417			
Grp Volume(v), veh/h	178	637	0	0	628	611	603	532	0			
Grp Sat Flow(s),veh/h/ln	1587	1667	0	0	1583	1532	1634	1583	1417			
Q Serve(g_s), s	12.3	32.8	0.0	0.0	40.0	40.0	39.0	33.7	0.0			
Cycle Q Clear(g_c), s	12.3	32.8	0.0	0.0	40.0	40.0	39.0	33.7	0.0			
Prop In Lane	1.00		0.00	0.00		0.48	0.40		1.00			
Lane Grp Cap(c), veh/h	177	864	0	0	576	557	645	625	559			
V/C Ratio(X)	1.00	0.74	0.00	0.00	1.09	1.10	0.94	0.85	0.00			
Avail Cap(c_a), veh/h	177	864	0	0	576	557	660	639	572			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	48.9	20.7	0.0	0.0	35.0	35.0	32.0	30.4	0.0			
Incr Delay (d2), s/veh	68.3	3.4	0.0	0.0	64.5	67.3	20.7	10.7	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.7	15.8	0.0	0.0	27.7	27.3	21.1	16.5	0.0			
LnGrp Delay(d),s/veh	117.2	24.0	0.0	0.0	99.5	102.3	52.6	41.0	0.0			
LnGrp LOS	F	C			F	F	D	D				
Approach Vol, veh/h		815			1239			1135				
Approach Delay, s/veh		44.4			100.9			47.2				
Approach LOS		D			F			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		62.0			17.0	45.0		48.0
Change Period (Y+Rc), s		5.0			* 4.7	5.0		4.6
Max Green Setting (Gmax), s		40.0			* 12	40.0		44.4
Max Q Clear Time (g_c+I1), s		34.8			14.3	42.0		41.0
Green Ext Time (p_c), s		2.0			0.0	0.0		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	67.3
HCM 2010 LOS	E

Notes

HCM 2010 Signalized Intersection Summary
2: Sebastopol Ave & Morris St

04/08/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	1144	5	3	1031	190	4	5	6	181	3	65
Future Volume (veh/h)	55	1144	5	3	1031	190	4	5	6	181	3	65
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1667	1700	1667	1667	1667	1700	1687	1700	1667	1700	1700
Adj Flow Rate, veh/h	55	1144	5	3	1031	190	4	5	6	181	3	65
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	0	2	0	0
Cap, veh/h	142	1022	4	13	894	760	14	18	21	228	9	193
Arrive On Green	0.09	0.62	0.62	0.01	0.54	0.54	0.03	0.03	0.03	0.14	0.14	0.14
Sat Flow, veh/h	1619	1658	7	1587	1667	1417	415	519	622	1587	62	1344
Grp Volume(v), veh/h	55	0	1149	3	1031	190	15	0	0	181	0	68
Grp Sat Flow(s),veh/h/ln	1619	0	1665	1587	1667	1417	1556	0	0	1587	0	1406
Q Serve(g_s), s	3.1	0.0	59.7	0.2	52.0	7.0	0.9	0.0	0.0	10.7	0.0	4.2
Cycle Q Clear(g_c), s	3.1	0.0	59.7	0.2	52.0	7.0	0.9	0.0	0.0	10.7	0.0	4.2
Prop In Lane	1.00		0.00	1.00		1.00	0.27		0.40	1.00		0.96
Lane Grp Cap(c), veh/h	142	0	1026	13	894	760	53	0	0	228	0	202
V/C Ratio(X)	0.39	0.00	1.12	0.24	1.15	0.25	0.28	0.00	0.00	0.79	0.00	0.34
Avail Cap(c_a), veh/h	451	0	1026	360	894	760	257	0	0	573	0	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.8	0.0	18.6	47.8	22.5	12.0	45.6	0.0	0.0	40.1	0.0	37.4
Incr Delay (d2), s/veh	1.7	0.0	67.0	9.2	81.7	0.4	2.8	0.0	0.0	6.2	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	46.2	0.1	43.9	2.8	0.4	0.0	0.0	5.1	0.0	1.7
LnGrp Delay(d),s/veh	43.5	0.0	85.6	57.0	104.1	12.4	48.5	0.0	0.0	46.3	0.0	38.3
LnGrp LOS	D		F	E	F	B	D			D		D
Approach Vol, veh/h		1204			1224			15			249	
Approach Delay, s/veh		83.7			89.8			48.5			44.1	
Approach LOS		F			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	64.8		18.6	13.2	57.1		8.0
Change Period (Y+Rc), s	4.7	5.1		* 4.7	* 4.7	5.1		4.7
Max Green Setting (Gmax), s	23	45.0		* 35	* 27	52.0		16.0
Max Q Clear Time (g_c+I1), s	2.2	61.7		12.7	5.1	54.0		2.9
Green Ext Time (p_c), s	0.0	0.0		0.9	0.1	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	82.6
HCM 2010 LOS	F

Notes

HCM 2010 TWSC
3: Petaluma Ave & Abbott Ave

04/08/2020

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	0	58	7	1241	45	0	0	0
Future Vol, veh/h	1	0	0	0	0	58	7	1241	45	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	3801088		-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	0	0	58	7	1241	45	0	0	0

Major/Minor	Minor1			Major1		
Conflicting Flow All	-	-	643	0	0	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	2.22	-	-
Pot Cap-1 Maneuver	0	0	416	-	-	-
Stage 1	0	0	-	-	-	-
Stage 2	0	0	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	-	0	416	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-
Stage 1	-	0	-	-	-	-
Stage 2	-	0	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	15.1	
HCM LOS	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	-	416
HCM Lane V/C Ratio	-	-	-	0.139
HCM Control Delay (s)	-	-	-	15.1
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.5

HCM 2010 Signalized Intersection Summary
1: Petaluma Ave & Sebastopol Ave

04/08/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	663	0	0	902	196	152	586	580	0	0	0
Future Volume (veh/h)	143	663	0	0	902	196	152	586	580	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1700	1700	0	0	1700	1700	1700	1700	1700			
Adj Flow Rate, veh/h	143	663	0	0	902	196	152	586	0			
Adj No. of Lanes	1	1	0	0	2	0	0	2	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	173	982	0	0	1097	238	200	815	446			
Arrive On Green	0.11	0.58	0.00	0.00	0.42	0.42	0.31	0.31	0.00			
Sat Flow, veh/h	1619	1700	0	0	2724	573	646	2637	1445			
Grp Volume(v), veh/h	143	663	0	0	552	546	392	346	0			
Grp Sat Flow(s),veh/h/ln	1619	1700	0	0	1615	1597	1668	1615	1445			
Q Serve(g_s), s	7.3	22.9	0.0	0.0	25.7	25.8	18.0	16.0	0.0			
Cycle Q Clear(g_c), s	7.3	22.9	0.0	0.0	25.7	25.8	18.0	16.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.36	0.39		1.00			
Lane Grp Cap(c), veh/h	173	982	0	0	671	664	515	499	446			
V/C Ratio(X)	0.83	0.67	0.00	0.00	0.82	0.82	0.76	0.69	0.00			
Avail Cap(c_a), veh/h	235	982	0	0	761	753	873	845	756			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	37.1	12.4	0.0	0.0	22.0	22.0	26.5	25.8	0.0			
Incr Delay (d2), s/veh	12.1	1.8	0.0	0.0	7.0	7.2	2.8	2.1	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.9	11.2	0.0	0.0	12.7	12.5	8.7	7.4	0.0			
LnGrp Delay(d),s/veh	49.2	14.2	0.0	0.0	29.1	29.2	29.3	27.9	0.0			
LnGrp LOS	D	B			C	C	C	C				
Approach Vol, veh/h		806			1098			738				
Approach Delay, s/veh		20.4			29.1			28.6				
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		54.0			13.8	40.3		30.8
Change Period (Y+Rc), s		5.0			* 4.7	5.0		4.6
Max Green Setting (Gmax), s		40.0			* 12	40.0		44.4
Max Q Clear Time (g_c+I1), s		24.9			9.3	27.8		20.0
Green Ext Time (p_c), s		4.3			0.1	7.5		6.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Notes

HCM 2010 Signalized Intersection Summary
2: Sebastopol Ave & Morris St

04/08/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	1096	7	1	1075	185	3	1	3	85	0	38
Future Volume (veh/h)	45	1096	7	1	1075	185	3	1	3	85	0	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1667	1700	1667	1667	1667	1700	1686	1700	1667	1700	1700
Adj Flow Rate, veh/h	45	1096	7	1	1075	185	3	1	3	85	0	38
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	0	2	0	0
Cap, veh/h	133	1081	7	4	957	813	12	4	12	181	0	157
Arrive On Green	0.08	0.65	0.65	0.00	0.57	0.57	0.02	0.02	0.02	0.11	0.00	0.11
Sat Flow, veh/h	1619	1654	11	1587	1667	1417	658	220	658	1587	0	1382
Grp Volume(v), veh/h	45	0	1103	1	1075	185	7	0	0	85	0	38
Grp Sat Flow(s),veh/h/ln	1619	0	1665	1587	1667	1417	1536	0	0	1587	0	1382
Q Serve(g_s), s	2.4	0.0	59.2	0.1	52.0	5.8	0.4	0.0	0.0	4.5	0.0	2.3
Cycle Q Clear(g_c), s	2.4	0.0	59.2	0.1	52.0	5.8	0.4	0.0	0.0	4.5	0.0	2.3
Prop In Lane	1.00		0.01	1.00		1.00	0.43		0.43	1.00		1.00
Lane Grp Cap(c), veh/h	133	0	1088	4	957	813	27	0	0	181	0	157
V/C Ratio(X)	0.34	0.00	1.01	0.23	1.12	0.23	0.26	0.00	0.00	0.47	0.00	0.24
Avail Cap(c_a), veh/h	483	0	1088	385	957	813	271	0	0	613	0	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.2	0.0	15.7	45.1	19.3	9.5	43.9	0.0	0.0	37.6	0.0	36.6
Incr Delay (d2), s/veh	1.5	0.0	30.7	24.8	69.4	0.3	4.8	0.0	0.0	1.9	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	35.9	0.1	42.1	2.3	0.2	0.0	0.0	2.1	0.0	0.9
LnGrp Delay(d),s/veh	40.7	0.0	46.4	69.9	88.7	9.8	48.7	0.0	0.0	39.5	0.0	37.4
LnGrp LOS	D		F	E	F	A	D			D		D
Approach Vol, veh/h		1148			1261			7			123	
Approach Delay, s/veh		46.2			77.1			48.7			38.8	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	64.3		15.0	12.2	57.1		6.3
Change Period (Y+Rc), s	4.7	5.1		* 4.7	* 4.7	5.1		4.7
Max Green Setting (Gmax), s	2.3	45.0		* 35	* 27	52.0		16.0
Max Q Clear Time (g_c+I1), s	2.1	61.2		6.5	4.4	54.0		2.4
Green Ext Time (p_c), s	0.0	0.0		0.5	0.1	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	61.2
HCM 2010 LOS	E

Notes

HCM 2010 TWSC
3: Petaluma Ave & Abbott Ave 04/08/2020

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	0	0	1	38	2	1203	52	0	0	0
Future Vol, veh/h	2	0	0	0	1	38	2	1203	52	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	65536	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	0	0	1	38	2	1203	52	0	0	0

Major/Minor	Minor1			Major1			
Conflicting Flow All	-	1233	628	0	0	0	
Stage 1	-	1233	-	-	-	-	
Stage 2	-	0	-	-	-	-	
Critical Hdwy	-	6.54	6.94	4.14	-	-	
Critical Hdwy Stg 1	-	5.54	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	
Follow-up Hdwy	-	4.02	3.32	2.22	-	-	
Pot Cap-1 Maneuver	0	176	426	-	-	-	
Stage 1	0	247	-	-	-	-	
Stage 2	0	-	-	-	-	-	
Platoon blocked, %					-	-	
Mov Cap-1 Maneuver	-	0	426	-	-	-	
Mov Cap-2 Maneuver	-	0	-	-	-	-	
Stage 1	-	0	-	-	-	-	
Stage 2	-	0	-	-	-	-	

Approach	WB	NB
HCM Control Delay, s	14.3	
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	NBRWBLn1
Capacity (veh/h)	-	-	- 426
HCM Lane V/C Ratio	-	-	- 0.089
HCM Control Delay (s)	-	-	- 14.3
HCM Lane LOS	-	-	- B
HCM 95th %tile Q(veh)	-	-	- 0.3

HCM 2010 Signalized Intersection Summary
1: Sebastopol Rd & Petaluma Ave 04/08/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	644	0	0	954	292	239	896	604	0	0	0
Future Volume (veh/h)	178	644	0	0	954	292	239	896	604	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1667	1667	0	0	1667	1700	1700	1667	1667			
Adj Flow Rate, veh/h	178	644	0	0	954	292	239	896	0			
Adj No. of Lanes	1	1	0	0	2	0	0	2	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	177	864	0	0	869	265	255	1014	559			
Arrive On Green	0.11	0.52	0.00	0.00	0.36	0.36	0.39	0.39	0.00			
Sat Flow, veh/h	1587	1667	0	0	2472	728	647	2570	1417			
Grp Volume(v), veh/h	178	644	0	0	631	615	603	532	0			
Grp Sat Flow(s),veh/h/ln	1587	1667	0	0	1583	1533	1634	1583	1417			
Q Serve(g_s), s	12.3	33.4	0.0	0.0	40.0	40.0	39.0	33.7	0.0			
Cycle Q Clear(g_c), s	12.3	33.4	0.0	0.0	40.0	40.0	39.0	33.7	0.0			
Prop In Lane	1.00		0.00	0.00		0.47	0.40		1.00			
Lane Grp Cap(c), veh/h	177	864	0	0	576	558	645	625	559			
V/C Ratio(X)	1.00	0.75	0.00	0.00	1.10	1.10	0.94	0.85	0.00			
Avail Cap(c_a), veh/h	177	864	0	0	576	558	660	639	572			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	48.9	20.8	0.0	0.0	35.0	35.0	32.0	30.4	0.0			
Incr Delay (d2), s/veh	68.3	3.6	0.0	0.0	66.4	69.4	20.7	10.7	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.7	16.1	0.0	0.0	28.1	27.6	21.1	16.5	0.0			
LnGrp Delay(d),s/veh	117.2	24.4	0.0	0.0	101.4	104.4	52.6	41.0	0.0			
LnGrp LOS	F	C			F	F	D	D				
Approach Vol, veh/h		822			1246			1135				
Approach Delay, s/veh		44.5			102.9			47.2				
Approach LOS		D			F			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		62.0			17.0	45.0		48.0
Change Period (Y+Rc), s		5.0			* 4.7	5.0		4.6
Max Green Setting (Gmax), s		40.0			* 12	40.0		44.4
Max Q Clear Time (g_c+I1), s		35.4			14.3	42.0		41.0
Green Ext Time (p_c), s		1.8			0.0	0.0		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	68.2
HCM 2010 LOS	E

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	1148	5	3	1035	190	4	5	6	181	3	65
Future Volume (veh/h)	56	1148	5	3	1035	190	4	5	6	181	3	65
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1667	1700	1667	1667	1667	1700	1687	1700	1667	1700	1700
Adj Flow Rate, veh/h	56	1148	5	3	1035	190	4	5	6	181	3	65
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	2	0	0	0	2	0	0
Cap, veh/h	143	1022	4	13	893	759	14	18	21	228	9	193
Arrive On Green	0.09	0.62	0.62	0.01	0.54	0.54	0.03	0.03	0.03	0.14	0.14	0.14
Sat Flow, veh/h	1619	1658	7	1587	1667	1417	415	519	622	1587	62	1344
Grp Volume(v), veh/h	56	0	1153	3	1035	190	15	0	0	181	0	68
Grp Sat Flow(s),veh/h/ln	1619	0	1665	1587	1667	1417	1556	0	0	1587	0	1406
Q Serve(g_s), s	3.2	0.0	59.8	0.2	52.0	7.0	0.9	0.0	0.0	10.7	0.0	4.2
Cycle Q Clear(g_c), s	3.2	0.0	59.8	0.2	52.0	7.0	0.9	0.0	0.0	10.7	0.0	4.2
Prop In Lane	1.00		0.00	1.00		1.00	0.27		0.40	1.00		0.96
Lane Grp Cap(c), veh/h	143	0	1027	13	893	759	53	0	0	228	0	202
V/C Ratio(X)	0.39	0.00	1.12	0.24	1.16	0.25	0.28	0.00	0.00	0.79	0.00	0.34
Avail Cap(c_a), veh/h	451	0	1027	360	893	759	257	0	0	573	0	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.8	0.0	18.6	47.8	22.5	12.1	45.7	0.0	0.0	40.2	0.0	37.4
Incr Delay (d2), s/veh	1.7	0.0	68.4	9.2	83.9	0.4	2.8	0.0	0.0	6.2	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	46.6	0.1	44.6	2.8	0.4	0.0	0.0	5.1	0.0	1.7
LnGrp Delay(d),s/veh	43.5	0.0	87.0	57.0	106.4	12.4	48.5	0.0	0.0	46.4	0.0	38.4
LnGrp LOS	D		F	E	F	B	D			D		D
Approach Vol, veh/h		1209			1228			15			249	
Approach Delay, s/veh		85.0			91.7			48.5			44.2	
Approach LOS		F			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	64.9		18.6	13.3	57.1		8.0
Change Period (Y+Rc), s	4.7	5.1		* 4.7	* 4.7	5.1		4.7
Max Green Setting (Gmax), s	23	45.0		* 35	* 27	52.0		16.0
Max Q Clear Time (g_c+I1), s	2.2	61.8		12.7	5.2	54.0		2.9
Green Ext Time (p_c), s	0.0	0.0		0.9	0.1	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	84.1
HCM 2010 LOS	F

Notes

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	0	62	7	1241	49	0	0	0
Future Vol, veh/h	1	0	0	0	0	62	7	1241	49	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	4063232		-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	0	0	62	7	1241	49	0	0	0

Major/Minor	Minor1			Major1		
Conflicting Flow All	-	-	645	0	0	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	2.22	-	-
Pot Cap-1 Maneuver	0	0	415	-	-	-
Stage 1	0	0	-	-	-	-
Stage 2	0	0	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	-	0	415	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-
Stage 1	-	0	-	-	-	-
Stage 2	-	0	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	15.2	
HCM LOS	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	-	415
HCM Lane V/C Ratio	-	-	-	0.149
HCM Control Delay (s)	-	-	-	15.2
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.5

Curian

September 10, 2020

Dear Commissioners,

After reviewing the initial study for the proposed automatic car wash, I am writing to express my concern that this project will negatively affect the downtown area.

I am the CEO of Curian, a tech services company, with offices on the adjacent parcel at 6791 Sebastopol Avenue, the former Ford garage. Our second-story office has large windows overlooking the Benedetti property. Currently, it is a very noisy neighbor, and the addition of a two-story car wash would be incredibly disruptive.

We are right next to the Joe Rodota Trail and the Laguna habitat and such intensive usage will adversely impact all users walking or biking by on the trail. Currently, the noise levels can be high due to: a) a loudspeaker they use for communication, b) cars/trucks honking, c) beeping from trucks backing up, d) power tools used for oil and tire changes.

In addition to increasing an already noisy parcel, this project will consume large amounts of water and power, and may contribute to downtown flooding by adding thousands of square feet of impervious paving.

Page 13, Table 8 fails to include our building in the noise monitoring survey. We use our office for meetings, video calls, and computer work. An increase in noise levels will likely prove unconducive to a working environment.

Sebastopol Municipal Code 8.25.060 prohibits noise emitted beyond a premise's boundary above 55 dB. Even with a ten-foot wall, this project will emit noise between 65-70 dB onto our offices. This unlawful amount of noise should immediately disqualify this project from further consideration.

In order to retain the charm of Sebastopol, I urge the Commission to expand the ordinance against drive-through uses to include car washes.

Thank you for your kind consideration.

Best regards,

Martin Reed

Car wash

Perry <2sparky@comcast.net>

Mon 9/14/2020 7:48 PM

To: David Hogan <DHogan@m-group.us>
Cc: ksvanstrom@cityofsebastopol.org <ksvanstrom@cityofsebastopol.org>

To whom it may concern.
I am writing to all regarding the proposed car wash within the Benedetti tire complex.
As a long time resident of Sebastopol, I am loyal to all the business owners here in town. I would prefer to include my car washing needs too.
The Benedetti tire and oil stop has had the local residents best interest for as long as I have been going there. It is my belief that once again this car wash will be in the best interest of our community.
Mark Reece and his management team will work to provide a service that will reduce water use, improve customer convenience while showing concern about our environment and it's effects on our community.
Please support our local folks in welcoming a new business to Sebastopol. Thank you.
Perry Sparkman, Sebastopol resident and classic car owner.

Sent from my iPhone

From: Michael McGlothlin <michael.mcglothlin@gmail.com>
Sent: Tuesday, September 15, 2020 7:23 AM
To: Kari Svanstrom <ksvanstrom@cityofsebastopol.org>
Subject: Benedetti Tire car wash expansion

I am writing in support of granting the permits needed for Benedetti Tire to construct a state of the art car wash.

The city is in need of a decent car wash that is environmentally sensitive and efficient. The existing car wash in town is not adequate for the volume of use, often creating long lines and congestion.

Additionally, the quality of the current car wash is not very good. We often go to a wash on Piner in Santa Rosa rather than use the one here in town.

I think that the proposed location at the back of the Benedetti complex will provide easy access to the car wash without disrupting traffic flows. In short, I think the new proposed car wash is a win-win for the city and clean cars and urge you to approve the permits.

Michael & Jean McGlothlin
707-829-3529
707-217-3595

Car Wash

Elaine Schneemann <elaines@sonic.net>

Tue 9/15/2020 8:55 AM

To: ksvanstrom@cityofsebastopol.org <ksvanstrom@cityofsebastopol.org>; David Hogan <DHogan@m-group.us>

Sirs,

This letter is in response to the Car Wash project at 6809 Sebastopol Ave. Sebastopol.

This heard about this project a few years ago and have been waiting for it to move forward. I am very excited that this is something we can bring to our town. I have lived here for 21 plus years, raised 4 kids and working on 7 grandkids. The car wash is something that I would use on a weekly basis and I have 4 cars, RV and addition movable trailers etc. that I need to wash. Living in the country on well water and a gravel driveway, it is not always easy to wash and do a good job cleaning vehicles at home. Plus water spots due to the well water.
This will also make it much easier, then going into Santa Rosa and spending my money there.
I am all for getting this project moving forward.

Thank you,

Elaine
Schneemann
707 483-7696

Approval of car wash

Jebb Trione <jtrione@mancuso-hd.com>

Tue 9/15/2020 9:48 AM

To: ksvanstrom@cityofsebastopol.org <ksvanstrom@cityofsebastopol.org>; David Hogan <DHogan@m-group.us>

This email is in support of the approval of the proposed car wash at Benedetti Tire , this business has been needed in this town for many years,hopefully your approval process will go quickly as the need is growing .

Thank you
Jebb Trione



Proposed car wash

kensil@sonic.net <kensil@sonic.net>

Tue 9/15/2020 11:37 AM

To: ksvanstrom@cityofsebastopol.org <ksvanstrom@cityofsebastopol.org>
Cc: David Hogan <DHogan@m-group.us>

As a long time business owner and resident of Sebastopol I would to extend my support for the proposed full service car wash at the Bennetti auto service location.
As a long term patron of Mark and Brad I know that the project has been well thought through and will be implemented with a high degree of care for all concerns associated with the project.
Bennetti's Tire Service has always had a high level of professional integrity in their business practices In our community.
I believe there is a definite need for the project in our community. I for one have my cars washed in Santa Rosa on a regular basis. Keeping that money in Sebastopol would be a definite benefit and convenience.
Lastly the design seems to be in keeping with our community aesthetics.
Hopefully the City of Sebastopol will quickly approve the project

Regards
Ken Silveria
Former and long time owner of Pacific Market as well as a long time resident of Sebastopol
Sent from I my iPhone



BARDELLA & ASSOCIATES

Taxes - Bookkeeping - Consultation

September 15, 2020

To Whom It May Concern:

We are writing to confirm our support of the potential new car wash in Sebastopol. We have been long time business owners in Sebastopol and support our community. We like the prospect of having a full-service car wash in Sebastopol. It also sounds like the car wash would be more environmentally friendly than city residents washing their vehicles at their own residence. We currently take our business out of Sebastopol to get a quality car wash.

Respectfully,

Barbara Bardella

Matt Bardella

702 Litchfield Avenue • Sebastopol, California 95472 • (707) 829-4800 • FAX (707) 823-2865
Web Site: http://www.bardella.com • Email: bardella@bardella.com

Enrolled to practice before the Internal Revenue Service

Proposed automatic car wash

Huck Hensley <hucksociety@yahoo.com>

Tue 9/15/2020 8:52 PM

To: ksvanstrom@cityofsebastopol.org <ksvanstrom@cityofsebastopol.org>; David Hogan <DHogan@m-group.us>

September 15, 2020

Dear Commissioners,

I have reviewed the initial studies for the proposed automatic car wash.

I am the property owner of the adjacent parcel at 6791 Sebastopol Avenue, the former Ford garage, which I renovated for offices, retail uses and Chimera Arts and Makerspace. I plan to propose infill housing on the open portion of the former Ford lot.

I believe the proposed car wash would negatively affect building tenants due to noise. It would also discourage future housing on the property, or anywhere nearby.

Generally, I think the proposed automatic car wash would be a step backward for Sebastopol; it would increase noise pollution downtown, generate more traffic and air pollution, contribute to flooding, and discourage downtown housing. I do not believe the strident nature of this use is appropriate in proximity to the Laguna habitat and Joe Rodota Trail.

The noise monitoring survey fails to include the Ford Building in its survey where it claims that the Sebastopol Inn is "...the closest noise sensitive use to the project site..." (page 13). The nearest offices are less than a hundred feet from the noisiest facet of the proposed car wash. The second-story offices in the Ford building are normally quiet, with people having meetings and doing computer work. Chimera Makerspace conducts indoor and outdoor classroom instruction just ten feet from the car wash exit.

The Sebastopol Municipal Code (8.25.060) prohibits noise emitted beyond a premises boundary above 55dBA.

Per Figure 8 of the noise wall analysis, the car wash operation, even with a ten-foot wall, would emit noise between 65-70 dBA onto the adjacent Ford property. I do not understand how a project generating an unlawful noise level can be approved.

The traffic study uses vehicle-per-day assumptions that do not match those of the noise assessment. The noise study estimates 250 to 350 vehicles per day through the car wash (page 23). The traffic study states: "The applicant anticipates serving an average of 125 to 150 customers per day, with 200 customers on a peak day" (page 17). This discrepancy casts grave doubts on the traffic study.

Finally, I believe the ordinance against drive-through uses should be amended to include car washes.

Thank you for your thoughtful consideration.

Respectfully,
Huck Hensley

Benedetti car wash

key250@aol.com <key250@aol.com>

Wed 9/16/2020 10:15 AM

To: David Hogan <DHogan@m-group.us>; ksvanstrom@cityofsebastopol.org <ksvanstrom@cityofsebastopol.org>

I am David Key from Key Auto Body 250 Morris St. I believe the car wash project will be a good fit for the area and Sebastopol. The car wash on Healdsburg Ave is hard to enter
and only compact vehicles can access it. Car washes save water and waste going down our storm drains. It also gives customers the choice of complete service at Benedetti Tire
Thank you very much, David Key

Benedetti Car Wash

Judy Reynolds <jreyseb@sbcglobal.net>

Wed 9/16/2020 11:15 AM

To: David Hogan <DHogan@m-group.us>

I would like to offer my support for the car wash plan at the back of Benedetti's Tire Service. I feel it would be nice instead of driving to Santa Rosa for a car wash of this caliber. I live in Sebastopol and hope Mark will get the cities support on this project. Thank you Judy Reynolds
Sent from my iPhone

Car wash

pete henderson <pete95403@yahoo.com>

Wed 9/16/2020 11:30 AM

To: David Hogan <DHogan@m-group.us>

Good day David, I am a longtime customer of Benedetti tire.I appreciate the professional handling of all my Ford 150 truck needs at this facility. I am excited to hear about the possibility of a state of the art car wash at this location. This will save me time and money trying to locate a good car wash. This will also save the environment of unnecessary water and waste runoff into the storm drains. I will be able to get service and a quality wash at the same place. I feel this project will be a great asset to the local community. Thanks for your time.
Peter G Henderson

Benedetti Car Wash

Richard Johnson <rmj52@sonic.net>

Wed 9/16/2020 12:09 PM

To: ksvanstrom@cityofsebastopol.org <ksvanstrom@cityofsebastopol.org>
Cc: David Hogan <DHogan@m-group.us>

Dear Planning Director Svanstrom and members of the Planning Commission,

This letter is in support of the application to install an automated car wash at the existing auto service center located at 6809 Sebastopol Avenue.

The project is consistent with the General Plan and compliments the existing tire/repair shop and oil changes facility currently located at the site. The project is in keeping with the surrounding commercial uses along Sebastopol Avenue. The proposed mitigation measures will enable the project to operate within all parameters established in the City.

In my view, this project has a number of positive features, including:

1) Installation of a car wash will enhance the range of automotive services offered at this location. In essence, being able to have a car washed concurrent with an oil change or repair eliminates the need for an additional trip. This adds a notable measure of convenience to the community and is consistent policies encouraging reduction in car trips.

2) The car wash is designed to use a minimal amount of water and to reclaim and reuse wash water. The system is designed with water conservation in mind.

3) Access and traffic circulation will function smoothly with the connection to Abbott and Barnes Avenues.

4) A car wash at this location will be an additional amenity to the business services located in our downtown and will contribute to the economic and employment vitality in our community.

I urge the Planning Commission to support this application.

Thank you for your courtesies.

Yours truly,

Richard Johnson

499 Hansen Lane

Sebastopol. ca. 95472

707-823-1355

Dear neighbors,

I am writing to express my support of the proposed Benedetti Car Wash site in Sebastopol. As a 44 year resident of Sonoma County I have been a long time customer of Benedetti Tire and trust they will provide the community with the same valuable service and quality they have delivered during their tenure in Sebastopol. An environmentally friendly carwash will provide me with an alternative option to washing my vehicle in my driveway which I am sure will benefit the environment. The location fits perfectly with the existing established automotive service facilities that have been there for several decades.

Thank you

Adam Burgess

Proposed Car Wash

Deb Hedge <mshawaii1960@me.com>

Wed 9/16/2020 11:53 PM

To: David Hogan <DHogan@m-group.us>

To whom it may concern,
I am delighted with the prospect and proposal set in front of you of a car wash in Sebastopol.
No longer will I have to drive to get my car washed. I can stay local in my community and get my car's oil changed and washed at the same place saving me time , wear and tear on my car and continue to help support my community.
Benedetti's Tire and oil has become the family go to for service on our cars... we trust Mark and the team he has put together to ensure our cars run efficiently and now with this new endeavor my car will be cared for from head to toe from a trusted business.
I hope you would approve this proposal and continue to allow this business to thrive and flourish as Benedetti's continues to be consistent in a world that is in flux
Thank you for your consideration in this matter
Deb Hedge
A loyal Benedetti client

Sent from my iPhone

Sebastopol Car Wash Proposal

Laura Jame <ljame@jamecpa.com>

Thu 9/17/2020 10:17 AM

To: ksvanstrom@cityofsebastopol.org <ksvanstrom@cityofsebastopol.org>; David Hogan <DHogan@m-group.us>

To Planning Commissioner Svanstrom and project contact David Hogan;

I'm writing to convey my support for the car wash proposed to be located in town at Benedetti Tire Service. As a long time resident of Sebastopol and regular customer of Benedetti Tire Service, I can see many benefits personally, economically and environmentally of having a full service, eco friendly car wash here in town. As there are no good modern options for residents to get their cars washed, we are forced to either wash our own cars or drive out of town. Not only has the cost of water service sky rocketed, but also for conservation purposes, I do not like to wash my car at my residence. This option will cost me 30-50 gallons per wash, per car and that becomes a cost prohibitive exercise for my household budget. As a result, I have to drive to Santa Rosa or Rohnert Park which is costly in terms of my time and fuel.

Given the eco friendly, state of the art technology of the new car wash proposal, the Sebastopol community will see improvements from both a cost and environmental perspective. Fewer people will be forced to wash their cars at home or have to get into their cars and drive long distances to other cities to have their cars washed. Please support the new car wash planned for Sebastopol with as much enthusiasm as do many of us in the community.

Sincerely,
Laura Jame, CPA

112 Pine Breeze Lane, Sebastopol, California 95472
Tel 707-829-8589 Fax 707-823-9760
E Mail: carybuilders@carybuilders.com
License #738609

September 17, 2020

David Hogan
M- Group City Planner – City of Sebastopol
dhogan@m-group.us

Dear Mr. Hogan,

As owner of Cary & Associates Builders, Inc., I am writing to express my support for the proposed Benedetti Car Wash facility. I believe adding a state of the art, modern high-tech vehicle washing facility in Sebastopol, would be a great asset to our community.

This new facility will allow local community members to support a local business, instead of going to out of town to Santa Rosa or Rohnert park for their car washing needs.

The car wash will implement water conservation efforts that will use less water than if we washed our vehicles at home, since the facility uses reclaimed water to prewash the vehicle prior to entering the automated facility.

I urge you to approve the Benedetti Car Wash project to move ahead allowing local community members to support local businesses. Keep our hard earned dollars local and reward long time community businesses with the ability to grow!!!

Best Regards,

Corey Cleland, CEO
Cary & Associates Builders, Inc.