City of Sonoma Planning Commission
AGENDA

Regular Meeting of July 9, 2015 -- 6:30 PM
Community Meeting Room, 177 First Street West
Sonoma, CA 95476

Meeting Length: **No new items will be heard by the Planning Commission after 10:30 PM**, unless the Commission, by majority vote, specifically decides to continue reviewing items. If an item is not heard due to the length of the meeting, the Commission will attempt to schedule a special meeting for the following week. If a special meeting is necessary, potential dates will be established at the close of this meeting, and a date set as soon as possible thereafter.

CALL TO ORDER – Chair, Bill Willers

Commissioners: Michael Coleman
James Cribb
Robert Felder
Mark Heneveld
Chip Roberson
Ron Wellander
Robert McDonald (Alternate)

Be Courteous - TURN OFF your cell phones and pagers while the meeting is in session.

PLEDGE OF ALLEGIANCE

COMMENTS FROM THE PUBLIC: Presentations by audience members on items not appearing on the agenda.

MINUTES: Minutes from the meeting of June 11, 2015.

CORRESPONDENCE

ITEM #1 – PUBLIC HEARING

REQUEST:
Consideration of an application to revise the conditions of approval for a four-lot subdivision to allow the removal of 6 additional trees on the property at 1028 Fifth Street East and 7 trees on the property at1032 Fifth Street East.

Applicant/Property Owner:
Chris Dluzak/1032, 1028 & 1036 Fifth Street East LLC

Staff: Wendy Atkins

Project Location:
1028 Fifth Street East and 1032 Fifth Street East

General Plan Designation:
Low Density Residential (LR)

Zoning:
Planning Area: Southeast Area

Base: Low Density Residential (R-L)
Overlay: None

RECOMMENDED ACTION:

Approve with conditions.

CEQA Status:
Categorically Exempt

ITEM #2 – PUBLIC HEARING

REQUEST:
Consideration of an Exception to Floor Area Ratio limitations associated with a second-story residential addition.

Applicant/Property Owner:
Darrel Jones

Staff: David Goodison

Project Location:
348 Patten Street

General Plan Designation:
Low Density Residential (LR)

Zoning:
Planning Area: Central-East Area

Base: Low Density Residential (R-L)
Overlay: Historic (/H)

RECOMMENDED ACTION:

Commission discretion.

CEQA Status:
Categorically Exempt

ITEM #3 – PUBLIC HEARING

REQUEST:
Consideration of a Use Permit to allow new and replacement commercial floor area for the Sonoma Cheese Factory as part of a multitenant marketplace, including consideration of a restaurant use and Parking Exception.

Applicant/Property Owner:
APPA Development/Viviani Trust

Staff: Rob Gjestland

Project Location:
2 West Spain Street

General Plan Designation:
Commercial (C)

Zoning:
Planning Area: Downtown District

Base: Commercial (C)
Overlay: Historic (/H)

RECOMMENDED ACTION:

Approve with conditions.

CEQA Status:
Categorically Exempt

ITEM #4 – DISCUSSION

REQUEST:
Circulation Element update: review of draft policy changes.

Applicant/Property Owner:
City of Sonoma

Staff: David Goodison

RECOMMENDED ACTION:

Provide direction to staff.

CEQA Status:
N.A.

ISSUES UPDATE
COMMENTS FROM THE COMMISSION
ADJOURNMENT

I do hereby certify that a copy of the foregoing agenda was posted on the City Hall bulletin board on July 2, 2015.

CRISTINA MORRIS, ADMINISTRATIVE ASSISTANT

Rights of Appeal: **Any decision of the Planning Commission may be appealed to the City Council.** Appeals must be filed with the City Clerk within fifteen (15) calendar days following the Planning Commission's decision, unless the fifteenth day falls on a weekend or a holiday, in which case the appeal period ends at the close of the next working day at City Hall. Appeals must be made in writing and must clearly state the reason for the appeal. Appeals will be set for hearing before the City Council on the earliest available agenda. A fee is charged for appeals.

Copies of all staff reports and documents subject to disclosure that relate to any item of business referred to on the agenda are available for public inspection the Monday before each regularly scheduled meeting at City Hall, located at No. 1 The Plaza, Sonoma CA, (707) 938-3681. Any documents subject to disclosure that are provided to all, or a majority of all, of the members of the Planning Commission regarding any item on this agenda after the agenda has been distributed will be made available for inspection at the Administrative Assistant office, No. 1 The Plaza, Sonoma CA during regular business hours.

If you challenge the action of the Planning Commission in court, you may be limited to raising only those issues you or someone else raised at the public hearing described on the agenda, or in written correspondence delivered to the Administrative Assistant, at or prior to the public hearing.

In accordance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk (707) 933-2216. Notification 48-hours before the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

City of Sonoma
PLANNING COMMISSION
REGULAR MEETING
June 11, 2015

Community Meeting Room, 177 First Street West, Sonoma, CA

Draft MINUTES

Chair Willers called the meeting to order at 6:30 p.m.

Roll Call:

Present:	Chair Willers, Comms. Heneveld, Cribb, Wellander, Roberson, Coleman, McDonald
Absent:	Comm. Felder
Others Present:	Planning Director Goodison, Senior Planner Gjestland, Associate Planner Atkins, Administrative Assistant Morris

Chair Willers stated that no new items would be heard after 10:30 p.m. unless the Planning Commission so decides. Any decisions made by the Planning Commission can be appealed within 15 days to the City Council. Comm. Heneveld led the Pledge of Allegiance.

COMMENTS FROM THE PUBLIC: Karla Noyes, resident, is concerned with future developments negatively impacting our limited water resources.

APPROVAL OF MINUTES: Comm. Heneveld made a motion to approve the Minutes of the Special Meeting on January 22, 2015. Comm. Cribb seconded. The motion was unanimously approved. (Comms. Wellander and Roberson abstained)

CHANGES TO AGENDA ORDER: None

CORRESPONDENCE: Late mail was received on Items #1 and #4, in addition to an Issues Update report prepared by staff.

Item #1 – Consideration of a Use Permit Amendment to allow an outdoor seating area for a coffee service trailer (Coffee & Coco) at 195 West Napa Street.

Applicant/Property Owner: Rocio Fuentes/Northwest Dealerco Holdings LL

Associate Planner Atkins presented staff's report.

Chair Willers opened the item to public comment.

Rocio Fuentes, applicant, explained that her business is not intended to be a drive through but she would like the option to offer repair service customers coffee while waiting for their cars to be repaired.

Comm. Roberson inquired about the fencing proposed.

The fence installer said the fence would be sturdy with the flexibility for people to go in and out. He would consult with the service station operator to ensure that it did not interfere with refueling.

Jennifer Tuffy, resident, frequented the coffee cart and supported the expansion. She valued the high level of customer service and was pleased to have a place to sit and drink a cup of coffee with her dog.

Scott Clyde, resident, enjoyed the convenience of the coffee cart location and expressed support for the application.

Chair Willers closed the item to public comment.

Comm. Roberson is concerned with the boundary/distinction between a coffee cart and café establishment.

Comm. Coleman is satisfied with the trailer and location.

Comm. Cribb discussed the proposal from a Use Permit perspective and recommended that DRHPC review be required for its design. He felt that the relationships between food trucks/ coffee carts and the neighboring businesses could be mutually beneficial, citing the El Coyote mobile food truck on Broadway as an example. He supported the use since it is not out of character for the environment and reasonable given the space.

Comm. McDonald stated that while he might be able to support a scaled-back proposal, he wanted to avoid having the use morph into a café. He confirmed with staff that a City Building permit and Sonoma County Health Department approval would be required.

Comm. Wellander supported the original application for a coffee cart with a few benches, as opposed to a café in this central location. In his view, the proposed seating was not visually compatible and would effectively transform the use into a cafe.

Comm. Heneveld agreed that the amount of seating should be reduced.

Comm. McDonald confirmed with staff that the Use Permit runs with the land not the individual/business entity and that the indoor seating ratio was applied with regard to the parking requirement.

Chair Willers supported some seats but is opposed to the intensity level of a café.

Comm. Roberson made a motion to approve four tables with eight seats, subject to conditions of approval, to include verifying that the seating area would not interfere with the fueling area for the gas station and requiring DRHPC review. Comm. Heneveld seconded. The motion was approved 6-1. Comm. Wellander opposed.

Item #2 – Public Hearing – Consideration of a Temporary Use Permit to hold the annual zucchini car race outdoors on the grounds of the Sebastiani Winery on Friday, July 31, 2015 14 389 Fourth Street East.

Applicant/Property Owner: Sonoma Valley Certified Farmers Market/Foley Family Wines, Inc.

Senior Planner Gjestland presented staff's report.

Comm. Roberson confirmed with staff that this event has not been the subject of any complaints or compliance issues.

Chair Willers opened the item to public comment.

Gary Peter, President/Sonoma Valley Certified Farmers Market, supported staff's presentation and agreed with the proposed conditions of approval.

Chair Willers closed the item to public comment.

Commissioners expressed support for the event because there was no history of it negatively impacting the neighborhood.

Comm. Roberson made a motion to approve the Temporary Use Permit as submitted, subject to the recommended conditions. Comm. Cribb seconded the motion. The motion was unanimously approved.

Item #3 – Consideration of a Use Permit to construct a new concrete foundation for a non-conforming detached garage on a residential property at 649 Second Street East.

Applicant/Property Owner: David Martineau/Mark Hoffman and Alexis deRaadt St. James

Associate Planner Atkins presented staff's report.

Chair Willers opened the item to public comment.

Dave Martineau, General Contractor, acknowledged that some of the work done was not included in the original permit so the construction project ceased so that the required approvals could be obtained.

Chair Willers closed the item to public comment.

After a brief discussion, Comm. Cribb made a motion to approve the construction of a new concrete foundation for a non-conforming detached garage, subject to the conditions of approval. Comm. Heneveld seconded the motion. The motion was unanimously approved

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Item #4 – Public Hearing – Consideration of a Use Permit amendment and Parking Exception to allow the following uses associated with the Williams-Sonoma store and culinary center at 605 Broadway: 1) conversion of residential area to retail display of home furniture/furnishings; 2) outdoor retail display and other uses in the garden area: and, 3) special events.

Applicant/Property Owner: Williams-Sonoma, Inc.

Senior Planner Gjestland presented staff's report.

Chair Willers opened the item to public comment.

Bud Cope, Senior VP Williams-Sonoma, apologized for the lapses that preceded this application. He explained that while the project was under construction, the company's vision for the property evolved. He hopes that the new proposal satisfies the concerns expressed by the Planning Commission at the last meeting and he wants to work with the Commission to ensure that the store has only positive impacts on the community.

Max Crome, Architect, Crome Architecture, stated that the staff summary was quite complete, so he would limit his comments to a few key points. He described the parking study and its findings, noting that 8 out 9 employees are Sonoma residents. With the addition of the two leased off-site spaces, to be used by employees, they feel that the normal use of the building is accommodated. He noted that, in response to direction given at the previous meeting, the scope of the proposed events has been reduced.

With regard to valet parking for special events, Bud Cope noted that they are proposing to submit a valet parking plan for staff review and approval prior to each event.

Comm. Roberson confirmed with the architect that there is no written agreement in place with USPS to use the adjacent parking spaces during special events, that space was identified in the narrative as an example. On the issue of ADA access within the building, he confirmed that an access specialist had been retained in order to ensure that all requirements were met. Through this review, and in consultation with the Building Official, it was determined that an elevator would not be required since it is a historically significant building.

Comm. Wellander asked if the same valet service for the grand opening would be used. The applicant confirmed that a different service, Gilmore Valet is contracted.

Comm. Cribb confirmed with the applicant that many of the special events proposed are similar to the events at the other flagship stores, such as book signings and cooking classes; however, the larger scale events, such as the Chuck Williams birthday celebration, are unique to Sonoma. Comm. Cribb noted that the use of the post office has minimal impacts, as it is right next door to the site, but what other sites might be used for valet parking?

Jeff Gilmore, owner/operator Gilmore Valet (Sonoma resident since 1989), has worked four events for Williams-Sonoma. He has developed a good relationship with the USPS Postmaster and in conjunction with previous events she has previously given permission, on a case-by-case basis, to park cars at the north end of the parking lot during times when the Post Office is closed provided sufficient parking spaces are retained for Post Office box customers. For most larger events, the Post Office in conjunction with the store's on-site parking lot is sufficient. For a day event, a local church parking lot was used successfully for a previous event. More remote lots can be used in conjunction with a shuttle van.

Comm. Coleman confirmed that Williams-Sonoma is renting the back house behind the store to store furniture and supplies. Bud Cope confirmed that this was the case, but noted that they did have a long-term lease on the property.

Chair Willers inquired about the future plans for proposed mid-sized and large special events at the store. The applicant identified the following examples: Chuck Williams Birthday on October 2nd, Thomas Keller (or other celebrity) book signing, or special cooking class.

Larry Barnett, 627 Fifth Street East, objected to the proposed changes to intensify the use of this site. He is of the opinion that nostalgia and marketing may have initially dictated the decision of Williams-Sonoma to return to Sonoma, but now the corporation is looking for a return on its investment. He felt that Williams-Sonoma was aware of the site limitations when they made their original application and asking for exceptions after the fact is unacceptable. In his view, using valet parking to accommodate an intensified use distorts the planning process. He feels an approval will set a bad precedent for other retailers to do the same and encouraged the Planning Commission to either deny the application or, at most approve a maximum of three medium sized events per year.

Karla Noyes, resident, agreed with Mr. Barnett's comments that events at the site would have an adverse impact on traffic and parking.

Tom Rouse, resident, applauded the decision of Williams-Sonoma to return to Sonoma and feels they are a great asset to the community. They have been good stewards to date and their current proposal makes sense. He feels the valet parking proposal is a good idea and in his view parking options are available to accommodate the special events.

Donna Harrah, Solano Avenue, views the changes as positive as there is a potential to provide jobs for the youth in the community. Williams-Sonoma is bringing people to Sonoma and adding to its vitality. In her view they have responded well to the direction given by the Planning Commission at the previous meeting.

Regina Baker, neighbor, is disappointed with the implementation of the original proposal and the proposed changes. In her view, the proposed events will be a detriment to the neighborhood. She noted that the Post Office lot is not guaranteed and she questioned the validity of the parking survey.

David Eichar, 1110 Loma Court, is concerned that special events will have a negative impact on residents. He is disappointed that the upstairs space is not wheel-chair accessible and contended that the parking survey is flawed. He feels that the valet parking should be free and that more off street parking spaces should be provided for employees. He recommended that the application be denied with respect to additional events.

Mary Martinez, resident, referenced her letter. She is not satisfied with the 20% reduction in the number and scale of proposed events and concurred with the concerns expressed by Larry Barnett. She noted that any use permit will run with the land. She suggested that the identity and quality of life in Sonoma are being compromised. She said that converting retail to an event center on the heavily traveled Broadway corridor is not appropriate and code enforcement for each event is problematic.

Gene Mai, resident (First Street West), said that the City denied his request for five feet of red-curb marking on First Street West that would have improved sight distance from the Carneros Lofts driveway.

Will Honeyborne, resident, is concerned with the proposal for the mid- and large-sized events. In his view, it is not the right place. He noted that some will not use valet parking, which will result in parking impacts. He is also concerned about enforcement.

Doug Mile, architect and resident on Fifth Street East, stated that the store is one of the best establishments that has opened in Sonoma in a long time. They have restored what was a tear-down into a culinary arts center. The proposed level of events is appropriate to the site and its

location on Broadway. Having the City review the valet parking on an event basis will ensure that that is adequate. The presence of the store is a great addition to Broadway and they have reduced the scale of the proposed events as requested by the Planning Commission.

Chair Willers closed the item to public comment.

Comm. Roberson stated that he was ambivalent about the proposal and looked forward to hearing from other Commissioners. He noted that, by way of example, the Williams-Sonoma grand opening was excessive with respect to crowding within the site. [The estimated attendance at that event was 120 persons.] There are limitations on what the space can accommodate. He appreciates the modifications that have been made in response to the previous direction. He is concerned about how disabled persons will be accommodated with the valet parking. On the other hand, that block has experienced a lot of business turnover. Having Williams-Sonoma there can be a positive for other businesses. The property has been revitalized and we want it to succeed. He is open to trying to make it work.

Comm. McDonald appreciates the renovation that has occurred and its contribution to the area. He is not satisfied that all issues are resolved in the current proposal but is willing to work with the applicant to reach a solution that works for all. He suggested that it may be desirable to have long-term parking agreements in place for special events. He noted that the parking analysis was done in the spring, but peak demand occurs in the summer. He would like to make sure that the applicant will keep the site and its surroundings clean with respect to potential trash from the take-out use. He wants to make sure that the proposal complies with ADA requirements. That said, he would like to give the applicant a chance, especially as the special events allowance would be reviewed after one year.

Comm. Cribb feels it is customary for a business to expect to make a profit. He sees value in Williams-Sonoma and in Chuck Williams as a prominent figure in the food industry to attract potential visitors to Sonoma. He compared the special events proposed on the subject property to Plaza events, which are far larger in scale and yet accommodated. He is of the opinion that some people are overstating the negative impacts associated with the proposal and stressed the importance of keeping the valet parking more fluid by allowing them to find sites as needed, with City staff review of the parking plan prior to each event. In his view, an evening event of up to 80 people is not excessive and can readily be accommodated, especially as many businesses in that area are closed.

Comm. Wellander is comfortable with a one-year trial period for special events as long as they manage them carefully and comply with the conditions. If during the trial period the impacts that some anticipate are manifested, the Commission may choose not to renew the use.

Comm. Coleman stated that he had reviewed the applicant's revised proposal carefully and was impressed with how they responded to the Planning Commission. In his view, the proposal will benefit the community and he is generally in support of it. He noted that the Post Office parking option has proved successful. They have done a great job on the renovation and he is confident that they will execute the proposed changes well and in a manner that respects the neighbors.

Comm. Roberson clarified with staff the elements of the application that represented a permanent change in use and those that were related special events and subject to a one-year trial period.

Comm. McDonald suggested a modification to Condition 2.E.

Comm. Heneveld expressed the view that the proposal before the Commission exceeded what he felt was appropriate for the property.

Chair Willers stated that he was disappointed with actions taken by Williams-Sonoma leading up to this application. Whether or not there was a deliberate intention to mislead, it reflects badly on Williams-Sonoma and he is not convinced that the current proposal would have been approved by the Planning Commission if it had been presented as such in the original application. He personally would not have voted for it. That said, in terms of the changes in the balance of uses, such as the outdoor retail display, it appears to function acceptably and parking appears to be adequate, especially given the mitigation that has been provided in response to the Commission direction at the previous meeting. Moving forward, he has great concern about the proposed event allowance. In his view, the findings to support events at the level requested cannot be made. These are corporate events, not community events. If an allowance for events is made, he believes it would be more manageable in terms of enforcement to define a single size limit for events, rather than having two classes of events (medium and large) as is currently proposed. The maximum size and the number of events should be reduced and Sundays should be kept free from events. In response to a question from Chair Willers, staff clarified that the total amount of parking in the Chase Bank parking lot appears adequate to support the two spaces that have been made available to Williams-Sonoma for additional employee parking.

Comm. Cribb disagreed with Chair Willers that the proposed type and scale of events were inappropriate. Third-party rentals are prohibited. It is not the nature of the events that are proposed that are problematic as these activities are directly related to their business. In his view, the main issue is parking, which what the Commission is looking at.

Comm. Roberson noted the book readings/author signings at Reader's Books as a point of comparison, that there may be as many as 60 people in attendance.

Chair Willers stated that he would like the Commission to address the permanent operational changes that have been proposed and the request for special events as separate motions. Comm. McDonald does not oppose a retail expansion indoors, as long as ADA requirements are met, but expressed some concern about the outdoor retail display.

The Commission reviewed the previous design that had been proposed for the outdoor area. After some discussion, the Commission reached a majority consensus that outdoor retail display of Williams-Sonoma products was an appropriate use.

Comm. Cribb made a motion to approve the use permit and parking exception for changes in the retail use of the building and the site, subject to conditions #1, 2 and 4, including the modification of condition of condition #2.E, to specify that two off-site spaces shall be provided, with the lease subject to staff review. Comm. McDonald seconded the motion.

Roll Call Vote: Ayes: Chair Willers, Comms. McDonald, Cribb, Wellander, Coleman; Noes: Comm. Heneveld (Comm. Roberson abstained). The motion was approved 5-1-1.

The Commission discussed whether the number and attendance allowed for special events should be scaled back further. Comm. Roberson stated that he viewed this as an experiment and he is willing to try it as proposed and see how the community reacts, knowing that it will be reviewed in one year and would be subject to additional conditions or termination at that time.

Comm. Wellander suggested that there be a limit of a single large event and fewer medium events, then let them prove themselves to be good neighbors during the trial period. If it works,

then the numbers could be increased following the one-year review, based on neighborhood feedback.

Comm. Roberson stated that limiting them to one large event during the trial period would not provide enough data points for an evaluation.

In response to a question from Comm. McDonald, staff and the project architect confirmed that the building occupancy allowance exceeds the number of attendees that would be permitted in a large event.

Chair Willers stated that while he did have significant concerns regarding the proposed allowance for events, he agreed that if a trial period is granted, then a number of events should be allowed in order to facilitate evaluation. He feels that there should be a single maximum size, of between 40 and 80, with a single limit on the number of events, as this will simplify enforcement.

Comm. Coleman agreed that a trial period was appropriate and he felt that having two classes of events would allow them to experiment with different models.

Comm. Roberson stated he was comfortable with proceeding with the event definitions and limits as proposed. The Commission discussed possible amendments to the conditions, including a prohibition of events on Sunday, a 9:00 p.m. cut-off, and a prohibition on amplified music.

Comm. Roberson made a motion to approve a temporary use permit allowing events, with the event definitions and maximum number of events as proposed, with the following amendments to the conditions of approval: 1) prior notification of events by the applicant to any interested parties, and 2) medium and large events, as defined in the project narrative, shall be prohibited on Sunday. Comm. Wellander seconded the motion.

Roll Call Vote: Ayes: Comms. Roberson, Wellander, McDonald, Cribb; Noes: Comms. Heneveld, Coleman and Chair Willers. The motion was approved 4-3.

Planning Director Goodison reported the following:

Planning Director Goodison presented a summary update of current projects in Sonoma.

Commissioner comments: Comm. McDonald inquired about EIR scoping review for the Chateau Sonoma hotel project that will be considered at a Special Meeting on June 25th.

Comments from the Audience: None

Adjournment: Comm. Heneveld made a motion to adjourn the meeting at 9:52 p.m. to the next meeting, scheduled for 6:30 p.m. on Thursday, June 25, 2015. Comm. Roberson seconded. The motion was unanimously adopted.

I HEREBY CERTIFY that the foregoing minutes of were duly and regularly adopted at a regular meeting of the Sonoma Planning Commission on the day of , 2015.

Approved:

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Cristina Morris, Administrative Assistant

City of Sonoma Planning Commission **STAFF REPORT**	***Agenda Item #1*** ***Meeting Date: 07-09-15***

Agenda Item Title: Application to revise the conditions of approval for a four-lot subdivision to allow for the removal of 13 additional trees.

Applicant/Owner: Chris Dulzak/1032/1028 & 1036 Fifth St E LLC

Site Address/Location: 1028 and 1032 Fifth Street East

Staff Contact: Wendy Atkins, Associate Planner
Staff Report Prepared: 07/01/15

PROJECT SUMMARY

Description: Application of Chris Dluzak to revise the conditions of approval for a four-lot subdivision to allow for the removal of six trees on the property at 1028 Fifth Street East and seven trees on the property at 1032 Fifth Street East.

General Plan Designation: Low Density Residential

Zoning: **Base:** Low Density Residential (R-L) **Overlay:** None

Site Characteristics: The property at 1028 Fifth Street East is a ±10,975 square foot lot and the property at 1032 Fifth Street East is a ±11,347 square foot lot. Both are located on the east side of Fifth Street East, directly across from Eastin Drive. The property at 1028 Fifth Street East is currently undeveloped and the property at 1032 Fifth Street East is partially developed with a one-story residence and attached garage.

Surrounding Land Use/Zoning:
North: Single-family home/ Low Density Residential (R-L)
South: Single-family home/ County zoning Rural Residential
East: Vacant lot/ County zoning (Rural Residential)
West: Single-family home/ Low Density Residential (R-L)

Environmental Review:

- ☒ Categorical Exemption
- ☐ Negative Declaration
- ☐ Environmental Impact Report
- ☐ Not Applicable
- ☐ Approved/Certified
- ☒ No Action Required
- ☐ Action Required

Staff Recommendation: Staff recommends approval, subject to conditions.

PROJECT ANALYSIS

BACKGROUND

On October 14, 2010, the Planning Commission approved a Mitigated Declaration, a Tentative Map, and an Exception for the 4-lot subdivision (see attached minutes), which decision was appealed to the City Council. On December 15, 2010, the City Council upheld the decision of the Planning Commission, in conjunction with amendments to the conditions of project approval. Subsequently, on January 5, 2011, the City Council adopted Resolution No. 01-2011 implementing the project approval (see attached Resolution and meeting minutes). On June 27, 2013, the Tree Committee approved an application to remove six trees on the property located at 1032 Fifth Street East, subject to an on-site replacement ratio of six each 15 gallon trees or three each 24-inch box size trees, in addition to the minimum replacement ratio of 2:1 (15-gallon) unless replaced with 24-inch box sized trees, then a lesser replacement ratio may be accepted.

DETAILED PROJECT DESCRIPTION

Prior to the approval of the four-lot subdivision there were 32 trees on the property. During the project review the City Council approved the removal of 16 trees on the site. Subsequently, 14 trees were removed including four trees that were removed without City approval. Currently, there are 18 trees on the site (1028, 1032, 1036, and 1040 Fifth Street East). Of the 18 remaining trees, seven have been approved for removal by the City. The applicant is proposing to remove an additional four trees on lot 1 (1028 Fifth Street East) and five trees on lot 2 (1032 Fifth Street East). The applicant is proposing to preserve two existing trees on the site (trees #5 and 6, located on Lot 4, 1040 Fifth Street East).

1028 Fifth Street East (Lot 1): There are four existing trees proposed to be removed (tree #s 4, 16, 17, 22). Two trees (#s1 and 2) were removed without approval by the City by a previous property owner. The applicant has stated that tree #4 should be removed because tree roots were torn as part of the grading for the driveway and that the long-term prospects for the tree are not good. Tree #16 experienced root loss when the grading was completed for the bio-swale and the applicant does not believe that the arborist recommendations are sufficient with regard to bracing. The tree species--Modesto Ash--is also known for having moderate to weak structure and the tree would overhang the residence. The applicant is proposing to remove tree #17 because the tree has an inherently weak union, it suffered root loss associated with the bio-swale drainage improvements, and it has an aggressive root system that may be damaged due to construction related to the foundation for the residence proposed at 1028 Fifth Street East (Lot 1). Tree #22 is proposed to be removed because it has been pollarded (a pruning practice in which a tree with a large-maturing form is kept relatively short), is known to have a weak branch structure, and has a shallow, aggressive root system.

1032 Fifth Street East (Lot 2): There are five existing trees proposed to be removed on Lot 2 (1032 Fifth Street East) (#s 13, 14, 15, 20, and 21). While these trees were approved for removal by the Tree Committee on June 27, 2013, their decision requires final approval by the Planning Commission. In addition, tree #18 was removed without approval by the City by a previous property owner and tree #19 was approved by the Tree Committee on June 27, 2013 and removed following Tree Committee review. The applicant has stated that the tree #s 13, 14, 15, 20, and 21 are proposed to be removed in order to develop a landscape plan that is consistent with the aesthetics of the proposed remodel and addition to the existing residence.

GENERAL PLAN CONSISTENCY **(☐Not Applicable to this Project)**

The property is designated Low Density Residential by the General Plan, which permits single-family homes and related accessory structures. The proposal does not raise any issues in terms of consistency with regard to General Plan goals and policies.

DEVELOPMENT CODE CONSISTENCY **(☐Not Applicable to this Project)**
Use: The property is zoned Low Density Residential (R-L). Single-family homes and related accessory structures are permitted uses in the R-L zoning district. The subdivision, tentative map, an exception was subject to Planning Commission approval, as such, any revisions to the project not consistent with the conditions of approval require review by the Planning Commission.

CONSISTENCY WITH OTHER CITY ORDINANCES/POLICIES **(☒Not Applicable to this Project)**

ENVIRONMENTAL REVIEW **(☐Not Applicable to this Project)**
Pursuant to Section of 15315 of the State CEQA Guidelines, the division of property in urbanized areas zoned for residential, commercial, or industrial us into four or fewer parcels, is categorically exempt from the provisions of CEQA (Class 15 – Minor Land Divisions).

DISCUSSION OF PROJECT ISSUES
Privacy screening: In staff's view the issue of most concern with the proposal to remove an additional 9 trees on Lots 1 and 2 is that of neighbor privacy screening. When the project was approved by the City Council a further condition of approval was added to provide additional plantings along the northern and southern property lines in order to minimize privacy impacts on adjoining neighbors. The applicant has submitted a preliminary landscape plan (see attached), which indicates that 17 trees (all 24-inch box size) are proposed to be planted on the properties located at 1028, 1032, and 1036 Fifth Street East (Lots 1, 2, and 3) along with a variety of shrubs and groundcovers. The preliminary landscape plan includes two Trident maple trees and a wall of chocolate bamboo, which will provide privacy screening for the properties to the north. Properties to the south are proposed to be screened with a variety of shrubs that can grow up to 6 to 8 feet in height. In addition, 4 Chinese fringe, 2 goldenrain, 4 crape myrtle, 2 pistachio, 1 additional trident maple, and 2 zelkoya trees are propose to be planted. The landscape plans shall require review and approval by the Design Review and Historic Preservation. The Planning Commission should determine if 17 replacement trees meets the tree replacement ratio recommended by the Tree Committee. The following is a summary of the recommended tree replacement ratio:

- Trees removed from the site shall be replaced at a 2:1 ratio with 15-gallon trees or a lesser ratio if 24-inch box size replacement trees are used.
- With regard to the request to remove an additional six trees, the Tree Committee recommended an on-site replacement ratio of 3 each 24-inch box size trees in addition to the replacement ratio noted above.

There are 18 existing trees on the property, 11 of which were recommended to be preserved in the arborist report and provide screening from adjacent properties. Nine of the 11 trees recommended to be preserved in the arborist report (#s 4, 13, 14, 15, 16, 17, 20, 21, 22) are proposed to be removed at this time, primarily due to root damage and in order to develop a landscape plan that is consistent with the aesthetics of the proposed remodel and addition to the existing residence. However, tree #22 is proposed to be removed because it has been pollarded and has an aggressive root structure.

Trees on adjoining properties: The applicant has also been in contact with the property owner to the south to explore the possibility of removing a eucalyptus tree and a Black Walnut tree. These trees are not on the subject properties and were not included as part of the arborist report conducted for the property. In addition, as this property is located outside of the City of Sonoma boundaries, the City has

no jurisdiction with regard to tree replacement ratios. If these trees are proposed to be removed, the applicant should contact the County of Sonoma to determine the tree removal process.

Trees removed without approval: Four trees were removed without approval by the City (#s1, 2, 18, and 19). The applicant has indicated that trees #1 and 2 were removed in order to accommodate the driveway, which was relocated to protect the Valley Oak tree located on the property north of Lot 1 (see original condition of approval number 15.d). The applicant does not know why tree #18 was removed. Tree #19 was removed post Tree Committee review.

1040 Fifth Street East: The applicant has not suggested any additional tree removal proposed for Lot 4 (1040 Fifth Street East). The applicant has stated that there is no current development plan for this lot. While there are four existing trees on the site (#s5, 6, 7, 8), the City has approved the removal of two trees on the site (#s7, 8). In the future if the applicant wishes to remove tree numbers 7 and 8 a request to revise the conditions of approval shall be made to the Planning Commission.

RECOMMENDATION

Staff recommends approval subject to the attached conditions.

Attachments

1. *Draft Conditions of Approval*
2. *Location Map*
3. *Supplemental Tree Information for Lots 1 & 2 of the Fichtenberg Subdivision (1028 & 1032 Fifth Street East (dated June 26, 2015)*
4. *Supplemental Tree Information for the Fichtenberg Subdivision (dated June 12, 2015)*
5. *Tree Protection Plan 20144 Fifth Street East (dated June 19, 2010)*
6. *Tree Removal approval Letter dated July 3, 2013*
7. *Tree Removal application dated May 23, 2013*
8. *Resolution No. 01-2011*
9. *Minutes form the December 15, 2010 City Council meeting*
10. *Minutes from the October 10, 2010 Planning Commission meeting*
11. *Preliminary landscape plan*
12. *Picture of chocolate bamboo*

cc: Chris Dluzak, via email

1032/1028 & 1036 Fifth St E LLC
1415 Fulton RD #205
Santa Rosa, CA 95403-7661

Charlie and Cindy Wiles
20148 Fifth Street East
Sonoma, CA 95476

Jennifer Arnold and George Greene
501 Este Madera Lane
Sonoma, CA 95476

Carol Schantz
476 Pear Tree Court
Sonoma, CA 95476

Bella Fox
511 Este Madera Lane
Sonoma, CA 95476

Peter and Deanna LaVault
568 Este Madera Drive
Sonoma, CA 95476

Dan Meader
19745 Eighth Street East
Sonoma, CA 95476

Charles Boles
474 Denmark Street
Sonoma, CA 95476

Suzi Pignataro
502 Este Madera Lane
Sonoma, CA 95476

The Hardister Family
515 Este Madera Lane
Sonoma, CA 95476

Robert Felder
1025 Fifth Street East
Sonoma, CA 95476

DRAFT

City of Sonoma Planning Commission
CONDITIONS OF APPROVAL
FINDINGS OF PROJECT APPROVAL
Dluzak Revised Conditions of Approval for a four-lot Subdivision – 1028 and 1032 Fifth Street East

July 9, 2015

1. The project shall be constructed in conformance with the approved site plan, floor plan, and building elevations, and conditions of approval dated December 15, 2010 except as modified by these conditions.

   Enforcement Responsibility: *Planning, Building and Public Works*
   Timing: *Prior to issuance of a building permit; Ongoing*

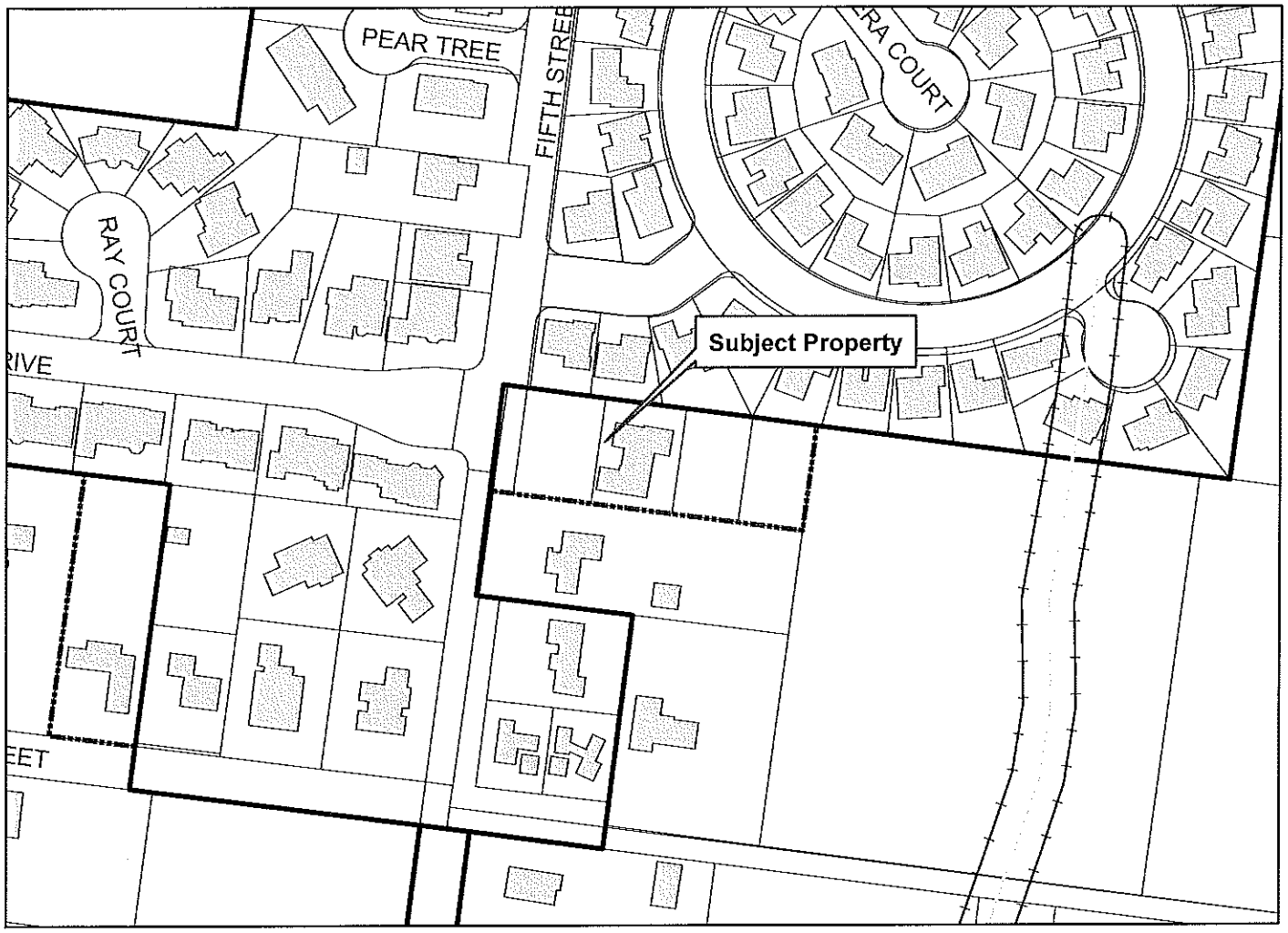
2. The applicant shall pay the fines associated with the illegal removal of trees (#s 1, 2, and 18), pursuant to section 12.08.080 of the Municipal Code. The project arborist shall determine the amount of the appraised value of each of the trees.

   Enforcement Responsibility: *Planning Department*
   Timing: *Prior to issuance of any building permit*

3. The project shall adhere to the tree protection measure included with the arborist report.

   Enforcement Responsibility: *Planning, Building and Public Works*
   Timing: *Prior to issuance of any building permit*

Vicinity Map



Project Summary

Project Name:	Dluzak Subdivision
Property Address:	1028 and 1032 Fifth St. E.
Applicant:	Chris Dluzak
Property Owner:	1032/1028&1036 Fifth St.
General Plan Land Use:	Low Density Residential
Zoning - Base:	Low Density Residential
Zoning - Overlay:	N/A

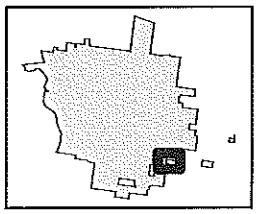
Summary:
Consideration to revise the conditions of approval for a four-lot subdivision to allow for the removal of 13 additional trees.

0 100 200 400 Feet

1 inch = 200 feet

Zoning Designations

R-HS	Hillside Residential (1 D.U./10acres, maximum)
R-R	Rural Residential (2 D.U./acre, maximum)
R-L	Low Density Residential (2-5 D.U./acre)
R-S	Sonoma Residential (3-8 D.U./acre)
R-M	Medium Denisty Residential (6-10 D.U./acre)
R-H	High Density (9-12 D.U./acre)
R-O	Housing Opportunity (15-20 D.U./acre)
R-P	Mobile Home Park (7 D.U./acre, maximum)
MX	Mixed Use (12 D.U./acre, maximum)
C	Commercial (15 D.U./acre, maximum)
C-G	Commercial-Gateway (15 D.U./acre, maximum)
W	Wine Production
P	Public Facility
Pk	Park
A	Agriculture



N

BALCERAK DESIGN

LANDSCAPE ARCHITECTURE • ARBORICULTURE

631 Fifth Street, Suite 205 Santa Rosa, CA 95404 (707) 573-8234

June 26, 2015

RECEIVED

JUN 26 2015

CITY OF SONOMA

Chris Dluzak
1028 & 1032 Fifth St. E., LLC
3877 Gravenstein Highway South
Sebastopol, CA 95472

Re: Supplemental Tree Information for Lots 1 & 2 of the Fichtenberg Subdivision (1028 & 1032 Fifth Street East).

INTRODUCTION

This letter has been created to clarify the current status of the trees located on Lots 1 and 2 of the Fichtenberg Subdivision. The following inventory of trees represents those trees that where indicated in the Sherby Sanborn Consulting Arborist Report as to be retained. At the time that the Sherby Sanborn Consulting Arborist Report was prepared Grading Plans, and Utility Plans where not available. As a result some trees were removed to install the subdivision drainage improvements. Additionally, the driveway alignment was shifted to the south to provide a more adequate root protection zone for the large Oak tree that is on the adjacent parcel just to the north boundary line of the subdivision.

LOT 1

TREE #1 – After the Sherby Sanborn Consulting Arborist Report was issued the project was conditioned to relocate the common driveway to the south to provide additional space for the large Oak tree situated to the north of the subject property. As a result of this Tree #1 was removed when the common driveway was installed.

TREE #2 – As with Tree #1, this tree was removed due to the condition requiring the driveway be moved to the south to provide space for the large Oak.

TREE #4 – This tree is proposed for removal, the *Supplemental Tree Information for the Fichtenberg Subdivision* (dated 6/12/15 as prepared by this office provides information about the reasons for proposed removal).

TREE #16 – This tree is proposed for removal, the *Supplemental Tree Information for the Fichtenberg Subdivision* (dated 6/12/15 as prepared by this office provides information about the reasons for proposed removal).

TREE #17 – Trees #17 and #18 are mislabeled in the Original Report, Tree #17 is on Lot 1 and Tree #18 (which has been removed) was on Lot 2. Tree #17 the *Liquidambar*

styraciflua, is proposed for removal. The *Supplemental Tree Information for the Fichtenberg Subdivision* (dated 6/12/15 as prepared by this office provides information about the reasons for proposed removal).

TREE #22 – This tree is proposed for removal, the *Supplemental Tree Information for the Fichtenberg Subdivision* (dated 6/12/15 as prepared by this office provides information about the reasons for proposed removal).

TREE #24 – This tree was identified as a poor specimen and the option of remove and replace is offered in the Sherby Sanborn Consulting Arborist Report. This tree was removed to install the subdivision drainage improvements.

TREE #26 – This tree was identified as a poor specimen and the option of remove and replace is offered in the Sherby Sanborn Consulting Arborist Report. This tree no longer exists, there are no clear indications of why this tree was removed.

TREE #28 – Although this tree is indicated to remain in the Sherby Sanborn Consulting Arborist Report, this tree has been removed already. There are no clear indications of why this tree was removed.

LOT 2

TREE #13 – This tree is proposed for removal. The Arborist's Report prepared by this office for Lot 2 (1032 Fifth Street East, dated June 20, 2013) provides greater detail about the condition of the trees and the rational for their removal.

TREE #14 – This tree is proposed for removal. The Arborist's Report prepared by this office for Lot 2 (1032 Fifth Street East, dated June 20, 2013) provides greater detail about the condition of the trees and the rational for their removal.

TREE #15 – This tree is proposed for removal. The Arborist's Report prepared by this office for Lot 2 (1032 Fifth Street East, dated June 20, 2013) provides greater detail about the condition of the trees and the rational for their removal.

TREE #18 – Trees #17 and #18 are mislabeled in the Original Report. Tree #17 is on Lot 1 and Tree #18, which has been removed, was on Lot 2. There are no clear indications of why this tree was removed.

TREE #19 – This tree is proposed for removal. The Arborist's Report prepared by this office for Lot 2 (1032 Fifth Street East, dated June 20, 2013) provides greater detail about the condition of the trees and the rational for their removal.

TREE #20 – This tree is proposed for removal. The Arborist's Report prepared by this office for Lot 2 (1032 Fifth Street East, dated June 20, 2013) provides greater detail about the condition of the trees and the rational for their removal.

TREE #21 – This tree is proposed for removal. The Arborist's Report prepared by this office for Lot 2 (1032 Fifth Street East, dated June 20, 2013) provides greater detail about the condition of the trees and the rational for their removal.

Please feel free to contact me if further discussion of these items is necessary, or if you have any questions.

Respectfully,
BALCERAK DESIGN

Gary Balcerak
Landscape Architect C-3704
Certified Arborist WE-3069A
Certified Urban Forester 125

BALCERAK DESIGN

LANDSCAPE ARCHITECTURE • ARBORICULTURE

631 Fifth Street, Suite 205 Santa Rosa, CA 95404 (707) 573-8234

June 12, 2015

Chris Dluzak
1028, 1032, & 1036 Fifth St. E., LLC
3877 Gravenstein Highway South
Sebastopol, CA 95472

Re: Supplemental Tree Information for the Fichtenberg Subdivision.

BACKGROUND

On June 19, 2010 Sherby Sanborn Consulting Arborist issued the original Arborist Report for the Subdivision. As is stated in the Summary portion of the document – "*The information regarding this project does not include a grading plan or utility plan. In addition, construction details for the front driveway section that will include pervious pavement are not included. Because roots are shallow, in an aggregate base is installed below the pavers, tree roots will probably be destroyed. Additionally, utility lines including sewer and water are commonly installed in trenches below the driveway.*" Therefore, not all of the impacts to the trees were discoverable at the time the original Report was issued.

The Subdivision Improvements were installed then construction stalled for a period of time, and the project ownership changed. In 2013 I was retained to act as the Project Arborist. Due to the relocation of the entry drive, to enhance the root protection area of the adjacent valley oak, the installation of drainage improvements, and other factors, a number of trees that were originally intended to be preserved ended up being removed.

The following chart identifies the 32 trees that were contained in the Sanborn Report, and lists each tree by its tree number, species, their status as recorded in the Sanborn Report, their current status in the field, and notes on why trees where removed. The tree removal notes reflect the obvious conditions that necessitated removal, such as the relocation of the driveway and the sidewalk improvements along the street frontage of Fifth Street East.

ANALYSIS

A more detailed analysis of the proposed tree removals for Lot 1 is in the following section. On July 3, 2013 the City issued a letter stating that removal of all the trees on Lot 2 was approved. All the trees on Lot 3 have been previously approved for removal. The four trees on Lot 4 all still exist on the site and appear to be in the same condition as reported in the Sanborn Report.

JUN 1 5 2015

TREE	SPECIES	STATUS ANTICIPATED	CURRENT STATUS	TREE REMOVAL NOTES
1	Malus sp.	Save	Gone	Driveway relocation
2	Malus sp.	Save	Gone	Driveway relocation
3	Prunus sp.	Remove	Gone	Driveway relocation
4	Platanus x hispanica	Save	Existing	
5	Quercus lobata	Save	Existing	
6	Juglans nigra	Save	Existing	
7	Juglans nigra	Remove	Existing	
8	Juglans nigra	Remove	Existing	
9	Acer palmatum	Remove	Existing	
10	Ulmus parvifolia	Remove	Gone	Unknown why tree was removed
11	Ulmus parvifolia	Remove	Gone	Unknown why tree was removed
12	Acer palmatum	Remove	Existing	
13	Maytenus borea	Save	Existing	City Tree Removal Letter dated 6/3/13
14	Morus nigra	Save	Existing	City Tree Removal Letter dated 6/3/13
15	Ligustrum lucidum	Save	Existing	City Tree Removal Letter dated 6/3/13
16	Fraxinus velutina 'Modesto'	Save	Existing	
17	Photinia x fraseri	Save	Existing	
18	Liquidambar styraciflua	Save	Gone	Unknown why tree was removed
19	Liquidambar styraciflua	Save	Existing	City Tree Removal Letter dated 6/3/13
20	Ligustrum lucidum	Save	Existing	City Tree Removal Letter dated 6/3/13
21	Citrus x lemon	Save	Existing	City Tree Removal Letter dated 6/3/13
22	Morus alba	Save	Existing	
23	Cinnamomum camphora	Remove	Existing	
24	Pinus sylvestris	Save?	Gone	Drainage improvements
25	Fraxinus velutina 'Modesto'	Remove	Existing	
26	Ligustrum lucidum	Save?	Gone	
27	Prunus persica	Remove	Gone	Unknown why tree was removed
28	Acer platanoides 'Crimson King'	Save	Gone	Unknown why tree was removed
29	Ligustrum lucidum	Remove	Gone	Unknown why tree was removed
30	Quercus lobata	Remove	Gone	Public sidewalk improvements
31	Quercus lobata	Remove	Gone	Public sidewalk improvements
32	Quercus lobata	Remove	Gone	Public sidewalk improvements

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DETAILS FOR TREE REMOVAL ON LOT 1

None of the trees that are being proposed for removal are native to California, none represent particularly great examples of their species and all have issues. My professional opinion is that the removals proposed are in the best interest of the project to assure that the new residences and associated landscaping provides a sustainable and aesthetically pleasing environment for many years to come.

Specifically regarding Tree #4, although the original Arborist Report said to retain this tree there is also language that reads "*The adjacent proposed driveway not specify pervious pavement adjacent to this tree. Grading and fill are not specified and this tree is close enough to the driveway that impacts to roots could be significant.*" And recommends "*This tree should be preserved. I recommend that pervious pavement be extended through the dripline of this tree without excavation and tunneling under roots for utilities if they are installed through the driveway. This tree should be protected following the guidelines in Appendix A.*" When I observed the tree clear evidence that roots had been torn, as part of the grading operation for the common driveway, was apparent. Unless there is evidence that the arborist was present when the grading was done there is no way to know how extensive the root damage was. In addition, grading for the driveway to support Lot 1 will impact the roots on two more sides of the tree, resulting in as much as 80-85% of the root zone being impacted. Given that trees often take years to show signs of decline it is my professional opinion that the long-term prospects for this tree are not good and removal and replacement is appropriate.

Tree #16 experienced root loss when the grading was done for the bio-swale again the exact extend of the root loss is unknowable at this point. The original Report states: "*At their union the three trunks have acute angles of attachment and imbedded bark. This is an inherently weak structure that can cause one or more trunks to fail. I recommend the trunks be braced with threaded rod if it is preserved.*" To install a rod to cable the trunks together means having to drill through the trunks this becomes a primary entry site for decay pathogens. While this type of mitigation is not uncommon to be effective the threaded rod, trunks, and the union itself need to be inspected annually, it is unlikely that this type of inspection schedule could be maintained. Modesto Ash is known for having moderate to weak structure and co-dominate leaders (as in this tree) are very common. Given that the tree would overhang the residence as well as the rear yard I think this tree represents enough hazard potential to be deemed unacceptable. I think removal is the best option.

Trees #17 and #18 are mislabeled in the Original Report, Tree #17 is on Lot 1 and Tree #18 (has been removed) was on Lot 2. The original Report states that the development impacts are "*...potentially significant. The tree is growing along the property line between lot 1 and 2. The building envelope of the house on lot 1 is close to this tree and foundation trenching and soil*

JUN 15 2015

compaction may affect it." As with Tree #16 there was root loss associated with the bio-swale grading and the roots would be farther impacted by the trenching required for the foundation and the patio area. Sweetgum trees have notoriously shallow and aggressive root systems and although commonly planted are not a particularly desirable species. Again it is my opinion that the long-term prospects are not good for this tree and removal aud replacement is a much better optiou.

Tree #22 is a Fruitless Mulberry that has been pollarded – a pruning practice in which a tree with a large-maturing form is kept relatively short. Starting on a young tree, cuts are made at a chosen height, resulting in the development of callus knobs at the cut height. This pruning practice requires annual removal of the sprouts arising from the knobs. Of all the trees I think this one is the only one that is really situated in a location that it could be retained. However, these trees are known to have weak branch structure, have shallow aggressive root systems, and are not considered a desirable species. Additionally, being deciduous this tree is without foliage part of the year – therefore, would only be partially effective as a privacy screen. Given the development proposal for this lot and the uninspiring nature of the species I think removal and replacement is the best course of action.

Trees #23 and #25 have always been proposed to be removed, as they fall within the building footprint.

Please feel free to contact me if further discussion of these items is necessary, or if you have any questions.

Respectfully,
BALCERAK DESIGN

Gary Balcerak
Landscape Architect C-3704
Certified Arborist WE-3069A
Certified Urban Forester 125

JUN 1 5 2015

BALCERAK DESIGN

LANDSCAPE ARCHITECTURE • URBAN FORESTRY

608 Beaver Street Santa Rosa, CA 95404 (707)573-8234

ARBORIST'S REPORT

1028 FIFTH STREET EAST

SONOMA, CALIFORNIA

November 11, 2014

NOV 18 2014

BALCERAK DESIGN

LANDSCAPE ARCHITECTURE • URBAN FORESTRY
608 Beaver Street Santa Rosa, CA 95404 (707)573-8234

November 11, 2014

Chris Dluzak
1028 & 1036 Fifth Street East, LLC
1028 Fifth Street East
Sonoma, CA 95476

INTRODUCTION

This Report has been prepared to address the City of Sonoma's Tree Ordinance as specified in Chapter 12.08 of the Sonoma Municipal Code. The property at 1028 Fifth Street East is currently an undeveloped lot. The subject property is part of a four-lot subdivision, and is also known as Lot 1. The development proposal is to construct a single-family residence, with attached garage, and associated improvements.

Sherby Sanborn prepared an Arborist Report on June 19, 2010, for the original subdivision improvements. This Report has been developed to address the existing trees on the subject property and the probable impacts to them resulting from the proposed development plan. For consistency the tree numbers from the Sanborn Report have been used in this document.

All living trees over four-inch in diameter at DBH, which would be impacted by the proposed construction, were evaluated for this Report including trees in severe decline and moribund trees. The construction impacts are based upou the Site Plan prepared by Avila-Bunch Architects, Iuc., dated October 2014.

A detailed description of each tree can be found in the Tree Evaluation section of this Report. A Tree Exhibit showing the location of the existing trees and their identification numbers has been provided for reference. A definition of terms used is provided at the end of this Report.

METHODS

A field observation of the trees was performed on November 5, 2014. The species identificatiou was determined based upon visual analysis of the features present at the time of the observation. All tree diameters were recorded nsing a standard diameter tape with units in feet and tenths of feet. When a tree had a crotch below 54-inches, the smallest trunk diameter below the crotch was measured and its height above natural grade was recorded. When the tree had more than one discrete trunk each trunk was measured individually. See the Tree Exhibit for the location of the trees and their tree number corresponding to the Tree Evaluations.

A detailed analysis was not requested nor performed. No crown explorations, climbing inspections, or below ground inspections were performed. The Tree Evaluations are based upon a visual inspection of the trees, from ground level, and the external defects present at the time of the observation. Therefore, the analysis is not exhaustive.

The overall condition of each tree is represented by its vigor and structure. Vigor is an indication of the overall health and relative capacity of that tree to increase in size. Vigor is determined by an examination of the crown size, architecture, and its quality. Vigor is influenced by competition of adjacent plants, site conditions and cultural care. Structure refers to the physical form of the tree, this includes branch attachment, and presence of decay, or mechanical damage the tree has suffered. Structure is an evaluation of the risk potential of parts of the tree, however it should not be confused with a Risk Analysis, which is a far more extensive inspection of a tree. Each tree has been rated, in each category, using a value of good, fair, or poor.

SPECIES ENCOUNTERED

Fruitless Mulberry (*Morus alba*) is a deciduous and fast growing tree, commonly reaching heights of 30 to 50 feet with an equal spread. They are known to tolerate a variety of difficult settings including desert heat, alkaline soil and coastal conditions, making them a popular landscape choice. However, their surface roots can lift pavement surfaces and make these trees difficult to garden under. This tree is popular for the pruning practice of pollarding. Pollarding is a pruning system in which the upper branches of a tree are removed annually to promote a dense head of foliage and long small diameter branches are produced each growing season. It has been common in Great Britain and Europe since medieval times and is practiced today in urban areas worldwide. The other notable feature of Fruitless Mulberry is that it is the most prized food of silk worms. The silk industry dates back over 4000 years in China – as the silk industry expanded worldwide the Fruitless Mulberry has moved with it.

Sweetgum (*Liquidambar styraciflua*) is an upright, deciduous tree that is native to the southeastern United States and is known for its brilliant fall color. In California, this species may grow as tall as 60 feet with an aggressive root system known to cause damage to paved surfaces and sewer lines. Additionally, many consider the profuse production of fruit a nuisance.

The London Plane Tree (*Platanus x hispanica*) has been widely planted as a street tree in urban areas across the northern hemisphere because it is fast growing and endures city smog, dust, reflected heat, and compacted soils and will grow in a limited soil volume.

Anthracnose fungal blight infects the leaves and tender shoots of these trees when climatic conditions are favorable. The pathogen causes premature dropping of leaves, twig dieback, and cankers on small branches. It is most severe during wet springs and is usually checked by the onset of dry weather.

The Camphor (*Cinnamomum camphora*) is native to the wet forests of subtropical and tropical Asia. Due to its smog tolerance and ability to survive urban situations it has been planted across the world's warm temperate, subtropical, and tropical regions. This tree produces the terpene chemical camphor, which is a much-used medical compound.

The Modesto Ash (*Fraxinus velutina* 'Modesto') is a horticultural variety that originates from a vigorous tree located in Modesto, California. Once considered an esteemed street tree, in part to its resistance to Oak Root Rot (*Armillaria mellea*) this tree has fallen out of favor due to its susceptibility to many other diseases and pests. In addition this tree commonly has surface roots that can damage paving. This tree can commonly reach 40 feet in height with a spread of 30 feet.

RESULTS

A total of six trees have been evaluated for this Report, consisting of five different species. The five species encountered, London Plane Tree (*Platanus x hispanica*), Camphor (*Cinnamomum camphora*), Fruitless Mulberry (*Morus alba*), Sweetgum (*Liquidambar styraciflua*), and Modesto Ash (*Fraxinus velutina* 'Modesto') are all commonly planted landscape species. None of the species observed are native to Sonoma County, although *Fraxinus velutina* is native to California. None of the other species are native to California.

None of the trees observed were of a size to qualify them as a "*significant private tree*" as defined in the Tree Ordinance.

None of the trees represent outstanding specimens and all have preexisting conditions, which coupled with the construction impacts make them unsuitable to be retained. The removal of the existing trees will allow for a new landscape plan to be developed that is harmonious with the building architecture and will allow the new property owners to fully utilize the subject property.

Please feel free to contact me if further discussion of these items is necessary, or if you have any questions.

Respectfully,
BALCERAK DESIGN

Gary Balcerak
Landscape Architect C-3704
Certified Arborist WE-3069A
Certified Urban Forester 125

TREE EVALUATIONS

Tree	Species	Diameter	Vigor	Structure	Status	Notes
4	London Plane Tree (*Platanus x hispanica*)	17.0"	Good	Good	Remove	Several stubs noted at the sites of old pruning cuts, poor pruning practice. Root loss associated with driveway construction – one structural root noted that had been severed by driveway excavation, not a clean cut; prime infection point location for fungal pathogen. More root loss will be associated with the construction of the driveway to service the subject property.
16	Modesto Ash (*Fraxinus velutina* 'Modesto')	9.2", 13.1", 10.3", 11.6"	Good	Fair	Remove	Main crotch has a narrow angle of attachment and included bark, structurally weak union. Secondary crotches also narrow angle of attachment with inclnded bark. Root loss associated with grading for Bio-Swale.
17	Sweetgum (*Liquidambar styraciflua*)	6.7"	Good	Good / Fair	Remove	Very upright habit, suppressed by Tree #16. Codominate leaders arise at ± 20' structurally weak nnion.
22	Fruitless Mulberry (*Morus alba*)	10.7"	Good	Good / Fair	Remove	Tree has been pollarded, several large limbs have been removed, very little callous tissue noted – indicates low vigor, prime infection point location for fungal pathogen.
23	Camphor (*Cinnamomum camphora*)	4.4"	Poor	Fair	Remove	Young tree in serious drought stress. Tree has been headed at 6' codominate leaders arise at this point, structurally weak union. Likely this tree is moribund.
25	Modesto Ash (*Fraxinus velutina* 'Modesto')	12.2"	Good	Poor	Remove	Limbs noted that are appressed to the trunk, causing a necrotic area. Bifurcation of main trunk at ± 8' narrow angle of attachment with included bark, structurally weak union.

Definition of Terms

Abiotic: nonliving
Adventitious: appearing in abnormal or uuusual position or place.
Aerobic: living or acting only in the presence of air (oxygen).
Allelopathy: the chemical process by which a plant suppresses competing plants
Anaerobic: living or acting only in the absence of air (oxygen).
Appressed: pressed closely to, but not fused.

Bifurcation: natural division of a branch or stem into two or more stems or parts.
Biotic: pertaining to living organisms.
Boundary tree: said of a tree when a property line crosses through the trunk.
Branch bark ridge: swelling of bark tissue on the upper side of the branch junction; normal pattern of development (contrast with embedded and included bark).
Branch collar: wood that forms around a branch attachment, frequently more pronounced below the branch.
Buttress root: a large woody root located at the base of the trunk (the root crown), which helps to support the tree.

Cambium: a layer several cells thick between the wood and the bark. This is the tissue that gives trunks the ability to grow in circumference.
Canker: a necrotic lesion in the bark of the stem or root; also, the scar left after shedding of bark tissues killed by localized disease or environmental injury.
Chlorosis: lacking in chlorophyll, typically yellow in color.
Codominate: equal in size and relative importance, usually associated with either the trunks/stems or scaffold limbs/branches in the crown; in the context of crown class, trees whose crowns form the bulk of the upper layer of the canopy but which are crowded by adjacent trees.
Compartmentalization: physiological process which creates the chemical and mechanical boundaries that act to limit the spread of disease and decay organisms.
Conk: fruiting or spore producing body of a group of fungi.
Crotch: the point (or angle) at which two branches (or branch and the leader) meet.
Crown: parts of the tree above the trunk, including leaves, and branches.

DBH: diameter of the trunk, measured at breast height (54 inches above the ground).
Dripline: the width of the crown, as measured by the lateral extent of the foliage.

Epicormic: shoots, which result from adventitious or latent buds.
Excurrent: crown form where a strong central leader is present (contrast with decurrent) to the top of the tree.
Exotic: introduced from another place or region; non-native.
Exudate: bleeding or oozing.

Flush cut: pruning cut where the branch collar is removed, causing unnecessary injury to the trunk or parent stem.
Frass: fecal material and/or wood shavings produced by insects.

Gall: a plants response to irritation from an insect, fungus, or a virus on the foliage, branches, or roots; producing growth, which isolates the irritation.
Girdling root: root that encircles all or part of the trunk, or other roots, which constricts the vascular tissue and inhibits secondary growth and the movement of materials.

Habit: the general characteristic appearance of a plant.
Heading: pruning technique where the cut is made to a bud, weak lateral branch not large enough to assume the role as a leader, or stub.
Herbaceous: a perennial plant that is not woody.
Hybrid: the offspring of two plants of different varieties, species, or genera.

Included bark: pattern of development at branch junctions where bark is turned inward rather than pushed out.
Inflorescence: the part of the plant responsible for the flowers.
Internode: the space between two nodes.

Latent bud: a bud that is more than one year old, which has grown enough to be located just below the surface of the bark.
Lenticel: a small opening in the bark that permits the exchange of gasses between the tree and the air.

Mechanical damage: injury caused by human activities as opposed to natural forces like wind, snow, or ice loads.
Moribund: nearly dead; having lost all vitality.

Necrotic: dead
Node: the often swollen or modified part of the stem that normally bears a bud.

Odoriferous: giving off an odor or scent or fragrance.

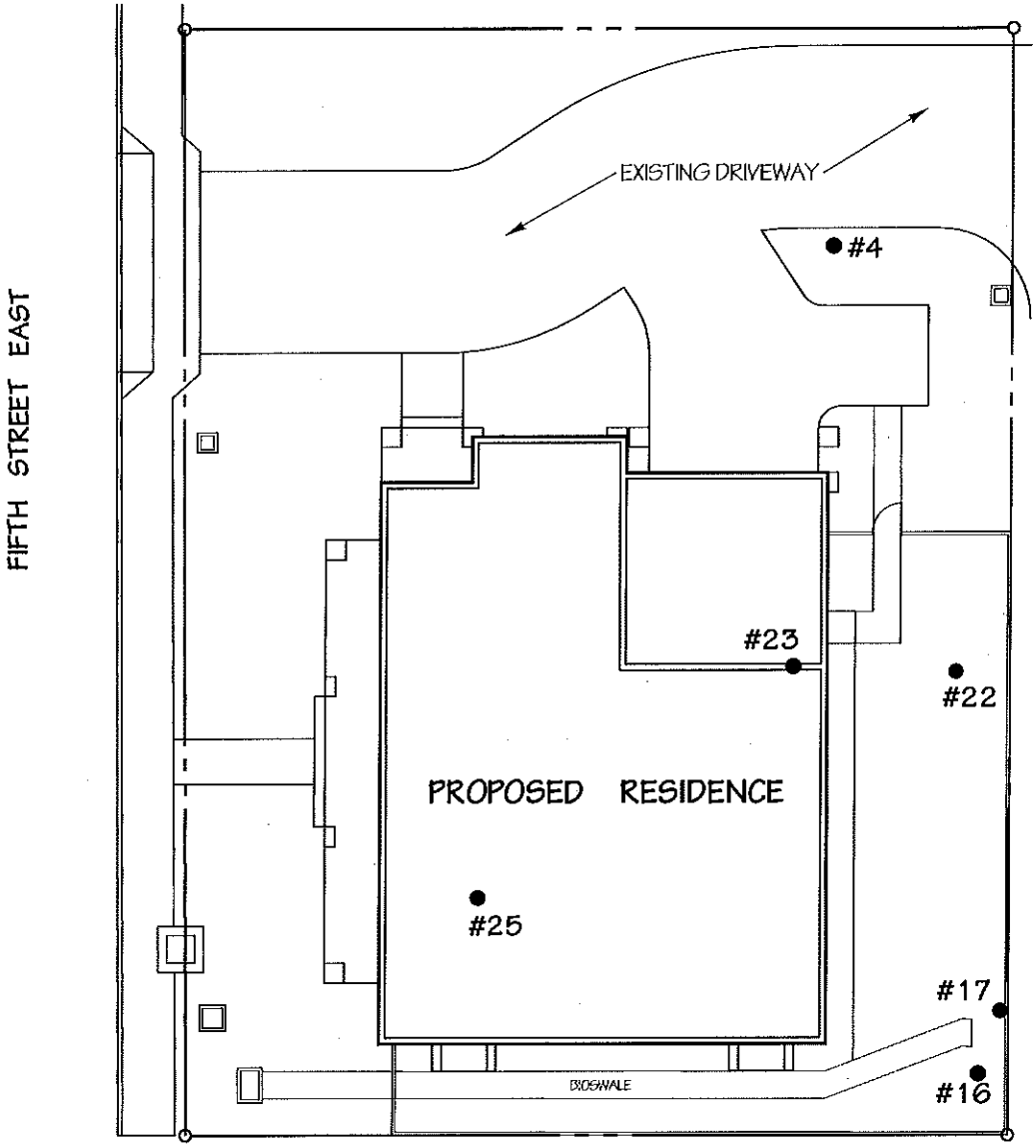
Parasite: au organism that grows in or on a host, gettiug all or part of its nutrients from the host.
Pathogen: any agent that causes disease, usually refers to microorganisms.
Pollarding: pruning technique where young trees or branches are initially headed, then re-headed on an aunual (or regular) basis without disturbing the callus knob (knuckle).

Reaction wood: specialized secondary wood, which develops in response to a lean or similar mechanical stress, attempting to restore the stem to the vertical.

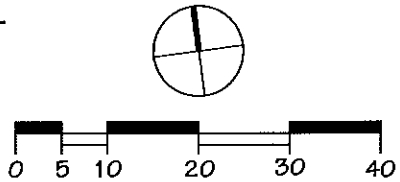
Saprophyte: an organism that gets nourishment from dead or decaying matter.
Scaffold limb: primary structural branch of the crown.
Structural Root: the large lateral roots that are responsible for anchoring the tree into the ground and allowing it to remain upright; these roots also store materials for the tree's later use.
Suppressed: trees which have been overtopped and whose crown development is restricted from above by the canopies of adjacent trees.

Watersprout: upright, epicormic shoot arising from the trunk or branches of a plant above the soil.
Wetwood: a clear, watery liqnid that originates from infections of the heartwood and inner sapwood by common soil-inhabiting bacteria. It normally flows to the wounded bark surface where it changes to brown, slimy ooze as a result of feeding by fnngi, bacteria, and insects. Wetwood infected wood is resistant to decay by fungi.
Woundwood: lignified, partially differentiated tissue that develops from the callus associated with wounds.

Xylem: tissue produced by the cambium that functions to transport and store water and mineral elements, as well as provide support; wood.



1028 FIFTH STREET EAST - TREE EXHIBIT



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11/11/14

SHEET 1 OF 1

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Tree Protection Plan

20144 Fifth Street East

June 19, 2010

Summary

The proposed plan splits a large single lot into four. The existing home will remain on the proposed lot 2 and new homes will be constructed on the remaining three lots. The information regarding this project does not include a grading plan or utility plan. In addition, construction details for the front driveway section that will include pervious pavement are not included. Because roots are shallow, if an aggregate base is installed below the pavers, tree root will probably be destroyed. Additionally, utility lines including sewer and water are commonly installed in trenches below the driveway. The large oak on the adjacent property (north side) could be negatively impacted. This tree is a "significant tree" as defined by the City of Sonoma Tree ordinance.

There are 32 trees on the property, 14 are recommended for removal, 16 are recommended for preservation, and 2 are recommended for preservation or removal (represented in the tree inventory as preserve?). For an overview of the tree inventory see the list on page 12. For detailed tree descriptions and recommendations, see the individual tree evaluations beginning on page 3. The project area and tree location map can be found on page 14.

Introduction

Wendy Atkins, Associate Planner with the City of Sonoma, requested that I prepare an arborist report for the property at 20144 Fifth Street East. This is a four lot split with homes to be constructed on three of the subdivided lots. No grading or utility plan was provided for this project so I am unable to determine the impacts of fill or utility trenching on trees. This report include an assessment of the health and construction impacts to tree on the property resulting from proposed construction impacts indicated on the master site plan.

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Scope of Work

All trees at the site with a trunk DBH (see terms and definitions section below) of 1 inch or greater and 6 feet tall will be identified on a map, tagged, numbered, and their trunk and crown radius recorded. This tree evaluation will include a cursory evaluation of the general health and structure of trees growing within or near the limits of the proposed new subdivision. This evaluation is based upon VTA, Visual Tree Assessment (Mattheck 2007). The evaluation will describe the current status of the trees and an assessment of construction impacts of the proposed project on each tree. Recommendations for the disposition of each tree and protection measures for protected trees will be included, as well as, recommendations for further tree condition diagnostic procedures or other appropriate arboricultural procedures.

Limitation of Observations

One aspect of any tree evaluation involves identifying trees that are a "HAZARD." To be a hazard, a tree must have a "DEFECT" that could cause all or part of it to fail and a "TARGET." Most trees have defects but not all defects are significant enough to cause a structural failure. Targets include people, houses, cars and facilities that attract people (like a picnic table) or any object of value. Evaluating the risk posed by any specific defect, as well as, the individual's tolerance of risk play an important role in determining possible treatments. Many hazards can be mitigated without the need to remove the tree.

Construction impacts such as soil compaction, root cutting, mechanical damage and improper pruning, to name just a few human activities, can affect tree health and safety. Therefore, my evaluations are based on the condition of these trees on June 15, 2010. I cannot be held responsible for activities or impacts that occur after the above date. As an arborist I make recommendations based upon on-site observation and information regarding the trees and the sit provided to me by the client. Such information, if inaccurate or incomplete, will affect the accuracy of these recommendations. In addition, property boundaries should be verified by client before treatments are applied. Failure to do so can lead to trespass and legal damages.

Disclosure Statement

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to structural failure of a tree or anticipate extreme weather events that could contribute to failure. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning and removal of trees may involve considerations beyond the scope of the Arborists services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

Terms and Definition

Tree Rating: Trees are rated based their condition (health) and defects. There are four rating categories: very-good, good, fair, and poor. Trees rated in *good* to *very-good condition* are in good health and structurally sound with only a few minor, correctable defects. Trees in *fair condition* have defect, disease, or health conditions which can indicate a higher risk of failure reducing their landscape value. For trees in *fair condition* it may be possible to improve their rating to good by reducing defects, treating insect or disease problems, and by improving growing conditions. Trees in *poor condition* show poor vigor, poses significant diseases and/or structural defects and may represent a high risk of failure. Defects in such trees are usually not correctable. Trees in *poor condition* have a very low landscape value.

Acute angles of attachment: Also known as a "V-crotch" describes a narrow angle of attachment between a branch and its parent (branch of origin), the trunk, or codominant stems (see below). The branch bark ridge is usually not visible in branches with acute angles and often result in imbedded bark (see below). For examples refer to Appendix C figures 8 and 9.

Branch Structure: This refers to the distribution of branches along the trunk and scaffold branches i.e. are branches evenly distributed within the upper two-thirds of the tree. In addition, are branches well spaced and free of interference or conflicts (crossing or lay upon one anther)?

Codominant: Either stems (trunks) or scaffold branches of equal size and relative importance, usually arising from a parent branch or trunk at the same level.

Crown: The leaves and branches of a tree measured from the lowest branch on the trunk to the top of the tree.

Crown Radius: is the maximum crown radius (the distance from the trunk center to the outer edge of the longest branch). Tree crowns are usually not symmetrical. In addition the crown may not be centered over the tree's root collar (the area at the base of the tree where the trunk and roots merge).

Defects: Cracks, splits, imbedded bark, cavities, dead or exfoliating bark, decay, insects, or disease.

Imbedded Bark: Bark that has developed between the union of two trunks, branches, or the trunk and a branch. Imbedded bark weakens the union increasing the likelihood that the union will fail and either the trunk or branch will tear out. Refer to Appendix C, figure 9 for an example.

Repair Structures: Generally these include bulges, swellings, and other abnormalities where the tree has responded to cracks, splits, injuries, and decay by adding wood to strengthen the affected area.

Root Collar: The area at the base of the tree where the trunk and roots merge.

Scaffold Branches: The large branches that form the main structure of the crown. These branches arise from the trunk or trunks and they are the parent branches for the smaller branches in the crown.

Tree Protection Zone: The area encompassed by the outer edge of the crown or dripline. This zone can also be determined by using crown radius and measuring from the center of the trunk. When trees are to be protected, this is usually the minimum area to be excluded from construction activities. Depending on a species tolerance to disturbance in this area can be larger or smaller.

Trunk diameter: is measured at 4.5 feet above median soil grade also known as DBH (diameter breast height). Trees that have more than one trunk or stems joined at or just above ground level are defined as multi-trunk. Each of the trunks of multitrunk trees is measured at DBH. Trees with branches arising at or below 4.5 feet are measured at the narrowest point between the lowest branch and the ground.

Observations

There are 32 trees on the property and 15 adjacent trees that may be impacted by the proposed project (see map page 13). Most of the trees on the property are in good condition and have been well cared for. The variety of trees includes fruit, deciduous, and evergreen varieties.

Individual Tree Evaluations

Tree Number 1

Apple, *Malus sp.* Trunk Diameter (DBH): 7 in.
Crown Radius: 7.5 ft. Number of Trunks: 1

Condition: This tree is in good condition, growing vigorously and bearing lots of fruit.

Development Impacts: Probably minor. The adjacent proposed driveway will have some type of pervious pavement. Grading and fill are not specified but the tree is far enough away that impacts are likely to be minimal.

Recommendations: This tree should be preserved and protected following the guidelines in Appendix A.

Tree Number 2

Apple, *Malus sp.* Trunk Diameter (DBH): 4.1 in.
Crown Radius: 6 ft. Number of Trunks: 1

Condition: This tree is in good condition, growing vigorously, however, I could find no fruit.

Development Impacts: Probably minor. The adjacent proposed driveway will have some type of pervious pavement. Grading and fill are not specified but the tree is far enough away that impacts are likely to be minimal.

Recommendations: This tree should be preserved and protected following the guidelines in Appendix A.

Tree Number 3

Plum, *Prunus sp.* Trunk Diameter (DBH): 6.4 in.
Crown Radius: 8 ft. Number of Trunks: 1

Condition: This tree is in good condition, growing vigorously and bearing is fruit.

Development Impacts: Significant. This tree is located within the construction envelop of the proposed driveway.

Recommendations: This tree should be removed and replaced.

Tree Number 4

California Sycamore, *Platanus racemosa* Trunk Diameter (DBH): 16.1 in.
Crown Radius: 18 ft. Number of Trunks: 1

Condition: This tree is in very good condition and growing very well. There is some evidence of sycamore anthracnose on the leaves which is normal for this time of year.

Development Impacts: Could be significant. The adjacent proposed driveway not specify pervious pavement adjacent to this tree. Grading and fill are not specified and this tree is close enough to the driveway that impacts to roots could be significant.

Recommendations: This tree should be preserved. I recommend that pervious pavement be extended through the dripline of this tree without excavation and tunneling under roots for utilities if they are installed through the driveway. This tree should be protected following the guidelines in Appendix A.

Tree Number 5

Black Walnut, *Juglans nigra* Trunk Diameter (DBH): 27.3 in.
Crown Radius: 35 ft. Number of Trunks: 1

Condition: Generally speaking this tree is in good health. It has a number of dead branches in the crown and thinning the crown to remove dead branches and some weight would be appropriate.

Development Impacts: Probably minor. The proposed house and driveway for this lot appear to be well away from this tree.

Recommendations: This tree should be preserved and protected following the guidelines in Appendix A. Black walnut trees are very sensitive to root loss (Matheny & Clark, 1998). Grading or fill soil within the dripline will probably result in tree decline. If fill is required, the tree should be removed.

Tree Number 6

Valley Oak, *Quercus lobata* Trunk Diameter (DBH): 1 in.
Crown Radius: 4 ft. Number of Trunks: 1

Condition: This tree is in fair condition. This young tree is being suppressed by the large black walnut trees.

Development Impacts: Probably minor. The proposed house and driveway for this lot appear to be well away from this tree.

Recommendations: This tree should be preserved and protected following the guidelines in Appendix A.

Tree Number 7

Black Walnut, *Juglans nigra* Trunk Diameter (DBH): 28.2 in.
Crown Radius: 31 ft. Number of Trunks: 1

Condition: This tree is in fair condition. It has a number of dead branches in the crown, evidence of canker and an infestation of mistletoe.

Development Impacts: Significant. The proposed home will be construction over this trees location.

Recommendations: This tree should be removed and replaced.

Tree Number 8

Black Walnut, *Juglans nigra* Trunk Diameter (DBH): 25.4 in.
Crown Radius: 30 ft. Number of Trunks: 1

Condition: Generally speaking this tree is in good health. It some dead branches in the crown and one scaffold branch is split. Thinning the crown to remove dead branches and some weight, as well as, the split branch would be appropriate.

Development Impacts: Possibly Significant. The proposed house is well within the dripline of this tree. Walnuts are particularly sensitive to construction activities that affect their roots.

Recommendations: Unless construction can be moved away from this tree, it should probably be removed and replaced. Black walnut trees are very sensitive to root loss (Matheny & Clark, 1998). Grading or fill soil within the dripline will probably result in tree decline. If fill is required, the tree should be removed.

Tree Number 9

Japanese Maple, *Acer palmatum* Trunk Diameter (DBH): 13.1 in.
Crown Radius: 13.5 ft. Number of Trunks: 1

Condition: This tree is in very good condition and growing vigorously.

Development Impacts: Significant. This tree is located at the edge of the construction envelop of the driveway on lot 3.

Recommendations: This tree should be removed and replaced.

Tree Number 10

Chinese Elm, *Ulmus parvifolia* Trunk Diameter (DBH): 4.1 in.
Crown Radius: 13 ft. Number of Trunks: 1

Condition: This tree is in poor condition. The tree leans significantly with soil mounding on the north side of the trunk. This suggests a poor root structure or saturated soil. Tree is supported by guys.

Development Impacts: Significant. This tree is located at the edge of the construction envelop of the driveway on lot 3.

Recommendations: This tree should be removed and replaced.

Tree Number 11

Chinese Elm, *Ulmus parvifolia* Trunk Diameter (DBH): 5 in.
Crown Radius: 12.5 ft. Number of Trunks: 1

Condition: This tree is in poor condition. The tree leans significantly with soil mounding on the north side of the trunk. This suggests a poor root structure or saturated soil. Tree is supported by guys.

Development Impacts: Significant. This tree is located within the construction envelope of the house.

Recommendations: This tree should be removed and replaced.

Tree Number 12

Japanese Maple, *Acer palmatum* Trunk Diameter (DBH): 12.2 in.
Crown Radius: 12 ft. Number of Trunks: 1

Condition: This tree is in very good condition and growing vigorously.

Development Impacts: Significant. This tree is located within the construction envelope of the house.

Recommendations: This tree should be removed and replaced.

Tree Number 13

Mayten, *Maytenus boaria* Trunk Diameter (DBH): 9.3 in.
Crown Radius: 9.7 ft. Number of Trunks: 1

Condition: This tree is in very good condition and growing vigorously.

Development Impacts: Minor. This tree is located at the edge of the existing house patio and should not be disturbed by construction.

Recommendations: Tree should be protected from adjacent construction following the guidelines in Appendix A.

Tree Number 14

Black Mulberry, *Moris nigra* Trunk Diameter (DBH): 5.5, 6.7, & 5 in.
Crown Radius: 14 ft. Number of Trunks: 3

Condition: This tree is in good condition and growing well.

Development Impacts: Probably minor. The tree is growing adjacent to the fence on lot 2. If properly protected, it should do well.

Recommendations: This tree should be preserved and protected by following the guidelines in Appendix A.

Tree Number 15

Glossy Privet, *Ligustrum lucidum* Trunk Diameter (DBH): 36 in.
Crown Radius: 10 ft. Number of Trunks: Clump

Condition: These trees are in good condition and growing well.

Development Impacts: Probably Minor. This tree is growing at the southwest corner of the existing home on lot 2.

Recommendations: This tree should be preserved and protected by following the guidelines in Appendix A.

Tree Number 16

Modesto Ash, *Fraxinus velutina* Trunk Diameter (DBH): 12.3, 9.7, & 10.7 in.
Crown Radius: 28 ft. Number of Trunks: 3

Condition: This tree is in good condition and growing well. At their union the three trunks have acute angles of attachment and imbedded bark. This is an inherently weak structure that can cause one or more trunks to fail. I recommend the trunks be braced with threaded rod if it is preserved.

Development Impacts: Potentially minor. The tree is growing near the fence and far enough from the house construction envelope to afford protection.

Recommendations: This tree should be preserved and protected by following the guidelines in Appendix A. Bracing to prevent the trunks from splitting apart is highly recommended.

Tree Number 17

Fraser Photinia, *Photinia x fraseri* Trunk Diameter (DBH): 24 in.
Crown Radius: 12 ft. Number of Trunks: Clump

Condition: This tree is in good condition and growing well.

Development Impacts: Potentially minor. The tree is growing adjacent to tree # 16 and far enough from the house construction envelope to afford protection.

Recommendations: This tree should be preserved and protected by following the guidelines in Appendix A.

Tree Number 18

Sweetgum, *Liquidambar styraciflua* Trunk Diameter (DBH): 5.6 in.
Crown Radius: 7.5 ft. Number of Trunks: 1

Condition: This tree is in very good condition, young, and growing well.

Development Impacts: Potentially significant. The tree is growing along the property line between lot 1 and 2. The building envelope of the house on lot 1 is close to this tree and foundation trenching and soil compaction may affect it.

Recommendations: This tree can probably be preserved if the adequate protection measures are followed. See Appendix A for those protection measures.

Tree Number 19

Sweetgum, *Liquidambar styraciflua* Trunk Diameter (DBH): 6.5 in.
Crown Radius: 8 ft. Number of Trunks: 1

Condition: This tree is in very good condition, young, and growing well.

Development Impacts: Potentially significant. The tree is growing along the property line between lot 1 and 2. The building envelope of the house on lot 1 is close to this tree and foundation trenching and soil compaction may affect it.

Recommendations: This tree can probably be preserved if the adequate protection measures are followed. See Appendix A for those protection measures.

Tree Number 20

Glossy Privet, *Ligustrum lucidum* Trunk Diameter (DBH): 6, & 3.5 in.
Crown Radius: 6 ft. Number of Trunks: 2

Condition: This tree is in very good condition and growing well.

Development Impacts: Minor. This tree is growing at a corner of the existing home on lot 2.

Recommendations: This tree should be protected following the guidelines in Appendix A.

Tree Number 21

Lemon, *Citrus x lemon* Trunk Diameter (DBH): 3.7 in.
Crown Radius: 4 ft. Number of Trunks: 1

Condition: This tree is in very good condition and growing well.

Development Impacts: Minor. This tree is growing at the front edge of the entry to the existing home on lot 2.

Recommendations: This tree should be protected following the guidelines in Appendix A.

Tree Number 22

Fruitless Mulberry, *Moris alba* Trunk Diameter (DBH): 9.4 in.
Crown Radius: 14 ft. Number of Trunks: 1

Condition: This tree is in good condition and growing well.

Development Impacts: Probably minor. The tree is growing on the west side of the house on lot 1. If properly protected from trenching and soil compaction it should do well.

Recommendations: This tree should be preserved and protected by following the guidelines in Appendix A.

Tree Number 23

Camphor, *Cinnamomum camphora* Trunk Diameter (DBH): 3.2 in.
Crown Radius: 3.5 ft. Number of Trunks: 1

Condition: This tree is in very good condition and growing well.

Development Impacts: Significant. The tree is growing within the building envelope of the house on lot 1.

Recommendations: This tree should be removed and replaced.

Tree Number 24

Scots Pine, *Pinus sylvestris* Trunk Diameter (DBH): 2.2, 2.8, 2, 1.5, & 2.1 in.
Crown Radius: 6 ft. Number of Trunks: 5

Condition: This tree is in fair condition. The five trunks have developed in a prostrate fashion and bent upward. No central leader.

Development Impacts: Potentially minor. The tree is growing between the vegetated swale and the house on lot 1.

Recommendations: While not a particularly nice specimen that is hidden by surrounding vegetation. This tree can be preserved and protected by following the guidelines in Appendix A. Because it is a poor specimen, this tree could also be removed and replaced.

Tree Number 25

Modesto Ash, *Fraxinus velutina* Trunk Diameter (DBH): 11.2 in.
Crown Radius: 13 ft. Number of Trunks: 1

Condition: This tree is in fair condition. One of the scaffold branches is infested with mistletoe which should be removed. Like the other Modesto ash, this tree is also suffering from anthracnose.

Development Impacts: Probably significant. The tree is growing near and inside the southwest corner of the building envelope.

Recommendations: This tree should be removed and replaced.

Tree Number 26

Glossy Privet, *Ligustrum lucidum* Trunk Diameter (DBH): 50? in.
Crown Radius: 12 ft. Number of Trunks: Clump

Condition: This small grove of glossy privet is in good condition and growing well. The clump may have developed from local seed and a single tree.

Development Impacts: Minor. This clump appears to be well away from construction

Recommendations: These can be preserved following the tree protection guidelines in Appendix A. Privet is an invasive species and while its flowers are beautiful, there pollen causes severe allergy problems for some people. It may be best to remove this clump and plant a more appropriate tree.

Tree Number 27

Peach, *Prunus sp.* Trunk Diameter (DBH): 3 in.
Crown Radius: 8 ft. Number of Trunks: 1

Condition: This small fruit tree is in fair condition with numerous small dead branches in its crown and somewhat sparse foliage.

Development Impacts: Significant. This tree is growing near the edge of what will be the covered porch of the house on lot 1.

Recommendations: This tree should be removed and replaced.

Tree Number 28

Norway Maple, *Acer platanoides 'Crimson King'* Trunk Diameter (DBH): 1.5 in.
Crown Radius: 3.2 ft. Number of Trunks: 1

Condition: This is a small young tree is in very good condition.

Development Impacts: Probably minor. This tree is growing near the front of lot 1, away from construction.

Recommendations: This tree can be preserved provided it is protected from soil compaction and other construction activities. The guidelines in Appendix A should be followed.

Tree Number 29

Glossy Privet, *Ligustrum lucidum* Trunk Diameter (DBH): 1.2, 1.2, & 1 in.
Crown Radius: 4 ft. Number of Trunks: 3

Condition: This small tree is in very good condition.

Development Impacts: Significant. This tree is growing near the edge of what will be the covered porch of the house on lot 1.

Recommendations: This tree should be removed and replaced.

Tree Number 30

Valley Oak, *Quercus lobata* Trunk Diameter (DBH): 3.7 in.
Crown Radius: 14 ft. Number of Trunks: 1

Condition: This small tree is in good condition; however, it leans to the north.

Development Impacts: Significant. This tree is growing in a location where a new sidewalk will probably be built and connect with the existing sidewalk to the north.

Recommendations: This tree should be removed and replaced.

Tree Number 31

Valley Oak, *Quercus lobata* Trunk Diameter (DBH): 6.2 & 3.1 in.
Crown Radius: 11 ft. Number of Trunks: 1

Condition: This tree is in good condition but is somewhat suppressed on one side due to the black walnut growing behind it.

Development Impacts: Significant. This tree is growing in a location where a new sidewalk will probably be built and connect with the existing sidewalk to the north.

Recommendations: This tree should be removed and replaced.

Tree Number 32

Valley Oak, *Quercus lobata* Trunk Diameter (DBH): 6.4 in.
Crown Radius: 17.8 ft. Number of Trunks: 1

Condition: This tree is in good condition; however, its crown is suppressed by the large oak to the east.

Development Impacts: Significant. This tree is growing in a location where a new sidewalk will probably be built and connect with the existing sidewalk to the north.

Recommendations: This tree should be removed and replaced.

Tree Inventory for 20144 Fifth Street East

Tree Tag Number	Common Name	Species	Number of Trunks	DBH (trunk diameter)	Crown Radius	Condition	Status
1	Apple	*Malus sp.*	1	7.0	7.5	Good	Preserve
2	Apple	*Malus sp.*	1	4.1	6.0	Good	Preserve
3	Plum	*Prunus sp.*	1	6.4	8.0	Good	Remove
4	California Sycamore	*Platanus racemosa*	1	16.1	18.0	Very Good	Preserve
5	Black Walnut	*Juglans nigra*	1	27.3	35.0	Good	Preserve
6	Valley Oak	*Quercus lobata*	1	1.0	4.0	Fair	Preserve
7	Black Walnut	*Juglans nigra*	1	28.2	31.0	Fair	Remove
8	Black Walnut	*Juglans nigra*	1	25.4	30.0	Good	Remove
9	Japanese Maple	*Acer palmatum*	1	13.1	13.5	Very Good	Remove
10	Chinese Elm	*Ulmus parvifolia*	1	4.1	13.0	Poor	Remove
11	Chinese Elm	*Ulmus parvifolia*	1	5.0	12.5	Poor	Remove
12	Japanese Maple	*Acer palmatum*	1	12.2	12.0	Very Good	Remove
13	Mayten	*Maytenus boaria*	1	9.3	9.7	Very Good	Preserve
14	Black Mulberry	*Moris nigra*	3	5.5, 6.7, 5	14.0	Good	Preserve
15	Glossy Privet	*Ligustrum lucidum*	Clump	36.0	10.0	Good	Preserve
16	Modesto Ash	*Fraxinus velutina*	3	12.3, 9.7, 10.7	28.0	Good	Preserve
17	Fraser Photinia	*Photinia x fraseri*	Clump	24.0	12.0	Good	Preserve
18	Sweetgum	*Liquidambar styraciflua*	1	5.6	7.5	Very Good	Preserve
19	Sweetgum	*Liquidambar styraciflua*	1	6.5	8.0	Very Good	Preserve
20	Glossy Privet	*Ligustrum lucidum*	2	6, 3.5	6.0	Very Good	Preserve
21	Lemon	*Citrus x lemon*	1	3.7	4.0	Very Good	Preserve
22	Fruitless Mulberry	*Moris alba*	1	9.4	14.0	Good	Preserve
23	Camphor	*Cinnamomum camphora*	1	3.2	3.5	Very Good	Remove
24	Scots Pine	*Pinus sylvestris*	5	2.2, 2.8, 2, 1.5, 2.1	6.0	Fair	Preserve?
25	Modesto Ash	*Fraxinus velutina*	1	11.2	13.0	Fair	Remove
26	Glossy Privet	*Ligustrum lucidum*	Clump	50?	12.0	Good	Preserve?
27	Peach	*Prunus sp.*	1	3.0	8.0	Fair	Remove
28	Norway Maple	*Acer platanoides 'Crimson King'*	1	1.5	3.2	Very Good	Preserve
29	Glossy Privet	*Ligustrum lucidum*	3	1.2, 1.2, 1	4.0	Very Good	Remove
30	Valley Oak	*Quercus lobata*	1	3.7	14.0	Good	Remove
31	Valley Oak	*Quercus lobata*	2	6.2, 3.1	11.0	Good	Remove
32	Valley Oak	*Quercus lobata*	1	6.4	17.8	Good	Remove

Adjacent Trees

There are 15 trees adjacent to this proposed development (see map page 14) five of which may be impacted significantly from this project. The large valley oak growing along the north boundary near Fifth Street East, my suffer the greatest impacts. The main driveway entrance will be constructed through the root protection zone. The plan calls for pervious pavement but without specific details regarding grade changes, utilities and soil compaction. Appendix B illustrates the typical root system of most trees. Because this is an offsite tree, special protection measures may be required to minimize construction impacts. These may include tunneling under roots for utilities, a no dig, no compaction driveway section, or rerouting the driveway to the south to avoid the root zone of this tree.

Trees growing along the east boundary may also be affected by grading/fill and foundation construction. Again, with no grading plan for this project, I can't evaluate impacts to those trees. Finally, the Vegetated swale along the south boundary, if deep enough, may impact tree roots on both sides of the property boundary.

Recommendations

Overall this appears to be a good project. However, some important details were not provided that may significantly impact tree roots and therefore tree preservation. A utility plan and a grading plan should be provided so a more accurate assessment of tree preservation can be ascertained.

Sincerely,

Sherburn R. Sanborn

Digitally signed by Sherburn R. Sanborn
DN: cn=Sherburn R. Sanborn, o=Sherby Sanborn Consulting Arborist, ou, email=ssanborn@sonic.net, c=US
Date: 2010.06.19 13:34:10 -07'00'

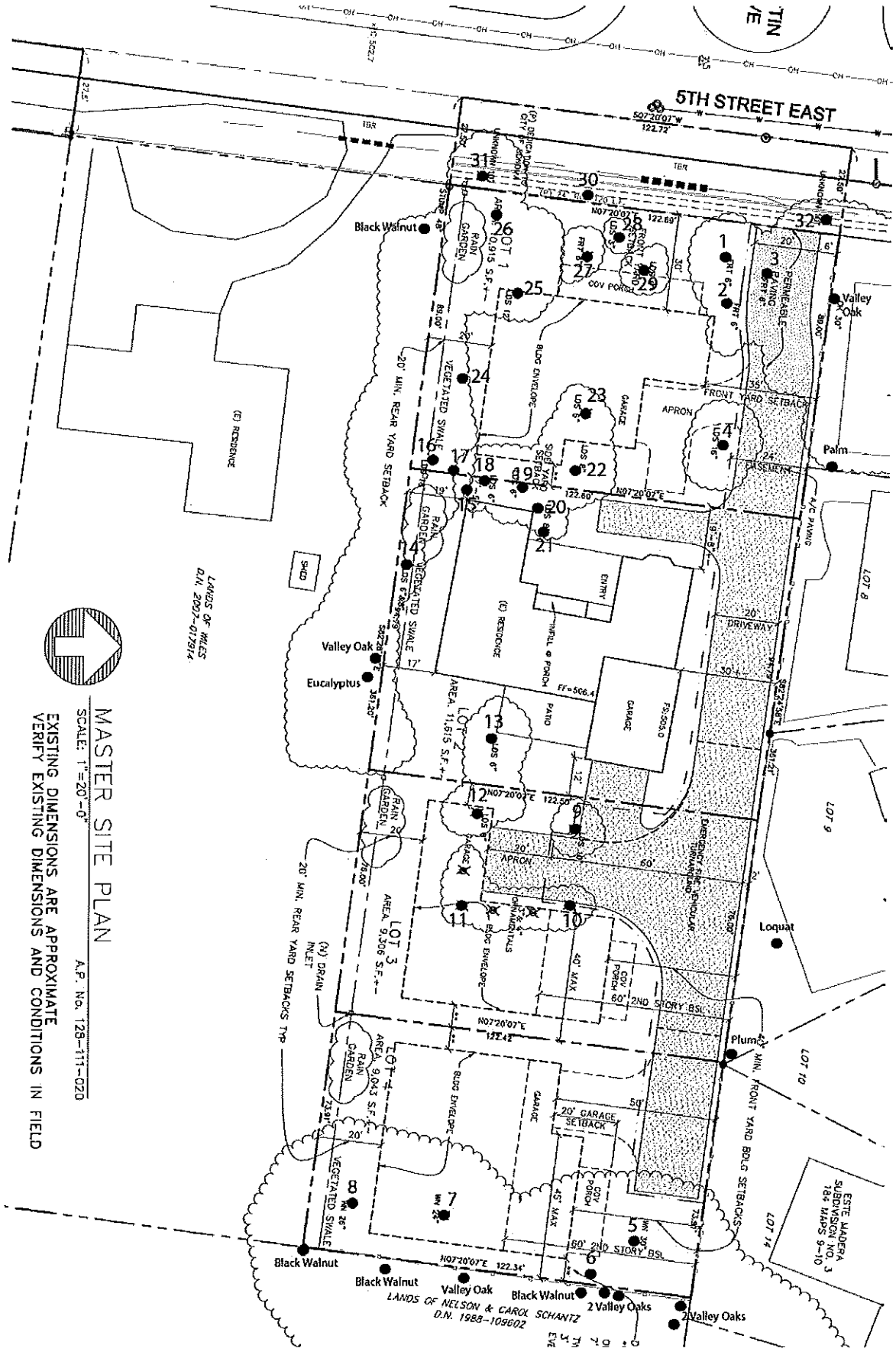
Sherburn R. Sanborn
ISA Certified Arborist WE-0258A
Member the American Society of Consulting Arborists

SRS: ss

References:

Matheny, Nelda and James R. Clark, 1998. *Trees and Development, a Technical Guide to Preservation of Trees During Land Development*. International Society of Arboriculture. 181 pages.

Mattheck, Claus, 2007. *Updated Field Guide for Visual Tree Assessment*. Forshungszentrum Karisruhe GmbH. 170 pages.


5TH STREET EAST
MASTER SITE PLAN
SCALE: 1"=20'-0"
A.P. No. 128-111-020
EXISTING DIMENSIONS ARE APPROXIMATE
VERIFY EXISTING DIMENSIONS AND CONDITIONS IN FIELD
LOT 1
LOT 2
LOT 3
LOT 4
LOT 8
LOT 9
LOT 10
LOT 14
(E) RESIDENCE
GARAGE
DRIVEWAY
APRON
FRONT YARD SETBACK
20' MIN. REAR YARD SETBACK
VEGETATED SWALE
RAIN GARDEN
BLDG ENVELOPE
PERMEABLE PAVING
Black Walnut
Valley Oak
Palm
Eucalyptus
Loquat
Plum
2 Valley Oaks
LANDS OF NELSON & CAROL SCHANTZ
D.N. 1988-109602
LANDS OF MILES
D.N. 2007-017914
ESTE MADERA SUBDIVISION NO. 3
7&8 MAPS 9-10

Appendix A

Tree Protection Measures

Protective Fencing:

All trees to be preserved should be protected by fencing the area under the dripline. Ideally the fence should be secured so that it can't be moved.

Fences should be erected before any, grading or construction begin and remain in place until the final project inspection.

No construction equipment or materials should be stored within the root protection zone. In addition, no dumping of toxic materials shall take place either within or near the tree protection zone. This includes gasoline, other petroleum products, broken drywall, and concrete spoils to name just a few materials potentially toxic to trees and tree roots.

A prominently displayed warning sign can alert workers to the sensitivity of the fenced tree protection zone. The sign should clearly state: "WARNING – *Tree Protection Zone* – This fence shall not be removed contact project arborist for additional information."

Protective Mulch:

Applying mulch within the tree protection zone can greatly benefit protected trees. Always use composted coarse wood chip mulch that will not compact. Never use raw wood chips. Suitable mulch is Arbor Mulch available from Grab-&-Grow Soil Products. Keep mulch away from root collar—large trees require 1 foot of clearance. Mulch should be no more than 2-3 inches deep. Protective mulch used to reduce soil compaction from vehicle traffic should be 6-8 inches deep. Mulch this deep should be temporary and must be removed to a final depth of 2-3 inches when construction is completed. It may also be necessary to reduce mulch depth during the winter months to prevent souring (mold build up).

Irrigatiou:

All trees, including native oaks can benefit from irrigation prior to and during construction, particularly during our hot summer months. Irrigate the outer two thirds of the crown radius using soaker hoses or a drip irrigation system. For native oaks, it is critically important that irrigation be kept away from the trunk and root collar. When irrigating large oaks, keep water at least eight feet from the trees root collar and trunk. Never allow water to splash on the trunk and root collar. Irrigate to a depth of six inches and allow soil to dry completely before the next irrigation. It may take many hours to moisten the soil to a depth of six inches. The easiest way to test the penetration depth is to dig several small holes within the irrigated area using a garden trowel or similar tool. If the soil isn't moist continue watering. Oaks should be irrigated once every six weeks while other trees can be irrigated more frequently.

Soil Grade Changes:

No soil grade changes should occur within the tree protection zone. Grade changes should be minimized immediately outside the tree protection zone and should not direct water into root collar area of trees.

Trenching and Root Pruniug:

Trenches should be dug using an air-spade or by hand—no power tools or mechanical trenching devices. The air-spade uses compressed air to remove soil around roots without damaging them. Digging should be done in a manner that avoids damaging roots larger than 1 inch. All roots should be cut at right angles and when possible, preferably back to a lateral. Any roots cut during trenching operations should be cleanly cut, at right angles, to sound wood using either pruning shears, loppers, pruning saws or

chainsaw. **Why not mechanical trenching?** Most mechanized trenching devices, such as a ditch-witch, don't cut roots cleanly. The root is grabbed, pulled, and torn leaving a ragged, broken surface. Because roots are elastic, when grabbed by a trencher the root stretches before it brakes then snaps back. This action can cause splits and other types of damage to occur between the break and the tree trunk. Such injuries cause roots to die back and provide avenues for soil born fungi to attack them.

Landscaping Under Native Oaks:

To insure the longevity of native oaks, landscaping underneath their crown should be kept as natural as possible. Irrigation systems should only be installed outside the dripline (the width of the crown, as measured by the lateral extent of the foliage). For more information regarding landscaping under native oaks, see the publication: *Compatible Plants Under and Around Oaks*, California Oak Foundation, http://www.californiaoaks.org/

Appendix B

Understanding Tree Roots

Where and how deeply roots grow depends on the soil conditions of the site. In fertile, well aerated soil with little competition from other trees, roots will extend in a more or less symmetrical pattern. The roots of a tree can grow laterally through the soil up to two or even three times the radius of the trees crown (figure 11). In addition, approximately 80% of a tree's roots develop within the first 12 to 18 inches of soil with few roots growing beyond a depth of three feet. The most important limiting factor affecting root development is soil density and oxygen availability. Sonoma County soils have high clay content so they are denser with lower oxygen levels. Water in the form of rain or irrigation, has a significant affect on soil oxygen levels. As water penetrates the soil it displaces carbon dioxide pushing it out of the soil while at the same time drawing oxygen in. Other than natural rainfall, native oaks do not need to be irrigated. Exceptions to this rule include active construction sites and periods of severe drought. Prior to and during construction, stress to protected trees may be reduced by periodic irrigation particularly during the summer months of July, August, and September. During periods of drought, it may be appropriate to supplement natural rainfall by irrigating oaks during the spring and early fall. Irrigation should be deep and infrequent and it should be kept 10 feet away from the trunk and root collar, particularly when sprinkler systems are used.

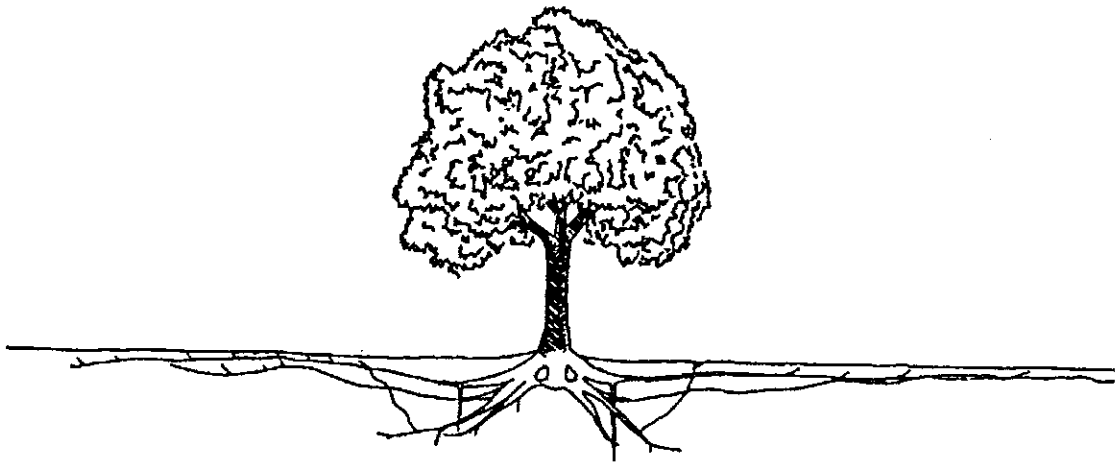


Figure 11

Appendix C

Tree Pruning Guidelines

Tree pruning should meet or exceed the pruning standards found in ANSI A300 and the current ISA *Tree-Pruning Guidelines*, 1995.

Basic Pruning Techniques

Making a proper pruning cut affects tree health because it affects how the tree responds to the wound created by the cut.

Trees grow by adding a layer of woody tissue around the existing tree each year. In the spring when tree growth begins, new wood is added to the outer branches first. Where these branches attach to a parent branch or the trunk, the new wood is diverted laterally around the parent branch, surrounding it. This wood tissue then merges underneath and connects to the wood of the trunk or parent branch. Next, a layer of wood is added to the trunk or parent branch and where this wood encounters the new branch wood, it diverts around the branch and envelops the branch wood. The swelling that results from the

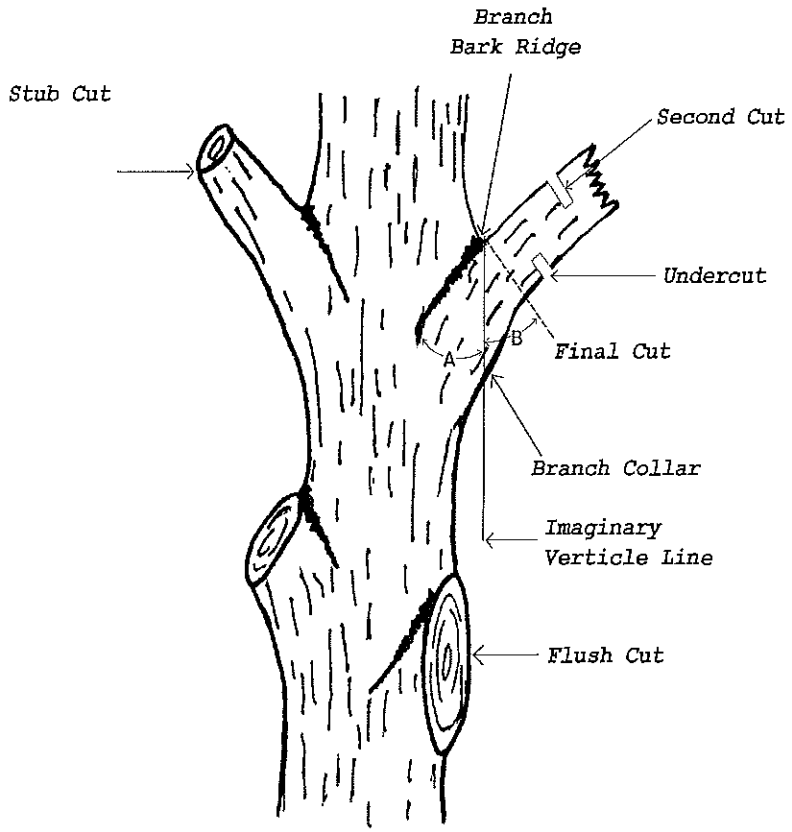


Figure 6

overlapping of wood at the branch union with the trunk or parent branch is called the '***branch collar.***' The raised strip of bark in the branch crotch is called the '***branch bark ridge***' (figure 6). Preserving the branch collar significantly affects wound closure and prevents decay from entering the parent branch or trunk.

There are three types of pruning cuts: thinning, heading and drop-crotch. Of the three the thinning cut is preferred because it preserves the branch collar so that the tissue of the trunk or parent branch is not injured or wounded. Pruning cuts that remove only branch wood, with the cut placed just outside the branch collar, are called '***natural target pruning.***' Trees respond to wounding by forming protective barriers that isolate the injured, diseased, or decayed wood. A pruning cut that preserves the branch collar limits the invasion of diseases or decay to the branch wood that remains after the branch is cut. An improper cut that removes the branch collar, often called a ***'flush cut,'*** (figure 6) can allow disease and decay to invade and weaken the wood of the trunk or parent branch. Flush cuts can lead to decay that over time may result in tree or branch failure.

Making a thinning cut is a four step process (refer to figure 6):

1. Identify or estimate the location of the branch collar. Branch collars can be inconspicuous, sunken, slightly protruding, or bulging.
2. Undercut the branch to be removed approximately two to six inches from branch collar. This undercut will prevent the bark under the branch from peeling or tearing away from the trunk or parent branch.
3. The second cut should go completely through the branch several inches outside the undercut. This will leave a stub.
4. Finally, remove the remaining branch stub at a point just outside the branch collar. If the branch collar is not obvious, draw an imaginary line parallel with the trunk or parent branch starting at the top, outer edge of the branch bark ridge. Now approximate angle **A** between the imaginary line and the branch bark ridge and make your pruning cut so angle **B** is the same as angle **A** (Figure 6).

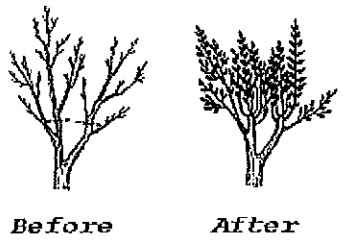


Figure 7

Heading cuts are made between branches or in the case of younger trees between nodes (Figure 7). When heading cuts are applied to large or mature trees it is called ***'topping.'*** Heading or topping a mature tree is often done to reduce its crown height and width. Some trees can be killed because topping can remove too much foliage. Topping allows decay to develop in branches and trunks, destroys the trees natural shape, and results in sprouting that produces many weakly attached branches. As the sprouts become larger over time, they frequently break out because of poor attachment while weak tree structure can result in a hazardous tree. In general, shade and ornamental trees should never be topped. Another form of heading is called ***'pollarding'*** that is sometimes used to create a tree with a round compact crown. Pollarding is most often seen in mulberry and sycamore.

Drop-crotch cuts remove the outer portion of a branch back to a smaller diameter branch 1/3 to 1/2 the diameter of the branch being removed (Figure 8). The size of the remaining branch is important because it must be large enough so it can become the new leader or terminal branch. Drop-crotch cuts are often used on young trees and less frequently on large, mature trees to redirect branch growth. Utility line clearing crews often use this method to redirect branch growth away from power lines. The correct location for the cut is through an imaginary line that bisects the angle formed by points A, B, and C

(figure 8). Line A to B is perpendicular to the branch to be removed while line A to C is formed by a line running through the branch bark ridge.

Before pruning a tree you have to decide where and how much foliage to remove. Remember, removing to much foliage can injure or kill a tree because leaves manufacture food by converting sunlight and carbon dioxide (CO_2) into sugars and Oxygen (O_2). Also remember, you can't feed a tree. Fertilizer is not food; it only provides essential elements like nitrogen, potassium, and phosphorus.

Here are some simple rules to consider before you begin:

- ✓ Never remove more than 25% of a trees live crown annually. This is particularly true for oaks.
- ✓ It is very important to have foliage or live crown distributed throughout the upper 2/3 of the tree. This also applies to branches i.e. foliage or smaller branches should arise from at least 2/3 of the branches length. Removing only interior branches, also called ***'lion-tailing'***, leaves all the foliage on the ends of the branches. Lion-tailing can actually cause branches to grow more rapidly in an effort to replace lost foliage. It can also cause sunburn and excessive sprouting. All these effects can result in weak or broken branches. ***Crown Cleaning*** **a tree care industry practice, where small branches and epicormic sprouts are removed from large sections of the trunk and scaffold branches, is a technique I do not recommended particularly when applied to native oaks.**
- ✓ Whenever possible avoid removing branches that are larger than four inches in diameter.

Pruning Young Trees

Pruning trees while they're young offers the greatest potential to affect their future size, shape, health, and safety. Because their branches are relatively small, pruning wounds close more rapidly so this is an opportune time to improve branch spacing or remove branches that will become crowded over time. Young trees should also be pruned to promote their shape and structure and to remove lower branches that may interfere with people or property as the tree matures. Immature trees often develop two or more

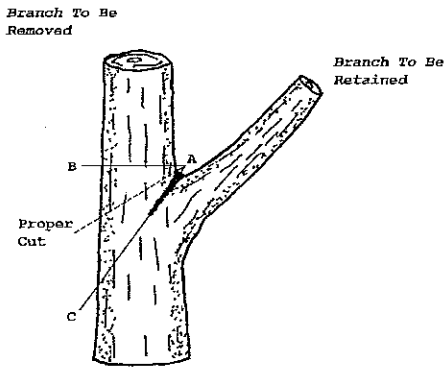


Figure 8

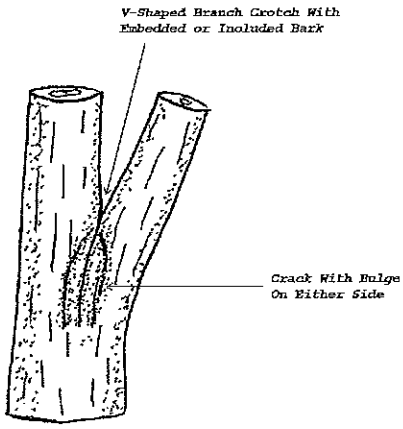


Figure 9

leaders or main stems (trunks). These ***'Codominant'*** stems sometimes conflict with each other and develop tight or ***'V-shaped'*** branch crotches with no branch bark ridge (figure 9). If one or more codominant stems exist and are larger than ½ the main trunk diameter, one or more should be removed to reduce crowding and ***'embedded bark'*** that can lead to branch or trunk breakage when the tree matures (figure 9).

Pruning Mature Trees

The outdated practice of cutting branches flush to the trunk and removing the branch collar destroys the natural protective zone. Flush cuts are more damaging in mature trees because branches are usually larger, so cuts are larger, and ***'woundwood'*** or ***'callus'*** tissue forms more slowly. Because of this, thinning and drop-crotch cuts are preferred because these cuts preserve the trees protective zone. Drop-crotch cuts are primarily used to reduce the length of branches while thinning cuts are used to remove dead, dying, diseased, or conflicting branches back to the parent branch or trunk. When possible, avoid removing branches that are larger than 4 to 5 inches in diameter because the wound takes longer to close. Before removing any live branches, first remove all dead branches from the crown. Now look for branches that are rubbing other branches, are less vigorous, and those with poor branch attachment. Pay particular attention to branches with V-shaped crotches or embedded bark (figure 9) because they are much more likely to break out. Ornamental and shade trees are best pruned by the method called 'thinning.' Through this method, branches are selectively removed, using thinning cuts, to preserves or improve the trees natural shape. Thinning also can be used to improve structure, reduce height and spread, reduce the weight of large lateral branches and improve wind resistance. Figure 10 illustrates how thinning preserves a trees natural shape.

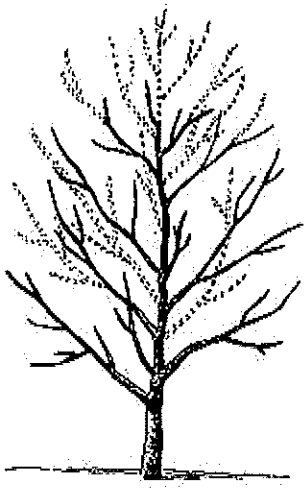


Figure 10

City of Sonoma

No. 1 The Plaza
Sonoma, California 95476-6618
Phone (707) 938-3681 Fax (707) 938-8775
E-Mail: cityhall@sonomacity.org

Sonoma Sister Cities:

Aswan, Arab Rebublic of Egypt
Chambolle-Musigny, France
Greve in Chianti, Italy
Kaniv, Ukraine
Patzcuaro, Mexico

July 3, 2013

Chris Dluzak
3877 Gravenstein Highway South
Sebastopol, CA 95472

Subject: Tree Removal Request – 1032 Fifth Street East (APN: 128-111-020).

Dear Mr. Dluzak:

On Thursday, June 27, 2013, the Tree Committee considered your application to remove the following trees on the property at 1032 Fifth Street East (Lot 2 of the Fichtenberg Subdivision): 1) mayten; 2) black mulberry; 3) sweetgum; 4) lemon; and 5) two privets. These trees were identified as Tree numbers 13, 14, 15, 19, 20, and 21, in the Sanborn arborist report and tree preservation plan that were prepared for the subdivision. After discussion, the Tree Committee approved the request subject to an on-site replacement ratio of 6, 15 gallon trees or 3, 24 inch box size trees in addition to the replacement ratio for the Sanborn arborist report that was completed in 2010, which required a minimum tree replacement ratio of 2:1 (15-gallon) unless replaced with 24 inch box sized trees, then a lesser replacement ratio will be excepted.

Please contact me at (707) 933-2202 if you have any questions or concerns regarding this matter.

Sincerely,

Wendy Atkins

Wendy Atkins
Associate Planner

Item #6

RECEIVED
JUN 19 2013
CITY OF SONOMA

City of Sonoma

Planning and Community Development
No. 1, The Plaza
Sonoma, CA 95476

Application for Tree Removal, Alteration or Relocation

On Public or Private Property per Ordinance No. 11-2009.

Date: May 23, 2013

Applicant Information:

Name: Chris Dluzak Telephone: (707) 889-3142

Mailing Address: 3877 Gravenstein Highway South, Sebastopol CA 95472

Tree Information:

Type of Permit Requested:
- ☒ Tree Removal
- ☐ Tree Alteration
- ☐ Tree Relocation

Location of Tree(s):
- ☐ Public Property*
- ☐ Single-Family or Multi-Family Residential Property
  - ☐ Non-residential Property
- ☒ Private Property
  - ☒ Single-Family or Multi-Family Residential Property
  - ☐ Non-residential Property

Site address where tree(s) is/are located: 1032 Fifth Street East

Specific location of tree(s) (Please provide color picture and diagram of tree): See Attached Tree Exhibit

Tree Species: #1: Mayten; #2: Black Mulberry; #3: Sweetgum; #4: Lemon; #5 Privet; #6 Privet

Trunk circumference of tree (measured at 4.5 feet above ground): See attached Tree Evaluations

Reasons for this request (attach additional sheets as necessary and documentation of associated damage, if any): In order to develop a landscape that is consistent with the aesthetics of the proposed remodel and addition to the existing residence all ~~four~~ six of the existing trees are proposed for removal.

Signature of Applicant

** If an application to remove a tree on public property is approved, the applicant will be required to contribute $250 toward the removal and replacement of each tree. Public property includes street right-of-ways and all other City-owned property.*

BALCERAK DESIGN
LANDSCAPE ARCHITECTURE • URBAN FORESTRY
608 Beaver Street Santa Rosa, CA 95404 (707)573-8234

ARBORIST'S REPORT

1032 FIFTH STREET EAST

LOT 2

SONOMA, CALIFORNIA

June 20, 2013

BALCERAK DESIGN
LANDSCAPE ARCHITECTURE • URBAN FORESTRY
608 Beaver Street Santa Rosa, CA 95404 (707)573-8234

June 20, 2013

Chris Dluzak
3877 Gravenstein Highway South
Sebastopol, CA 95472

INTRODUCTION:

This Report has been prepared to address the City of Sonoma's Tree Ordinance. All trees, as defined in the City's Tree Ordinance, that are on the subject property were observed to determine their species, size, vigor, and structure. As there is now a development plan for this lot, the suitability of retaining and incorporating the existing trees into the proposed landscape can now be adequately addressed.

The evaluations are based upon a visual inspection of the trees. A detailed analysis was not requested nor performed. No crown explorations or climbing inspections were performed. All diameters given are as measured at 54" off grade (Diameter at Breast Height), unless otherwise noted. The overall condition of each tree is represented by its vigor and structure. Vigor is an indication of the overall health and general condition of the tree. Structure refers to the physical form of the tree, this includes branch attachment, presence of decay, or mechanical damage the tree has suffered. Each tree was rated, in each category, using a value of good, fair, or poor.

A Tree Exhibit showing the location of the existing trees and their identification numbers has been provided for reference. A definition of terms used is provided at the end of this report. A detailed description of each tree can be found in the Tree Evaluation section of this Report.

SUMMARY:

A total of six trees, of five different species, have been evaluated for this Report. All of the trees are exotic to California, and do not represent outstanding examples of their species.

The ownership of a tree is determined by where the trunk is located, regardless of the foliage or roots. When a tree trunk is found solely on one property that property owner has complete ownership of the tree. In a case where the property line passes through some portion of the trunk then the tree is in co-ownership equally between the two property owners. Under this condition the tree is referred to as a boundary tree. In this situation neither owner may unilaterally undertake any action that would be detrimental to the tree. Tree #3 is a boundary tree

between Lot 1 and Lot 2. At this time all the lots are under the ownership of one individual therefore no special agreement is required.

The City's Tree Ordinance defines a tree as follows: *"Tree means a woody plant having a single trunk, or a combination of multiple trunks, with a natural growth pattern that includes a definitely formed branching crown"*. Trees #5 and #6 do not meet this definition as they lack a defined crown associated with a tree. However, because they were counted as trees in the original report for the subdivision they have been included in this report for the subject property.

In order to develop a landscape that is consistent with the aesthetics of the proposed remodel and addition to the existing residence all of the existing trees are proposed to be removed.

METHODS:

The trees, contained on the subject property, were observed on April 27, 2013. The species identification was determined based upon visnal analysis of the features present at the time of the observation. All tree diameters were recorded using a standard diameter tape with units in feet and tenths of feet. When a tree had a crotch below 54-inches, the smallest trunk diameter below the crotch was measured and its height above natural grade was recorded.

TREE SPECIES ENCOUNTERED:

Tree #1 is a Mayten (*Maytenus borea*) tree. This evergreen tree is native to Chile and is a slow grower obtaining as much at forty feet in height with age. The habit of this tree is that of a small scale Weeping Willow (*Salix babylonica*). Given the variability of this species a number of named varieties have been developed. This tree commonly develops surface roots and as such is difficult to garden under. It is common for this tree to produce suckers if the roots are disturbed so it is best used where it has ample space and it is not disturbed.

Tree #2 is a Black Mulberry tree *(Morus nigra)*. This species is thought to be native to central and southwestern Asia, but due to widespread cultivation by man it is imposable to be certain. This is a deciduous, fast growing tree, reaching heights of 30 feet with age, and a slightly wider spread. They are known to tolerate a variety of soil and environmental conditions.

Tree #3 is an American Sweetgum (*Liquidambar styraciflua*). This upright deciduous tree is native to the eastern United States and is known for brilliant fall color. In California, this species may grow as tall as 60 feet with an aggressive root system known to cause damage to paving and sewer lines.

Tree #4 is a Lemon (*Citrus × limon*) a small evergreen tree believed to be native to Asia. It is an ancient hybrid of which one parent is Citron (*Citrus medica*) but the other parent has been

lost to antiquity. The tree's yellow fruit is well known and is used for culinary purposes throughout the world. There are numerous named varieties. This tree is usually ten to fifteen feet in height, but its habit is dependent on the variety grown.

Trees #5 and #6 are Glossy Privet (*Ligustrum lucidum*). This is an evergreen tree or large shrub that originates from China, Korea, and Japan. This tree can obtain thirty feet in height with an even greater spread. It produces large panicles of white flowers in summer, which many people find severely allergenic. Birds find the fruit attractive and as a result this species has become a pest in certain areas of California. As a matter of fact the California Invasive Plant Inventory identifies it as a "Species of Concern" and they are currently studying its impacts. It is already prohibited from being planted within the service area of the Marin Municipal Water District.

Please feel free to contact me if further discussion of these items is necessary, or if you have any questions.

Respectfully,
BALCERAK DESIGN

Gary Balcerak
Landscape Architect C-3704
Certified Arborist WE-3069A
Certified Urban Forester 125

TREE EVALUATIONS

Tree	Species	Diameter	Vigor	Structure	Status	Notes
1	*Maytenus borea* (Mayten Tree)	8.6"	Fair	Fair	Remove	This is a semi-mature tree. Tree with strong lean to the north, likely due to shading from adjacent trees. This tree was headed back resulting in four scaffold limbs arising at the same point on the trunk, this is structurally unsound. This tree is not vigorous and will be negatively impacted by the remodel/addition work. Sanborn Tree 13.
2	*Morus nigra* (Black Mulberry)	7.4", 5.2", 7.3"	Good/Fair	Fair	Remove	This is a semi-mature tree. This tree has been headed back in the past resulting in vigorous new growth that is poorly attached to the trunk. Although the small stature of the tree means it has a low hazard potential it is not structurally sound. This tree has suffered root loss as a result of the work done in the drainage easement. Additionally, it appears that fill soil, from the grading operation, was placed around the base of this tree. Sanborn Tree 14.
3	*Liquidambar styraciflua* (Sweetgum)	7.1	Good	Good	Remove	This is a young tree. A significant number of surface roots were noted they would likely be impacted by the remodel/addition work. Its location, approx. 5.5' off the face of the residence, makes it a poor candidate for retention. Sanborn Tree 19.
4	*Citrus x lemon* (Lemon)	3.2" @ 2' off grade.	Good	Good	Remove	This is a mature small tree with an overall nice form. However this tree must be removed to install the landing and stairs off 'Bedroom 4'. Sanborn Tree 21.

TREE EVALUATIONS

Tree	Species	Diameter	Vigor	Structure	Status	Notes
5	*Ligustrum lucidum*) Glossy Privet	6", 3.5"			Remove	This plant had been removed at the time of the observation. The size noted is taken from the report prepared by Sherby Sanborn Consulting Arborist, dated June 19, 2010. Sanborn Tree 20.
6	(*Ligustrum lucidum*) Glossy Privet	3", 3", 3", 2" @ 14" off grade.	Poor	Fair	Remove	This is a suppressed plant with a thin canopy. This plant does not exhibit a well-defined branching crown. In order to install the proposed walkway this plant will need to be removed. Sanborn Tree 15.

Definition of Terms

Abiotic: nonliving
Adventitious: appearing in abnormal or unusual position or place.
Aerobic: living or acting only in the presence of air (oxygen).
Allelopathy: the chemical process by which a plant suppresses competing plants
Anaerobic: living or acting only in the absence of air (oxygen).
Arborescent: having the nature or habit of a tree.

Bifurcation: natural division of a branch or stem into two or more stems or parts.
Biotic: pertaining to living organisms.
Branch bark ridge: swelling of bark tissue on the upper side of the branch junction; normal pattern of development (contrast with embedded and included bark).
Branch collar: wood which forms around a branch attachment, frequently more pronounced below the branch.
Bud: the rudimentary state of a leaf, branch, or flower.
Buttress root: a large woody root located at the base of the trunk (the root crown), which helps to support the tree.

Cambium: a layer several cells thick between the wood and the bark. This is the tissue that gives trunks the ability to grow in circumference.
Canker: a necrotic lesion in the bark of the stem or root; also, the scar left after shedding of bark tissues killed by localized disease or environmental injury.
Chlorosis: lacking in chlorophyll, typically yellow in color.
Codominate: equal in size and relative importance, usually associated with either the trunks/stems or scaffold limbs/branches in the crown; in the context of crown class, trees whose crowns form the bulk of the upper layer of the canopy but wbich are crowded by adjacent trees.
Compartmentalization: physiological process which creates the chemical and mechanical boundaries that act to limit the spread of disease and decay organisms.
Conk: fruiting or spore producing body of a group of fungi.
Crotch: the point (or angle) at which two branches (or branch and the leader) meet.
Crown: parts of the tree above the trunk, including leaves, and branches.

DBH: diameter of the trunk, measured at breast height (54 inches above the ground).
Dripline: the width of the crown, as measured by the lateral extent of the foliage.

Epicormic: shoots, which result from adventitious or latent buds.
Excurrent: crown form where a strong central leader is present (contrast with decurrent) to the top of the tree.
Exotic: introduced from another place or region; non-native.
Exudate: bleeding or oozing.

Flush cut: pruning cut where the branch collar is removed, causing unnecessary injury to the trunk or parent stem.
Frass: fecal material and/or wood shavings produced by insects.

Gall: a plants response to irritation from an insect, fungus, insect, or a virus on the foliage, branches, or roots; producing growth, which isolates the irritation.
Girdling root: root that encircles all or part of the trunk, or other roots, which constricts the vascular tissue and inhibits secondary growth and the movement of materials.

Habit: the general characteristic appearance of a plant.
Heading: pruning technique where the cut is made to a bud, weak lateral branch not large enough to assume the role as a leader, or stub.
Herbaceous: a perennial plant that is not woody.
Hybrid: the offspring of two plants of different varieties, species, or genera.

Included bark: pattern of development at branch junctions where bark is turned inward rather than pushed out.
Inflorescence: the part of the plant responsible for the flowers.
Internode: the space between two nodes.

Latent bud: a bud that is more than one year old, which has grown enough to be located just below the surface of the bark.
Lenticel: a small opening in the bark that permits the exchange of gasses between the tree and the air.

Mechanical damage: injury caused by human activities as opposed to natural forces like wind, snow, or ice loads.
Moribund: nearly dead; having lost all vitality.

Necrotic: dead
Node: the often swollen or modified part of the stem that normally bears a bud.

Odoriferous: giving off an odor or scent or fragrance.

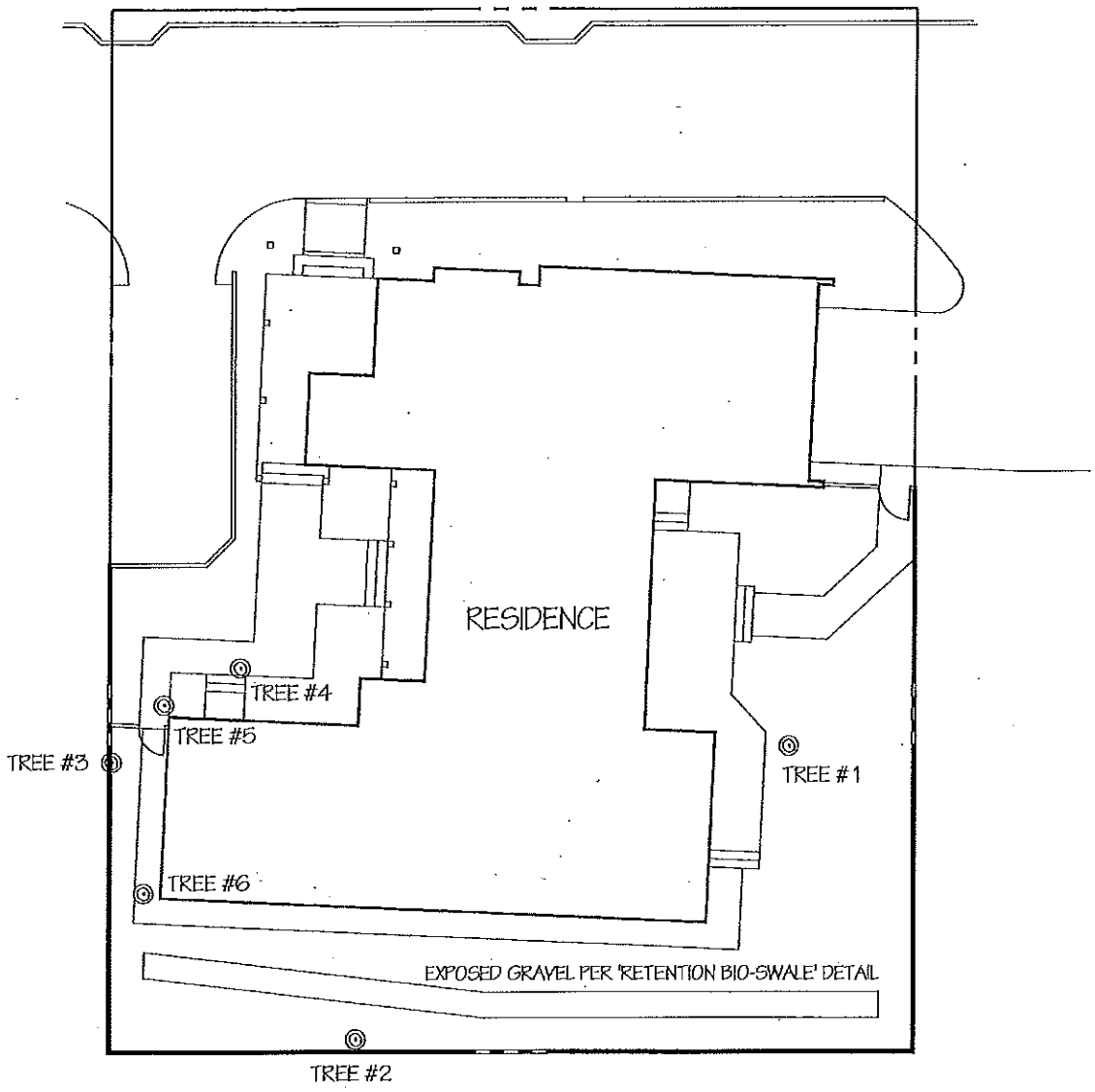
Parasite: an organism that grows in or on a host, getting all or part of its nutrients from the host.
Pathogen: any agent that causes disease, usually refers to microorganisms.
Pollarding: pruning technique where young trees or branches are initially headed, then re-headed on an annual (or regular) basis without disturbing the callus knob (knuckle).
Prostrate: a stem lying flat on the ground, often rooting at the nodes.

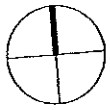
Reaction wood: specialized secondary wood, which develops in response to a lean or similar mechanical stress, attempting to restore the stem to the vertical.

Saprophyte: an organism that get nourishment from dead or decaying matter.
Scaffold limb: primary structural branch of the crown.
Sucker: a shoot rising from an underground root or stem.
Suppressed: in crown class, trees which have been overtopped and whose crown development is restricted from above.

Watersprout: upright, epicormic shoot arising from the trunk or branches of a plant above the soil.
Wetwood: a clear, watery liquid that originates from infections of the heartwood and inner sapwood by common soil-inhabiting bacteria. It normally flows to the wounded bark surface where it changes to brown, slimy ooze as a result of feeding by fungi, bacteria, and insects. Wetwood infected wood is resistant to decay by fungi.
Woundwood: lignified, partially differentiated tissue that develops from the callus associated with wounds.

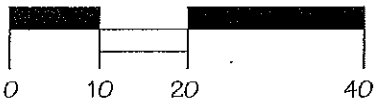
Xylem: tissue produced by the cambium that functions to transport and store water and mineral elements, as well as provide support; wood.





TREE EXHIBIT

1032 FIFTH STREET EAST



BALCERAK DESIGN

JUNE 20, 2013

CITY OF SONOMA

RESOLUTION NO. 01 - 2011

A RESOLUTION OF THE SONOMA CITY COUNCIL UPHOLDING THE DECISION OF THE PLANNING COMMISSION TO APPROVE AN APPLICATION TO SUBDIVIDE THE PROPERTY AT 20144 FIFTH STREET EAST INTO FOUR LOTS IN CONJUNCTION WITH EXCEPTIONS FROM THE SETBACK REQUIREMENTS, SUBJECT TO AMENDMENTS TO THE CONDITIONS OF PROJECT APPROVAL.

WHEREAS, on April 30 2010, an application was filed by Artlee, LLC for an application to subdivide the property at 20144 Fifth Street East into four lots; and

WHEREAS, upon considering this application in the course of a hearing held on October 14, 2010, the Planning Commission voted 3-2 to approve the four-lot subdivision in conjunction with Exceptions from the setback requirements; and

WHEREAS, this decision was appealed to the City Council by two residents near the site on the following basis: (1) only five Commissioners considered the item; (2) the Commissioners decision was split (3-2); (3) water usage/city rationing; (4) heritage tree issues; and (5) several neighbors had requested a continuation of the Planning Commission meeting at which the project was approved; and

WHEREAS, the City Council considered the appeal in a duly noticed public hearing held on December 15, 2010.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Sonoma hereby upholds the decision of the Planning Commission to approve an application to subdivide the property at 20144 Fifth Street East into four lots in conjunction with exceptions from the setback requirements, subject to modifications to the conditions of approval, as set forth in Exhibit A, intended to better address neighbor concerns about privacy and about noise associated with garbage and recycling services.

The foregoing Resolution was duly adopted this 5th day of January 2011, by the following roll call vote:

AYES:	Sanders, Brown, Barbose, Gallian
NOES:	Rouse
ABSENT:	None
ABSTAIN:	None

Laurie Gallian

Laurie Gallian, Mayor

ATTEST:

Gay Johann

Gay Johann, MMC
City Clerk

EXHIBIT A
As revised by the City Council on December 15, 2010

City of Sonoma Planning Commission
CONDITIONS OF PROJECT APPROVAL AND MITIGATION MONITORING PROGRAM
Fichtenberg 4-lot Subdivision – 20144 Fifth Street East

December 15, 2010

1. The following are required by the City and other affected agencies prior to the approval of the Parcel Map.

   a. A Parcel Map shall be prepared and submitted to the City Engineer and Planning Director for review and approval along with the following supporting data: a current (within the most recent three months) Preliminary Title Report, Joint Access Easement Agreement, Private Storm Drain Easement, private utility easements (for separate water, sewer and public utility services), closure calculations, copies of existing easements, and copies of records used to prepare survey (such as deeds and easements, filed maps, etc.). Upon approval and acceptance by the City, the map will be released to the Applicant's title company for filing at the office of the Sonoma County Recorder. The Applicant shall provide the number and types of copies to the City as directed by the City Engineer.

   b. The applicant shall submit a copy of the Joint Access Easement Agreement to provide for access to Lots 1, 2, 3, and 4. Said agreement shall provide for maintenance of the access and is subject to review and approval of the City.

   c. All required sidewalk, street, storm drainage, water, sewer, access and public utility easements shall be dedicated to the City of Sonoma or to other affected agencies of jurisdiction, as required and shown on the Parcel Map.

   d. Three-quarter inch iron pipe monuments shall be set at all tract corners and at all lot corners, unless otherwise approved by the City Engineer. Street centerline monuments shall be set as directed by the City Engineer. Prior to recordation of the map, applicant's Surveyor shall certify that all monuments have been set to the satisfaction of the City Engineer. The applicant may post a bond for setting interior monuments after the recordation of the map but prior to issuance of a building permit. Bond amount is hereby established at $500 per lot and will be released upon submittal of certification by applicant's Surveyor.

   e. The applicant shall show proof of payment of all outstanding engineering plan check fees within thirty (30) days of notice for payment and prior to Parcel Map recordation.

Enforcement Responsibility: *Planning Administrator; City Engineer*
Timing: *Prior to approval of the Parcel Map*

2. Prior to approval of the Parcel Map, Applicant shall submit Improvement Plans to the City Engineer and Planning Director (for arborist review) for review and approval. The Improvement Plans shall be prepared by a registered civil engineer and all public improvements shall meet City standards. All drainage improvements shall be designed in accordance with the Sonoma County Water Agency "Flood Control Design Criteria." Plans and engineering calculations for drainage improvements, and plans for sanitary sewer facilities, shall be submitted to the Sonoma County Water Agency for review and approval. The following public improvements shall be required and shown on the Improvement Plans:

   a. Driveway approaches and any non-conforming sidewalk shall be removed and replaced to meet City and Federal ADA standards. Existing curb, gutter, and sidewalk that are damaged or deemed by the City Engineer to be in disrepair shall be removed and replaced to City standards.

   b. Street widening and street frontage improvements for Fifth Street East including but not limited to, storm drainage, paving, conform paving, curb gutter, sidewalk, street lighting, fire hydrant, striping and signage, in accordance with City Standards. The design of the sidewalk shall accommodate the valley oak tree located adjacent to Lot 1.

   c. Street paving requirements for both Fifth Street East and the private driveway shall be identified in the geotechnical report and structural section for the pavement shall be in conformance with the report recommendations or City standards, whichever applies.

   d. A drainage plan for proposed private storm drain lines and facilities shall be included in the Improvement Plans. No lot-to-lot drainage is allowed unless a private storm drain easement is acquired. The Drainage plan shall be referred to the Sonoma County Water Agency for review and approval.

   e. Proposed sewer services serving each lot. Applicant shall submit sewer service connection plans directly to the Sonoma County Water Agency for review and approval.

   f. Separate water services and meters serving each lot. Backflow assemblies as required by the Fire Department and/or the State of California shall also be shown on the improvement plans.

   g. The applicant shall show proof of payment of all outstanding engineering plan check fees within thirty (30) days of notice for payment and prior to the approval of the improvement plans, whichever occurs first.

h. Utility trenching shall not occur within the drip line of the valley oak adjacent to Lot 1.

Enforcement Responsibility:	*City Engineer; Sonoma County Water Agency*
Timing:	*Prior to the approval of the Parcel Map*

3. Prior to approval of the Parcel Map, the Applicant shall install improvements in accordance with the City-approved Improvement Plans.

Enforcement Responsibility:	*City Engineer*
Timing:	*Prior to the approval of the Parcel Map*

4. All existing and proposed utility distribution facilities for the subdivision, including electric, telecommunications, cable TV, etc., shall be undergrounded.

Enforcement Responsibility:	*City Engineer*
Timing:	*Prior to the approval of the Parcel Map*

5. All Fire Department and Building Code requirements shall be satisfied, including signing or striping the driveway as an emergency access lane to prohibit parking, except in specifically designated areas.

Enforcement Responsibility:	*Fire Department; Public Works; Building Division*
Timing:	*Prior to recording the Parcel Map*

6. The applicant shall be required to pay for all inspections prior to the acceptance of public improvements, or within 30 days of receipt of invoice; all plan checking fees at the time of the plan checks; and any other fees charged by the City of Sonoma, the Sonoma County Water Agency or other affected agencies with reviewing authority over this project.

Enforcement Responsibility:	*Public Works; Building Division; Affected Agencies*
Timing:	*Prior to the acceptance of public improvements, or plan check, or within 30 days of receipt of invoice, as specified above*

7. The following agencies must be contacted by the applicant to determine permit or other regulatory requirements of the agency prior to approval of the Parcel Map, including the payment of applicable fees:
   a. Sonoma County Water Agency. *[For sewer connections and modifications and interceptor requirements, and for grading, drainage, and erosion control plans]*

Enforcement Responsibility: *City Engineer*
Timing: *Prior to the approval of the Parcel Map*

8. A sewer clearance shall be provided to the City Engineer and Building Division verifying that all applicable sewer fees have been paid prior to approval of the Parcel Map. Note: Substantial fees may apply for new sewer connections and/or the use of additional ESDs from an existing sewer connection. The applicant is encouraged to check with the Sonoma County Water Agency immediately to determine whether such fees apply.

Enforcement Responsibility: *City Engineer; Building Division*
Timing: *Prior to the approval of the Parcel Map*

9. The following agencies must be contacted by the applicant to determine permit or other regulatory requirements of the agency prior to issuance of a building permit, including the payment of applicable fees:

a. Sonoma County Water Agency [For sewer connections and modifications and interceptor requirements, and for grading, drainage, and erosion control plans]
b. Sonoma Valley Unified School District [For school impact fees]
c. Sonoma County Department of Environmental Health [For abandonment of wells]

Enforcement Responsibility: *Building Division; Public Works Division*
Timing: *Prior to issuance of a building permit*

10. No structures of any kind shall be constructed within the public easements dedicated for public use, except for structures for which the easements are intended.

Enforcement Responsibility: *Building Division; Fire Department; Planning Di vision; Public Works*
Timing: *Prior to the issuance of any building permit; Ongoing*

11. Any wells on the site shall be abandoned in accordance with permit requirements of the Sonoma County Department of Environmental Health; or equipped with a back-flow prevention device as approved by the City Engineer. Wells that will remain shall be plumbed to irrigation system only and not for domestic use.

Enforcement Responsibility: *City Engineer*
Timing: *Prior to approval of the Grading Plans and Improvement Plans*

12. A soils and geotechnical investigation and report, prepared by a licensed civil engineer, shall be required prior to the issuance of a grading permit and/or approval

of the improvement plans, as determined by the City Engineer. Recommendations identified in the report shall consider the recommendations provided in the geotechnical investigation prepared for the development and shall be incorporated into the construction plans for the project and into the building permits.

Enforcement Responsibility:	*Building Division; City Engineer*
Timing:	*Prior to issuance of a grading permit and/or approval of improvement plans*

13. All Building Division and Building Code requirements shall be met. A building permit shall be required.

Enforcement Responsibility:	*Building Division*
Timing:	*Prior to construction*

14. The applicant shall submit a Water Conservation Plan to the City Engineer for review and approval. The Plan shall include conservation measures for indoor and outdoor water use and shall be consistent with the City's water conservation and landscape efficiency ordinances.

Enforcement Responsibility:	*City Engineer*
Timing:	*Prior to issuance of a building permit*

15. The project shall be constructed in accordance with the following requirements related to tree preservation, mitigation, and replacement:

    a. Trees removed from the site shall be replaced at a 2:1 ratio with 15-gallon trees or a lesser ratio if 24-inch box size replacement trees are used.
    b. The developer shall adhere to the tree protection measures included within the arborist report.
    c. Any replacement trees planted along the property frontages shall be consistent with the City's Street Tree Planting Program, including the District Tree List.
    d. The driveway shall be relocated away from the drip line of the large valley oak growing along the north boundary near Fifth Street East as shown on the approved site plan. Special protection measures, including the use of CU Structural Material, identified in the arborist report shall be applied. The project arborist, Sherby Sanborn, shall review the grading and improvement plans for compliance with tree protection measures and shall be on site during construction activities occurring in proximity to the tree.

Enforcement Responsibility:	*Planning Division; Design Review Commission*
Timing:	*Prior to the issuance of any occupancy permit*

16. The development shall be subject to the review and approval of the Design Review Commission (DRC). This review shall encompass site plan adjustments as required by these conditions or as deemed necessary by the DRC (except no modifications substantially altering the approved site plan or at variance with the conditions of approval shall be made), and review of elevation details, exterior materials and colors. The side plan shall indicate the exact locations of all utilities for the individual lots. The DRC shall give consideration to window placement, the scale and orientation of any second-floor elements, and other design details in order to maximize visual compatibility and minimize privacy impacts on adjoining properties.

Enforcement Responsibility: *Planning Division; DRC*
Timing: *Prior to the issuance of any building permit*

17. A landscape plan shall be prepared by a licensed landscape architect. The plan shall be subject to the review and approval of the Design Review Commission (DRC). The plan shall address site landscaping, fencing/walls, hardscape improvements, required tree plantings. The landscape plan shall comply with City of Sonoma's Water Efficient Landscaping Ordinance (Municipal Code §14.32) and Development Code Sections 19.46 (Fences, Hedges, and Walls), and 19.40.060 (Landscape Standards) and shall provide for plantings along the northern and southern property lines in order to minimize privacy impacts on adjoining properties.

Enforcement Responsibility: *Planning Division; Design Review Commission*
Timing: *Prior to the issuance of any occupancy permit*

18. Onsite lighting shall be addressed through a lighting plan, subject to the review and approval of the Design Review Commission (DRC). All proposed exterior lighting for the site shall be indicated on the lighting plan and specifications for light fixtures shall be included. The lighting shall conform to the standards and guidelines contained under Section 19.40.030 of the Development Code (Exterior Lighting). No light or glare shall be directed toward, or allowed to spill onto any offsite areas. All exterior light fixtures shall be shielded to avoid glare onto neighboring properties, and shall be the minimum necessary for site safety and security.

Enforcement Responsibility: *Planning Division; Design Review Commission*
Timing: *Prior to the issuance of any occupancy permit*

19. Prior to the issuance of any building permit, a water demand analysis, prepared by a licensed civil engineer, shall be submitted by the applicant and shall be subject to the review and approval of the City Engineer. Building permits for the project shall only be issued if the City Engineer finds, based on the water demand analysis in relation to the available water supply, that sufficient capacity is available to serve the proposed development, which finding shall be documented in the form of a will-

serve letter, prepared by the City Engineer. Any will-serve letter shall remain valid only so long as the use permit for the project remains valid.

Enforcement Responsibility:	*City Engineer*
Timing:	*Prior to issuance of any building permit*

20. The following dust control measures shall be implemented as necessary during the construction phase of the project: 1) all exposed soil areas (i.e. building sites, unpaved access roads, parking or staging areas) shall be watered at least twice daily or as required by the City's construction inspector, 2) exposed soil stockpiles shall be enclosed, covered, or watered twice daily; and 3) streets adjoining the project site (Fifth Street East) shall be swept daily, if visible soil material is deposited onto the road.

Enforcement Responsibility:	*Building Department*
Timing:	*Ongoing during construction*

21. If archaeological remains or a dense concentration of historic period site indicators are uncovered, work at the place of the discovery shall be halted immediately until a qualified archaeologist can evaluate the finds. Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible addition of bone and shell remains, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

Enforcement Responsibility:	*Building Department; Planning Department; Public Works Department*
Timing:	*Ongoing during construction*

22. The Society of Vertebrate Paleontology, a national scientific organization of professional vertebrate paleontologists, has established standard guidelines that outline acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, specimen preparation, analysis, and curation. Most practicing professional paleontologists in the nation adhere to the Society of Vertebrate Paleontology assessment, mitigation, and monitoring requirements, as specifically spelled out in its standard guidelines. If paleontological resources are identified during construction activities, all work in the immediate area will cease until a qualified paleontologist has evaluated the finds in accordance with the standard guidelines established by the Society of Vertebrate Paleontology. If the paleontological resources are considered to be significant, a data recovery program will be implemented in accordance with the guidelines established by the Society of

Vertebrate Paleontology. Data recovery will reduce all impacts to a less-than-significant level.

Enforcement Responsibility:	*Building Department; Planning Department; Public Works Department*
Timing:	*Ongoing during construction*

23. If human remains are encountered, excavation or disturbance of the location shall be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

Enforcement Responsibility:	*Building Department; Planning Department; Public Works Department; Coroner*
Timing:	*Ongoing during construction*

24. Post Construction Best Management Practices to control the quality of surface water runoff from the site shall be used throughout the site to capture and filter surface runoff prior to its leaving the site or entering the storm drainage system. Acceptable methods of capturing and filtering water pollution can be found in the SUSMP guidelines (i.e., Guidelines for the Standard Urban Storm Water Mitigation Plan for the Santa Rosa Area and Unincorporated Areas around Petaluma and Sonoma dated June 2005) including the use of filters, grease traps, interceptors and biotechnical solutions (grass-lined swales and filtering basins in landscaped areas surrounding parking areas) which shall be implemented as feasible. The civil engineer for the project shall incorporate these measures into the engineering plans for the project site and shall be subject to the approval of the City Engineer. In addition, the applicant shall comply with the City of Sonoma Stormwater Best Management Plan. The applicant shall submit a preliminary and final storm water mitigation plan (AMP) in compliance with the 2005 SUSMP guidelines herein referenced to the City Engineer for review and approval.

Enforcement Responsibility:	*City Engineer; Public Works Department; Building Department*
Timing:	*Prior to issuance of any building permit; Ongoing during construction*

25. All construction equipment shall be maintained and operated so as not to generate unacceptable noise levels in the vicinity of the project site. Stationary construction equipment (e.g., compressors) shall be situated as far as possible from inhabited areas, and equipment not actively in use shall be shut down to reduce unnecessary noise. The contractor shall be responsible to insure that all construction equipment

is equipped with manufacturer-approved mufflers/baffles. Noise-producing construction activities and materials delivery shall comply with the limitation of the City's Noise Ordinance.

Enforcement Responsibility:	*Building Department; Planning Department; Public Works Department;*
Timing:	*Ongoing during construction*

26. The applicant shall arrange with the local garbage company to collect garbage from the area in front of lot 1.

Enforcement Responsibility:	*Planning Department*
Timing:	*Ongoing*

27. The applicant/developer shall comply with all requirements of the County of Sonoma Permit and Resource Management Department (PRMD) as outlined in the following:

a. The Applicant shall initiate proceedings with the Permit and Resource Management Department (P.R.M.D.) to annex property to the Sonoma Valley County Sanitation District. Prior to obtaining a permit to construct sanitary sewer facilities for development of the subject property, the Applicant shall submit a copy of the Sonoma Local Agency Formation Commission (L.A.F.C.O.) Certificate of Completion of Annexation to the Sanitation Section of P.R.M.D.

b. NOTE ON MAP: "A separate Sewer Connection Permit for each lot in this subdivision shall be obtained prior to occupancy of any building constructed on the lot". All fees shall be paid to, and all sewer construction shall be inspected and accepted by the Sonoma County Permit and Resource Management Department prior to occupancy of the building.

c. The Applicant shall construct a new sanitary sewer main and appurtenances or post securities with the City of Sonoma to ensure that sewer facilities are installed in accordance with Sonoma County Water Agency (S.C.W.A.) Design and Construction Standards for Sanitation Facilities, where applicable, and/or specific details, as shown on approved improvement plans.

d. The Applicant shall construct a new water main and appurtenances or post securities with the City of Sonoma to ensure that water supply facilities are installed in accordance with City of Sonoma Water System Standards where applicable, and/or specific details, as shown on approved improvement plans.

e. The Applicant shall submit improvement plans to the Sanitation Section of P.R.M.D. for review and approval of the sanitary sewer design. Improvement plans shall be blue line or black line drawings on standard bond paper, 24 inch by 36 inch in size, and prepared by a licensed civil engineer registered in the State of

California. Sanitary sewer facilities shall be designed and Improvement Plans prepared in accordance with S.C.W.A. Design and Construction Standards for Sanitation Facilities. The Applicant shall pay Plan Checking fees to the Sanitation Section of P.R.M.D. prior to the start of Improvement Plan Review.

Please note that review of the sanitary sewer design is a separate review from that of the buildings, drainage and frontage improvements, and shall be performed by the Sanitation Section of the Permit and Resource Management Department under a separate permit.

The sewer design originals shall be signed by the S.C.W.A. Chief Engineer prior to the issuance of any permits for construction of the sanitary sewer facilities. The design engineer shall submit improvement plans to the Sanitation Section of P.R.M.D. on 24 inch by 36 inch mylar or vellum originals for signature by S.C.W.A. All sanitary sewer inspection permits shall be obtained from the Sanitation Section of P.R.M.D. prior to the start of construction.

f. The Applicant shall grant a public sewer easement to the Sonoma Valley County Sanitation District.

g. The easement shall be a minimum of 15 feet in width, and shall be granted to the sanitation district by separate document. The easement shall be shown on the subdivision map and on the improvement plans prior to approval of the improvement plans by the Engineering Division of P.R.M.D. A copy of the easement shall be submitted with the improvement plans for the initial sewer design plan check.

h. No building shall be connected to the newly constructed sewer main until the sewer main has been inspected and accepted by the Engineering Division of P.R.M.D., and a Sewer Connection Permit has been issued for the building. A Sewer Completion Notice is required PRIOR to Occupancy.

i. Prior to connection of the existing residence to the public sewer system, the Applicant shall obtain a Septic Tank Destruct permit from the Sanitation Section of P.R.M.D. The septic tank abandonment shall be inspected and approved by the Engineering Division of P.R.M.D. when the residence is connected to the sewer system.

j. Prior to the start of sewer construction within the City of Sonoma's Right-of-way of Fifth Street East, the Applicant shall obtain a City of Sonoma Encroachment Permit. A copy of the issued Encroachment Permit and five (5) copies of signed improvement plans shall be provided to P.R.M.D. when obtaining the sewer construction permit.

k. The Applicant shall obtain a permit to construct sanitary sewer facilities for the proposed subdivision prior to the start of construction. All sewer work shall be inspected and accepted by the Engineering Division of P.R.M.D., and a Sewer

Completion Notice shall be issued by the Inspector before occupancy is granted for any building in the subdivision.

l. The Applicant shall be responsible for the restoration of existing conditions including, but not limited to surfacing, landscaping, utilities and other public improvements that have been disturbed due to the construction of sanitary sewer facilities. Restoration shall be completed prior to the issuance of a Sewer Completion Notice, unless otherwise specifically approved in advance by P.R.M.D.

m. The Applicant shall have "record drawings" prepared by the project engineer, in accordance with Section 6-05, of the S.C.W.A. Design and Construction Standards for Sanitation Facilities. The record drawings shall be submitted to the Engineering Division of P.R.M.D. for review and approval prior to acceptance of the sanitary sewer facilities.

Enforcement Responsibility:	*City Engineer; Public Works Department; Planning Department; PRMD*
Timing:	*Prior to final occupancy*

3. CITY MANAGER COMMENTS AND ANNOUNCEMENTS

City Manager Kelly reported that beginning that Friday; City water customers would be able to access water account information and make payments online. She said that notice to the public would be provided in the newspaper and through a notice included with the next water billing.

4. PRESENTATIONS

Item 4A. **Proclamation Honoring Beverly Smith**

Mayor Gallian read aloud the proclamation honoring Beverly Smith for her twenty-five years of service with the Sonoma County Council on Aging. Ms. Smith thanked the Council for the recognition.

5. CONSENT CALENDAR/AGENDA ORDER

Item 5A: **Waive Further reading and Authorize Introduction and/or Adoption of Ordinances by Title Only.**

Item 5B: **Approval of the Minutes of the December 1, 2010, City Council Meeting.**

Item 5C: **Approval of City co-sponsorship of "Climate Protection: Everybody Profits VII" Event to be held in Petaluma.** Council approved a $500 co-sponsorship.

Item 5D: **Adoption of Resolution Declaring Surplus Property in Accordance with City Ordinance No. 01-2009 [Fire Ladder Truck].** Res. No. 49-2010.

Item 5E: **Extension of Exclusive Negotiating Agreement with Affordable Housing Associates (addressing the predevelopment and planning of an affordable housing development at 19344 Sonoma Highway).**

Mayor Gallian requested that agenda item 6B be heard prior to 6A. Clm. Barbose removed Consent Item 5B and asked that the minutes be carried over to a future meeting. Laurie Langton requested that Item 7C be considered prior to 7B.

It was moved by Clm. Sanders, seconded by Clm. Barbose, to approve the requested changes to the agenda order and to approve the Consent Calendar except for Item 5B. The motion carried unanimously.

6. PUBLIC HEARINGS

Item 6B: **Discussion, consideration and possible action adopting a resolution in support of the City's Community Development Block Grant [CDBG] Application for FY 2011/12.**

Assistant City Manager Giovanatto reported that the City participated with other Sonoma County cities in the federal Community Development Block Grant Program (CDBG). In past years, the program has funded seismic retrofit, affordable housing, mobilehome rehabilitation and improvements to City Parks. Participating cities each set priorities that are presented to the Technical Advisory Committee (TAC) at a public hearing in February 2009. The TAC, comprised of representatives from each member city, recommends projects for funding to the County Board of Supervisors who make the final allocations. Giovanatto stated that staff was recommending support of an application for funds to complete accessibility improvements at Depot Park.

The public comment period was opened and closed with none received.

It was moved by Clm. Sanders, seconded by Clm. Brown, to adopt Res. No. 50-2010 entitled A Resolution of the City Council of the City of Sonoma Endorsing and Prioritizing Applications for the Community Development Block Grant Consolidated Application for FY 2011/12. The motion carried unanimously.

Item 6A: **Consideration of an appeal of the Planning Commission's decision to approve an application to subdivide the property at 20144 Fifth Street East into four lots in conjunction with Exceptions from the setback requirements.**

Associate Planner Atkins reported that the Planning Commission considered the request of Art Fichtenberg for a four-lot subdivision in conjunction with Exceptions from the setback requirements in October. After public testimony and discussion, they voted 3-2 to approve the project, subject to conditions of approval. Subsequently, on October 29, 2010, Jennifer Arnold and Carol Schantz filed an appeal of the Planning Commission's decision citing the following

Item 6A: **Consideration of an appeal of the Planning Commission's decision to approve an application to subdivide the property at 20144 Fifth Street East into four lots in conjunction with Exceptions from the setback requirements, Continued.**

issues: (1) only five Commissioners considered the item; (2) the Commissioners decision was split (3-2); (3) water usage/city rationing; (4) heritage tree issues; and (5) several neighbors had requested a continuation of the Planning Commission meeting at which the project was approved. Atkins stated that staff recommended upholding the decision of the Planning Commission thereby approving the tentative map and Exceptions from the setback requirements.

Mayor Gallian opened the public hearing. Appellant Jennifer Arnold stated that she filed an appeal because there were only five Planning Commissioners present at their meeting and they denied a request by several of the neighboring property owners to continue the matter. She also expressed concerns about water availability, the Heritage Tree on the property, loss of privacy due to the two-story structures, and the additional noise and traffic the project would generate.

Co-appellant Carol Schantz cautioned that installation of infrastructure too near the trunk of a tree would kill it and she asked the Council to consider the trees. Ms. Schantz questioned why there were rules if exceptions were going to be approved and she requested that Council deny the application in its present configuration.

Rosemary Sutcliffe inquired if Councilmembers had actually visited the site.

Vic Conforti pointed out that the proposed lots exceeded the Development Code minimum size for Low Density Residential and they met all the setbacks except for those on Lot 2. He said the existing home on Lot 2 was what triggered the need for the exceptions. Conforti stated that the project had been designed to ensure there would be no loss of privacy by the neighbors and that Mr. Fichtenberg was willing to install additional landscaping to act as visual barriers.

Art Fichtenberg stated that the windows in the structures had been specifically located to ensure there would be no loss of privacy for the neighbors. He pointed out that the Design Review Commission would be reviewing and making recommendations regarding those types of details. Fichtenberg stated that he would be using a new method for building around a tree that would protect the root system.

Robert Felder, speaking as a neighbor not as a member of the Planning Commission, stated that if the project had been considered as a Planned Development, the City would have had much more latitude in setting conditions of approval and could have restricted the development to single story structures.

Rosemary Sutcliffe stated that allowing two-story structures in a single-story development would have a negative impact on the neighborhood.

Cindy Wiles stated that Mr. Fichtenberg was trying to squeeze too much development onto the property. She asked Council not to approve the exceptions or to allow two-story structures. Ms. Wiles also expressed concerns about the Heritage Oak tree and the additional demands on the City's water and sewer systems.

Susan Hardister expressed her agreement with the appellants.

Bella Fox stated objection to the proposed driveway location. She stated the newly generated traffic would be within twenty feet of her home and would subject her to increased noise, pollution, lights and loss of privacy.

Milla Wiles stated that two-story structures would affect their quality of life. Camille Wiles stated the proposed development would disrupt her family's life and noted that the walnut trees slated for removal currently provide the only shade for their horses.

Patty Defern inquired if the impacts of additional traffic had been addressed. She also questioned if there was adequate turn-around space for fire trucks. Ms. Defern expressed concerns relating to flooding and drainage on the east side of town. She also questioned if Mayor Gallian should be participating in the discussion since her husband voted on the application as a member of the Planning Commission.

When there were no additional comments, Mayor Gallian closed the public hearing.

Item 6A: **Consideration of an appeal of the Planning Commission's decision to approve an application to subdivide the property at 20144 Fifth Street East into four lots in conjunction with Exceptions from the setback requirements, Continued.**

Clm. Sanders asked staff to address some of the issues brought up by the public. Atkins stated that the Fire Department, in approving the development plans, had required a sixty-foot turnaround and placed a no parking restriction on the driveway. She stated that the project would be subject to the City's noise ordinance.

Clm. Brown asked the City Attorney to address the issue of a potential conflict of interest for Mayor Gallian. Mr. Walter stated that there was no evidence to indicate that Mayor Gallian was prejudiced just because her husband voted on the project and unless there was a showing of actual bias or favoritism, she would not be deemed to be automatically disqualified.

Clm. Sanders stated she was sympathetic to the concerns expressed by the appellants and neighbors; however, she would vote to uphold the decision of the Planning Commission. She noted that the project could have included five lots instead of the four being proposed and stated that preserving the existing home justified granting the exceptions.

Clm. Barbose agreed. He noted that the final landscaping would be reviewed by the Design Review Commission and stated he felt the garbage trucks should not go down the driveway.

Clm. Rouse stated he felt the City could do better than what was being proposed and that some compromises should be made to address the privacy issues. He said he would support the appeal.

Clm. Brown stated his agreement with Sanders and Barbose and commented that the Council could relay to the Design Review Commission that privacy was of utmost importance. He stated that infill projects like this were a goal of the City.

Mayor Gallian stated her neighborhood had gone through a similar process and she was sympathetic with the appellants. She added that the solar and rain garden ideas would benefit the entire neighborhood.

It was moved by Clm. Sanders, seconded by Clm. Brown, to deny the appeal and to direct staff to take measures to address the issues of garbage and privacy and to request that the Design Review Commission provide the most amount of privacy possible. Clm. Sanders stated that she had previously asked the City Council to revise the Development Code so that road areas were not included in the square footage when calculating lot coverage. The motion carried four to one, Clm. Rouse dissented.

RECESS: The meeting recessed from 8:00 to 8:15 p.m.

Item 6C: **Consideration and Possible Adoption of Resolution Awarding a Design/Build Contract to SolarCraft Services, Inc. in the Amount of $137,249 for the Corporation Yard Administration Building Photovoltaic System Project No. 0919.**

Senior Planner Gjestland reported that in 2007, the City received approval from the IRS to issue Clean Renewable Energy Bonds (CREBs) in the amount of $1,156,000 to fund qualifying solar projects at four City-owned sites. The CREBs were issued by the City on July 10, 2008 and a subsequent feasibility analysis found that, of the four qualifying City projects, installation of photovoltaic arrays on the Police Station/Community Room building and Corporation Yard Administration building were the most feasible and cost effective. The Police Facility project was subsequently completed and went on-line in June 2010. As a second phase, the City solicited proposals for the Corporation Yard Administration building project. Of the four proposals that were submitted, the proposal submitted by SolarCraft Services, Inc. ranked highest through an evaluation process conducted by City staff. Gjestland stated that staff was recommending adoption of the resolution making required findings and awarding the contract to Solar/Craft.

Mayor Gallian opened the public hearing. Bill Stewart, SolarCraft Services Inc., thanked Council for their consideration. He stated that the system would consist of 102 REC 235-watt solar modules flush-mounted on a rail system to the metal roof. It would also include a monitoring system to provide performance information and identify malfunctions. He added the system would be warranted for twenty-five years with labor being included the first ten years.

When there were no additional public comments, Mayor Gallian closed the public hearing.

Chair Howarth closed the public hearing.

Comm. Gallian made a motion to approve the Use Permit to allow the continued offering of live music performances, subject to the conditions recommended by staff. Comm. Edwards seconded the motion. The motion passed unanimously.

Item #2 – Continued Public Hearing - Application to subdivide a property into four lots in conjunction with Exceptions from the setback requirements.

Project Location: 21044 Fifth Street East.

Applicant/Property Owners: Art Fichtenberg/Artlee LLC

Chair Howarth noted that a number of letters had been received requested that the hearing on this item be postponed. He stated that the Planning Commission would deal with that issue first and asked if there was any comment from the public on that question.

Chair Howarth opened the public hearing.

Vic Conforti, project architect, stated this is the fourth time the project has been before Planning Commission and he does not want a continuance, as he feels the Commission has sufficient information to proceed. He noted that at the meeting of September 9th, the Commission held a two-hour public hearing on the item, at which time neighbors of the project were able to express their concerns.

Art Fichtenberg, applicant, favors a resolution of the item and asked that the Planning Commission proceed.

Chair Howarth closed the public hearing.

Chair Howarth made a motion to proceed with the public hearing this evening. Comm. Edwards seconded the motion. The motion passed 4-1. Ayes: Edwards, Howarth, Gallian, George. Noes: Henevald.

Associate Planner Atkins presented staff's report.

Chair Howarth opened the public hearing.

Mr.Conforti explained the rationale for the setbacks and the placement of the garage on Lot 2. He increased the setback to 30 feet to respect the privacy concerns of neighbors. He reviewed the diagram that had been developed to illustrate sight-lines from second-story building elements.

Mr.Fichtenberg, assured the Planning Commission that he will comply with the conditions of approval requiring additional setbacks for second-floor building elements and noted this issue would be addressed through the design review process as well. He indicated outreach efforts to neighbors to address the concerns expressed at the last meeting would continue to be made, and offered to plant trees on neighboring properties, if requested

Chair Howarth closed the public hearing.

Comm. George asked if the intent is to proceed on separate motions in terms of environmental review and consideration of project approval. He reiterated that his concerns about water availability and the standards used by the Sanitation District with respect to recycled wastewater would not allow him to support the adoption of a negative declaration.

Planning Director Goodison noted that the initial study evaluation of potential impacts in the area of water quality and sanitation was based on the applicable standards of the state and federal governments.

Comm. Edwards stated that he supports the Negative Declaration.

Comm. Gallian stated that because the Sanitation District is in compliance with applicable water quality standards, there is no basis, in his view, to reject the Negative Declaration on those grounds.

Comm. Edwards made a motion to adopt the Negative Declaration. Comm. Gallian seconded the motion. The motion passed 3-2. Ayes: Howarth, Edwards, Gallian, Noes: George, Henevald.

Comm. Gallian made a motion to approve the Tentative Map, subject to the conditions of approval. Comm. Edwards seconded the motion. The motion passed 3-2. Ayes: Howarth, Edwards, Gallian, Noes: George, Henevald.

Chair Howarth commended the applicant for his efforts and cooperation and hopes he will continue to work with the neighbors.

Item #3 – Public Hearing – Application to develop the property at 19347 Ffith Street West with a residential care facility for adults with autism.

Project Location: 19347 Fifth Street West.

Applicant/Property Owners: Woven Shade/Sonoma Community Development Agency

Planning Director Goodison presented staff's report. Comm. Henevald asked about the drainage. Planning Director Goodison stated that the project would incorporate on-site water quality features and would connect with storm drains in the vicinity of the site.

Chair Howarth asked about the zoning of the four parcels off West Spain Street. Planning Director Goodison stated that they were zoned Low-Density Residential and each could be developed with a single-family residence in the future.

Comm. Edwards asked about the structures shown on the northwest corner of the site and it was confirmed they are proposed greenhouses.

Chair Howarth opened the public hearing.

Mark Jackson, representing the applicants, commended City staff for accessibility and diligence. He reviewed the project concept and the needs it would address.

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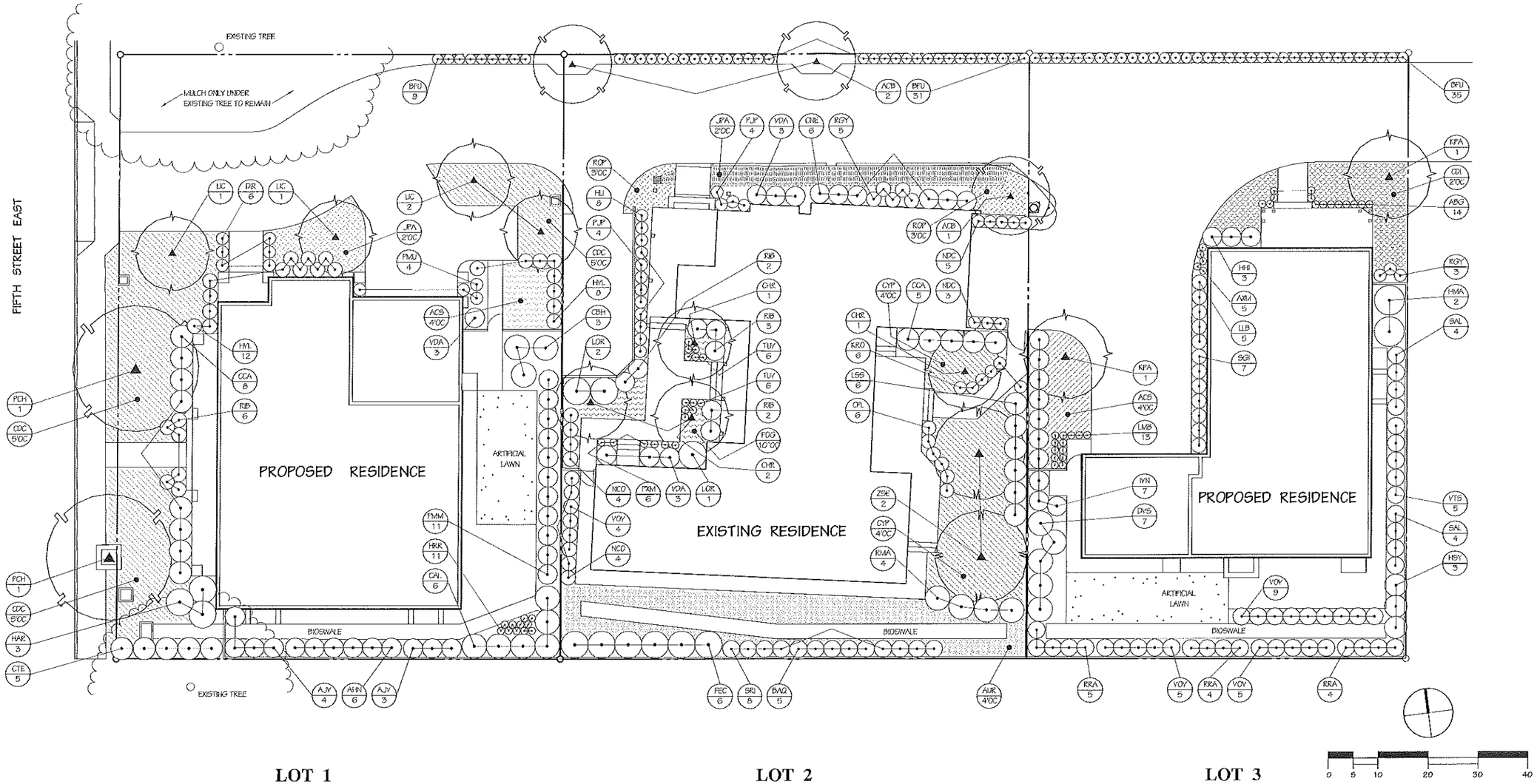

LOT 1 LOT 2 LOT 3

PLANTING LEGEND

KEY	SIZE	BOTANICAL NAME	COMMON NAME	REMARKS	WATER USE
		TREES			
ACD	24"BOX	ACER BUERGERIANUM	TRIDENT MAPLE		MEDIUM
CHR	24"BOX	CHIONANTHUS RETUSUS	CHINESE FRINGE TREE		MEDIUM
KFA	24"BOX	KOELREUTERIA PANICULATA	GOLDENRAIN TREE		MEDIUM
LIC	24"BOX	LAGERSTROEMIA INDICA 'CHEROKEE'	CRAPE MYRTLE		LOW
PCH	24"BOX	PISTACIA CHINENSIS	PISTACHIO		LOW
ZSE	24"BOX	ZELKOVA SERRATA	ZELKOVA		MEDIUM
		SHRUBS			
AHN	#5	ABUTILON X HYBRIDUM 'NABOB'	CHINESE LANTERN		MEDIUM
AJV	#5	AUCUBA JAPONICA 'VARIEGATA'	GOLD DUST PLANT		MEDIUM
BAQ	#5	BERBERIS AQUIFOLIUM	OREGON GRAPE		MEDIUM
CAL	#5	CALYCANTHUS OCCIDENTALIS	SPICE BUSH		MEDIUM
CBH	#5	CAMELLIA JAPONICA 'BOB HOPE'	CAMELLIA		MEDIUM
CNE	#5	CAMELLIA SASANQUA 'NORTHERN EXPOSURE'	CAMELLIA		MEDIUM
CCA	#5	CARPENTERIA CALIFORNICA 'ELIZABETH'	BUSH ANEMONE		MEDIUM
CTE	#5	CHOISYA TERNATA	MEXICAN ORANGE		MEDIUM
CPL	#5	CORREA PULCHELLA 'PINK FLAMINGO'	AUSTRALIAN FUCHSIA		LOW
DYS	#5	DODONAEA VISCOSA 'SARATOGA'	HOPSEED BUSH		LOW
FEC	#5	FRANGULA CALIFORNICA 'EVE CASE'	COFFEEBERRY		LOW
HYL	#5	HEBE 'LAKE'	HEBE		MEDIUM
HLI	#5	HEBE 'LINDSAYI'	HEBE		MEDIUM
HAR	#5	HETEROMELES ARBUTIFOLIA	TOYON		LOW
HSY	#5	HIBISCUS SYRIACUS	ROSE OF SHARON		LOW
HMA	#5	HYDRANGEA MACROPHYLLA	GARDEN HYDRANGEA		MEDIUM
HHI	#5	HYPERICUM 'HIDCOTE'	NO COMMON NAME		MEDIUM
IVN	#5	ILEX VOMITORIA 'NANA'	DWARF CHINESE HOLLY		LOW
LSG	#5	LEPTOSPERMUM SCOPARIUM 'SNOW WHITE'	NEW ZEALAND TEA TREE		MEDIUM
LLB	#5	LONICERA NITIDA 'LEMON BEAUTY'	BOX HONEYSUCKLE		LOW
LOR	#5	LOROPETALUM CHINENSE 'RUBUH'	NO COMMON NAME		LOW
NDC	#5	NANDINA DOMESTICA 'COMPACTA'	HEAVENLY BAMBOO		LOW
PJP	#5	PIERIS JAPONICA 'PRELUDE'	LILY OF THE VALLEY		MEDIUM
PMM	#5	PODOCARPUS MACROPHYLLUS 'MAKI'	SHRUBBY YEW PINE		MEDIUM
RIB	#5	RHAPHIOLEPIS INDICA 'BALLERINA'	INDIAN HAWTHORN		LOW
RKA	#5	RHODODENDRON X 'KAMAPO'	RHODODENDRON		MEDIUM
RMA	#5	RIBES MALVACEUM 'DANGING TASSELS'	CHAPARRAL CURRANT		VERY LOW
RGY	#5	ROSA GYMNOCARPA	WOOD ROSE		LOW
SAL	#5	SYMPHORICARPOS ALBUS	SNOWBERRY		LOW
SRI	#5	SYMPHORICARPOS RIVULARIS	SNOWBERRY		LOW
VOY	#5	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY		MEDIUM
VDA	#5	VIBURNUM DAVIDII	VIBURNUM		MEDIUM
VYB	#5	VIBURNUM TINUS 'SPRING BOUQUET'	LAURUSTINUS		MEDIUM
		PERENNIALS			
ARM	#1	ACHILLEA X 'MOONSHINE'	YARROW		LOW
ABG	#1	ANIGOZANTHOS 'RUSH GOLD'	KANGARDO PAW		LOW
BFU	#5	BORINDA FUNGOSA	CHOCOLATE BAMBOO		MEDIUM
DIR	#1	DIETES IRIDIOIDES	AFRICAN IRIS		LOW
HKR	#1	HEUCHERA SANGUINEA 'RASPBERRY ROSE'	CORAL BELLS		MEDIUM
KRO	#1	KNIPHOFIA ROOPERI	EAST CAPE POKER		LOW
LMB	#1	LIRIOPE MUSCARI 'BIG BLUE'	LILY TURF		MEDIUM
NCO	#1	NEPHROLEPIS CORDIFOLIA	SOUTHERN SWORD FERN		MEDIUM
PAM	#1	PENSTEMON X 'MIDNIGHT'	BEARD TONGUE		MEDIUM
PMU	#1	POLYSTICHUM MUNITUM	SWORD FERN		MEDIUM
SGI	#1	STIPA GIGANTEA	GIANT FEATHER GRASS		MEDIUM
TUV	#1	TULBAGHIA VIOLACEA	SOCIETY GARLIC		LOW
		GROUNDCOVERS			
ACS	#1	ARCTOSTAPHYLOS EDMUNDSII 'CARMEL SUR'	CARMEL SUR MANZANITA	4' O.C. TRI. SPACING	LOW
AUR	#1	ARCTOSTAPHYLOS UVA-URSI 'RADIANT'	MANZANITA	4' O.C. TRI. SPACING	LOW
CDI	#1	CAREX DIVULSA	BERKELEY SEDGE	2' O.C. TRI. SPACING	LOW
CYP	#1	CEANOTHUS GRISEUS 'YANKEE POINT'	WILD LILAC	6' O.C. TRI. SPACING	LOW
CDC	#1	COTONEASTER DAMMERI 'CORAL BEAUTY'	COTONEASTER	5' O.C. TRI. SPACING	LOW
FOG	#1	FESTUCA OVINA 'ELIJAH BLUE'	ELIJAH BLUE FESCUE	10" O.C. TRI. SPACING	MEDIUM
JPA	#1	JUNCUS PATENS	CALIFORNIA RUSH	2' O.C. TRI. SPACING	LOW
ROP	#1	ROSMARINUS OFFICINALIS 'PROSTRATUS'	ROSEMARY	3' O.C. TRI. SPACING	LOW

NOTE:
AT THIS TIME THERE IS NOT A DEVELOPMENT PLAN FOR LOT 4 (1040 FIFTH STREET EAST). IT APPEARS THAT THERE IS SUFFICENT SPACE FOR 2 TREES ON LOT 4. WITH THIS ASSUMPTION THERE WOULD BE A TOTAL OF 18 NEW TREES, OF A 24" BOX SIZE, INSTALLED TOWARDS THE REQUIRED TREE MITIGATION FOR ANTICIPATED TREE REMOVALS. THE ABOVE REFERENCED 18 TREES DOES NOT INCLUDE THE PISTCHE CHINENSIS TREE LOCATED AS A STREET TREE ON FIFTH STREET EAST AS THIS TREE WAS A CONDITION OF APPROVAL FOR THE SUBDIVISION.

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LICENSED LANDSCAPE ARCHITECT
GARY PHILLIP BALCERAK
NO. C 3704
Ren. 7/31/17
STATE OF CALIFORNIA

PLANTING PLAN

LOTS 1, 2, & 3
1028, 1032, & 1036 FIFTH STREET EAST
SONOMA, CALIFORNIA

Date	No.	Revision

Date: 6/30/15
Scale: 1" = 10'-0"
Drawn: GPB
Job: 1415
Sheet
L-1
Of 4 Sheets

2:25 PM 6/30/15

City of Sonoma Planning Commission **STAFF REPORT**	Agenda Item #2 Meeting Date: 07-09-15

Agenda Item Title: Application for an Exception to Floor Area Ratio limitations associated with a second-story residential addition located at 348 Patten Street.

Applicant/Owner: Darrel Jones

Site Address/Location: 348 Patten Street

Staff Contact: David Goodison, Planning Director
Staff Report Prepared: 06/29/15

PROJECT SUMMARY

Description: Application of Darrel Jones for an Exception to Floor Area Ratio limitations associated with a second-story residential addition located at 348 Patten Street.

General Plan Designation: Low Density Residential (LR)

Zoning: **Base:** Low Density Residential (R-L) **Overlay:** Historic

Site Characteristics: The subject property is a ±6,808 square-foot parcel located on the north side of Patten Street, east of Fourth Street West. The property is unusual, in that it is an interior lot with no street frontage. It is developed with a 2,841-square foot residence (including an attached garage).

Surrounding Land Use/Zoning:
North: Single-family residence/Low Density Residential
South: Single-family residence/Low Density Residential
East: Single-family residence/Low Density Residential
West: Single-family residence/Low Density Residential

Environmental Review:

- ☒ Categorical Exemption
- ☐ Negative Declaration
- ☐ Environmental Impact Report
- ☐ Not Applicable
- ☐ Approved/Certified
- ☒ No Action Required
- ☐ Action Required

Staff Recommendation: Commission discretion.

PROJECT ANALYSIS

BACKGROUND

Building Permit Submittal and Plan Check. In May of 2014, Darrel Jones applied for a building permit to remodel and expand an existing single-family residence on the subject property. The residence was a one-story structure having an area of 1,660 square feet, including the attached garage. As set forth on the building permit submittal, the second-floor addition was identified as adding 1,290 square feet of living space. The site area identified on the building plans was shown as ".18 acres/6,766 square feet". The building plans were routed to various City departments for review, including the Planning Department. Planning staff signed off on the plans on June 5, 2014.

Floor Area Ratio Error. Floor Area Ratio represents building floor area (including living area and garage space, but excluding attics and other unconditioned space) divided by lot size. The maximum allowed FAR in the Low Density Residential Zone is 0.35. Using the building area information summarized on the first page of the building plans and the reported lot area of 6,766 square feet, the proposed construction would result in a Floor Area Ratio (FAR) of 0.43, which exceeds the maximum allowed for a 6,766 square foot lot by 581 square feet. This calculation is shown on the first page of the plan set. There is no evidence that Mr. Jones attempted to conceal or misrepresent the information necessary to determine the FAR resulting from his proposed addition. An arithmetic error or some other oversight was committed by planning staff in calculating the FAR. (It is possible that planning staff may have taken the lot size from a subscription service called Realquest that the City uses to obtain Assessor's Parcel information generated by the Sonoma County Assessor's Office. As--incorrectly--reported on Realquest, the property has an area of 8,250 square feet.)

Neighbor Concerns and City Response to Date. In February of 2015, Dennis Donnelly came to City Hall to inquire about the construction project. Mr. Donnelly and his wife reside at 567 Fourth Street East, which adjoins the property at 348 Patten Street on the east. At that time, the structure was essentially complete, as it had been fully framed and sheathed. In reviewing the plans with Mr. Donnelly, staff realized that the FAR had not been calculated correctly and informed Mr. Donnelly of that fact. The planner later called Mr. Donnelly to inform him that the residence most likely exceeded the allowed FAR by 458 square feet. This number was based on updated information obtained from the contractor who designed the building. The contractor measured the as-built attic area, which had been built somewhat differently than as shown on the plans. In addition, the contractor obtained a more accurate estimate of the lot size. This new information accounted for the difference from the FAR as shown on the building plans. In the meantime, Mr. Donnelly also met with Joe Burroughs, the City's Plans Examiner. Mr. Burroughs reviewed the building plans with Mr. Donnelly and reported to him that figures as shown on the plans suggested that the FAR was exceeded by 581 square feet. Mr. Donnelly was understandably frustrated to receive conflicting information on this subject.

On March 20, 2015, the City Manager and the Planning Director met with Mr. Donnelly to review the situation. At that meeting, the Planning Director confirmed that while there was no doubt that the structure exceeded the FAR allowance, the exact area of the discrepancy was still in question, due to conflicting information on the lot size and uncertainty as to the as-built area of the attic space. Staff promised to clearly document this information and to review all other aspects of the building with regard to compliance with zoning regulations. In order to resolve the FAR question and review compliance with other zoning requirements, staff contacted Mike Buti, registered land surveyor, to obtain a calculation of

the lot size. This calculation was then reviewed and validated by the City Engineer. In the field, the Planning Director measured the apparent lengths of the property lines (using fences and other indicators) to verify that they corresponded to the boundaries as described in the legal description of the property. The area of the property was found to be 6,808 square feet, which is somewhat larger than as listed on the building plans. At the same time, the Plans Examiner and the Associate Planner took field measurements at the site to verify the area of the attic space. The total area of the second floor was found to be 1,633.5 square feet, including an attic area of 425.95 square feet, resulting in a net area of 1,207.55 square feet. Excluding the attic area, the conditioned building (both floors) area and garage area of the residence totals 2,841.05 square feet. Dividing this number by the lot size shows that the FAR limit is exceeded by 458 square feet. (Note: as pointed out in the applicant's narrative, the elevator is counted twice. Typically, staircases and elevators are only counted once when calculating floor area. If the elevator were only counted once, the FAR would be reduced by 90 square feet, to 0.40.) The Plans Examiner and the Associate Planner also took field measurements to verify building height and setbacks. These were found to be consistent with the building plans and in compliance with zoning requirements. Building height, setbacks, and coverage are all in compliance.

Construction Status/Application for Exception: A certificate of occupancy has not yet been issued for the residence. Although major elements of the construction have been completed, Mr. Jones estimated that it will not be finished until sometime in August. Mr. Jones has been advised that he proceeds with construction at his own risk. Because the City cannot issue a certificate of occupancy until the FAR is resolved, Mr. Jones has elected to apply for an Exception to the FAR standard as a means of bringing the residence into compliance.

DETAILED PROJECT DESCRIPTION

The applicant has constructed a second-story residential addition in conjunction with a substantial remodel of the first floor. Excluding attic space (which is not counted toward FAR), the second floor has a net area of 1,207.55 square feet. The main portion of the second floor is devoted to a master bedroom and bath, but it also includes a laundry-room/home office area. The applicant is requesting an Exception from the normal limits on Floor Area Ratio in order to legalize the expansion of the residence. The remodel/addition is designed in a craftsman style, with sloping roofs and gables on the north and south. As built, the residence has a ridge height of 30 feet, sloping down to 11.5 feet. The front-yard setback (on the west) is 37 feet, while the rear yard setback (on the east) is 23 feet. The side yard setbacks are 12 feet on the north and 7 feet on the south.

GENERAL PLAN CONSISTENCY **(☐Not Applicable to this Project)**

The property is designated Low Density Residential by the General Plan, which allows for single-family homes and related accessory structures. The project does not raise any issues in terms of consistency with the *City of Sonoma 2020 General Plan.*

DEVELOPMENT CODE CONSISTENCY **(☐Not Applicable to this Project)**

The residence, with the addition, complies with limits on coverage, setbacks, and height. The only issue raised by the proposal is consistency with the Floor Area Ratio (FAR) limitation. "Floor Area" refers to building area by floor, excluding loft areas, cellars, attic space, and carports. In the Low Density Residential zone, the normal limit on FAR is 0.35, meaning that residential floor area, may not exceed 35% of lot area. Because the subject property has an area of 6,808 square feet, the normal limit on

residential building area is 2,382 square feet. The residence, with the second floor addition, exceeds this limit by 458 square feet (or 368 square feet if the elevator is only counted once).

Exception Findings: Pursuant to Development Code Section 19.48.050.A.1, the Planning Commission may grant an Exception of up to 30% to the normal FAR standard, provided that specified findings can be made. These findings are listed below, along with a summary of the applicant's argument in support of them, as well as staff comments.

1. *The adjustment authorized by the Exception is consistent with the General Plan, any applicable Specific Plan, and the overall objectives of this Development Code.*

   In staff's experience, this finding can be made with respect to Exceptions involving residential additions in residential zones, because the *use* associated with the Exception request is consistent with the property's General Plan land use designation (Low Density Residential) and zoning (also Low Density Residential).

2. *An exception to the normal standards of the Development Code is justified by environmental features or site conditions; historic development patterns of the property or neighborhood; or the interest in promoting creativity and personal expression in site planning and development.*

   The applicant makes a number of arguments in support of this finding, including the following:

   Environmental Features. The applicant notes that the property is unusual in that it is an interior lot. Based on this condition as well as the footprint and orientation of the first floor, any expansion of the residence would necessitate the construction of a second floor, which in turn would have the potential to create issues with respect to views to and from adjoining properties. However, the applicant contends that the Craftsman-style used in the design of the addition, due to its sloping rooflines, minimizes massing and potential view conflicts with neighbors.

   Historic Development Patterns. The applicant provides evidence that two-story construction is found throughout the neighborhood. The applicant also provides a spreadsheet that identifies other instances of properties in the neighborhood where the FAR limit (which was established in 2003) is exceeded.

   Creativity and Personal Expression. The applicant argues that the design of the second floor is proportionate to that of the overall residence and that reducing the FAR would compromise the design, but would not bring any benefit to any neighboring property owner with respect to view and massing, since there could still be a second floor and the increment of FAR that exceeds the 0.35 limit cannot be tied to any particular portion of the second-story. The applicant also states that the residential remodel was designed to incorporate a number of handicapped accessibility features, including an elevator. The applicant contends that reducing the area of the second floor would defeat this design goal. (Note: this latter argument is made under the "Environmental Features" heading, but in staff's view it seems more relevant to "Creativity and Personal Expression.")

3. *Granting the Exception will not be detrimental to the public health, safety, or welfare, or injurious to the property or improvements in the vicinity and in the same zoning district.*

The applicant notes that the residence complies with height and setback requirements and argues that there is no particular feature of the residence that can be expressly linked to the increase in FAR that would have a detrimental impact on any adjoining property. The applicant states that the second story, in and of itself, should not be viewed as incompatible because second story homes are relatively common in the area and the second floor complies with setback and height limits.

Eight letters have been received from neighbors in the area who support the application. However, the neighbors to the east, at 567 Fourth Street East, oppose the application because they believe it is incompatible with respect to their property. To elaborate on this particular relationship, the subject residence is set back 23 feet from the eastern property line. Trees on the property at 567 Fourth Street East provide partial screening, but the second floor can still be discerned and the owners of 567 Fourth Street East note that views of the sunset are affected. These trees are deciduous, so the screening benefit is reduced in the fall and winter.

Note: the above represents staff summary of the most relevant arguments made by the applicant in support of the Exception findings. The complete analysis prepared by the applicant is set forth in the project narrative (attached). While the applicant has made substantial arguments in support of the Exception findings, staff would also emphasize that neighboring property owners at 567 Fourth Street East oppose the Exception request, because they believe it has damaged views from their back yard and reduced the value of their property.

CONSISTENCY WITH OTHER CITY ORDINANCES/POLICIES **(☒Not Applicable to this Project)**

ENVIRONMENTAL REVIEW **(☐Not Applicable to this Project)**
Pursuant to Section 15305 of the State CEQA Guidelines, minor alterations in development requirements not resulting in the creation of a new parcel are Categorically Exempt from environmental review (Class 5 – Minor Alterations in Land Use Limitations).

DISCUSSION OF PROJECT ISSUES
Staff would emphasize that there is no evidence that the property owner was attempting to circumvent planning regulations and the discrepancy in Floor Area Ratio should have been noted in the plan review process. That said, staff's error is not a basis for approving an Exception. The normal findings must be made and that is the key issue with this application.

RECOMMENDATION
Commission discretion.

Attachments

1. *Findings*
2. *Draft Conditions of Approval*
3. *Location map*
4. *Correspondence*
5. *Applicant's Submittal (includes project narrative, findings analysis, neighborhood conformance survey, photographs, elevations and as-built floor-plans, vicinity map showing adjoining structures)*

cc: Darrel Jones (via email)

Fred O'Donnell (via email)

Dennis and Joy Donnelly
567 Fourth Street East
Sonoma, CA 95476

DRAFT

City of Sonoma Planning Commission
FINDINGS OF PROJECT APPROVAL
Jones FAR Exception – 348 Patten Street

July 9, 2015

Based on substantial evidence in the record and upon consideration of all testimony received in the course of the public review, including the public review, the City of Sonoma Planning Commission finds and declares as follows:

Exception Approval:

1. The adjustment authorized by the Exception is consistent with the General Plan, any applicable Specific Plan, and the overall objectives of this Development Code;

2. An exception to the normal standards of the Development Code is justified by environmental features or site conditions; historic development patterns of the property or neighborhood; or the interest in promoting creativity and personal expression in site planning and development;

3. Granting the Exception will not be detrimental to the public health, safety, or welfare, or injurious to the property or improvements in the vicinity and in the same zoning district.

DRAFT

City of Sonoma Planning Commission
CONDITIONS OF PROJECT APPROVAL
Jones FAR Exception – 348 Patten Street

July 9, 2015

1. The addition shall be constructed in conformance with the project narrative, site plan and elevations.

   Enforcement Responsibility: *Planning Department; Building Department*
   Timing: *Prior to issuance of final occupancy permit.*

2. All Building Department and Fire Department requirements shall be met..

   Enforcement Responsibility: *Building Department*
   Timing: *Prior to issuance of final occupancy permit.*

May 17, 2015

To: Sonoma City Council and Staff

From: Joy and Dennis Donnelly

Re: Construction Project at 348 Patten Street

The following states the outcome we would like to see regarding the above construction project.

We ask that this project comply with Sonoma City Zoning Requirements. This is an expensive and time consuming undertaking, but not to rework this project violates our right to expect the City of Sonoma to enforce its zoning requirements.

The building is 458 square feet over the floor area zoning requirements for living space. There is also an additional 425 square feet of floor space for storage on the second floor, which is not counted in the total living space floor area. The enormous size of this project obstructs our view, particularly of the winter sunsets, impinges upon our privacy, and devalues our property.

The city recognizes that serious mistakes have been made. We ask that these mistakes be rectified. The consequences of these mistakes should not fall on us. Construction profits should not be made at our expense.

John R Schafer MD
353 Patten Street
Sonoma, CA 95476

RECEIVED

JUN 22 2015

CITY OF SONOMA

David Goodison
Planning Director
City of Sonoma
No. 1 The Plaza
Sonoma, CA 95476

Re: 348 Patten Street – Support for Approval of Exception to Floor Area Ratio (FAR)

Dear Mr. Goodison:

We are writing to express our strong support for the City to approve the application for a FAR exception for the home being built at 348 Patten Street by Darrel Jones. We live at 353 Patten Street and have been part of the community for 50 years. Our house is located directly across Patten Street from the Jones' home.

We built our 2-story, 5 BR house in 1965, with the strong support of the neighbors, who felt it might increase the value of their homes. We have had nothing but praise for building a 2 story house, since it makes better use of the land available and avoids crowding. Since then other 2-story houses have been built around the neighborhood, each one adding to the value of the area.

I have looked at the new construction and find the house to be beautifully designed and amazingly energy efficient. This degree of energy efficiency is much easier to obtain in a multistory house. There is no way this structure will decrease the value of any of the neighboring houses, which only stand to increase in value.

We have known the Jones family for nearly 50 years, and they are good neighbors. In fact this neighborhood has always been friendly and cooperative with each other. Mr. Jones explained to me that the City originally approved his plans to construct his home. Only after the construction was substantially complete and a neighbor raised an issue, did the City realize that it had made a mistake in calculating the building square footage when it approved the plans. Given these circumstances, we also think that fairness dictates that the exception should be approved. It seems to us that the Joneses should not be penalized for this error.

We urge the City and Planning Commission to approve the application for a FAR exception at 348 Patten Street. We ask that this letter be includedin the materials presented to the PlanningCommission at the hearing on the exception.

John Schafer

John and Gwen Schafer

RECEIVED

JUN 22 2015

CITY OF SONOMA

Cafe Sarafornia

1413 Lincoln, Calistoga, Napa Valley, California 94515 707-942-0555

City of Sonoma
Mr David Goodison
Planning Director
Sonoma, Ca, 95476

19 June '15

Re: 348 Patten St - Support for approval of Exception to Floor Area (FAR)

Dear Mr Goodison;

We are writing the City of Sonoma for the approval of the application for a FAR exception, for the house being built at 348 Patten, by Darrel Jones.

We have been neighbors of the Jones for 16 years, with never a difficult issue. There are five (5), two (2) story dwellings adjacent to our house at 365 Patten. They have no adverse effects, for us or with this neighborhood.

We have a been in business in Sonoma, other California locations, and out of state. In each of these cases, we depended on Public Officials, and Architectural Consultants to ensure we are fulling the required guidelines and requirements. Many times we have been told we can do or can't, to the building plans we have submitted. Most of the time they are understandable, and aid in the project. But, once plans have been approved, and required building inspections have been made, at required times. Then it would be onerous to stop and then require the permit owner to tear down, or make major changes.

Sincerely

Madeline & Drake Dierkhising
365 Patten
Sonoma, Ca 95476

Drake Dierkhising
Madeline Dierkhising

Thomas M. Dixon, M.D.
Mary A. Dixon
587 Fourth Street East
Sonoma, California 95476

June 9, 2015

David Goodison
Planning Director
City of Sonoma
No. 1 The Plaza
Sonoma, CA 95476

Re: 348 Patten Street Construction

Dear Mr. Goodison:

We are writing in support of approval of exception to floor area ratio (FAR) for the above project. It is our understanding that Darrel Jones received City Approval to build this house and he has done so. Apparently the City was in error in approving this based on FAR. But since Mr. Jones proceeded in good faith, we feel that it would be wrong for the City to not approve the exception

We live behind the house in question and can see it from our back yard. We have no objection to its presence.

We have lived in Sonoma for over 40 years and have been in our present home for 25 years. The Joneses are good neighbors, and we don't feel they should be penalized for an error made by the City.

Sincerely,

Thomas M. Dixon, M.D.

Mary A. Dixon

577 FOURTH STREET EAST

SONOMA, CALIFORNIA 95476

June 9, 2015

David Goodison
Planning Director
City of Sonoma
No. 1 The Plaza
Sonoma, Ca 95476

Re: 348 Patten Street
Support for Approval of Exception to Floor Area Ratio (FAR)

Dear Mr. Goodison:

The late Bernard Watts and I purchased our property at 577 Fourth St. East in 1993. And, so I have known the Jones family, as friends and good neighbors, for 22 years.

The above referenced lot abuts mine. In fact, we share the same property line. I am familiar with the circumstances that require the need for the exception in this case.

I write in support of Darrel Jones' application for the City and Planning Comission to approve and grant the FAR exception at 348 Patten Street so that contruction on the building be completed as soon as possible.

Sincerely,

Moira L. Watts

Moira L. Watts

cc: Darrel Jones

June 8, 2015

David Goodison
Planning Director City of Sonoma
No 1 The Plaza
Sonoma, CA 95476

Re: 348 Patten Street - Support for Approval of Exception to Floor Area Ratio (FAR)

Dear Mr. Goodison,

This letter is to express our support to approve the application for a FAR exception for the home being built at 348 Patten Street by Darrel Jones. We have lived at 552 Third Street East since 1966 and have been part of this community for 70 years. We have known the Jones family for 45 years. Our house is located a couple of blocks from the Jones' house.

The home in question appears similar in size to other two-story homes in the neighborhood, our own included. The home as designed will not have a negative effect on our property or home. We do not believe it will adversely affect neighboring properties given the home's consistency with the design and size of other homes in the neighborhood.

Although the house square footage technically exceeds the City's FAR limits, the design of the home makes it appropriate for the lot and the neighborhood. We actually toured the property personally and from its appearance the home does not seem over-sized or out of place for the neighborhood.

The Jones family have always been good neighbors. Mr. Jones explained to me that the City originally approved his plans to build this house. Only after the construction was substantially complete and a neighbor raised an issue, did the City realize that it had made a mistake in calculating the building square footage when the plans were approved. As everyone thought the home complied when the plans were submitted, it seems to us that the Jones' should not be penalized for the error. Given the circumstances, we believe it is only fair that the exception should be approved.

We urge the City and Planning Commission to approve the application for the FAR exception at 348 Patten Street. We request that this letter be presented to the Planning Commission at the hearing on the exception.

Respectively submitted,

James Kamahele
Jill Kamahele

James Kamahele and Jill Kamahele

DANIEL FLORANCE

346 Patten St
Sonoma, CA 95476
Phone (707) 938-8043

June 8, 2015

David Goodison
Planning Director
City of Sonoma
No. 1 The Plaza
Sonoma, CA 95476

Dear Mr. Goodison,

Re: 346 Patten St. -Support for Approval of Exception to Floor Area Ratio (FAR)
My wife and I are writing to express our support for the City to approve the application for a FAR exception for the house being built at 348 Patten St. by Darrel Jones. We live at 346 Patten St. and have been a part of the community for over 45 yrs. Our house is next door to the house being built.
We support the size and design of the home, especially the second story. The home appears similar in size to other two story homes in the neighborhood. There are many two story homes in the neighborhood. Our house has a second story. We think that this will improve the value of the homes in the neighborhood. Although the house square footage technically exceeds the City`s FAR limits, the design of the home makes it appropriate for the lot and the neighborhood. The design and setback of the second story makes it appear right sized for the lot. From its appearance , the home does not seem over-sized or out of place for the neighborhood. Given this , We do not believe it will have a negative effect on the homes and properties in the area.
We have known the Jones family for many years They are good neighbors. Mr. Jones explained to me that the City originally approved his plans to construct his home. Only after the construction was substantially complete and a neighbor raised an issue,did the City realize that it had made a mistake in calculating the building square footage when it approved the plans. Given the circumstances , we also think that fairness dictates that the exception should be approved. Everyone though the home complied when the plans were submitted . So, it seems to us the Jones should not be penalized for the error.
We urge the City and Planning Commission to approve the application for a FAR exception at 348 Patten St. We ask this letter be included in the materials presented to the Planning Commission at the hearing on the exception.
Sincerely, Daniel J Florance and Virginia S Florance

6/22/15

Planning Commission of the City of Sonoma

c/o Sonoma City Hall

#1 The Plaza

Sonoma, CA 95476

As a Patten Street neighbor of Darrel Jones, I have no objection to the adjusted (FAR) he is asking to create.

Susan Scarbrough

Susan Lewis Scarbrough

303 Patten Street

Sonoma, CA 95476

David Goodison
Planning Director
City of Sonoma
No.1 The Plaza
Sonoma, CA 95476

I am writing to express support for approval of the application for an FAR exception for the home being built at 348 Patten St. by Darrel Jones. My house is located a block from the Jones house.
Although the house square footage exceeds the City's FAR limits, I don't believe it will have a negative effect on homes and property in the area.
Mr. Jones explained to me that the City approved the plans and only after construction was substantially complete was it discovered that an error had been made in calculating the building square footage.
Given the circumstances and the overall consistency with other homes in the neighborhood, I believe an exception is warranted.

Roger Heigel
315 Patten St.
Sonoma, CA 95476

APPLICATION FOR EXCEPTION TO THE PLANNING AND DEVELOPMENT CODE
348 PATTEN STREET, SONOMA
DARREL AND CATHERINE JONES
JUNE 12, 2015

SUPPORTING MATERIALS

- PROJECT NARRATION FOR 348 PATTEN STREET
- FINDINGS IN SUPPORT OF AN EXCEPTION TO THE PLANNING AND DEVELOPMENT CODE
- CITY OF SONOMA STAFF PROJECT COMPLIANCE CHART FOR 348 PATTEN STREET
- CITY OF SONOMA STAFF FIELD MEASUREMENTS DRAWING OF 348 PATTEN STREET
- PLANNING AND DEVELOPMENT CODE NEIGHBORHOOD CONFORMANCE SURVEY
- PATTEN STREET NEIGHBORHOOD ASSESSOR'S PARCEL MAP
- PHOTOS OF EXISTING TWO-STORY HOUSES IN NEIGHBORHOOD
- PHOTOS OF FIRST AND SECOND FLOOR VIEWS FROM 348 PATTEN STREET
- ELEVATION DRAWINGS FOR 348 PATTEN STREET
- FIRST FLOOR AS-BUILT FLOOR PLAN FOR 348 PATTEN STREET
- SECOND FLOOR AS-BUILT FLOOR PLAN FOR 348 PATTEN STREET
- FIRST AND SECOND FLOOR FAR DRAWING FOR 348 PATTEN STREET
- PARCEL PLAN SHOWING NEIGHBORING PROPERTIES WITH DISTANCES FROM THE 348 PATTEN STREET PROPERTY LINES TO THE PRIMARY RESIDENTIAL STRUCTURES

JUN 1 2 2015

PROJECT NARRATIVE

This is a description of the process for the remodel of the single family home located at 348 Patten Street and why an exception to the Floor Area Ratio (FAR) standard under the City Code is required.

The historical background of 348 and 358 Patten is that Johanna and Phillip Bill Sr. bought two 50' by 300' lots on Patten Street in 1949. They built their retirement home at 358 Patten in 1952. They subsequently subdivided the property into four lots, granting their son Phil Bill Jr. and his wife Bernice the lot directly behind their home, where they built their home at 348 Patten in 1972. We bought 358 Patten from Johanna Bill's estate from Phil Jr. in 1975. Because he and Bernice were active in the garden club, they performed a lot line adjustment at the time of the sale between 348 and 358 Patten to transfer approximately 45' of the rear yard of 358 Patten to their lot at 348 Patten for their garden area.

After Phil Bill Jr.'s and Bernice Bill's death, we purchased 348 Patten with the express purpose of restoring the property line to its original location to restore the rear yard of our primary residence at 358 Patten. We then planned to remodel and sell 348 Patten to cover the cost of the purchase and lot line adjustment. I work on passive houses as an electrical contractor and had long wanted to build one myself, so I looked forward to not only regaining a rear yard but having the opportunity to create something extraordinary with the house at 348 Patten Street.

We planned the addition of the second story to the house as part of the remodel. We had drawings made and submitted to the City Planning and Building Departments on May 20, 2014. The City reviewed and approved the plans as compliant with all City standards and issued the construction permit on July 24, 2014. Based on the City approval of the plans, we entered into contracts for construction and commenced construction of the remodel in August 2015.The overall cost of the purchase and remodel is approximately $1,400,000 to $1,500,000. The remodel alone is approximately $600,000 to $700,000 and to date we have spent over $400,000 for planning, design and construction of the home.

City staff informed us, on February 25, 2015, that there was a complaint by the neighbors across the rear property line (Dennis and Joy Donnelly) that the addition of the second story created a loss of privacy for them in their back yard. We had informed all the surrounding neighbors, including the Donnellys, of our remodeling plans and had not heard any complaints or reservations from anyone. We were surprised by the complaint since there are second story residences at 346, 358 and 366 Patten, and 547

4th Street East, all with second story windows overlooking the Donnelly's back yard. The original first floor rear windows and doors of the home on 348 Patten also have a clear view of their back yard.

Upon reviewing the plans, City staff found a technical error in the original approval of the plans. The house square footage was improperly measured. With the corrected measurement, the FAR for the house is .417, which exceeded the City requirement of .35. By the time the error was discovered, the construction had substantially proceeded. The structural framing was complete and had been inspected on January 28, 2015, and rough electrical and plumbing systems, weatherproofing, and exterior insulation were in the process of being installed.

At a meeting in April with David Goodison (Planning Director) and Carol Giovanatto (City Manager), we were offered an apology for the City's mistake in approving the plans. We participated in several meetings with City staff to clarify the actual as-built measurements of the house and the size of the lot. Based on as-built measurements by City of Sonoma staff, the total square footage of the house is 2841 square feet. The lot size is 6808 square feet. After confirming all the available information on the as-built structure and lot size, City of Sonoma staff determined that the FAR is .417 and the building size is 458 square feet larger than allowed under the FAR. We have subsequently learned that City of Sonoma staff calculated the floor area including the area of the staircase and elevator for both the first and second floors. City of Sonoma practice for calculating living space normally excludes floor area for the second story stair and elevator. In this case, that would exclude ninety square feet, leaving a resulting floor area of 368 square feet over the FAR. Disregarding the unconditioned garage floor area of 372 square feet, the resulting floor area ratio would be below the Planning Code limit of .35.

Based on the foregoing, we decided to apply for an exception to the FAR standard as permitted under the City Code. The facts to support the findings for an exception are submitted as part of the application. We strongly believe that the findings for an exception can be made and an exception should be approved. We designed the remodel and addition to conform to all elements of the Planning and Development Code, and the FAR issue has arisen due to a mistake discovered after the exterior and interior framing of the house was complete. All other elements of the house, such as setbacks and height, conform to or exceed the Code requirements as shown in the Project Compliance Chart attached as Exhibit A to this Project Narrative. The resulting structure is a classic two-story Craftsman style house. We had originally planned to incorporate ten foot ceilings, but compromised with 9½ foot ceilings on the first floor to

maintain a maximum height below the Code requirement. The second story size and design are consistent with the many other two-story homes in the neighborhood.

We have worked diligently to make this house remodel special from a design and environmental features standpoint. It is built in the Arts and Crafts/Craftsman style. It is a LEED certified environmentally sustainable net-zero energy use home. We have incorporated the following features which are above and beyond building code requirements: a solar photovoltaic array, a rainwater recovery system, ductless HVAC and heat recovery whole-house ventilation, point-of-use tankless water heating, LED lighting throughout, low- and very low-water landscaping designed with pollinator friendly plants, and 100% permeable paving and landscaping. The building will be fully accessible in accordance with ADA guidelines and standards. Our goal is to make this home a model of innovative and state-of-the-art residential construction.

The denial of the exception would be financially devastating to us. We would have to rebuild the second story which would destroy the integrity of the house and render the upstairs only marginally useful. Additionally, a change in plans at this time would have a substantial financial impact due to delay and additional costs. We are working on a construction loan deadline of October 1, 2015. We do not think we can complete the remodel if the exception is denied.

We invite the Planning Commission to visit and view the house in its present state of construction to see the design and massing of the building, especially the second-story feature. We have been long-time members of the community and are good neighbors. We also have always had a good relationship with the City of Sonoma and its staff, and we appreciate the help and expertise they have shown in the past. We wish to continue that good relationship through resolving this unfortunate situation, which was the result of an error, through the exception process.

348 Patten Street – Findings for Exception for Floor Area Ratio (FAR)

This document sets forth the legal and factual basis for granting an exception to the FAR requirement applicable to the home remodel at 348 Patten Street.

Under the City Code, an exception is available for an exceedance of dimensional standards, including building area such as FAR (Sonoma Municipal Code (SMC) section 19.54.050 B. 1). The exception sought is an increase in the FAR from .35 to .417. The FAR permitted under the exception would exceed the Code standard by 19%. Therefore, the exception is allowable since it would not exceed 30 percent of the standard from which relief is sought (SMC section 19.54.050). The exception will allow an additional 458 square feet over the allowable building square footage.

The findings required for an exception are:

1. The adjustment authorized by the exception is consistent with the General Plan, any applicable specific plan, and the overall objectives of this development code;

2. An exception to the normal standards of the development code is justified by environmental features or site conditions; historic development patterns of the property or neighborhood; or the interest in promoting creativity and personal expression in site planning and development;

3. Granting the exception will not be detrimental to the public health, safety, or welfare, or injurious to the property or improvements in the vicinity and in the same zoning district.

The facts supporting each of the findings for an exception are set forth below.

1. *Exception is consistent with General Plan and overall objectives of the Development Code*

The single-family home is a permitted use under the Low Density Residential designation for the property in the General Plan and the Development Code. The proposed home is consistent with all the development standards for the Central East Planning Area under the Zoning Code except FAR (see Project Compliance Chart, Exhibit A to Project Narrative). In fact, the home exceeds the minimum development standards under the Development Code for front setback, side setback for first story, side setback for second story, and rear setback.

The house is consistent with all the policies applicable to single family development in the Land Use Element of the General Plan. The house is consistent with Goal CD-4 and its underlying policies and implementation measures. Goal CD-4 encourages quality, variety and innovation in new development. Policy 4.1 promotes innovative design. The home has numerous design features and measures that satisfy this goal and policy. The home is built in the Arts and Crafts/Craftsman style. It is a LEED certified environmentally

sustainable net-zero energy use home. It incorporates the following innovative and high quality features which are above and beyond code requirements: a solar photovoltaic array, a rainwater recovery system, ductless HVAC and heat recovery whole-house ventilation, point-of-use tankless water heating, LED lighting throughout, low- and very low-water landscaping designed with pollinator friendly plants, and 100% permeable paving and landscaping. The home also is consistent with the City's Urban Growth Management policies since it is infill development in an existing residential neighborhood.

The home is also consistent with the goals and policies of the General Plan's Environmental Resources Element to conserve natural resources to ensure their long-term sustainability (Goal ER-3). Policy ER 3.2 encourages construction and building materials that promote energy and water conservation and reduce greenhouse gas emissions. Implementation Measure ER-3.2.1 encourages green building practices to promote land, energy and water conservation. The home promotes these policies through its LEED certified environmentally sustainable net-zero energy use design, a solar photovoltaic array, a rainwater recovery system, ductless HVAC and heat recovery whole-house ventilation, point-of-use tankless water heating, LED lighting throughout, low- and very low-water landscaping designed with pollinator friendly plants, and 100% permeable paving and landscaping. In addition, the home is built on an already developed lot as a remodel of an existing single family home.

2. *Exception is justified by environmental features or site conditions; historic development patterns of the property or neighborhood; or the interest in promoting creativity and personal expression in site planning and development*

This finding contains three justifications for granting an exception, but only one justification is required to grant the exception. The three standards for justifying an exception are: (1) environmental features or site conditions; (2) historic development patterns of the property or neighborhood; or (3) the interest in promoting creativity and personal expression in site planning and development. The exception is justified under all three standards, but only one needs to be met for approval.

(1) *Environmental features or site conditions.* The lot is an interior flag lot which is unusual in size and shape. A lot line adjustment by the new owners returned the lot to its original size. The footprint of the existing home prior to the remodel is the same as the footprint of the remodel. The prior home had existing views into the backyard of the Donnellys from the original existing first floor windows and door. Since the lot is an interior flag lot, it is surrounded by other single family lots on all sides which is an unusual condition. Therefore, any construction of a second story home on the lot would have views into neighbors' properties.

The overall height of the house is a function of the design of Craftsman style houses. The ceiling heights determine the overall height of the roofline. The house was originally designed with ten-foot ceilings on the first and second floor, but the first floor ceiling was reduced to nine and one half feet to conform to the Planning Code maximum height requirement. Because the house is designed to conform to the Planning and

Development Code height and setback requirements, the second floor living space is restricted to the center of the second story and consists of a single bedroom, one bathroom, closets, and hallway and adjacent spaces in two dormers. The remainder of the second floor is unconditioned attic space.

The house is designed using European passive house standards and methods developed over the last forty years. A two-story house is the most efficient design possible for maximizing living space while minimizing exterior wall, roof and under-floor area. All exterior walls, roof and under-floor area are insulated by blown in bat fiberglass insulation in the interior and extruded polystyrene foam on the exterior. The building envelope is sealed air tight and the house uses whole-house ventilation which ensures a continuous filtered fresh air exchange while recovering energy from the exhaust air. Heating and cooling are by a ductless HVAC heat pump system sized at approximately ten to fifteen percent of that for a conventional house.

In order to include a viable solar panel array as an environmental feature, the second story roof has to be a certain minimum size, slope and design. The square footage of the second story is commensurate with the roof area and design to support the solar panels needed to contribute to the net zero energy design of the home. The outline of the roof is larger only by the small areas that were added to the front and south side to create the squared shape required for consistency with the Craftsman style design. The roof is also designed as a lifetime standing seam steel roofing to prevent contamination of the rainwater recovery with petroleum based products found in standard asphalt roofing methods.

The house is also designed to be Universally Accessible, using design guidelines by the Center for Universal Design, NC State University College of Design and state and federal ADA standards and requirements. The house includes ramped access to the front and rear entrances, an elevator for garage, first and second floor access, and ADA compliant bathrooms, toilets and showers. The requirement for accessible spaces for persons with limited mobility require wider hallways, doorways and rooms. Reducing the second floor area would defeat these design goals and make the space unsuitable for ADA access. Universally Accessible design is promoted as a way to both provide housing for persons of limited mobility as well as to enable home owners to age at home instead of being forced to live out the end of their lives in assisted living facilities.

Reducing the second floor area would have no effect on the outward size and appearance of the house since it was designed to conform to all Planning and Development Code exterior height and setback requirements.

(2) *Historic development patterns of the property or neighborhood.* The size, massing and design of the home, including the second story, are consistent with the development patterns of the neighborhood. Pictures of other two-story houses in the neighborhood are submitted as part of the application. These pictures show that there are many two-story homes in the area adjacent to the Project site. Furthermore, other neighbors of the Donnellys have second stories that overlook the Donnellys' property.

The design of the home also is consistent with these other two-story homes. The letters from the neighbors submitted as part of the application state that the size of the home seems consistent with the size of the lot. The home is a Arts and Crafts/Craftsman style design. The home includes the following specific features as part of its design, as shown in the project elevations, to be consistent with the neighborhood development patterns.

The Craftsman style is employed by many other homes in the neighborhood built throughout its history as well as those being built today. The design is consistent with the historical nature of Sonoma in that the City has developed from the early1830s Spanish influence, through the Victorian, Arts and Crafts/Craftsman, Art Deco and Modern eras. Many of the homes in the neighborhood were built in the 1960s through the 1980s and consist of the styles popular in residential tract housing developments of that time. The Craftsman style of this home adds to the historical fabric of the neighborhood while incorporating the latest energy and environmental efficient design practices and features.

As shown by the attached spreadsheet, many of the homes built before the most recent Planning and Development Code revision do not conform to the setback, height, building and lot size requirements of the Code. The exception and variance process addresses those conformance issues for remodels and new construction. Exceptions to allow for the desired use of the property by the owners in itself does not degrade the fabric or character of the neighborhood but provide a useful tool for the Planning Commission to address the balance between an owner's desires and compatibility with neighboring homes. Exceptions to development standards have also been granted to other homes in the area, including exceptions to FAR. Exceptions were granted in 2009 to allow the construction of a studio at 340 Patten Street on an interior flag lot of non-standard shape.

The home is consistent with the historical development of the site. The remodeled home has the same building footprint on the lot as the original home. So, it is built on the same location on the lot. Preserving the original building footprint location constrains the location and design of the second story. Any size second story would present the same issues of overlooking the neighbors' property given the fact that the lot is an interior flag lot.

(3) I*nterest in promoting creativity and personal expression in site planning and development*. The second story size and design are critical to the overall remodel concept and design. The second story size and area is proportional to the first floor, which footprint is not changed from the prior home. The Arts and Crafts/Craftsman features of the second story are reflective of the size and proportionality of the home overall, as shown in the project elevations. Reducing the floor area of the home would not change the outward design of the structure. Instead, it would only render the second floor useless. There is no viable way to reduce the building square footage without compromising the overall building design. So, a redesign to reduce square footage would eliminate the essential site planning and design features that went into the development of the entire project.

The site landscaping is designed to be low water and very low water plantings incorporating primarily pollinator supportive plants. The walkways, paving, driveway and patio are all permeable paving methods. Irrigation for landscaping utilizes rainwater recovery, with 3,000 gallons of rainwater storage below grade. The concrete rear patio and front sidewalks are replaced with recovered redwood decks and permeable walkways. Covered porches at the front and rear of the house break up the vertical expanse of the exteriors rendering the appearance visually appropriate for the style and size of the home.

3. *Exception will not be detrimental to the public health, safety, or welfare, or injurious to the property or improvements in the vicinity and in the same zoning district*

The exception will not be detrimental to public health, safety, or welfare, or injurious to properties in the area or same zoning district. The exception would allow an additional 458 square feet in a remodel of an existing single family home in an existing, developed area. The small amount of building square footage in an otherwise compliant home design cannot in and of itself be detrimental to public health and safety. In addition, letters of support from neighboring property owners were submitted as part of the application. These letters all state that the home as designed will not adversely affect their property. The letters also state that the home as designed will not have a negative effect on other neighbors' property due to (1) the home's consistency with the design and size of other homes in the neighborhood and (2) the fact that lot sizes and design in the area, especially for interior flag lots, make views of adjacent neighbors' property common. The objections of the Donnellys based on views into their backyard do not establish the harm required under this finding for denial, especially since the former home on the property also had views into the Donnellys' yard.

Other evidence to support that the home will not have an adverse effect on public health, safety, or welfare or other property is the consistency of the home as designed with other homes in the areas. The pictures of adjacent homes submitted as part of the application show that there are many other similar sized, two-story homes in the area. Due to the lot design and size in the area, these homes all have views of their neighbors' property. This common occurrence cannot be a basis of finding injury to other properties or a detriment to health, safety, or welfare for the proposed home.

348 Patten Street

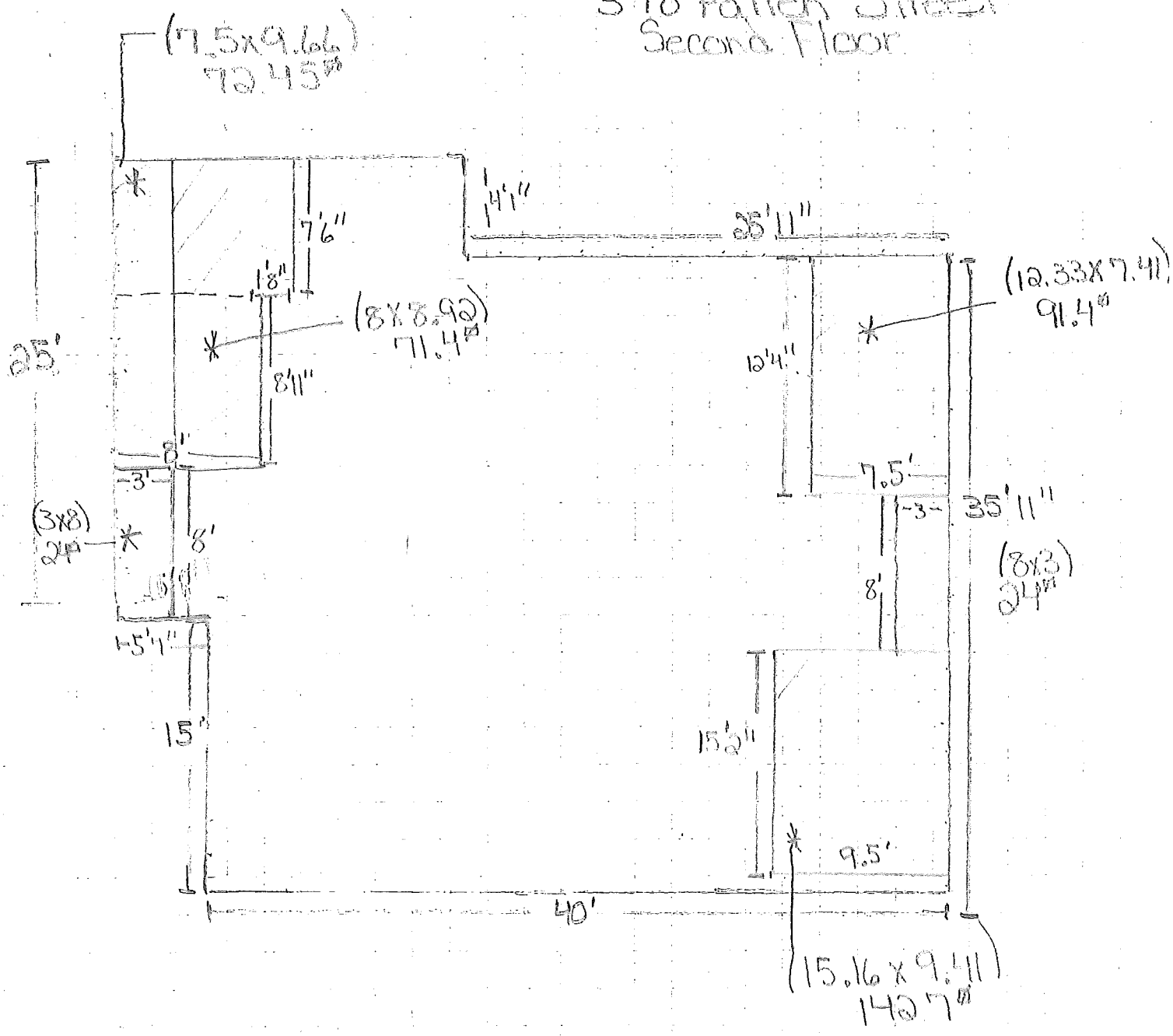
Development Code Compliance Summary

Central-East Area Zoning District Requirements		Described on Building Plans	As-built	Are Development Code Requirements Met?
Setbacks*				
Front/Streetside	**20'**	37.5'-42' (west)	36'11"-41'3"	Yes
Side: One-story	**7" minimum, 18" combined**	11'-24' (north)/7'-12' (south)	12'10"-27'2" (north)/7'5"-12'3.5" (south)	Yes
Side: two-story	**3' for every 5' above 15'**	**North:** At height of 20', the setback is between 20.5' and 33.5'; at a height of 25', the setback is between 28.5' and 41.5'; at a height of 25', the dormer is setback 17'. **South**: At a height of 20', the setback is between 17' and 22'; at a height of 25', the setback is between 24.5' and 29.5'; at a height of 25', the dormer is setback 13'.	Substantially as shown on the Building Plans. Second-floor sideyard setbacks meet or exceed Development Code standards.	Yes
Rear	**20'**	23'	23'2"	Yes
Garage	**20' from the front of the primary structure**	Existing garage, not setback from primary structure.	N/A	Not applicable as the garage is an existing element of the building.
Max. F.A.R (0.35)**	**2,382.8 sq. ft.**	2,950 sq. ft.	2,841	No. FAR is exceeded by **458** square feet.
Max. Coverage (40%)**	**2,732.2% sq. ft**	2,143 sq. ft.	2,143 sq. ft.	Yes.
Height	**30'**	30' (peak)	29' - 11.5' (peak)	Yes.

* Perimeter walls and interior walls were also measured in the field in order to verify the size of the residence. The as-built wall lengths correspond to those shown on the building permit submittal.

** The lot area indicated on the building plans is 6,766 square feet; However, the actual lot area as calculated by Mike Buti, land surveyor, and confirmed by the City Engineer, is 6,808 square feet.

348 Patten Street
Second Floor



Unconditioned Space
142.7□
24□
91.4□
24□
71.4□
72.45□
405.95

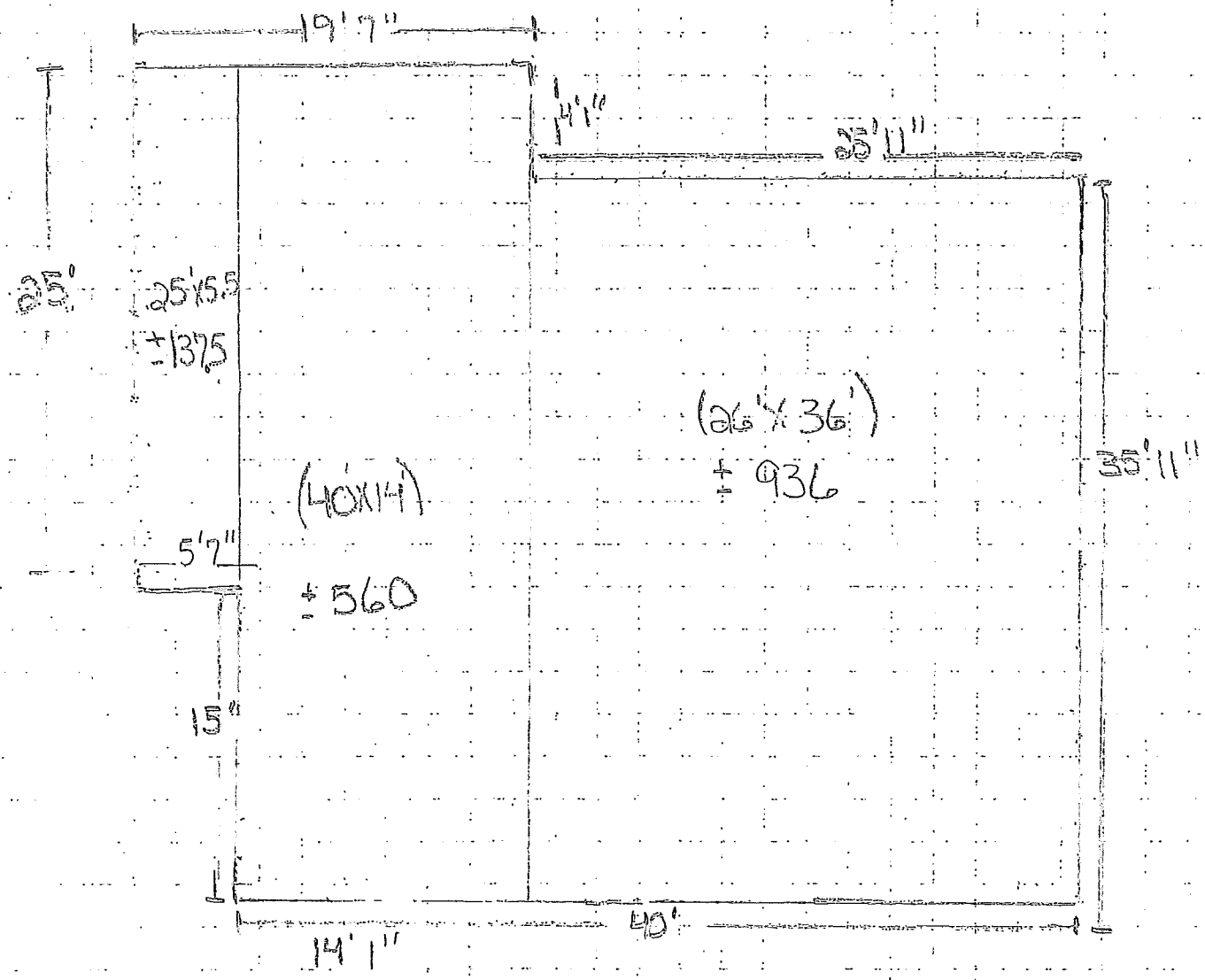
// unconditioned space

Total area (2nd Floor) = 1,633.5□
Unconditioned − 425.95
1,207.55□

Total living area 1633.5□ + 1207.55□ = 2841.05

348 Patton Street

First Floor



Area = 137.5
+ 560
+ 936
1633.5 ☐'

DARREL AND CATHERINE JONES
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PATTEN STREET CONFORMANCE
SURVEY

	A	B	C	D	E	F	G	H	I	J	K
1	STREET	NUMBER	LOT SIZE SQ. FT.	HOUSE SIZE SQ. FT.	GARAGE SIZE SQ. FT.	ESTIMATED	TOTAL AREA SQ. FT.	GARAGE SETBACK CONFORM	SIDE SETBACK CONFORM	SIDE HEIGHT CONFORM	FAR
2	PATTEN	229	7,500	2,281	360		2,641	Y	N	N	0.35
3	PATTEN	232	14,000	2,207	200	E	2,407	Y	Y	Y	0.17
4	PATTEN	235	7,500	861	200	E	1,061	Y	Y	Y	0.14
5	PATTEN	245	7,500	2,193	200	E	2,393	Y	N	N	0.32
6	PATTEN	248	14,000	1,727	200	E	1,927	Y	Y	Y	0.14
7	PATTEN	272	14,000	1,209	200	E	1,409	Y	Y	Y	0.10
8	PATTEN	279	11,325	1,874	308		2,182	Y	Y	Y	0.19
9	PATTEN	282	7,500	1,779	480		2,259	Y	N	N	0.30
10	PATTEN	291	10,500	1,154	462		1,616	N	N	Y	0.15
11	PATTEN	299	6,750	1,311	200	E	1,511	Y	N	Y	0.22
12	PATTEN	301	6,750	1,275	420		1,695	N	N	Y	0.25
13	PATTEN	303	7,500	1,750	378		2,128	Y	Y	N	0.28
14	PATTEN	315	8,000	2,037	442		2,479	N	N	Y	0.31
15	PATTEN	322	8,750	1,770	350		2,120	Y	N	Y	0.24
16	PATTEN	325	6,969	2,088	400		2,488	N	N	Y	0.36
17	PATTEN	330	7,405	2,312	200	E	2,512	Y	N	Y	0.34
18	PATTEN	338	10,500	2,076	200	E	2,276	Y	Y	Y	0.22
19	PATTEN	340	13,000	1,326	462		1,788	N	N	Y	0.14
20	PATTEN	346	8,500	2,077	500		2,577	N	N	N	0.30
21	PATTEN	348	6,808	2,378	372		2,750	N	Y	Y	0.40
22	PATTEN	350	7,501	1,732	540		2,272	Y	N	Y	0.30
23	PATTEN	353	13,500	2,521	441		2,962	N	Y	Y	0.22
24	PATTEN	358	8,726	2,952	700		3,652	Y	N	N	0.42
25	PATTEN	365	16,000	2,548	563		3,111	N	Y	Y	0.19
26	PATTEN	366	5,900	1,747	240		1,987	Y	N	N	0.34
27	PATTEN	387	7,500	986	276		1,262	N	Y	Y	0.17
28	PATTEN	388	9,000	2,311	738		3,049	Y	N	Y	0.34
29	PATTEN	401	10,497	1,842	748		2,590	Y	Y	Y	0.25
30	PATTEN	411	9,000	1,296	480		1,776	Y	N	Y	0.20
31	PATTEN	420	10,000	1,080	280		1,360	Y	Y	Y	0.14
32	PATTEN	423	9,147	1,493	304		1,797	N	N	Y	0.20
33	PATTEN	433	8,712	2,195	480		2,675	N	N	N	0.31
34	PATTEN	434	8,550	1,296	299		1,595	N	N	Y	0.19
35	PATTEN	443	9,000	1,525	200	E	1,725	Y	Y	Y	0.19
36	PATTEN	444	7,800	1,843	240		2,083	Y	N	Y	0.27
37	PATTEN	453	7,500	1,208	200	E	1,408	Y	N	Y	0.19
38	PATTEN	461	10,900	2,100	200	E	2,300	N	Y	Y	0.21
39	PATTEN	476	10,000	1,611	200	E	1,811	Y	N	N	0.18
40	PATTEN	482	7,500	498	216		714	N	N	Y	0.10

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SURVEY

	A	B	C	D	E	F	G	H	I	J	K
1	STREET	NUMBER	LOT SIZE SQ. FT.	HOUSE SIZE SQ. FT.	GARAGE SIZE SQ. FT.	ESTIMATED	TOTAL AREA SQ. FT.	GARAGE SETBACK CONFORM	SIDE SETBACK CONFORM	SIDE HEIGHT CONFORM	FAR
41	PATTEN	481	7,400	1,240	200	E	1,440	Y	Y	Y	0.19
42	PATTEN	492	8,500	2,143	369		2,512	N	N	Y	0.30
43	PATTEN	493	8,400	1,679	200	E	1,879	Y	N	Y	0.22
44	3RD E	516	18,730	3,521	200		3,721	N	Y	Y	0.20
45	3RD E	528	17,420	1,930	400		2,330	Y	Y	Y	0.13
46	3RD E	538	10,000	1,848	504		2,352	Y	N	N	0.24
47	3RD E	552	10,000	2,274	200	E	2,474	Y	N	N	0.25
48	3RD E	557	14,800	2,545	200	E	2,745	Y	Y	Y	0.19
49	3RD E	562	10,000	3,458	200	E	3,658	N	N	N	0.37
50	3RD E	572	10,000	1,099	180		1,279	Y	N	N	0.13
51	3RD E	573	7,500	708	240		948	Y	Y	Y	0.13
52	3RD E	582	7,029	1,419	320		1,739	Y	Y	Y	0.25
53	3RD E	583	5,700	938	480		1,418	Y	N	N	0.25
54	3RD E	596	8,000	1,618	432		2,050	Y	Y	Y	0.26
55	3RD E	597	9,900	1,929	231		2,160	N	Y	N	0.22
56	4TH E	537	10,000	1,616	400		2,016	N	N	Y	0.20
57	4TH E	540	6,969	1,196	462		1,658	N	N	Y	0.24
58	4TH E	544	7,500	1,777	440		2,217	N	N	Y	0.30
59	4TH E	547	13,000	2,344	148		2,492	Y	Y	Y	0.19
60	4TH E	557	12,200	1,324	240		1,564	Y	N	Y	0.13
61	4TH E	564	10,200	1,696	414		2,110	Y	Y	Y	0.21
62	4TH E	567	13,900	2,740	360		3,100	Y	N	Y	0.22
63	4TH E	572	7,797	1,849	360		2,209	N	N	Y	0.28
64	4TH E	577	12,200	1,719	480		2,199	N	N	Y	0.18
65	4TH E	584	9,000	2,224	336		2,560	Y	N	Y	0.28
66	4TH E	587	8,700	1,355	275		1,630	Y	N	Y	0.19
67	4TH E	590	8,500	2,033	506		2,539	Y	Y	Y	0.30
68	4TH E	621	7,500	1,216	460		1,676	N	N	Y	0.22
69	4TH E	630	6,300	1,975	480		2,455	N	N	N	0.39
70	4TH E	631	16,100	2,622	556		3,178	Y	N	Y	0.20
71	4TH E	640	6,615	1,728	504		2,232	N	N	Y	0.34
72	4TH E	641	7,840	1,436	528		1,964	N	N	Y	0.25
73	4TH E	650	6,098	1,975	480		2,455	N	N	N	0.40
74	4TH E	660	6,615	1,728	504		2,232	N	N	Y	0.34
75	4TH E	665	6,370	1,572	448		2,020	N	N	Y	0.32
76	4TH E	670	6,098	1,975	480		2,455	N	N	N	0.40
77	4TH E	675	6,370	1,572	448		2,020	N	N	Y	0.32
78	4TH E	680	6,300	1,975	480		2,455	N	N	N	0.39

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SURVEY

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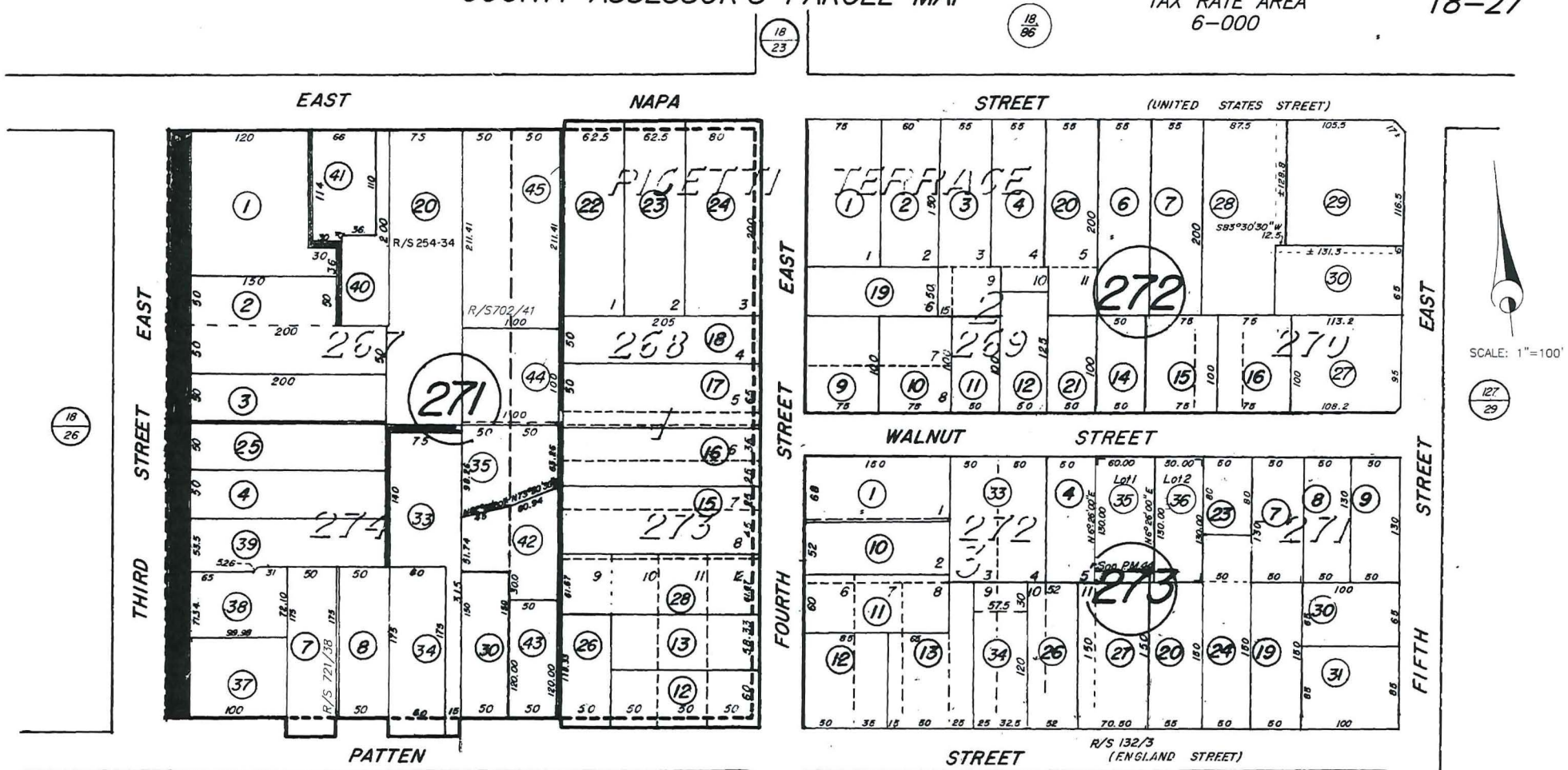
1	STREET	NUMBER	LOT SIZE SQ. FT.	HOUSE SIZE SQ. FT.	GARAGE SIZE SQ. FT.	ESTIMATED	TOTAL AREA SQ. FT.	GARAGE SETBACK CONFORM	SIDE SETBACK CONFORM	SIDE HEIGHT CONFORM	FAR
79	4TH E	685	6,446	2,028	440		2,468	N	N	Y	0.38
80	4TH E	690	7,505	1,923	483		2,406	N	N	Y	0.32
81	E. WALNUT	424	7,500	2,479	480		2,959	Y	Y	N	0.39
82	E. WALNUT	430	4,791	1,246	288		1,534	N	N	Y	0.32
83	E. WALNUT	433	14,800	1,616	520		2,136	N	N	Y	0.14
84	E. WALNUT	438	6,250	1,456	460		1,916	N	N	Y	0.31
85	E. WALNUT	443	7,505	2,140	540		2,680	N	N	N	0.36
86	E. WALNUT	446	5,000	2,326	200		2,526	N	N	N	0.51
87	E. WALNUT	453	7,505	1,981	361		2,342	N	N	Y	0.31
88	E. WALNUT	454	5,000	1,544	200	E	1,744	Y	N	N	0.35
89	E. WALNUT	455	6,098	2,184	440		2,624	N	N	N	0.43
90	E. WALNUT	466	7,500	2,194	200	E	2,394	Y	N	N	0.32
91	E. WALNUT	471	4,000	900	240		1,140	N	N	Y	0.29
92	E. WALNUT	474	7,500	1,768	550		2,318	N	N	N	0.31
93	E. WALNUT	479	5,248	1,665	286		1,951	N	N	Y	0.37
94	E. WALNUT	489	5,250	1,509	100		1,609	N	N	Y	0.31
95	E. WALNUT	497	6,500	1,124	312		1,436	Y	N	Y	0.22
96											
97	LEGEND:										
98	CONFORMS		NON-CONFORMING								

COUNTY ASSESSOR'S PARCEL MAP

TAX RATE AREA
6-000

18-27



REVISED
02-23-93=26(272)-KT
05-01-96=27(272)-KT
02-27-97=Corr.-KT
11-13-97=45(271)-RL
12-22-97=30(272),Corr.-LSL
10-19-04=Ag.-LF
02-23-93=26(272)-KT
04-16-07=R/S-BC
04-08-09=R/S-BC

Sonoma Parcel Map 44
Bk. 388 Pg. 9, 10 Rec. 8/20/86

NOTE: Assessor's parcels do not necessarily constitute legal lots. To verify legal parcel status, check with the appropriate city or county community development or planning division.

NOTE: This map was prepared for Assessment purposes only and does not indicate either parcel legality or a valid building site. No liability is assumed for the accuracy of the data delineated. The acreages are based on the information supplied to the Assessor (i.e. recorded survey maps recorded deeds, prior assessment maps, etc.)

Assessor's Map Bk. 018, Pg. 27
Sonoma County, Calif. (ACAD)

HYBRID 4-16-07 BC

299 Patten Street

303 Patten Street

346 Patten Street

348 Patten Street

353 Patten Street

358 Patten Street

358 Patten Street

366 Patten Street

388 Patten Street

547 4th Street East

375 East Napa Street

375 East Napa Street

357 East Napa Street

339 East Napa Street

327 East Napa Street

316 East Napa Street

516 3rd Street East

516 3rd Street East

528 3rd Street East

538 3rd Street East

552 3rd Street East

340 Patten Street from 2nd floor

346 Patten Street from 2nd floor

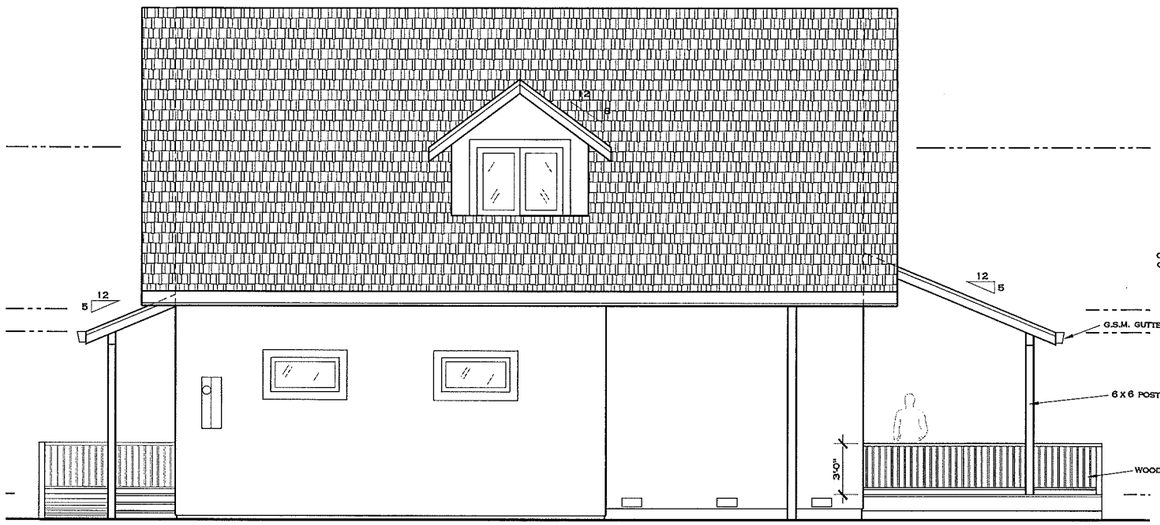
358 Patten Street from 2nd floor

567 4th Street East from kitchen window

567 4th Street East from kitchen window

567 4th Street East from 2nd floor window

567 4th Street East from 2nd floor window



PROPOSED SOUTH ELEVATION

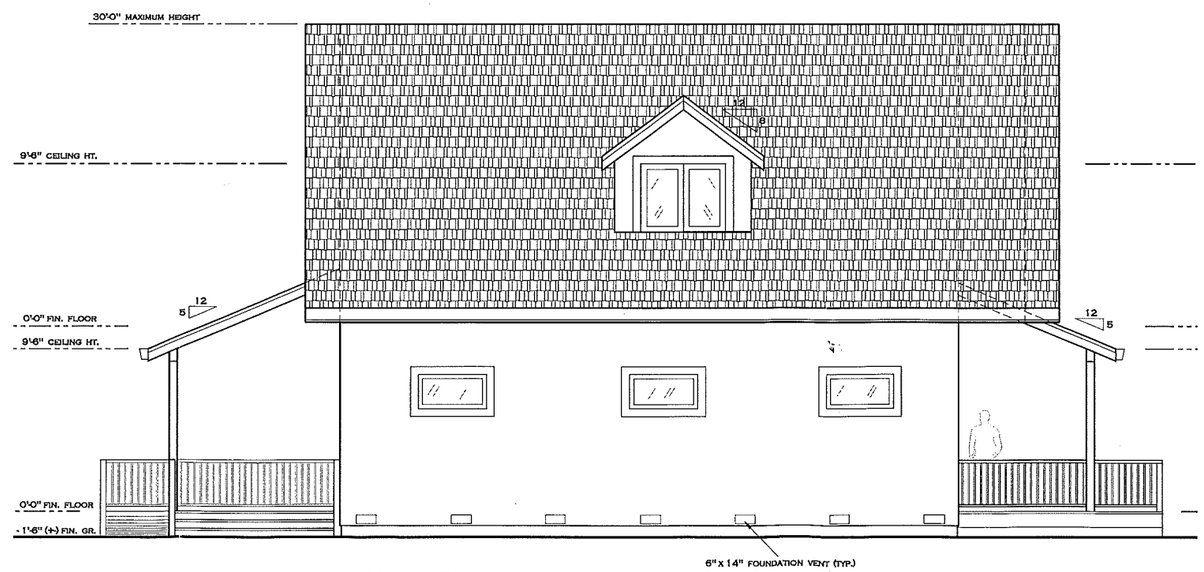
1/4" = 1'-0"

PROPOSED WEST ELEVATION

1/4" = 1'-0"

PROPOSED EAST ELEVATION

1/4" = 1'-0"



PROPOSED NORTH ELEVATION

1/4" = 1'-0"

SEE SHEETS 9 & 10 FOR TYPICAL DETAILS & NOTES

Revisions:

△ OCTOBER 27, 2014

F i
G O

CONSTRUCTION DRAWINGS
FRED O'DONNELL
622 BROADWAY
P.O. BOX 898
SONOMA, CA. 95476
707.996.0103 WORK
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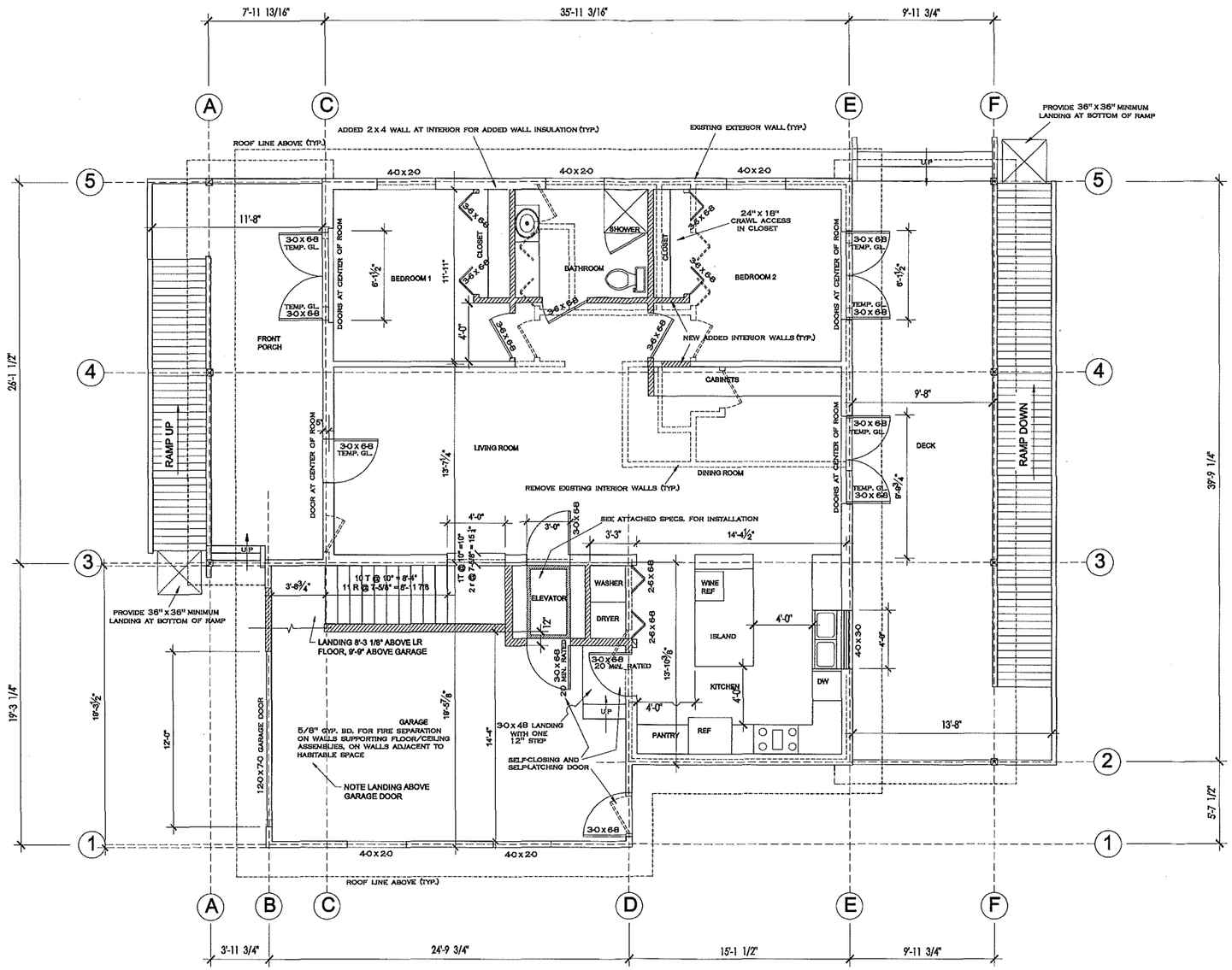
FIGODRAWINGS@GMAIL.COM
WWW.FIGODRAWINGS.COM

JONES RESIDENCE
Addition / Remodel
348 Patten Street
Sonoma, California

Date: MAY 2014
Scale: AS NOTED

Proposed Exterior Elevations

5



PROPOSED LOWER FLOOR PLAN

ALL WINDOWS TO BE DUAL GLAZED 1/4" = 1'-0"
SEE SHEET S2.0 FOR BUILDING SECTIONS

TYP. WALL FRAMING: 2 x 4 STUD @ 16" O.C. WITH STUCCO OR WOOD SIDING EXTERIOR FINISH 5/8" GYP. BD. INTERIOR FINISH TYP. (PLYWOOD SHEARWALL AS OCCURS) SEE STRUCTURAL PLANS AND SHEET 9 FOR MORE INFORMATION ON WALL CONSTRUCTION

SEE SHEETS 9 & 10 FOR TYPICAL DETAILS & NOTES

Revisions:
1 JULY 2, 2014
2 OCTOBER 27, 2014
3 JUNE 10, 2015

F i G O
CONSTRUCTION DRAWINGS

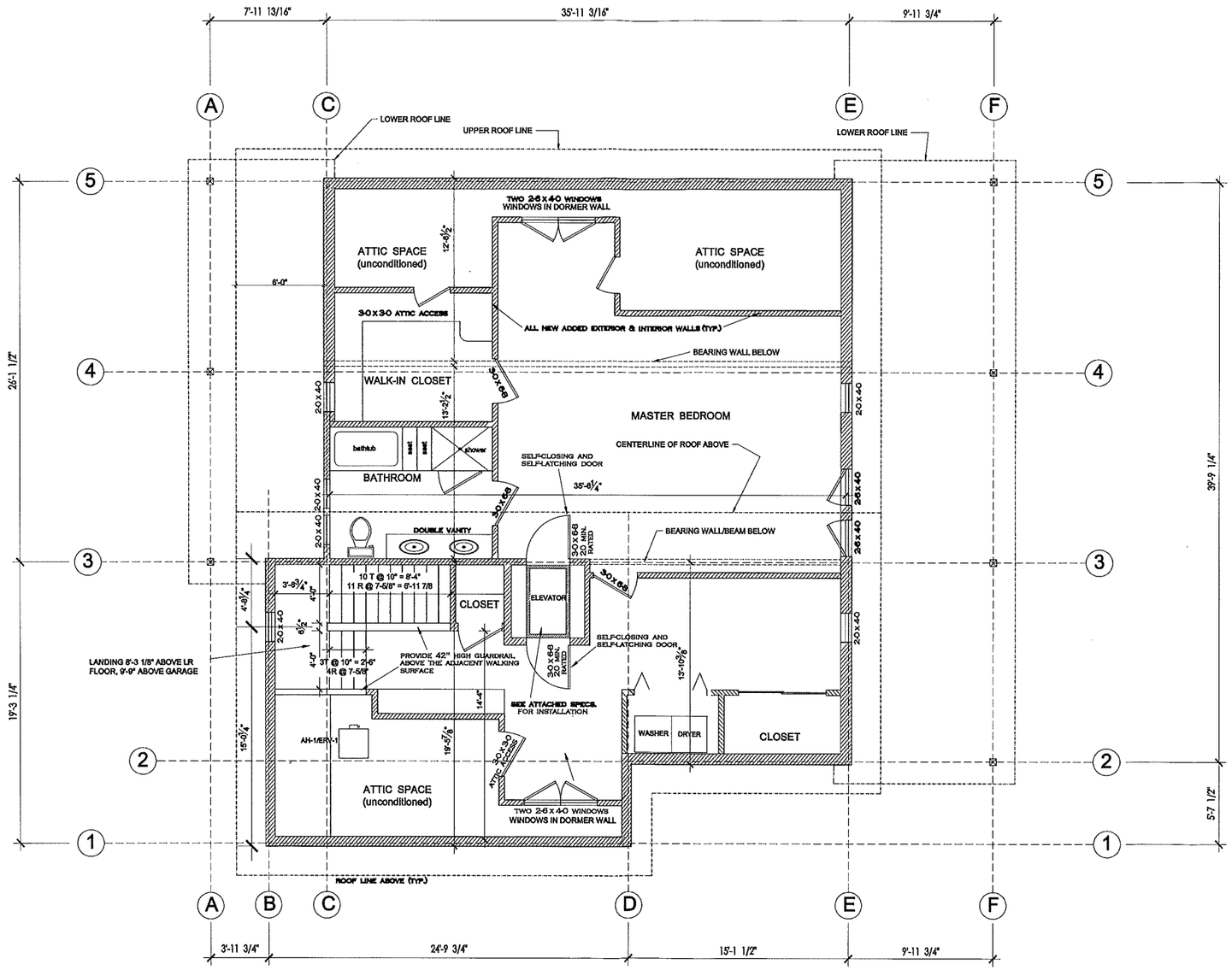
FRED O'DONNELL
822 BROADWAY
P.O. BOX 898
SONOMA, CA. 95476
707.996.0103 WORK
707.996.0112 FAX
FIGODRAWINGS@GMAIL.COM
WWW.FIGODRAWINGS.COM

JONES RESIDENCE
Addition / Remodel
348 Patten Street
Sonoma, California

Date: MAY 2014
Scale: AS NOTED

Proposed Lower Floor Plan

3



PROPOSED UPPER FLOOR PLAN

1/4" = 1'-0"

ALL WINDOWS TO BE DUAL GLAZED
SEE SHEET S2.0 FOR BUILDING SECTIONS

TYP. WALL FRAMING: 2 X 4 STUD @ 16" O.C. WITH STUCCO OR WOOD SIDING EXTERIOR FINISH 5/8" GYP. BD. INTERIOR FINISH TYP. (PLYWOOD SHEARWALL AS OCCURS) SEE STRUCTURAL PLANS AND SHEET 9 FOR MORE INFORMATION ON WALL CONSTRUCTION

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Addition / Remodel
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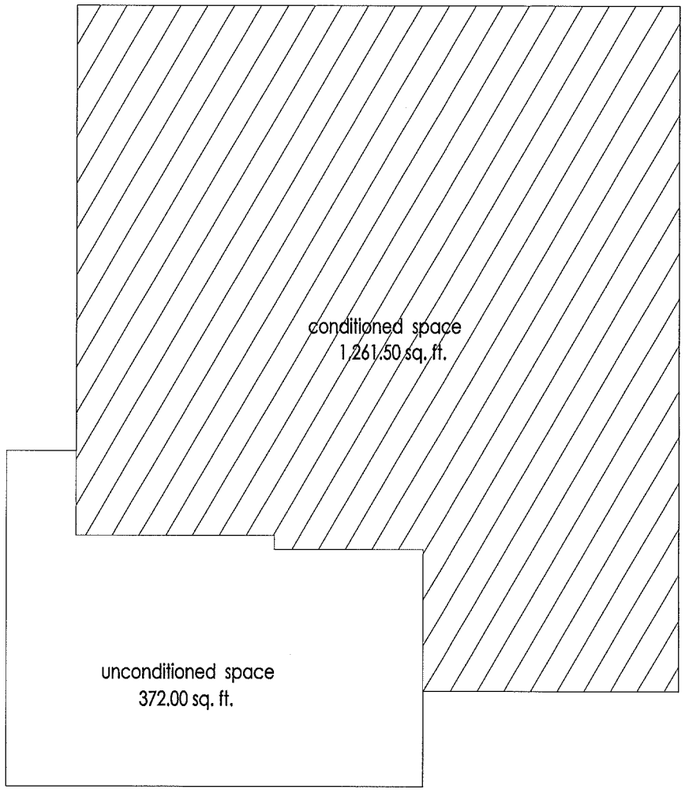
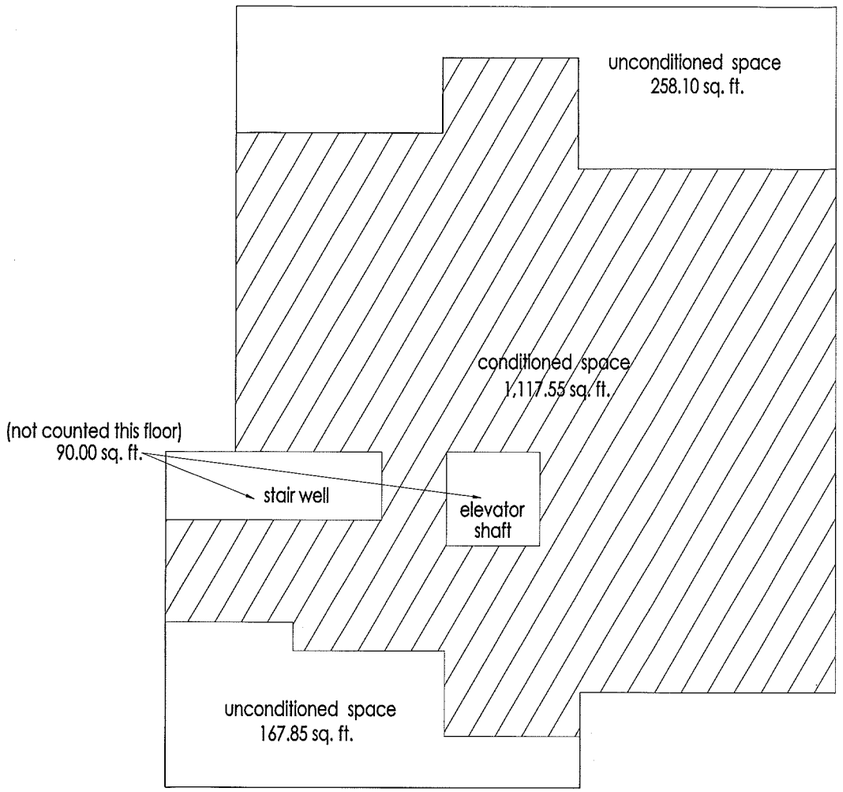
Date: MAY 2014
Scale: AS NOTED

Proposed Upper Floor Plan

4





Lower Floor Plan

1/4" = 1'-0"

living space = 1,261.50 sq. ft.
non-living space = 372.00 sq. ft.
total upper floor = 1,633.50 sq. ft.

F.A.R. = 1633.50 sq. ft.

total actual = 40%
F.A.R. = 2,751.05 sq. ft.

total allowed 35% =
F.A.R. = 2,382.80 sq. ft.

currently over F.A.R. = 368.25 sq. ft.

total F.A.R. space = 2,751.05 sq. ft.
total non-F.A.R. space = 887.95 sq. ft.
total all space = 3,639.00 square feet

Upper Floor Plan

1/4" = 1'-0"

living space = 1,117.55 sq. ft.
non-living space = 515.95 sq. ft.
total upper floor = 1,633.50 sq. ft.

F.A.R. = 1117.55 sq. ft.

Revisions:

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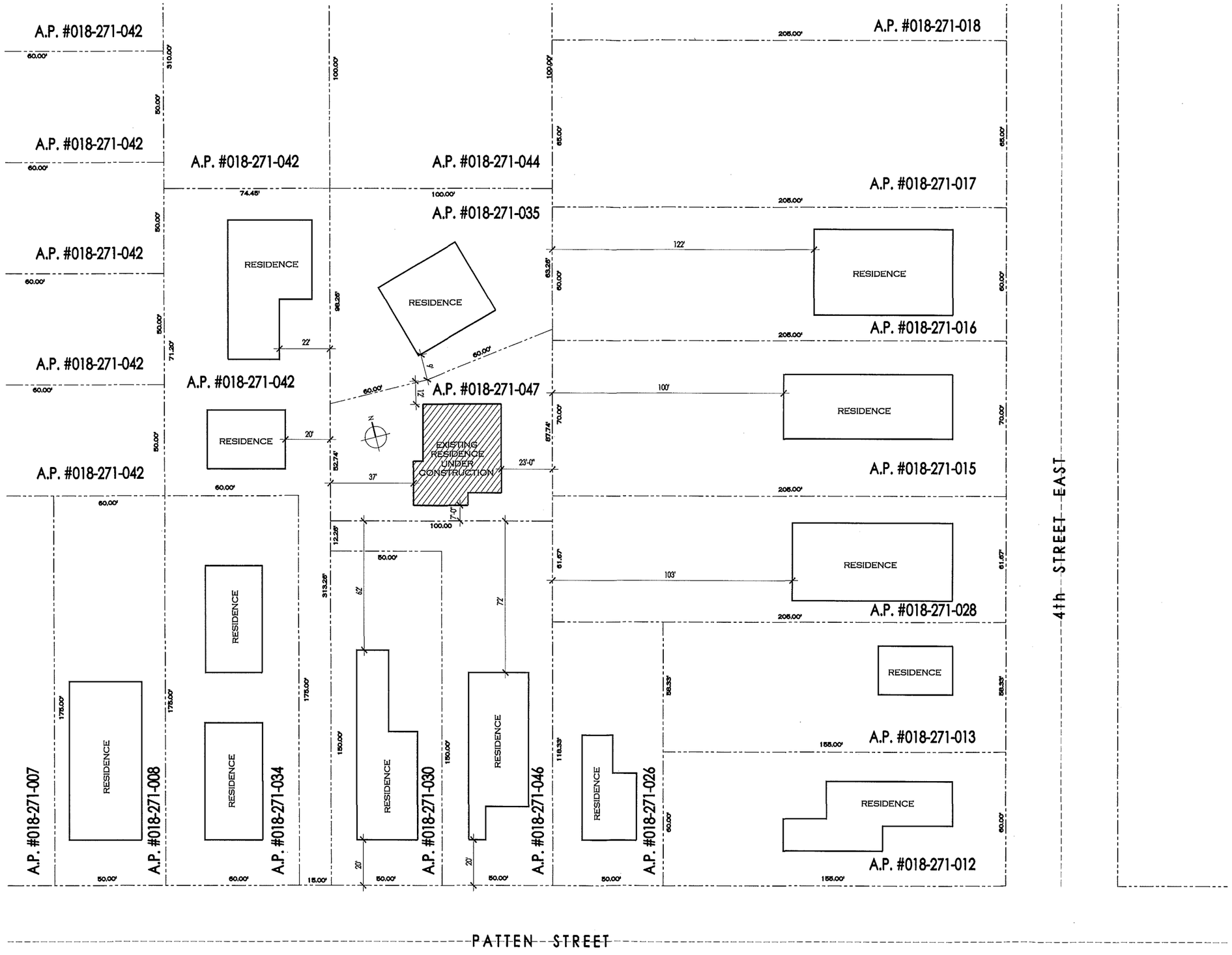
JONES RESIDENCE
Addition / Remodel
348 Patten Street
Sonoma, California

Date: JUNE 2015
Scale: AS NOTED

House
Square Ft.
Totals

H



dimensions to houses shown are + -

Revisions:

F i
G O
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JONES RESIDENCE
Addition / Remodel
348 Patten Street
Sonoma, California

Date: JUNE 2015
Scale: 1" = 20'-0"

Neighborhood Plan

P

City of Sonoma Planning Commission **STAFF REPORT**	Agenda Item #3 Meeting Date: 07-09-15

Agenda Item Title: Application of APPA Development for a Use Permit to allow new and replacement commercial floor area for the Sonoma Cheese Factory as part of a multitenant marketplace, including consideration of a restaurant use and Parking Exception.

Applicant/Owner: Viviani Trust

Site Address/Location: 2 West Spain Street

Staff Contact: Rob Gjestland, Senior Planner
Staff Report Prepared: 07/02/15

PROJECT SUMMARY

Description: Application of APPA Development for a Use Permit to allow new and replacement commercial floor area for the Sonoma Cheese Factory at 2 West Spain Street as part of a multitenant marketplace, including consideration of a restaurant use and Parking Exception.

General Plan Designation: Commercial (C)

Zoning: **Base:** Commercial (C) **Overlay:** Historic (/H); Plaza Retail (/P)

Site Characteristics: The subject property consists of two parcels on the north side of the Plaza with a combined area of approximately of ±20,400 square feet. The properties are currently developed with the historic Sonoma Cheese Factory building.

Surrounding Land Use/Zoning:
North: Casa Grande Parking Lot (State Parks)/Park
South: Sonoma Plaza (across Spain Street)/Park
East: Sonoma State Historic Park/Park
West: Restaurants/Commercial

Environmental Review:

- ☒ Categorical Exemption
- ☐ Negative Declaration
- ☐ Environmental Impact Report
- ☐ Not Applicable
- ☐ Approved/Certified
- ☒ No Action Required
- ☐ Action Required

Staff Recommendation: Approve with conditions.

PROJECT ANALYSIS

BACKGROUND

On November 13, 2014, the Planning Commission considered an application to reconfigure the interior of the Sonoma Cheese Factory to allow a multitenant marketplace (the Use Permit application was for Phase I of a broader three-phase concept that also envisioned new and replacement floor area in future phases). The Planning Commission was supportive of both the specific proposal and the larger concept, and voted unanimously to approve a Use Permit for the Phase I improvements. In addition, the Planning Commission directed that a parking credit for areas of demolition, in the amount of one space per 300 square feet of gross floor area removed, could be preserved and applied to future building additions/expansion. Furthermore, the Planning Commission recognized the existing amount of seating associated with food serving activities (103 seats) as grandfathered in with respect to parking requirements.

DETAILED PROJECT DESCRIPTION

The applicant is now returning to the Planning Commission for consideration of project Phases II and III so that the development can be constructed as one unified project. The Phase I approval is retained and incorporated into the broader project now presented, which is to create a pedestrian oriented, multitenant marketplace featuring locally sourced artisan foods, cheeses, bake goods, wine, coffee, and other related food and non-food products. In way of background, the Phase I approval allowed a reconfiguration of the interior space of the Sonoma Cheese Factory and called for demolition of a rear building element to facilitate a pedestrian walkway and courtyard linking the Casa Grande parking lot and Plaza.

Beyond those improvements approved under Phase 1, the project now includes additional demolition and replacement floor area at the back of the structure to accommodate a new restaurant (Tenant Space 12), and a new, ±1,900-square foot building in the northwest portion of the site (Tenant Space 13) that would accommodate cheese aging, food service, and sales. In total the project would increase the gross commercial floor area on the site by ±2,240 square feet (from 11,397 to 13,635 square feet) and accommodate eleven retail food/beverage purveyors and restaurant uses. The building façade of the original Sonoma Cheese Factory building would remain unchanged. A new trash enclosure is proposed on the east side of the property as the pedestrian walkway will eliminate the current screened dumpster location. Additional details are provided in the attached project narrative and drawings.

GENERAL PLAN CONSISTENCY **(☐Not Applicable to this Project)**

The property is designated Commercial by the General Plan. The Commercial land use designation is intended to provide areas for retail, hotel, service, medical, and office development, in association with apartments and mixed-use developments and necessary public improvements. The following General Plan policies apply to the project:

Local Economy Element, Policy 1.1: Focus on the retention and attraction of businesses that reinforce Sonoma's distinctive qualities – such as agriculture, food and wine, history and art – and that offer high-paying jobs.

Local Economy Element, Policy 1.5: Promote and accommodate year-round tourism that is consistent with the historic, small-town character of Sonoma.

Community Development, Policy 5.4: Preserve and continue to utilize historic buildings as much as feasible.

The proposal is consistent with the intent of the Commercial land use designation and applicable General Plan policies that encourage food industry businesses, tourism, and the preservation of historic structures.

DEVELOPMENT CODE CONSISTENCY **(☐Not Applicable to this Project)**

Use: The property is located within a Commercial (C) zoning district, which is applied to areas appropriate for a range of commercial land uses including retail, tourist, office, and mixed-uses. With more than three retail vendors/tenants, the marketplace falls under the definition of a shopping center and is therefore subject to review and approval of a Use Permit by the Planning Commission. In addition, restaurant uses and other businesses that prepare and sell food/beverages are subject to review and approval of a Use Permit by the Planning Commission.

Setback Requirements: There are no minimum setback requirements for Commercial properties in the Downtown Planning Area, except when abutting a residential zone, which is not applicable in this case. As proposed, new/replacement floor area at the back of the existing building would provide a minimum 16-foot setback from the east (side) property line, and would abut the north (rear) property line with a zero setback. The new building proposed toward the northwest corner of the site would similarly abut the north (rear) property line, while providing a 10-foot setback from the west (side) property line, and a 2.5-foot setback on the south.

Floor Area Ratio (FAR): The maximum FAR for Commercial properties in the Downtown Planning Area is 2.0. The project would increase the FAR from 0.56 to 0.67, remaining well below allowable levels.

Lot Coverage: The maximum coverage for Commercial properties in the Downtown Planning Area is 100%. The project would increase the lot coverage from 52% to 63%, remaining well below allowable levels.

Building Height: The maximum building height in the Commercial zone is 35 feet. The areas of new construction, including the rear addition and new building would not exceed 20 feet in height.

Parking Requirements: The property has no on-site parking with the exception of a loading area at the back. However, for structures that face the Plaza additional parking is not required for a new use unless the new use results in: 1) an increase in the square footage of the structure, or 2) an off-street parking requirement that exceeds one parking space for each 300 square feet of floor area (Development Code Section E.19.48.040.F). As previously noted, the project would increase the gross commercial floor area on the property by ±2,240 square feet. Accordingly, an Exception from the parking standards is necessary for the proposal. Under the Development Code, the Planning Commission may grant an Exception from parking standards, provided that the findings below can be made (§19.54.050):

1. *The adjustment authorized by the Exception is consistent with the General Plan, any applicable Specific Plan, and the overall objectives of this Development Code;*

   The uses associated with the parking exception request are consistent with the property's Commercial land use designation/zoning.

2. *An exception to the normal standards of the Development Code is justified by environmental features or site conditions; historic development patterns of the property or neighborhood; or the interest in promoting creativity and personal expression in site planning and development;*

   In part, the Exception request relates to the historic development pattern of the downtown. The City's parking standards recognize that much of the historic development around the Plaza occurred prior to the automobile age by providing properties fronting the Plaza with a credit of 1 parking space per 300 square feet of floor area. Under this standard, the subject property receives a credit of 38 parking spaces based on the existing gross floor area of the building (11,397 square feet). If this parking credit is translated into an equivalent level of restaurant/food service seating (1 space per four seats), then 152 seats are allowable. In essence, this approach applies the existing parking credit to the entire project, including the additional floor area. This methodology provides a basis for allowing an Exception because there would be no increase in parking intensity under the Code given the equivalency. Furthermore, applying the restaurant ratio is sensible considering the marketplace is largely an assemblage of food purveyors and/or restaurant uses that will require seating.

   That said, staff would note that the applicant is also requesting that the 103 seats recognized as grandfathered from the November 2014 review also be allowed as outdoor seating. Under the City's parking regulations only 25% of the indoor seating (i.e., 38 outdoor seats in this case) would be allowable without triggering an additional parking requirement. In staff's view, the project should be held to the 25% limit on outdoor seating.

3. *Granting the Exception will not be detrimental to the public health, safety, or welfare, or injurious to the property or improvements in the vicinity and in the same zoning district.*

   With the increase in floor area and multitenant use contemplated under the proposal, staff recognizes that there will be an intensification of use from the current condition. However, even with the intensification of use, staff has not identified any aspect of the project that would create compatibility issues with its surroundings. In addition, the pedestrian connection created by the project will improve circulation in the area as well as design compatibility with neighboring uses.

Demolition Permit: A portion of the building located at the back of the site would be demolished to accommodate the project. Pursuant to a Historic Resource Evaluation of the property (enclosed), this northern portion of the structure consists of more contemporary additions that are not character defining features. An updated letter submitted by the Historical Consultant finds that the proposed alterations included in the Use Permit Drawings prepared by RDC Architecture dated June 25, 2015, including the area of demolition at the back, would not adversely impact the historic significance of the structure (refer to attached letter prepared by Stacy Farr, Page & Turnbull, dated June 26, 2015). That being said, areas proposed for demolition appear to be over 50 years old and therefore require review and approval of a Demolition Permit by the DRHPC. A condition of approval has been included in this regard as well as a condition making the Use Permit contingent on upon DRHPC approval of the Demolition Permit.

Design Review: Under Section 19.54.080.B.2 of the Development Code, new commercial construction and building additions, exterior building modifications, repainting, lighting, and landscaping are subject to design review by the DRHPC (signs are also subject to DRHPC review). Conditions of approval have been included to address these design review requirements.

Site Design & Architectural Review: Under the Development Code, the Planning Commission is responsible for reviewing and acting upon the project site plan, building massing and elevation concepts to the extent it deems necessary. Subsequent review by the Design Review & Historic Preservation Commission is also required for commercial development, encompassing elevation details, colors and materials, landscaping (including fences and walls), lighting, and site details (in this case bike racks, the trash enclosure, and improvements/features associated with the exterior pedestrian walkway and courtyard), and any other issues specifically referred to the DRHPC by the Planning Commission (§19.54.080.D). This requirement has been included in the draft conditions of approval.

Bicycle Parking: Any change of commercial use within an existing structure that requires Use Permit approval must provide bicycle parking on-site (§19.48.110). While bicycle parking is not identified on the plans, a condition of approval has been included to address this requirement, giving the DRHPC responsibility over the location and type of bicycle racks.

CONSISTENCY WITH OTHER CITY ORDINANCES/POLICIES **(☐Not Applicable to this Project)**

Water Demand Analysis & Will-Serve Letter: Pursuant to Resolution No. 46-2010, the project will be subject to the requirement for a water demand analysis and will-serve letter from the City Engineer to confirm that adequate water capacity exists prior to the issuance of a building permit for the project. These items have been included in the draft conditions.

ENVIRONMENTAL REVIEW **(☐Not Applicable to this Project)**

The applicant commissioned a Historic Resource Evaluation (HRE) of the property which found that the building appears to be eligible for listing on the California Register of Historic Resources due to its association with the development of the cheese industry in Sonoma (refer to enclosed Historic Resource Evaluation prepared by Page & Turnbull, dated November 6, 2014). Because the building meets the criteria for listing on the California Register, it is considered a historical resource under the California Environmental Quality Act (CEQA). That said, an updated letter submitted by the Historical Consultant finds that the proposed alterations shown in the Use Permit Drawings by RDC Architecture dated June 25, 2015, would not impact the character defining features of the building and therefore would have no impact or a less than significant impact on the historic significance of the structure (refer to attached letter prepared by Stacy Farr, Page & Turnbull, dated June 26, 2015). Accordingly, the project would be considered Categorically Exempt from the provisions of CEQA under Section 15303 (Class 3 – New Construction).

DISCUSSION OF PROJECT ISSUES

Compatibility: In staff's view, the proposal does not raise significant issues in terms of compatibility with surrounding land uses as the property is located in the Downtown District in a commercial setting. In general, the project would increase the vitality of a somewhat underutilized property on the Plaza while providing an improved pedestrian connection and outdoor space.

Lot Merger: At present, the building straddles the two parcels that comprise the project site, APN 018-162-022 and APN 018-162-004. Accordingly, staff has included a condition of approval requiring that the parcels be merged in order to resolve this nonconforming condition.

Parking: As noted above, there is a rational basis for translating the property's parking credit to an equivalent level of seating for the proposal, as suggested in the project narrative, although additional outdoor seating above the normally allowed level (25% of indoor seating) is not supported. While this would be considered equivalent in terms of parking requirements, there is a general intensification of use

and if the Commission has concerns about potential parking impacts, a reduction in the net increase of floor area can be considered.

Outdoor Grill: During the previous 2014 review the Planning Commission directed staff to evaluate the outdoor grill, which the Building Official subsequently confirmed is not Code compliant. The applicant indicates the grill will be removed from its current location but wants to reserve the right to reinstall a grill if desired. Staff has included a draft condition that would require any new, replacement, or reinstalled grill to conform to applicable Building Code and Fire Department requirements.

RECOMMENDATION

Staff recommends approval of the Use Permit and Parking Exception, subject to the attached conditions.

Attachments:

1. *Draft Findings of Project Approval*
2. *Draft Conditions of Approval*
3. *Vicinity Map*
4. *Project Narrative*
5. *Letter of Findings prepared by Stacy Farr, Page & Turnbull, dated June 26, 2015*
6. *Project Use Permit Drawings*

Enclosure:

1. *Historic Resource Evaluation of 2 West Spain Street prepared by Page & Turnbell, dated November 6, 2014*

cc: Michael Ross (via email)
RDC Architecture, Inc.
18924 Sonoma Highway
Sonoma, CA 95476

Aaron Marzwell (via email)
APPA Development
3301 Pico Blvd. , Ste. A
Santa Monica, CA 90405

DRAFT

City of Sonoma Planning Commission

FINDINGS OF PROJECT APPROVAL

Sonoma Cheese Factory Multitenant Market Use Permit & Parking Exception

2 West Spain Street

July 9, 2015

Based on substantial evidence in the record and upon consideration of all testimony received in the course of the public review, including the public review, the City of Sonoma Planning Commission finds and declares as follows:

Use Permit Approval

1. That the proposed use is consistent with the General Plan and any Specific Plan;

2. That the proposed use is allowed with a conditional Use Permit within the applicable zoning district and complies with all applicable standards and regulations of the Development Code (except for approved Variances and Exceptions): and

3. The location, size, design, and operating characteristics of the proposed use are compatible with the existing and future land uses in the vicinity; and

4. The proposed use will not impair the architectural integrity and character of the zoning district in which it is to be located.

Parking Exception Approval

1. That the adjustment authorized by the Exception is consistent with the General Plan, any applicable Specific Plan and the overall objectives of this Development Code.

2. That the Exception to the normal standards of the Development Code is justified by environmental features or site conditions; historic development patterns of the property or neighborhood; or the interest in promoting creativity and personal expression in site planning and development.

3. That the granting of the Exception will not be detrimental to the public health, safety, or welfare, or injurious to the property or improvements in the vicinity and in the same zoning district.

DRAFT

City of Sonoma Planning Commission

CONDITIONS OF PROJECT APPROVAL

Sonoma Cheese Factory Multitenant Market Use Permit & Parking Exception

2 West Spain Street

July 9, 2015

1. The previous 11/13/14 approval for Phase 1 is hereby retained and incorporated into the updated conditions of approval set forth below.

   Enforcement Responsibility: *Planning Department*
   Timing: *Ongoing*

2. The Use Permit shall be contingent upon approval of a Demolition Permit by the Design Review & Historic Preservation Commission (DRHPC) allowing for demolition of the rear portion of the building as shown on Drawing No. A2.05 (Floor Plans-Demolition) dated 06/25/2015.

   Enforcement Responsibility: *Planning Department; DRHPC*
   Timing: *Prior to issuance a building permit*

3. The buildings and property shall be improved and used in conformance with the project narrative dated June 10, 2015, and approved Project Use Permit Drawings prepared by RDC Architecture dated 06/25/2015, except as modified by these conditions and the following:

   a. The maximum number of retail vendors, including the Sonoma Cheese Factory, shall be limited to eleven. Spaces identified on the floor plan (Drawing No. A2.10) for use as tenant receiving and office, (i.e, spaces 10 and 11) are not considered or counted as retail vendors.
   b. The number of indoor seats associated with food/beverage service shall be limited to 152. The number of outdoor seats shall be limited to 38.
   c. The marketplace shall be closed to the public by midnight daily.
   d. The existing, non-Code compliant outdoor grill shall be removed. Any new, replacement, or reinstalled outdoor grill shall comply with applicable Building Code and Fire department requirements.

   Enforcement Responsibility: *Planning Department; Building Department; Fire Department*
   Timing: *Prior to issuance a building permit*

4. The two parcels that comprise the project site, APN 018-162-022 and APN 018-162-004 shall be merged.

   Enforcement Responsibility: *Planning Department; Building Department; City Engineer*
   Timing: *Prior to issuance of a building permit*

5. No structures of any kind shall be constructed within the public easements dedicated for public use, except for structures for which the easements are intended.

   Enforcement Responsibility: *City Engineer; Public Works Department; Planning Department*
   Timing: *Prior to the issuance of any building permit; Ongoing*

6. A soils and geotechnical investigation and report, prepared by a licensed civil engineer, shall be required for the development prior to the issuance of any building permit. Recommendations identified in the geotechnical investigation and report shall be incorporated into the construction plans for the project and into the building permits.

   Enforcement Responsibility: *City Engineer; Building Department*
   Timing: *Prior to issuance of any building permit*

7. All Building Department requirements shall be met, including applicable Building Code requirements related to compliance with CALGreen standards, seismic retrofitting, occupancy separation, the provision of commercial kitchen hood(s), and ADA requirements (i.e. disabled access including at entrances, handicap parking, accessible paths of travel, bathrooms, etc.). A building permit shall be required.

   Enforcement Responsibility: *Building Department*
   Timing: *Prior to construction*

8. All Fire Department requirements shall be met, including applicable requirements related to emergency access, kitchen hood(s), fire sprinkler systems, and water line/connections for fire service.

   Enforcement Responsibility: *Fire Department; City Engineer; Building Department*
   Timing: *Prior to issuance of any building permit; Prior to operation*

9. A grading and drainage plan shall be required if deemed necessary by the City Engineer/Public Works Director

   Enforcement Responsibility: *City Engineer; Public Works Department; Building Department*
   Timing: *Prior to issuance of any building permit*

10. An encroachment permit from the City shall be required for all work within the public right of way on West Spain Street.

    Enforcement Responsibility: *City Engineer; Public Works Department; Building Department*
    Timing: *Prior to any work/construction within the public right of way*

11. The applicant shall obtain any necessary permits, licenses, and/or clearances from the Sonoma County Environmental Health Division and the State Department of Alcoholic Beverage Control (ABC) for food/beverage preparation, cooking, and service associated with the use. Food/beverage preparation, cooking, and service shall conform to the limitations of those permits.

    Enforcement Responsibility: *Department of ABC; Sonoma County Health Division; Planning Department*
    Timing: *Prior to operation; Ongoing*

12. The applicant shall comply with the following requirements of the Sanitation Division of Sonoma County Permit & Resource Management Department (PRMD) and the Sonoma County Water Agency (SCWA):

    a. The applicant shall submit a Wastewater Discharge Survey to PRMD. The Applicant shall obtain a **Survey for Commercial/Industrial Wastewater Discharge Requirements** ("Green form") from PRMD, and shall submit the completed Survey, along with two (2) copies of the project site plan, floor plan and plumbing plan to the Sanitation Section of PRMD. The Survey evaluation must be completed by the Sonoma County Water Agency and submitted to the PRMD Engineering Division before a building permit for the project can be approved.
    b. If additional sewer pre-treatment and/or monitoring facilities (i.e. Grease trap, Sampling Manhole, etc.) are required by the Sonoma Valley County Sanitation District per the Wastewater Discharge Survey, the Applicant shall comply with the terms and requirements of the Survey prior to commencing any food or beverage service. If required, the Sampling Manhole shall be constructed in accordance with Sonoma County Water Agency *Design and Construction Standards for Sanitation Facilities*, and shall be constructed under a separate permit issued by the Engineering Division of PRMD.
    c. In accordance with Section 5.05, "Alteration of Use", of the Sonoma Valley County Sanitation District Ordinances, the Applicant shall pay increased sewer use fees as applicable for changes in the use of the existing structure. The increased sewer use fees shall be paid the Engineering Division of PRMD prior to the commencement of the use(s).
    d. A sewer clearance shall be provided to the City of Sonoma Building Department verifying that all applicable sewer fees have been paid prior to the issuance of any building permit. **Note: Substantial fees may apply for new sewer connections and/or the use of additional ESDs from an existing sewer connection. The applicant is encouraged to check with the Sonoma County Sanitation Division immediately to determine whether such fees apply**.

    Enforcement Responsibility: *Sanitation Division of Sonoma County Planning & Management Resource Department; Sonoma County Water Agency: City of Sonoma Building Department*
    Timing: *Prior to issuance of a building permit*

13. The Applicant shall pay any required increased water fees applicable to the changes in use in accordance with the latest adopted rate schedule.

    Enforcement Responsibility: *Public Works Department; Water Operations Supervisor; City Engineer*
    Timing: *Prior to final occupancy*

14. In addition to those already identified, the following agencies must be contacted by the applicant to determine permit or other regulatory requirements of the agency prior to issuance of a building permit, including the payment of applicable fees:

    a. Sonoma Valley Unified School District [For school impact fees)
    b. Sonoma County Water Agency [For grading, drainage, and erosion control plans]

    Enforcement Responsibility: *Building Department*
    Timing: *Prior to issuance of a building permit*

15. The project shall be subject to design review by the Design Review & Historic Preservation Commission (DRHPC), encompassing exterior building modifications, elevation details, exterior materials and colors, lighting, landscaping, trash enclosure design and the location and type of required on-site bicycle parking. This review shall include improvements associated with the new exterior pedestrian walkway and courtyard.

    Enforcement Responsibility: *Planning Department; DRHPC*
    Timing: *Prior to the issuance of a building permit*

16. A landscape plan shall be prepared by a licensed landscape architect. The plan shall be subject to the review and approval of the Design Review & Historic Preservation Commission (DRHPC). The plan shall address site landscaping (including planters/containers), hardscape improvements, pedestrian furniture/amenities, and any fencing/walls. The landscape plan shall comply with City of Sonoma's Water Efficient Landscaping Ordinance (Municipal Code §14.32) and Development Code Sections 19.46 (Fences, Hedges, and Walls) and 19.40.060 (Landscape Standards).

    Enforcement Responsibility: *Planning Department; DRHPC*
    Timing: *Prior to the issuance of a building permit*

17. Onsite lighting shall be addressed through a lighting plan, subject to the review and approval of the Design Review & Historic Preservation Commission (DRHPC). All proposed exterior lighting for the building and/or site shall be indicated on the lighting plan and specifications for light fixtures shall be included. The lighting shall conform to the standards and guidelines contained under Section 19.40.030 of the Development Code (Exterior Lighting). No light or glare shall be directed toward, or allowed to spill onto any offsite areas. All exterior light fixtures shall be shielded to avoid glare onto neighboring properties, and shall be the minimum necessary for site safety and security.

    Enforcement Responsibility: *Planning Department; DRHPC*
    Timing: *Prior to the issuance of a building permit*

18. As normally required, signage for the business/property shall be subject to review and approval by the Design Review Commission (DRC).

    Enforcement Responsibility: *Planning Department or Design Review Commission*
    Timing: *Prior to installation of signage*

19. All applicable stormwater requirements shall be met and implemented on site prior to final occupancy.

    Enforcement Responsibility: *Stormwater Coordinator; City Engineer*
    Timing: *Prior to final occupancy*

20. If historic or prehistoric artifacts or sites are observed during construction, all work in the vicinity of the find shall stop until the discovery area can be evaluated by an archaeologist. Depending on the extent and cultural composition of the discovered materials, data recovery may be necessary and it may be advisable to have subsequent excavation monitored by an archaeologist who should be ready to record, recover, and/or protect significant cultural materials from further damage. Artifacts that are typically found associated with prehistoric sites include humanly modified stone, shell, bone

or other cultural materials such as charcoal, ash and burned rock indicative of food procurement or processing activities. Prehistoric domestic features include hearths, firepits, or house floor depressions whereas typical mortuary features are represented by human skeletal remains. Historic resources potentially include all by-products of human land use greater than 50 years of age, including alignments of stone, foundation elements from previous structures, minor earthworks, and surface scatters and subsurface deposits of domestic type debris.

Enforcement Responsibility: *Planning Department; Building Department; Public Works Department*
Timing: *Throughout project construction*

21. If human remains are encountered, all work shall stop in the immediate vicinity of the discovered remains and the County Coroner and a qualified archaeologist shall be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission shall be contacted by the Coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains is provided.

Enforcement Responsibility: *Planning Department; Building Department; County Coroner*
Timing: *Throughout project construction*

22. Prior to the issuance of any building permit, water demand analysis shall be prepared by a licensed civil engineer and submitted by the applicant and shall be subject to the review and approval of the City Engineer. Said analysis shall be in compliance with the City's current policy on water demand and capacity analysis as outlined in Resolution 46-2010. Building permits for the project shall only be issued if the City Engineer finds, based on the water demand analysis in relation to the available water supply, that sufficient capacity is available to serve the proposed development, which finding shall be documented in the form of a will-serve letter, prepared by the City Engineer. Any will-serve letter shall remain valid only so long as the use permit for the project remains valid.

Enforcement Responsibility: *City Engineer; Public Works Department*
Timing: *Prior to issuance of any building permit*

Vicinity Map

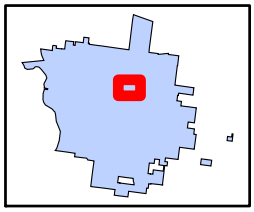
Project Summary	
Project Name:	Sonoma Cheese Factory
Property Address:	2 West Spain Street
Applicant:	APPA Development
Property Owner:	Viviani Trust
General Plan Land Use:	Commercial
Zoning - Base:	Commercial
Zoning - Overlay:	Historic; Plaza Retail
Summary:	
Consideration of a Use Permit to allow new and replacement commercial floor area for the Sonoma Cheese Factory as part of a multitenant marketplace, including consideration of a restaurant use and a Parking Exception.	

0 100 200 400 Feet

1 inch = 200 feet

Zoning Designations

R-HS	Hillside Residential (1 D.U./10acres, maximum)
R-R	Rural Residential (2 D.U./acre, maximum)
R-L	Low Density Residential (2-5 D.U./acre)
R-S	Sonoma Residential (3-8 D.U./acre)
R-M	Medium Denisty Residential (6-10 D.U./acre)
R-H	High Density (9-12 D.U./acre)
R-O	Housing Opportunity (15-20 D.U./acre)
R-P	Mobile Home Park (7 D.U./acre, maximum)
MX	Mixed Use (12 D.U./acre, maximum)
C	Commercial (15 D.U./acre, maximum)
C-G	Commercial-Gateway (15 D.U./acre, maximum)
W	Wine Production
P	Public Facility
Pk	Park
A	Agriculture



N

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ARCHITECTURE

RossDrulisCusenbery

June 10, 2015

PROJECT NARRATIVE
Application Type: City of Sonoma Minor Conditional Use Permit - Phases II & III
Project Name: Sonoma Cheese Factory
Project Location: 2 West Spain Street, Sonoma, CA 95476
APN: Two Parcel Property -018-162-004 & 018-162-022 to be merged into one parcel
Owner: Nina & Maria Viviani Trust, Comerica Bank & Trust NA, Trustee of the Viviani Trust (Trust)
Developer: APPA Development, Santa Monica, CA
Project Architect: RossDrulisCusenbery Architecture, Inc., Michael B. Ross, AIA

PROJECT OVERVIEW
The building located at 2 West Spain Street was built in 1945 for Celso Viviani to serve as the factory, retail space, and office for the Sonoma Cheese Factory. When Mr. Viviani and Tom Vella, established the company in 1931 it was the first dedicated cheese making facility in Sonoma. The Sonoma Cheese Factory manufactured cheese continuously until 2001 at this site. Since that time, changing cultural, ownership, and economic conditions affected the business. The current owner, the Nina & Maria Viviani Trust, is proposing to revitalize the property through the creation of a new multi-tenant, specialty food marketplace featuring locally sourced, artisan foods, cheeses, baked goods, wine, coffee, and other related food and non-food products.

Business Redevelopment Concept
The Sonoma Cheese Factory will be redeveloped to be a pedestrian oriented, central community gathering space that celebrates local artisan food and wine in an inviting and dynamic social setting. The history of the Sonoma Cheese Factory, and its ideal location on the plaza, provides an excellent opportunity for this to be successful. No other food retail operator in Sonoma has the iconic presence, historical significance, and the available well positioned location to do so. The proposed marketplace concept will be similar to the Oxbow Public Market business model in nearby Napa however its emphasis will be the history, production, aging and sales of local cheeses and other related food products.

The new marketplace will include multiple vendors under one roof. In support of this concept the Trust has consulted with Mr. Steve Carlin the developer and owner of the Oxbow Public Market in Napa, CA and APPA Development. The goal of this project is to revitalize and restore the Sonoma Cheese location as the preeminent specialty food purveyor in the Sonoma Valley. The project proposes to do so in the following manner.

Emphasizing Pedestrian Connectivity and Flow

The project will provide a significant community benefit to Sonoma by creating pedestrian connectivity and flow between the Sonoma Plaza, the Casa Grande Parking Lot, Depot Park, the Veterans Building and the Overlook Trail to the north. The project will build a new outdoor pedestrian walkway and exterior courtyard on the west side of the site between the Sonoma Cheese Factory building and Mary's Pizza Shack. An alley exists there now but is closed to all pedestrian traffic. Following the partial removal of non significant additions to the north side of the building, the alley will be re-opened, redesigned and transformed into a lively courtyard. New entry portals, signage, lighting and landscaping will provide welcoming features for pedestrians. This new walk way will provide a direct path of travel linking the commercial activity around the Plaza with the Casa Grande Parking lot and beyond.

Preservation and Renovation of Existing Buildings

The existing Sonoma Cheese Factory is an ensemble of three buildings constructed over a period of time. The front and center portions of the building represent the original massing of the building. The rear concrete masonry unit (CMU) portions of the building were constructed at varying more contemporary dates. Beginning in 1958 the building underwent a series of additions and alterations primarily at the rear of the building. In 2005 the interior of the original building fronting Spain Street was extensively renovated to expand the retail use of the building.

Similar to the project's approach to site improvement, the project proposes to open the interior of the building to create a sense of procession, discovery, social interaction and flow through open market with multiple tenants spaces. Currently the three primary building elements of the Sonoma Cheese Factory Building are perceived as separate barely contiguous elements. The public only has access to roughly 50% of the building. The remainder of the building is underutilized and requires demolition and replacement or significant repairs or renovation in order to effectively contribute to the Sonoma Plaza commercial vibrancy and economy. The project proposes to make virtually 100% of the building open to the public and commercial uses.

Historic Resource Evaluation Study

In the summer of 2014 the Trust engaged Page & Turnbull Historic Resource Consultants, San Francisco, CA to prepare an Historic Resource Evaluation (HRE) for the property. The HRE concluded the northern more contemporary portions of the building, which are proposed for removal and replacement by this project, are not historically significant. Per the HRE:

"Agglomerative additions at the rear of the building are not considered to be character defining features, as they are utilitarian in design, were partially constructed outside of the identified period of significance and are no longer used for cheese production."

The proposed development plan will not alter any of the of the character defining features of the building that enable it to convey its historic appearance and potential significance including its distinctive orange tile cladding, any fenestrations a the primary south facade, the southern portions of the east and west facades, metal awnings over the primary entrances or the massing and footprint of the primary building as it was originally constructed.

Originally Proposed as a Three Phase Project - Now Combined

The project was originally proposed to the Sonoma Planning Commission as a three phased project. On November 13, 2014, Phase I of the project was granted a conditional Use Permit by the City of Sonoma Planning Commission. This Use Permit application retains the prior approved Conditional Use Permit and requests the approval of previous Phases II & III of the project. Once approved this will be a single coordinated construction project. The attached Use Permit drawings depict a single unified project.

Description of All Project Phases

All previous project phases are generally described below.

PHASE I: Phase I has been approved and this Use Permit is retained. Phase I includes partial demolition of the non-significant northern CMU building, renovation and construction of new multi tenant improvements in the existing retail space fronting the Plaza, new ADA restrooms and the construction of a new exterior pedestrian walkway and courtyard directly and visually linking the Historic Sonoma Plaza with the Casa Grande Parking lot and Depot Park to the North.

PHASE II: Phase II includes: Demolition of the remaining non-significant northern CMU buildings and reconstruction of a new approximately 3,100 GSF Addition (Tenant Space 12).

PHASE III: Construction of a new approximately 1,900 GSF Building (Tenant Space 13).

Land Use Type and Food Service Seating

Defining a project like this as purely "retail" or “restaurant” does not accurately describe the public market experience. Virtually all tenants will sell food. Most tenants will require food service seating at their stall. The tenant mix will change over time, however, all tenants will be artisan food purveyors whenever possible. Offering seating flexibility to tenants is paramount to the success of projects like this. The Oxbow Public Market in Napa, Pike Place Market in Seattle, The Ferry Building in SF, and the Packing House in Anaheim are precedents in support of this approach. For parking and food service seating purposes the definition of "retail" and "restaurant" is blurred for this project type. Therefore for the purpose of clarifying the Cheese Factory's food service seating and parking requirements the land use type "Restaurant" per the Sonoma Development Code's *Parking Requirements by Land Use Table 4-4* has been applied. Parking will be based on interior seat count.

Grandfathered Parking and Food Service Seating Allotment

On November 13, 2014 the Sonoma Planning Commission granted the project a Conditional Use Permit for Phase I of the project inclusive of a parking credit of one space per 300 SF of existing building area and the grandfathering of 103 existing restaurant seats in respect to parking requirements. This yields:

Existing Retail Building = 11,397 SF/300 = 38 grandfathered parking spaces, plus 103 grandfathered food service seats.

Allowable Food Service Seating Relative to Grandfathered Parking Spaces

Restaurant seating is calculated as one space per every four seats. Therefore translating the grandfathered parking spaces into allowable seat count is: 38 spaces x 4 or 152 food service seats. This approach will support the flexible interior seating requirements of a changing tenant mix. This Use Permit requests the project be designated "Restaurant" for parking and seating purposes and be allowed up to 152 interior seats and the assignment of the 103 grandfathered food service seats towards exterior seating should they be required.

SPECIFIC PROJECT DATA

Site Parcel Addresses: 2 West Spain Street, Sonoma CA
APN: 018-162-004
Zoning: Commercial, Downtown District, Historic Overlay.

BUILDING AREA SUMMARY

GSF			
Phase	**Floor-1 (GSF)**	**Floor -2 (GSF)**	**Total (GSF)**
Existing	10,621	776	**11,397**
Proposed Project	12,859	776	**13,635**

DEVELOPMENT CRITERIA

Building Setbacks:

Front and street: None
Side: none required except when abutting a residential zone
Rear: none required
Garage Setback: 20' from main structure (for residential)

Building Height: 35’ allowable. No building height change is proposed for this project.

Total Lot Area: 20,335 SF

Existing Building Coverage: 10,621 SF

FAR Allowable: 2.0 x Total Site Area or 40,670 SF

Actual Lot Coverage at Proposed Full Phase III Build Out: 66% lot coverage

Actual Building Area at Full Build Out: 13,653 SF = FAR compliant

Open Space: 7,523 SF (approximately 37% of site area)

Landscape: New pedestrian courtyard entry portal, signage, lighting, plantings, street furniture and hardscape paving.

Submitted by:
Michael B. Ross, AIA, NCARB
Principal, CEO
RossDrulisCusenbery Architecture, Inc.
18294 Sonoma Highway
Sonoma, CA 95476
mross@rdcarchitecture.com

June 26, 2015

David Goodison
Planning Director
City of Sonoma City Hall
No. 1 The Plaza
Sonoma, CA 95476

RE: Sonoma Cheese Factory, Historic Resource Evaluation Findings

Dear Mr. Goodison,

Page & Turnbull was contacted by Michael Ross of RossDrulisCusenbery in June 2014 to perform a Historic Resource Evaluation (HRE) for the Sonoma Cheese Factory at 2 West Spain Street in Sonoma, California. Page & Turnbull, established in 1973, is an award-winning, full-service architecture, historic preservation, and planning firm with a mission to give new life and purpose to historic structures and places.

This HRE was undertaken in order to inform the design of proposed alterations to the Sonoma Cheese Factory. The purpose of this HRE was to determine if the Sonoma Cheese Factory would be eligible for listing in the California Register of Historical Resources (California Register) and would therefore qualify as a historic resource for the purposes of California Environmental Quality Act (CEQA) review.

The HRE was completed in September 2014 and found that the building appears to be eligible for the California Register due to its historic significance under evaluative Criterion 1 (Events), for its association with the development of the cheese industry in Sonoma. Despite some alterations and additions to the building that postdate its identified period of significance (1945-1968), the building retains sufficient integrity to convey its historic appearance.

In order for a building that has been determined eligible for the California Register to remain eligible for register listing, proposed alterations must be sensitive to the building's character defining features, which enable the building to convey its historic appearance and significance. For the Sonoma Cheese Factory, character defining features were determined to include:

- The building's generally rectangular footprint and massing, which reflect the building's massing when it was originally constructed and convey the building's historic factory, retail, and office use. This includes the two story portion at the south (front) of the building, which contained the retail store and office, and the one high bay story at the center portion, which contained the factory.
- Fenestration pattern and material at the first and second story of the primary (south) façade and at the front (south) portion of the east and west facades, including two doors, plate glass windows, glass block windows at the first story, and multi lite windows at the second story.

- Flat metal awnings with rounded corners above the two primary entrances of the building.
- Rectangular vertically-oriented glazed orange tile cladding at the primary (south) façade and front (south) portions of the east and west facades.
- Four full-height white stucco-clad metal ribs at the primary façade.
- Slightly up-pitched roof at the two-story front (south) portion of the building, including the curved white stucco-clad overhang.
- Projecting vertical perimeters of the primary (south) façade.

Alterations made to features that are not considered character defining are generally not considered to have a negative impact on a building's eligibility for historic register listing. Features that are not considered character defining features of the Sonoma Cheese Factory include those that were added after the period of significance (1945-1968), as well as features that represent agglomerative utilitarian construction, and are no longer used for cheese production, including:

- Agglomerative additions to the north (rear) portion of the building that were constructed between 1959 and 1981. These agglomerative additions are utilitarian in design and construction, and are no longer used for cheese production, and are therefore not considered character defining features of the building at this time.
- Stucco cladding at the east and west facades.
- All material elements of the one-story open porch at the east façade.
- Full-height multi-lite windows with anodized aluminum sash at the east façade.

A review of proposed alterations to the Sonoma Cheese Factory, included in the Use Permit Drawings by RossDrulisCusenbery dated June 25, 2015 indicates that all of the proposed alterations are located in areas of the building that do not impact the character defining features of the building. Likewise, the proposed alterations are of a height (one story plus gable) and massing that do not visually impact the character-defining features or massing of the historic portion of the building.

It is the opinion of Page & Turnbull that proposed alterations are compliant with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The proposed alterations do not have an adverse impact on the historic resource: after the proposed alterations are complete, the Sonoma Cheese Factory will remain eligible for listing in the California Register.

Sincerely,

Stacy Farr

Stacy Farr
Architectural Historian/Cultural Resources Planner

Cc: Michael B. Ross, AIA

SONOMA CHEESE FACTORY

2 WEST SPAIN STREET, SONOMA, CA. 95476

Concept Rendering: Not for Construction

PROJECT USE PERMIT DRAWINGS

Preliminary Design Concepts. Design Subject To Change. Not For Construction Purposes.

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ARCHITECTURE

SONOMA CHEESE FACTORY

APPA Development

2 West Spain Street, Sonoma, CA. 95476
A.P.N. # 018-162-004 & 018-162-022

REVISIONS

No.	Description	Date

PROJECT USE PERMIT DRAWINGS

Sheet Title

COVER SHEET

Drawn By ER

Checked By Checker

Scale:

Date:
06/25/2015

Project No. Project Number

A0.00

Drawing No.

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Mechanical Engineer

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Civil Engineer

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(707) 974-6138 (cell)
(707) 528-2506 (Fax)

PROJECT INFORMATION

APN:	**018-162-004**
PROJECT:	SONOMA CHEESE FACTORY 2 W SPAIN STREET, SONOMA, CA 95476
DESCRIPTION:	Renovation and Construction of New Tenant Improvements in Existing Retail Space, New ADA Restrooms and Construction of New Exterior Pedestrian Walkway and Courtyard, and New Building Additions.
BUILDING AREAS:	Existing: 11,397 SF GROSS FLOOR AREA Proposed: 13,635 SF GROSS FLOOR AREA
SITE:	20,335 SF (0.47 ACRES) TOTAL SITE AREA
BUILDING FLOOR AREA RATIO:	66% LOT COVERAGE
FIRE SPRINKLERED:	YES
T.I. USE/OCCUPANCY:	M, B, A-2, S-2
ZONING:	DOWNTOWN DISTRICT COMMERCIAL / HISTORIC OVERLAY
TOTAL BUILDING STORIES:	SINGLE STORY WITH PARTIAL SECOND STORY
DEFERRED SUBMITTALS:	T.B.D.

SCOPE OF WORK

GENERAL SCOPE OF WORK SINGLE CONSTRUCTION PHASE PROJECT
The scope of work includes but is not limited to the following:

Building and Site Demolition as Required

Renovation and Construction of New Tenant Improvements in Existing Retail Space

New ADA Restrooms and Circulation Corridor in existing Cold Storage Building

Construction of New Exterior Pedestrian Walkway and Courtyard

Construction of a New 2,956 NSF Addition (Tenant Space 12).
- Assume slab on grade, Type V, wood frame structure with glass and metal window walls, exposed roof framing, with low pitched roofs and stucco and corrugated metal siding.

Construction of a New 1,862 NSF Affinage Cheese Aging Building (Tenant Space 13).
- Assume slab on grade, Type V, wood frame structure with glass and metal window walls, exposed roof framing with insulating foam roof with stucco and corrugated metal siding. This building will require specialized cooling and humidity control systems and high performance building envelope insulation and vapor barrier assembly

Building and Site Remodel, Renovation and Repair as Required

1. SITE WORK
Site Work Includes:
- Develop new pedestrian walkway and exterior courtyard with new concrete paving, landscaping, new entry portals, signage and lighting.
- Existing eastside exterior dining area to be maintained and leased to Spaces 8 and 9.
- Relocate existing PGE Gas Meter to new location
- Relocate existing fire sprinkler water main and branch lines as required
- Provide exterior courtyard storm water drainage system
- Provide new courtyard landscape irrigation system
- Stub out water, waste, electric and gas lines to new additions
  New Grease interceptor
- Provide accessible path of travel to Casa Grande Parking Lot and Spain Street public right of way
- Code required way finding signage and lighting
  Required excavation and off haul of materials
  Storm water management

2. DEMOLITION
Demolition Includes:
- Demolition of north CMU shop and storage buildings and foundations to allow for construction.
  Existing site concrete demolition and removal
- Legal removal from the site and disposal and recycling of all demolition waste
- Demolish and relocate existing restrooms in current retail space and exterior dining area.
- Demolish portion of existing retail space north wall to allow for ramp widening from existing store to rear portions of building.
- Demolish portion of retail space north wall between new Tenant Space 3 and main store.
- Demolish existing cold case including partial removal of shear wall
- Removal of selected interior finishes and ceilings to accommodate new construction and anchorage of suspended ceiling mounted tenant armature system or soffits
- Concrete slab cutting and removal to accommodate new under floor waste, water and electric piping system for tenant spaces and new restrooms.
- Exterior slab removal to accommodate new pedestrian way and exterior courtyard paving
- Clean existing attic areas and remove abandoned electrical and mechanical systems

3. NEW CONSTRUCTION
Construction Includes:
- Patch and repair of existing building systems and finishes as required
- Floor leveling as required
- New ramp to the raised floor level of Tenant Space 3
- Construction of two new ADA compliant restrooms in current cold storage room.
- Provide ADA access compliant front entry doors
- Construct new occupancy separation wall, hallway and ceiling systems between new common bathrooms and tenant storage areas.
- Install new under slab waste, water and electric piping systems in main retail space
- Install new main retail HVAC distribution and return air system. Reuse existing roof top units.
- Construct new shear walls and required seismic connections in main retail space
  New exterior windows and store entry systems along west wall
- Construct new exterior walls and roof at Tenant Space 3.
- Provide MEP to Space 3.
- Construct new skylight in Tenant Storage Space 10
- Construct new rooftop compressor pads for future tenant compressors. Provide power feed, drain pan and condensate drain system
- Redistribute fire sprinkler system to serve new tenant spaces and common areas
- Provide new interior finishes including but not limited to new wall, floor and ceiling coverings
- Metal frame tenant space armature, lighting, signage and infrastructure system
- Refurbish and clean exterior facade
- New exterior signage and awning
- Construct new 3107 SF Addition (Tenant Space 12). Assume slab on grade, Type V, wood frame structure with glass and metal window walls, exposed roof framing, with low pitched roofs and stucco and corrugated metal siding..
- Construct new 1820 SF Affinage Cheese Aging Building (Tenant Space 13). Assume slab on grade, Type V, wood frame structure with glass and metal window walls, exposed roof framing with insulating foam roof with stucco and corrugated metal siding
- Provide specialized cooling and humidity control systems and high performance building envelope insulation and vapor barrier assembly in new Affinage Building,Tenant Space 13

GENERAL DESIGN CRITERIA
General minimum design criteria includes but is not limited to:

4. CODES
- Compliance with all required and applicable State and local building, zoning, municipal and environmental health codes, and all applicable manufacturer's guidelines, standards, recommendations, installation requirements and specifications
- Building envelope, lighting, water conservation and energy use design to comply with Title 24
- Cal Green Code Requirements

5. ELECTRICAL
Provide electrical service to all designated Tenant Spaces:
- Space 1, 2, 3 and 4 - 100 AMPS
- Space 8 & 9 - 200 AMPS
- Space 5, 6, and 7 – three 20 AMP circuits with convenience outlets.
- Power usage to be sub metered at the Meter Main by E-Mon D-Mons.
- Electrical for each tenant space to home run back to the main electrical panel.
- Building will be required to comply with most current Title 24 requirements per 2013 California Green Standards Code.
- Provide power feed to future roof top mounted condensers for tenant spaces

6. GENERAL LIGHTING
- Provide interior and exterior lighting per code
- Provide ceiling mounted warehouse style fixtures in retail circulation spaces
- Specific Tenant space signage and product lighting provided by Tenant.

7. PLUMBING
- Provide stub ups for water, waste and vent at each tenant space per the following.
  - 2" Water Line - verify actual size
  - 4" Waste Line - verify actual size
  - Natural gas main line
- Waste Line: Provide a joint utility central water supply and waste line that runs north and south underneath the proposed tenant spaces.
  Provide waste, vent and water supply laterals to tenant spaces and new Affinage Building.
- Tenant space floor sinks, exhaust hoods, condensate drains and gas lines to be provided by individual tenant
- Provide building wide grease trap / central grease interceptor
- Plumbing for Common Area restrooms per plan
- Provide automatic fire sprinkler system throughout
- Relocate existing gas meter
  Relocate existing fire sprinkler lines as required

8. MECHANICAL
- Provide General HVAC system at 1 ton per 200-250/ SF.
- Provide area for future tenant rooftop mounted condensers

9. TELEPHONE/ DATA/SECURITY
- Provide Stub-Ups into each space in conduit.
- Home run all tel/data conduit to Tel/Data Room.
- Tenants to provide own data cabling, computer and cash register systems
- Discuss: provide building wide intrusion alarm system
- Discuss: possible video monitoring system

10. SIGNAGE
- Create Tenant Criteria Graphic Standards Manual
- Tenant Sign Standard to be approximately 6 SF per store.
- Tenants design and provide own interior signage with ownership review and approval.
- New exterior signage and graphics program approved by the City of Sonoma

SHEET INDEX

GENERAL

A0.00	COVER SHEET
A0.01	PROJECT INFORMATION
A0.02	GENERAL NOTES, LEGENDS, AND ABBREVIATIONS

CIVIL

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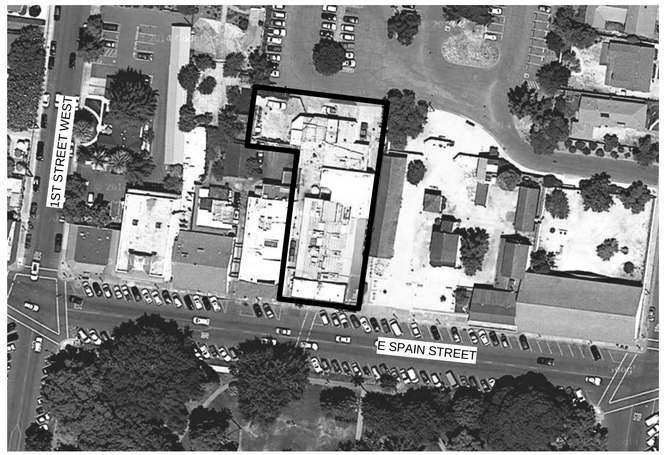
ARCHITECTURAL

A1.00	PROPOSED SITE PLAN
A2.01	FLOOR PLANS (E)
A2.05	FLOOR PLANS - DEMOLITION
A2.10	FLOOR PLANS (N)
A3.20	EXTERIOR ELEVATIONS - PRELIMINARY DESIGN CONCEPTS SUBJECT TO CHANGE

VICINITY MAP: SONOMA, CA

PROJECT SITE



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SONOMA CHEESE FACTORY

APPA Development

2 West Spain Street, Sonoma, CA. 95476 A.P.N. # 018-162-004 & 018-162-022

REVISIONS

No.	Description	Date

PROJECT USE PERMIT DRAWINGS

Sheet Title

PROJECT INFORMATION

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ABBREVIATIONS

&	AND
Ð	ANGLE
@	AT
C	CENTERLINE
45'	DEGREES (45 DEGREES)
Æ	DIAMETER OR ROUND
9 ½"	INCHES (9 AND ½ INCHES)
#	POUND OR NUMBER
P	PROPERTY LINE
<	LESS THAN
>	GREATER THAN
A/C	AIR CONDITIONING
AB	ANCHOR BOLT
ACONC	ASPHALTIC CONCRETE
ACOUS	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AGGR	AGGREGATE
AL	ALUMINUM
ALUM	ALUMINUM
APPROX	APPROXIMATE
APT.	APARTMENT
ARCH	ARCHITECTURAL
ASPH	ASPHALTIC
AUTO	AUTOMATIC
AVG	AVERAGE HB
AV	ACOUSTICAL VENT
BD	BOARD
BFI	BLACK-FACED INSULATION
BITUM	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
B.O.	BOTTOM OF
BOT	BOTTOM
BSMT	BASEMENT
BUR	BUILT-UP ROOF
BUWP	BUILT-UP WATERPROOFING
CAB	CABINET
CB	CATCH BASIN
CC	CENTER TO CENTER
CEM	CEMENT
CER	CERAMIC
CG	CORNER GUARD
CI	CAST IRON
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CLG	CEILING
CLKG	CAULKING
CLO	CLOSET
CLR	CLEAR
CNTR	COUNTER
CO	CLEAN OUT
COL	COLUMN
COMB	COMBUSTION
COMP	COMPOSITION
COORD	COORDINATE
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONN	CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CPT	CARPET
CS	CASEMENT (WINDOW)
CT	CERAMIC TILE
CTR	CENTER
CTSK	COUNTERSUNK
CYL	CYLINDER
D	DEEP
DBL	DOUBLE
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DFPT	DOUGLAS FIR PRESSURE TREATED
DH	DOUBLE HUNG (WINDOW)
DIA	DIAMETER
DICA	DRILLED IN CONCRETE ANCHOR
DIF	DIFFUSER
DIM	DIMENSION
DIMP	DIMENSION POINT
DISP	DISPOSAL
DN	DOWN
DO	DOOR OPENING
DR	DOOR
DS	DOWNSPOUT
DSP	DRY STANDPIPE
DW	DISHWASHER
DWG	DRAWING
DWR	DRAWER
(E)	EXISTING
E	EAST
EA	EACH
E.F.O.S.	EXTERIOR FACE OF STUD
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE
E.O.	EDGE OF
EP	ELECTRICAL PANEL
EQ	EQUAL
EQPT	EQUIPMENT
EWC	ELECTRICAL WATER COOLER
EXH	EXHAUST
EXP	EXPANSION
EXPO	EXPOSED
EXT	EXTERIOR
F	FIXED POSITION (WINDOW)
FA	FIRE ALARM
FAU	FORCED AIR UNIT
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FHC	FIRE HOSE CABINET
FHMS	FLAT HEAD MACHINE SCREW
FIN	FINISH
FIXT	FIXTURE
FL	FLOOR
FLASH	FLASHING
FLUOR	FLUORESCENT

F.O.	FACE OF
F.O.F.	FACE OF FINISH
F.O.S.	FACE OF STUD
F.O.T.	FACE OF TREAD
FPL	FIREPLACE
FPRF	FIREPROOF
FR	FIRE RESISTIVE
FRMG	FRAMING POLYFS FULL SIZE
FSK	FLOOR SINK
FT	FEET OR FOOT
FTG	FOOTING
FURR	FURRING
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GEN	GENERAL
GFRC	GLASS FIBER REINFORCED CONCRETE
GFI	GROUND FAULT INTERRUPTED
GI	GALVANIZED IRON
GL	GLASS OR GLAZING
GLU	GLUE
GND	GROUND
GR	GRADE
GRAN	GRANITE
GSM	GALVANIZED SHEET METAL
GYP	GYPSUM
H	HIGH
HB	HOSE BIB
HC	HOLLOW CORE
HCP	HANDICAPPED
HD	HEAD
HDRY	HAND DRYER
HDWD	HARDWOOD
HDWE	HARDWARE
HM	HOLLOW METAL
HO	HOPPER (WINDOW)
HORIZ	HORIZONTAL
H.P.	HIGH POINT
HR	HOUR
HT	HEIGHT
HVAC	HEATING VENTING & AIR CONDITIONING
HWH	HOT WATER HEATER
ID	INSIDE DIAMETER
INCAN	INCADESCENT
INSUL	INSULATION
INT	INTERIOR SCD
JAN	JANITOR
JCT	JUNCTION
JST	JOIST
JT	JOINT
KIT	KITCHEN
KHB	KEYED HOSE BIB
LAM	LAMINATE
LAND	LANDING
LAV	LAVATORY
L.C.C.	LEAD COATED COPPER
LH	LEFT HAND
LIQ	LIQUID
LKR	LOCKER
LL	LIVE LOAD
L.L.V.	LONG LEG VERTICAL
L.P.	LOW POINT
LSD	LINEAR SLOT DIFFUSER
LT	LIGHT
LWT	LIGHTWEIGHT
MAT	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MBL	MARBLE
MBX	MAILBOX
MC	MEDICINE CABINET
MD	MEDIUM DENSITY
MECH	MECHANICAL
MED	MEDIUM
MEMB	MEMBRANE
MET, MTL	METAL OR METALLIC
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MUL	MULLION
MW	MICROWAVE
(N)	NEW
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO.	NUMBER
NOM	NOMINAL
NR	NON RATED
NTS	NOT TO SCALE
O/	OVER
OA	OVERALL
OBS	OBSURE (GLASS)
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFD	OVERFLOW DRAIN
OHS	OPPOSITE HAND SIMILAR
OP	OPENING
OL	OCCUPANT LOAD
OPER	OPERABLE
OPP	OPPOSITE
OZ	OUNCE
P+T	POWER AND TELEPHONE
PA	PUBLIC ADDRESS
PC	PIECE
P.C.	PRECAST
PERP	PERPENDICULAR
PKT	POCKET (DOOR)
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLYWOOD
PNL	PANEL
POL	POLISH(ED)
POLY	POLYETHYLENE

PR	PAIR
PRCST	PRECAST
PREFAB	PREFABRICATED
PT	POINT
PTCL	PARTICLE
PTDIS	PAPER TOWEL DISPENSER
PTD	PAINTED
PTN	PARTITION
PVC	POLY VINYL CHLORIDE
QT	QUARRY TILE
QTY	QUANTITY
QUAL	QUALITY
(R)	REVISED
R	RISER
RAD	RADIUS
RD	ROOF DRAIN
REBAR	REINFORCING BAR
REF	REFERENCE
REFL	REFLECTED OR REFLECTIVE
REFR	REFRIGERATOR
REG	REGISTER
REINF	REINFORCED
REQ'D	REQUIRED
RET	RETAINING
REV	REVISION OR REVISED
REVER	REVERSED
RF	RESILENT FLOORING
RH	RIGHT HAND
RM	ROOM
RND	ROUND
RO	ROUGH OPENING
R.O.W.	RIGHT OF WAY
RWD	REDWOOD
RWL	RAIN WATER LEADER
S	SOUTH
S&P	SHELF AND CLOTHES POLE
SAD	SEE ARCHITECTURAL DRAWINGS
SAFF	SELF-ADHERING FLEXIBLE FLASHING
SAVD	SEE AUDIO/VISUAL DRAWINGS
SC	SOLID CORE
SCD	SEE CIVIL DRAWINGS
SCHED	SCHEDULE
SCP	SECURITY COMMUNICATION SYSTEM PANEL
SD	SOAP DISH OR DISPENSER
SECT	SECTION
SED	SEE ELECTRICAL DRAWINGS
SF	SQUARE FEET
SFPD	SEE FIRE PROTECTION DRAWINGS
SFRM	SPRAY-APPLIED FIRE-RESISTIVE MATERIAL
SGD	SLIDING GLASS DOOR
SLD	SEE LANDSCAPE DRAWINGS
SLTD	SEE LIGHTING DRAWINGS
SMD	SEE MECHANICAL DRAWINGS
SNHG	SINGLE HUNG (WINDOW)
SH	SHELF
SHR	SHOWER
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SMW	SHEET METAL WATERPROOFING
SND	SANITARY NAPKIN DISPENSER
SNR	SANITARY NAPKIN RECEPTACLE
SP	STANDPIPE
SPD	SEE PLUMBING DRAWINGS
SPEC	SPECIFICATION
STANDPIPE OUTLET	
SPRM	SINGLE PLY ROOF MEMBRANE
SQ	SQUARE
SS	STAINLESS STEEL
SSD	SEE STRUCTURAL DRAWINGS
SSED	SEE SECURITY ELECTRONICS DRAWINGS
SSL	STAINLESS STEEL
STA	STATION
STD	STANDARD
STL	STEEL
STLD	SEE TELECOMMUNICATIONS DRAWINGS
STN	STAINLESS
STOR	STORAGE
STRL	STRUCTURAL
SUSP	SUSPENDED
SV	SHEET VINYL
SYM	SYMMETRICAL
T	TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TB	TOWEL BAR
TC	TRASH COMPACTOR
TDIS	TOWEL DISPENSER
TEL	TELEPHONE
TEMP	TEMPERED
TEMPOR	TEMPORARY
TER	TERRAZZO
TERM	TERMINATION
THK	THICK
THRSD	THRESHOLD
T.O.	TOP OF
T.O.W.	TOP OF WALL
TPH	TOILET PAPER HOLDER
TV	TELEVISION OUTLET
TRASH	TRASH RECEPTACLE
TS	TUBE STEEL
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES INC.
UNF	UNFINISHED
UON	UNLESS OTHERWISE NOTED
UR	URINAL
VCT	VINYL COMPOSITE TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
W/	WITH
W/D	WASHER AND DRYER
W	WEST OR WIDE
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WH	WATER HEATER
WO	WHERE OCCURS
WP	WATERPROOF
WPM	WATERPROOFING MEMBRANE
WR	WATER RESISTANT
WS	WEATHERSTRIPPING
WSCT	WAINSCOT
WSP	WET STANDPIPE
WT	WEIGHT

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MATERIAL DESIGNATIONS

- CONCRETE MASONRY UNIT
- EARTH
- GYPSUM BOARD
- CEMENT PLASTER
- STEEL
- ALUMINUM
- PLYWOOD
- GLASS
- WOOD: FINISH
- WOOD: ROUGH - CONTINUOUS
- WOOD: ROUGH - BLOCKING

ARCHITECTURAL SYMBOLS

A 1

GRID LINE
ROOM IDENTIFICATION

OFFICE 096
ROOM NAME
ROOM NUMBER

10 A5.0
SECTION
SECTION IDENTIFICATION
LOCATION OF SECTION

10 A6.0
ELEVATION
ELEVATION IDENTIFICATION
LOCATION OF ELEVATION

096.1
DOOR NUMBER
REFER TO DOOR SCHEDULE

#
WINDOW TYPE
REFER TO WINDOW / LOUVER SCHEDULE

#
WALL TYPE
REFER TO WALL SCHEDULE

3
REVISION
REVISION NUMBER
AREA OF REVISION

WORK POINT
(OR CONTROL OR DATUM POINT)

235.00'
FINISH GRADE ELEVATION
(DECIMAL FEET)

CHAIN LINK FENCE

PROPERTY LINE

A B C D 1 A5.00
INTERIOR ELEVATION IDENTIFICATION
ELEVATION DESIGNATION NUMBER
GROUP NUMBER
SHEET WHERE LOCATED

4 A7.01
DETAIL
DETAIL DESIGNATION
SHEET WHERE LOCATED

FEC
FIRE EXTINGUISHER CABINET

EXISTING WALL TO BE REMOVED

EXISTING DOOR TO BE REMOVED

000 W D H
CASEWORK TAG
WOODWORK INSTITUTE CDS NUMBER

BUILDING CODE SUMMARY

1. APPLICABLE REGULATIONS: CONFORM TO MOST CURRENTLY ADOPTED EDITION OF THE FOLLOWING CODES, GUIDELINES AND STANDARDS

2013 CALIFORNIA BUILDING CODE
NFPA 101, LIFE SAFETY CODE - CHAPTERS 5 AND 13
NFPA 13, SPRINKLER SYSTEMS WITH APPROVED CALIFORNIA AMENDMENTS
CALIFORNIA MECHANICAL CODE
CALIFORNIA PLUMBING CODE
CALIFORNIA ELECTRIC CODE
CALIFORNIA ENERGY CODE
2013 CALGREEN BUILDING REQUIREMENTS AND CITY OF MENLO PARK ADDITIONAL MANDATORY STANDARDS 1/1/12
UNIFORM FIRE CODE WITH APPROVED CALIFORNIA AMENDMENTS

TITLE 19 - PUBLIC SAFETY, STATE FIRE MARSHAL
CALIFORNIA CODE OF REGULATIONS

TITLE 24 - CALIFORNIA CODE OF REGULATIONS, AMERICANS WITH DISABILITIES ACT
ACCESSIBILITY GUIDELINES (ADAAG)
UNIFORM ACCESSIBILITY STANDARDS

APPLICABLE STANDARDS

UL - UNDERWRITERS LABORATORIES FIRE RESISTANCE DIRECTORY
UL - UNDERWRITERS LABORATORY BUILDING MATERIALS DIRECTORY
SMACNA - FIRE, SMOKE AND RADIATION DAMPER INSTALLATION GUIDE FOR HVAC SYSTEMS

2. BUILDING TYPE
(TABLE 503 2013) TYPE V-B, OCCUPANCY A-2, M

GENERAL NOTES

1. DEFINITIONS:
   A. "TYPICAL" OR "TYP." MEANS IDENTICAL FOR ALL CONDITIONS, UNLESS OTHERWISE NOTED;
   B. "SIMILAR" OR "SIM" MEANS COMPARABLE CHARACTERISTICS FOR THE CONDITION NOTED. VERIFY DIMENSIONS AND ORIENTATIONS;
   C. "PROVIDE" MEANS TO FURNISH AND INSTALL;
   D. "FURNISH" MEANS TO FURNISH, AND OTHERS TO INSTALL;

2. DIMENSIONING RULES
   A. HORIZONTAL DIMENSIONS ARE SHOWN FROM FACE OF FINISH UNLESS OTHERWISE NOTED;
   B. DIMENSIONS NOTED "HOLD", "CLEAR" OR "CLR" MUST BE PRECISELY MAINTAINED;
   C. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT APPROVAL OF THE ARCHITECT OR UNLESS NOTED (+/-);
   D. DIMENSIONS TO THE EXTERIOR WALL ARE TO THE OUTSIDE FINISHED FACE OF WALL UNLESS OTHERWISE NOTED;
   E. VERTICAL DIMENSIONS FOR CASEWORK, TOILET ACCESSORIES, HANDRAILS AND GUARDRAILS ARE FROM THE FINISHED FLOOR, UNLESS OTHERWISE NOTED;
   F. DO NOT SCALE DRAWINGS. IF CONTRACTOR IS UNABLE TO LOCATE DIMENSIONS FOR ANY ITEM OF WORK, CONSULT WITH THE ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION;
   G. DIMENSIONS MARKED V.I.F. SHALL BE "VERIFIED IN FIELD" BY THE CONTRACTOR AND COORDINATED WITH THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

3. THE ORIGINAL OF THESE DRAWINGS MEASURE 24"x36". IF THE SHEETS IN USE ARE SMALLER THAN THE ORIGINAL SHEETS HAVE BEEN REDUCED IN SIZE AND THE SCALE MUST BE REDUCED ACCORDINGLY.

4. REPETITIVE ITEMS NOTED IN ONE CONDITION ARE TO BE PROVIDED COMPLETE IN ALL SIMILAR CONDITIONS.

5. DETAILS ARE KEYED TO REPRESENTATIVE LOCATIONS ONLY AND APPLY TO ALL SIMILAR CONDITIONS.

6. CONTRACTOR SHALL VISIT SITE AND BE FULLY COGNIZANT OF ALL FIELD CONDITIONS PRIOR TO SUBMITTING BID. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE SUBMITTING BID AND STARTING WORK. ANY CONFLICT OR DISCREPANCY BETWEEN THE DRAWINGS AND ACTUAL
CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING, BEFORE PROCEEDING WITH ANY WORK OR PRESENTATION OF BID. ONLY WRITTEN DIMENSIONS ON THE DRAWINGS SHALL BE USED. DO NOT SCALE THE DRAWINGS.

7. ALL WORK SHALL CONFORM TO ALL GOVERNING CODES, AMENDMENTS, RULES, REGULATIONS, ORDINANCES, LAWS, ORDERS, APPROVALS, ETC., THAT ARE REQUIRED BY PUBLIC AUTHORITIES WITH JURISDICTION OVER THIS PROJECT. IN THE EVENT OF CONFLICT, THE MOST STRINGENT REQUIREMENT SHALL APPLY.

8. THE CONTRACT DOCUMENTS INCLUDE THE DRAWINGS, ALL SEPARATE DOCUMENTS LISTED ON SHEET A0.01 , THE GENERAL CONDITIONS, SPECIAL CONDITIONS AND ALL ADDENDA ISSUED BY THE ARCHITECT.

9. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND COORDINATE WORK WITH INSTALLATION OF "NOT IN CONTRACT" (NIC) ITEMS, COORDINATE DESIGN DETAILS WITH ALL OTHER DISCIPLINES BEFORE ORDERING OR INSTALLING ANY WORK.

10. ANY SURFACES DAMAGED DURING CONSTRUCTION SHALL BE PATCHED AND REFINISHED OR REPLACED TO MATCH SIMILAR/SAME FINISHES EXISTING ON SITE.

11. CONTRACTOR SHALL VERIFY THAT NO CONFLICTS EXIST BETWEEN THE LOCATION OF ANY NEW AND EXISTING MECHANICAL, TELEPHONE, ELECTRICAL, LIGHTING, PLUMBING, SPRINKLER EQUIPMENT (INCLUDING ALL PIPING, DUCTWORK AND CONDUIT); AND ENSURE THAT ALL REQUIRED CLEARANCES FOR INSTALLATION AND MAINTENANCE OF ABOVE EQUIPMENT ARE PROVIDED. ANY CONFLICT MUST BE RESOLVED IN WRITING BEFORE INSTALLATION OF WORK IN THE AREA OF CONFLICT. THE CONTRACTOR SHALL SUBMIT COORDINATION DRAWINGS PRIOR TO STARTING OF THE WORK.

12. SHOP DRAWINGS FOR ALL MILLWORK AND CASEWORK TO BE SUBMITTED TO AND REVIEWED BY THE ARCHITECT PRIOR TO FABRICATION.

13. PROVIDE STRUCTURAL BACKING FOR ALL NEW CABINETS, GRAB BARS, TOILET ROOM, EQUIPMENT, SHELVES, HARDWARE, LIGHTING FIXTURES, SERVER CABINETS/RACKS FLAT SCREEN VIDEO MONITORS AND OTHER BUILDING ELEMENTS REQUIRING SECURE ANCHORAGE.

14. CONTRACTOR SHALL MAINTAIN STRICT CONTROL OF CLEANLINESS AND PREVENT DUST FROM LEAVING CONSTRUCTION AREAS. CONSTRUCTION WORK SHALL NOT PREVENT OWNER FROM USING THE PREMISES IN AREAS NOT AFFECTED BY THE NEW WORK. CONSTRUCTION VEHICLES AND EQUIPMENT SHALL BE DEPLOYED IN A MANNER WHICH CAUSES AS LITTLE DISRUPTION AS POSSIBLE.

15. SEALANT, CAULKING AND FLASHING LOCATIONS SHOWN ON DRAWINGS ARE NOT INTENDED TO BE INCLUSIVE. FOLLOW MANUFACTURERS' INSTALLATION RECOMMENDATIONS AND STANDARD INDUSTRY PRACTICES FOR THE USE OF ALL SEALANTS.

16. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION, PROVIDING TRENCHING, CONDUIT AND CONNECTIONS TO AND BETWEEN THE BUILDINGS FOR ALL UTILITIES AND CONFORMING WITH ALL UTILITY COMPANY AND GOVERNMENT AGENCY REQUIREMENTS AS REQUIRED BY THE CONTRACT DOCUMENTS.

17. AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF PERSONS AND PROPERTY, AND FOR ALL NECESSARY INDEPENDENT ENGINEERING REVIEWS OF THESE CONDITIONS. THE OWNER'S OR ENGINEER'S JOB SITE VISITS ARE NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.

18. THE DESIGN ADEQUACY AND SAFETY OF THE ERECTION BRACING, SHORING AND TEMPORARY SUPPORTS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, OBSERVATION VISITS TO THE JOB SITE BY OWNER SHALL NOT INCLUDE INSPECTION OF APPROVAL OF THE ABOVE ITEMS.

19. THESE PLANS ARE THE PROPERTY OF ROSS DRULIS CUSEBERY INC. AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY WORK OTHER THAN THE LOCATIONS SHOWN HEREIN.

20. BUILDING INSPECTOR NOTE: ACCEPT NO INK OR PENCIL CORRECTIONS TO THESE DRAWINGS. ALL CHANGES SHALL BE MADE TO THE ORIGINALS BY THE ARCHITECT. THE ARCHITECT SHALL BE HELD HARMLESS FOR ALL CHANGES NOT IN ACCORD WITH THIS REQUIREMENT. ALL USERS OF THESE DRAWINGS AGREE BY USING SAID DRAWINGS TO HOLD THE OWNER HARMLESS FOR ANY AND ALL WORK THAT DOES NOT CONFORM TO REQUIREMENTS AND MINIMUM STANDARDS OF
THE UNIFORM BUILDING CODE IN FORCE, APPLICABLE LOCAL ORDINANCE AND ACCEPTED STANDARDS OF GOOD CRAFTSMANSHIP.

21. HAZARDOUS MATERIALS DISCOVERY, TESTING AND ABATEMENT: OWNER SHALL BE RESPONSIBLE FOR THE DISCOVERY, TESTING AND ABATEMENT OF ANY HAZARDOUS MATERIALS SHOULD THEY OCCUR IN THE WORK AREA, PRIOR TO COMMENCEMENT OF WORK.

22. ALL PRODUCTS AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH INDUSTRY AND CODE STANDARDS AND MANUFACTURER'S RECOMMENDATIONS, GUIDELINES AND REQUIREMENTS.

23. THE CONTRACTOR SHALL MEET ALL REQUIRED 2013 CAL GREEN BUILDING STANDARDS CODE REQUIREMENTS AS MARKED IN THE CALGREEN CHECKLIST DOCUMENT ATTACHED TO THE PERMIT DOCUMENTS

24. CONTRACTOR TO PROVIDE AN OPERATIONS, MAINTENANCE AND WARRANTY MANUAL FOR ALL BUILDING SYSTEMS TO THE OWNER UPON COMPLETION OF THE WORK.

25. ALL BUILDING MATERIALS MUST MEET THE VOC LIMITS AS OUTLINED IN THE 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE.

26. CONTRACTOR TO RECEIVE APPROVAL FROM THE ARCHITECT FOR ANY PROPOSED SUBSTITUTIONS PRIOR TO PURCHASE, FABRICATION OR INSTALLATION.

27. CONTRACTOR TO PROVIDE FULL SCALE ROOM LAYOUTS FOR APPROVAL BY OWNER PRIOR TO CONSTRUCTION OF NEW PARTITIONS.

28. CONTRACTOR IS RESPONSIBLE FOR OBTAINING, SCHEDULING AND PAYING FOR ALL PERMITS, FEES, INSPECTIONS, AND APPROVALS.

29. SUPERVISION AND CONSTRUCTION PROCEDURES: THE CONTRACTOR SHALL SCHEDULE AND COORDINATE ALL SUBCONTRACTORS AND SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACTS AND OMISSIONS OF THE CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES, AND OTHER PERSONS OR ENTITIES PERFORMING PORTIONS OF THE WORK FOR OR ON BEHALF OF THE CONTRACTOR OR ANY OF ITS SUBCONTRACTORS.

31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION OF WORK ALREADY PERFORMED TO DETERMINE THAT SUCH WORK IS IN PROPER CONDITION TO RECEIVE SUBSEQUENT WORK.

32. WARRANTY: THE CONTRACTOR WARRANTS TO THE OWNER AND ARCHITECT THAT MATERIALS AND EQUIPMENT FURNISHED UNDER THE CONTRACT WILL BE OF GOOD QUALITY AND NEW UNLESS THE CONTRACT DOCUMENTS REQUIRE OR PERMIT OTHERWISE. THE CONTRACTOR FURTHER WARRANTS THAT THE WORK WILL CONFORM TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND WILL BE FREE FROM DEFECTS. WORK, MATERIAL OR EQUIPMENT NOT CONFORMING TO THESE REQUIREMENTS MAY BE CONSIDERED DEFECTIVE. THE CONTRACTOR'S WARRANTY EXCLUDES REMEDY FOR DAMAGE OR DEFECT CAUSED BY ABUSE, ALTERATIONS TO THE WORK NOT EXECUTED BY THE CONTRACTOR, IMPROPER OR INSUFFICIENT MAINTENANCE, IMPROPER OPERATION, OR NORMAL WEAR AND TEAR AND NORMAL USAGE. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF MATERIALS AND EQUIPMENT.

33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING THE DISCHARGE OF POLLUTANTS OR WASTE FROM THE PROJECT SITE DURING AND AFTER CONSTRUCTION. THE CONTRACTOR SHALL EMPLOY BEST MANAGEMENT PRACTICES (BMP) FOR EFFECTIVENESS: SILT FENCING, STRAW WATTLES, EROSION BLANKETS, CHECK DAMS, RIP RAP CONSTRUCTION, CONSTRUCTION ENTRANCES TO CONTROL SOIL DISCHARGE, PRIMARY AND SECONDARY CONTAINMENT OF FOR PETROLEUM PRODUCTS, PAINTS, LIME AND OTHER MATERIALS OF CONCERN AND PERMANENT MEASURES SUCH AS INFILTRATION GALLERIES, RAIN GARDENS, AND STORM WATER TREATMENT SYSTEMS THAT ADDRESS POST CONSTRUCTION STORM WATER RUNOFF. THE CONTRACT DOES NOT DICTATE ONE BMP OVER ANOTHER, HOWEVER THE CONTRACTOR MUST PROVIDE AN EFFECTIVE COMBINATION OF BPM'S TO MEET THE INTENT OF PREVENTING OR MINIMIZING THE DISCHARGE OF POLLUTANTS FROM THE SITE.

CODE ANALYSIS

OCCUPANT LOAD FACTOR

(REFERENCE: TABLE 1004.1.2)	
ACCESSORY STORAGE, MECH. EQUIPMENT ROOM	300 gross
ASSEMBLY WITHOUT FIXED SEATS (TABLES AND CHAIRS)	15 net
BUSINESS AREAS (OFFICE, LOBBY)	100 gross
KITCHENS (COMMERCIAL)	200 gross
MERCANTILE (BASEMENT AND GRADE FLOOR AREAS)	30 gross
MERCANTILE (STORAGE, STOCK, SHIPPING AREAS)	300 gross

OCCUPANT LOAD

ALLOWABLE BUILDING AREA

APPROX. TOTAL BUILDING T.I. AREA	13,485 SF
BUILDING TYPE	TYPE V-B
OCCUPANCY TYPES (SECTION 303.3, 309.1)	M, B, A-2, S-2

508.3.2 ALLOWABLE BUILDING AREA AND HEIGHT
Shall be based on the most restrictive allowances for the occupancy groups under consideration for the type of construction. A-2 is most restrictive and shall be used.

TABLE 503 - BASIC ALLOWABLE AREA:
A-2 Occupancy — 6,000 SF PER FLOOR, 1 STORY MAX.

506.1 BUILDING AREA MODIFICATIONS
Aa = **24,751 SF PER FLOOR**
2 STORY MAX

$Aa = \{At + [At \times If] + [At \times Is]\}$
$Aa = \{6,000 + [6,000 \times .125] + [6,000 \times 3]\} =$ **24,751 SF**

$At = 6,000$ sf

$If = [F/P - 0.25]W/30$
$If = [200/533 - 0.25]30/30 = .125$

$F = 200$ ft
$P = 533$ ft
$W = 30$ ft

504.2 BUILDING HEIGHT AUTOMATIC SPRINKLER SYSTEM INCREASE
Where a building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, the value specified in Table 503 for maximum buliding height is increased by 20 feet and the maximum number of stories is increased by one.

PLUMBING FIXTURE ANALYSIS

FIXTURES REQUIRED	MALE		FEMALE	
	REQUIRED	PROVIDED	REQUIRED	PROVIDED
WATER CLOSETS	2	2	3	3
URINALS	1	1	-	-
LAVATORIES	1	2	1	2

Preliminary Design Concepts. Design Subject To Change. Not For Construction Purposes.

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SONOMA CHEESE FACTORY

APPA Development

**2 West Spain Street,
Sonoma, CA. 95476
A.P.N. # 018-162-004
& 018-162-022**

REVISIONS

No.	Description	Date

PROJECT USE PERMIT DRAWINGS

Sheet Title

GENERAL NOTES, LEGENDS, AND ABBREVIATIONS

Drawn By ER Checked By Checker
Scale:
Date:
06/25/2015
Project No. Project Number

A0.02
Drawing No.

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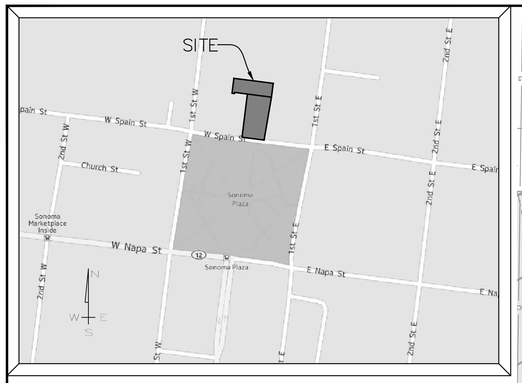
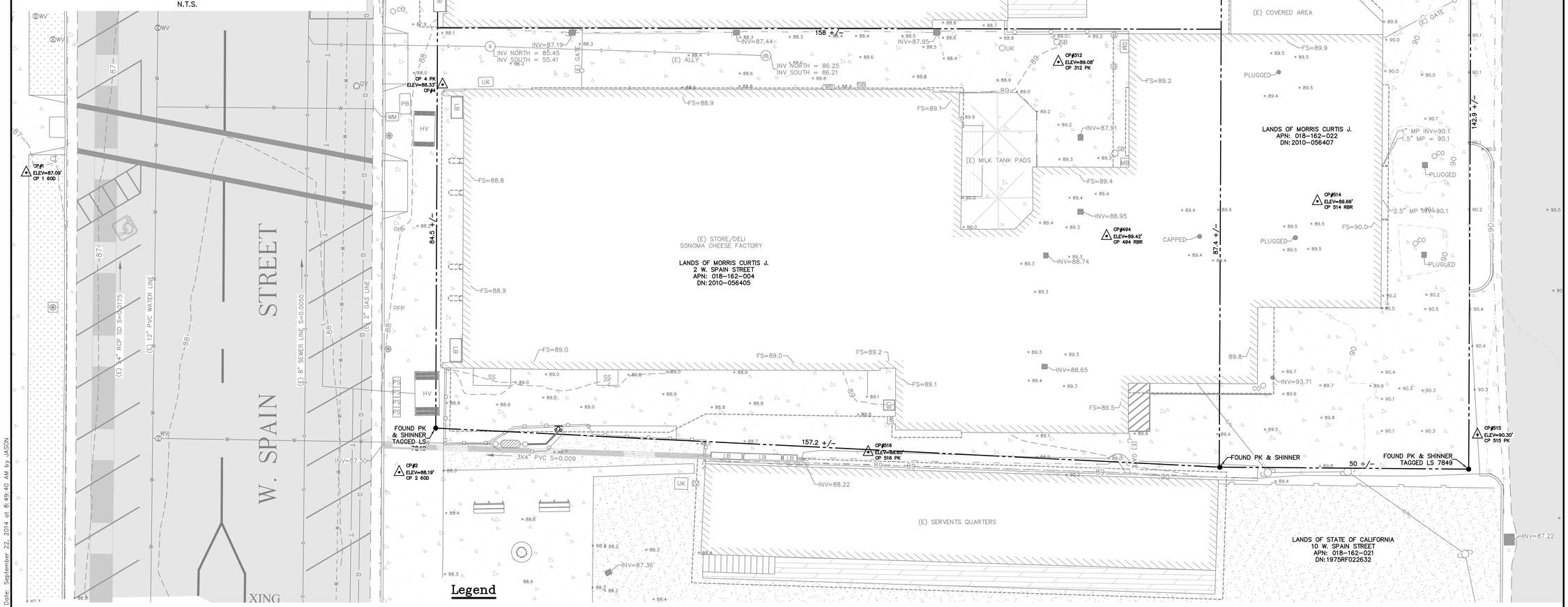


VICINITY MAP
N.T.S.



FOR REDUCED PLANS, THE ORIGINAL SCALE IS IN INCHES 0 1 2 3

Legend

△	CONTROL POINT W/ NUMBER		(E) JOINT UTILITY POLE		(E) SLIDE RAIL		(E) BUILDING	LB	LANDSCAPE BOX
●	FOUND PK & SHINNER AS NOTED		(E) DROP INLET VARIOUS SIZES		(E) WOOD FENCING		(E) GRASS SURFACE	MB	METAL BOX
	(E) SINGLE/DOUBLE POST SIGN	XX	(E) UTILITIES VARIOUS SIZES		(E) CHAIN FENCING		(E) SAND SURFACE	MP	METAL PIPE
B	(E) BOLLARD	PS	(E) PAPER STAND		(E) Adobe Fencing	INV	INVERT	PB	PAC BELL
	(E) STREET LIGHT	LB	(E) LANDSCAPE BOX	O/H	(E) OVERHEAD LINE	PVC	POLYVINYL CHLORIDE	PS	PAPER STAND
FP	(E) FLAG POLE	WF	(E) WATER FOUNTAIN	S	(E) SEWER LINE	RCP	REINFORCED CONCRETE PIPE	PT	PRESSURE TANK
CO	(E) CLEANOUT		(E) DOUBLE CHECK VALVE	W	(E) WATER LINE	TYP	TYPICAL	SB	SEWER BOX
WV	(E) WATER VALVE		(E) BENCH	W	(E) ABANDON WATER LINE	CO	CLEANOUT	SD	STORM DRAIN
GV	(E) GAS VALVE		(E) CONTOUR MAJOR	T	(E) TELEPHONE LINE	CP	CONTROL POINT	SL	STREET LIGHT
	(E) FIRE HYDRANT		(E) CONTOUR MINOR	G	(E) GAS LINE	FS	FINISH SLAB	SS	SERVER STATION
	(E) WHARF HYDRANT		(E) BOUNDARY LINE		(E) ASPHALT SURFACE	FP	FLAG POLE	TB	TELEVISION BOX
W	(E) WELL		(E) EDGE OF CONCRETE		(E) TILE SURFACE	GM	GAS METER	UK	UNKOWN
	(E) LANDSCAPE TREE 1-4"		(E) FLOW LINE		(E) CONCRETE SURFACE	GV	GAS VALVE	WB	WATER BOX
PT	(E) PRESSURE TANK		(E) EDGE OF ROAD		(E) WOOD SURFACE	HV	HIGH VOLTAGE	WF	WATER FOUNTAIN
S	(E) SANITARY SEWER MANHOLE		(E) BUILDING OVERHANG		(E) WOOD DECK SURFACE	IV	IRRIGATION VALVE	WM	WATER METER

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

BENCHMARK

SURVEY PERFORMED – AUGUST 14, 2014
FOUND 3" BRASS DISK STAMPED "US GEOLOGICAL SURVEY 83",LOCATED ON THE SOUTH EXTORIOR WALL OF AN EXISTING BUILDING AT THE INTERSECTION OF EAST NAPA STREET AN FIRST STREET WEST. ELEVATION = 84.89 USGS27

MAPPING NOTE

THE LOCATION OF UNDERGROUND STRUCTURES AND UTILITIES SHOWN HEREON HAS BEEN DETERMINED FROM SURFACE EVIDENCE OF THEIR EXISTENCE AND/OR FROM INFORMATION OBTAINED FROM PUBLIC AND/OR UTILITY AGENCIES. THE ENGINEER ACCEPTS NO LIABILITY FOR THE LOCATION, EXISTENCE OR NON-EXISTENCE OF THOSE UNDERGROUND STRUCTURES, UTILITY LINES AND RELATED APPURTENANCES. ANY INDIVIDUAL, COMPANY OR AGENCY USING THIS MAP MUST CONFIRM THE LOCATION OF ALL UNDERGROUND LINES OR STRUCTURES PRIOR TO COMMENCING ANY EXCAVATION.

Huffman Engineering & Surveying
537 College Avenue., Suite A
Santa Rosa, Ca. 95404
P:(707) 542-6559
www.huffmanengineering.net

REVISIONS

#	Description	Date

Surveyor: LICENSED LAND SURVEYOR ROBERT HUFFMAN CHARLES STATE OF CALIFORNIA 12-31-14 No. 7641

Rob Huffman L.S. 7641

SONOMA CHEESE FACTORY

SITE MAP
2 W. SPAIN STREET
SONOMA
A.P.N:018-162-004

Date: 08/15/14	Scale: 1" = 10'
File: 14-063	Sheet 1
Dwn: JMH	Of 1 Sheets
Job: 14-063	

Path: V:\Proj14\14-063\dwg\14-063.dwg Layout Name: 24X36 Plot Date: September 22, 2014 at 8:49:40 AM by JASON

1 FIRST FLOOR PLAN - ALL PHASES
1/16" = 1'-0"

Preliminary Design Concepts. Design Subject To Change. Not For Construction Purposes.

RossDrulisCusenbery
ARCHITECTURE
18294
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FAX 707 996 8542

SONOMA CHEESE FACTORY

APPA Development

2 West Spain Street, Sonoma, CA. 95476
A.P.N. # 018-162-004 & 018-162-022

REVISIONS

No.	Description	Date

PROJECT USE PERMIT DRAWINGS

Sheet Title

PROPOSED SITE PLAN

Drawn By ER
Checked By Checker

Scale:

Date:
06/25/2015

Project No. Project Number

A1.00
Drawing No.

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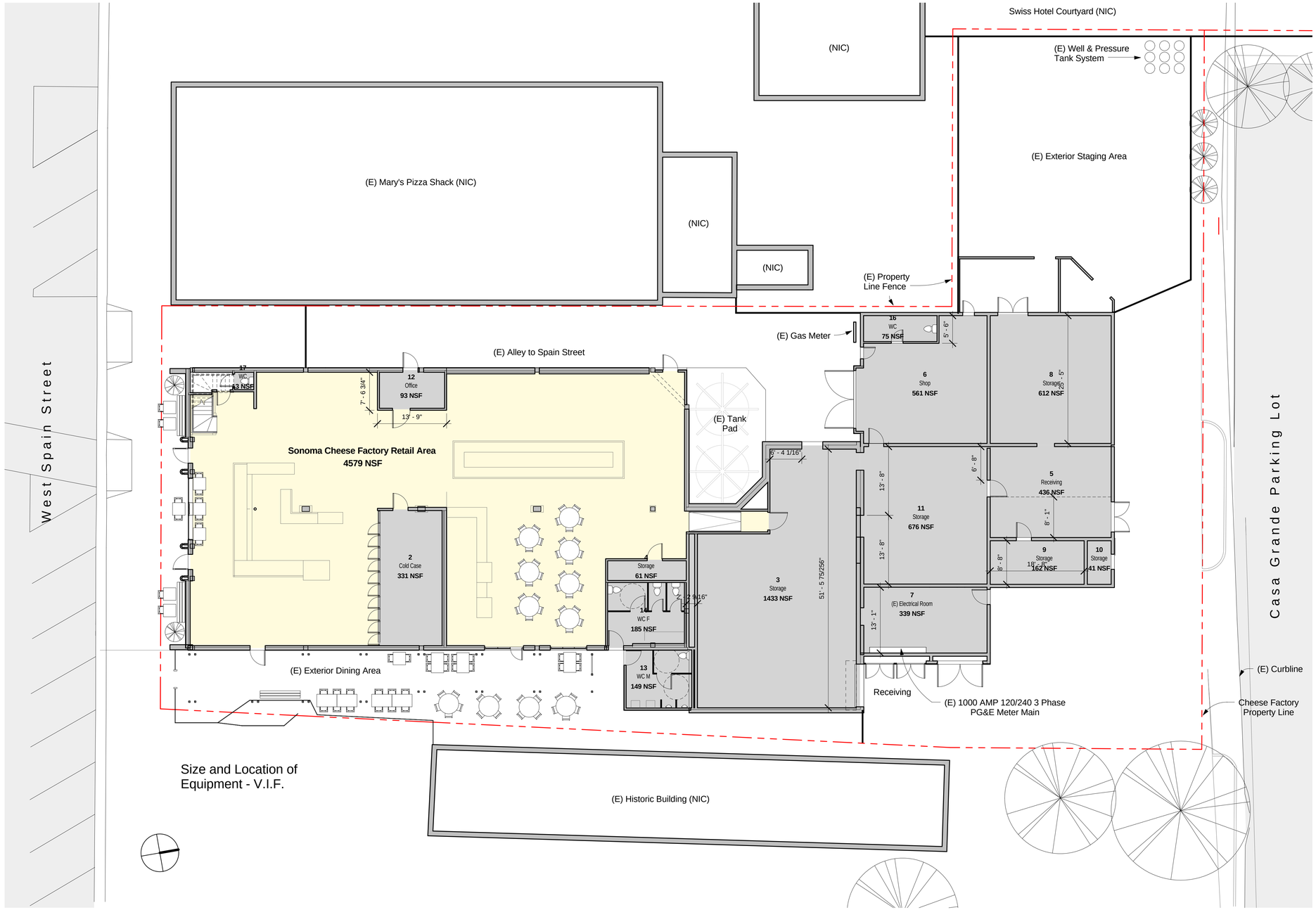
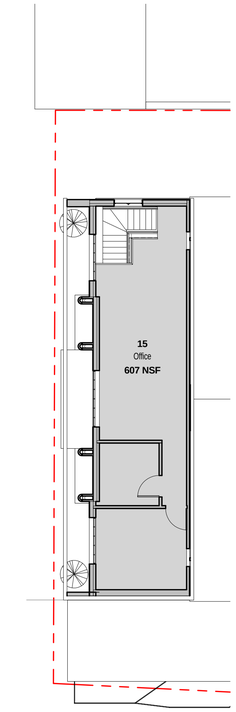


1 FIRST FLOOR - EXISTING
1" = 10'-0"



2 FP- 02- SECOND FLOOR - EXISTING
1" = 10'-0"

EXISTING FOOD SERVICE SEATING COUNT

Indoor Dining Seats:	41
Exterior Dining Seats:	62
Total Seats:	**103**

TOTAL EXISTING GROSS BUILDING AREA: 11,397 GSF

Note: All individual interior spaces are expressed in Net Square Feet (NSF)

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SONOMA CHEESE FACTORY

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REVISIONS

No.	Description	Date

PROJECT USE PERMIT DRAWINGS

Sheet Title

FLOOR PLANS (E)

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Scale:

Date:
06/25/2015

Project No. Project Number

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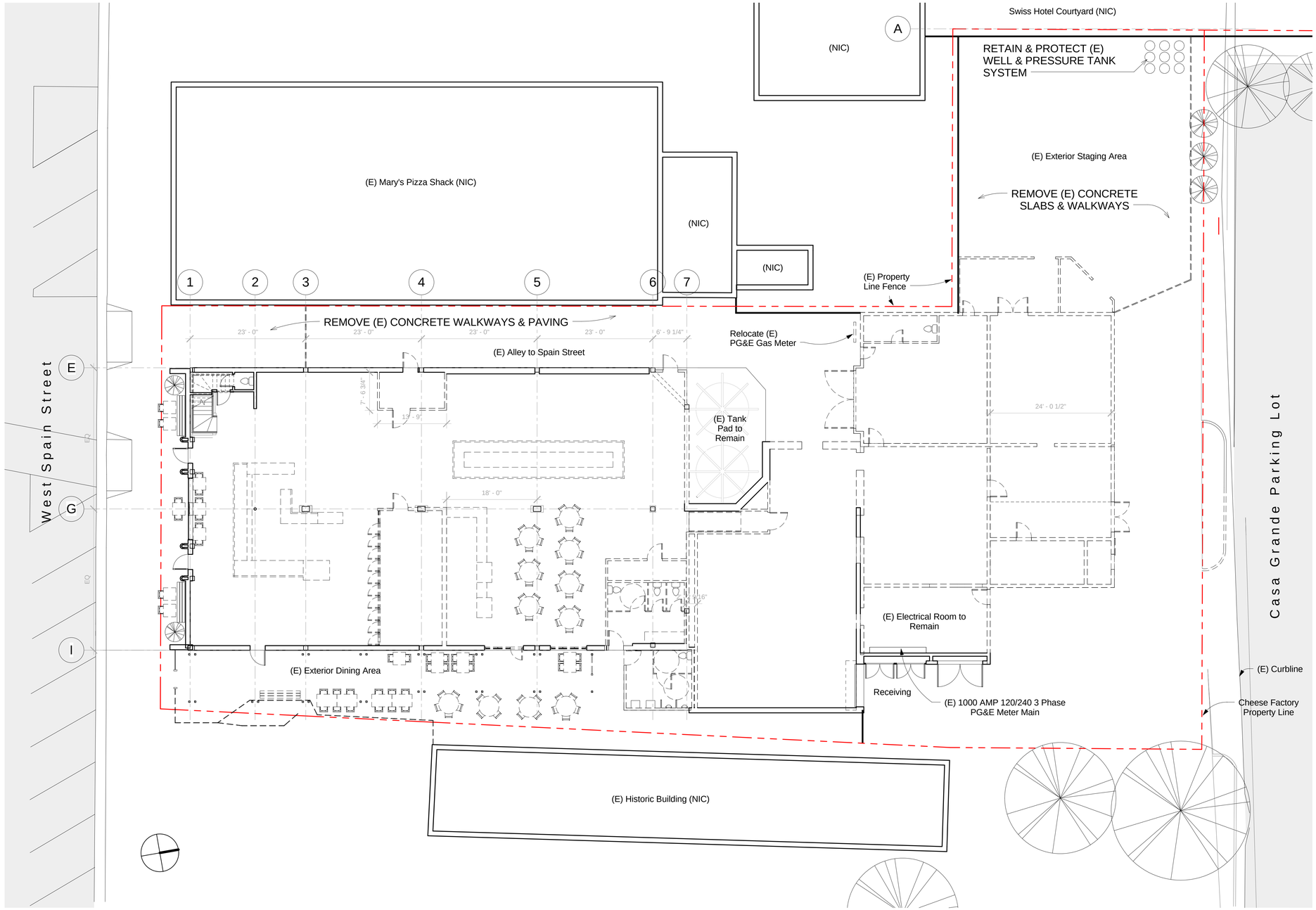
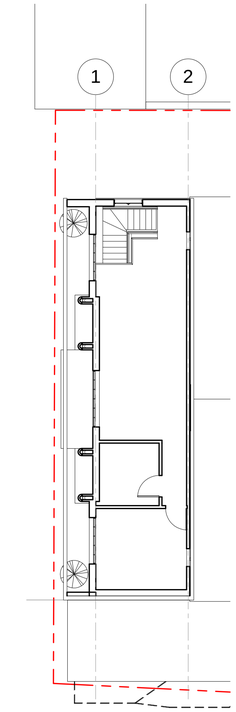


1 SITE PLAN - DEMOLITION
1" = 10'-0"



2 DP- 02- SECOND FLOOR
1" = 10'-0"

TO BE DEMOLISHED / REMOVED

TO REMAIN

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SONOMA CHEESE FACTORY

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A.P.N. # 018-162-004 & 018-162-022

REVISIONS

No.	Description	Date

PROJECT USE PERMIT DRAWINGS

Sheet Title

FLOOR PLANS- DEMOLITION

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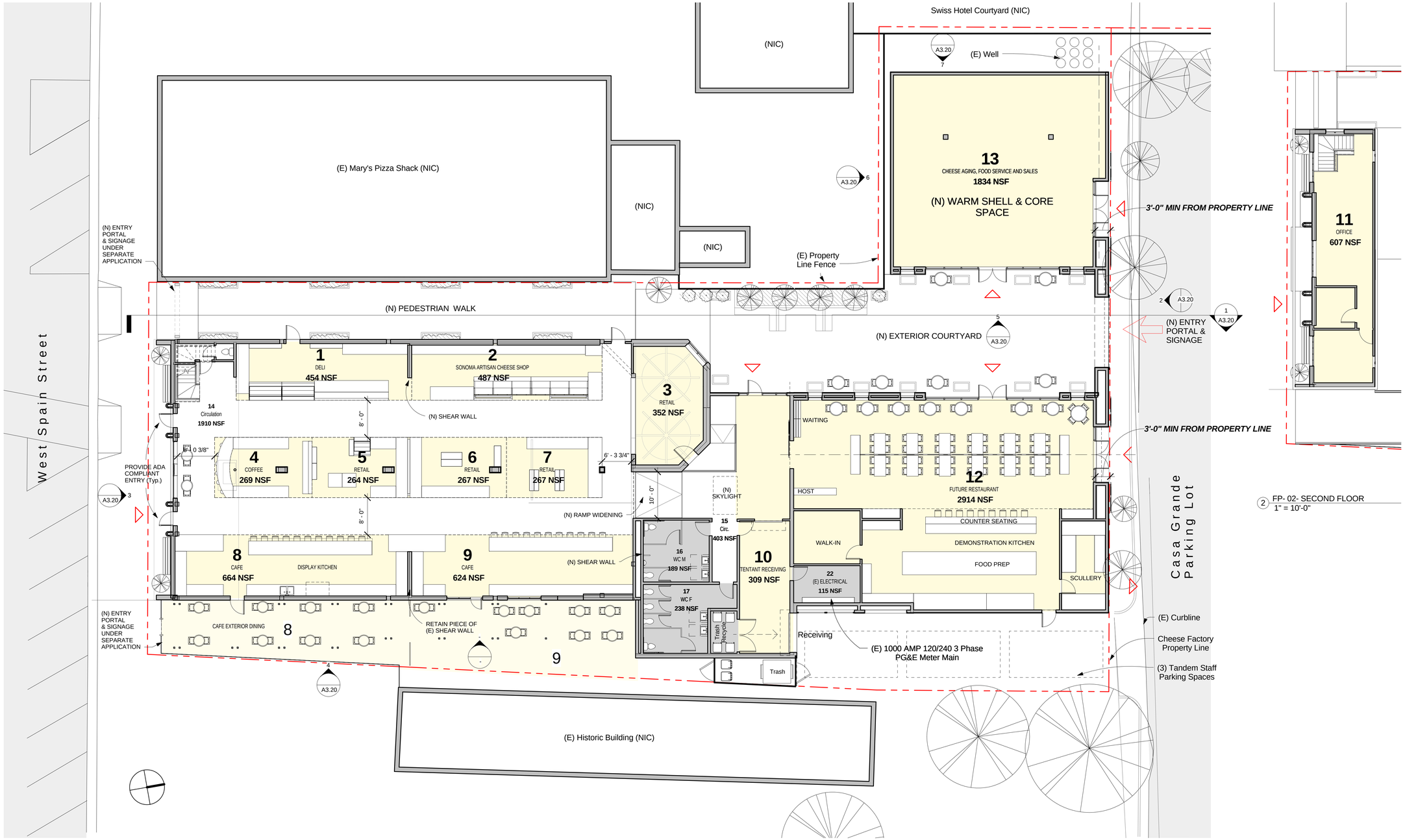

1 FIRST FLOOR PLAN - PHASE I
1" = 10'-0"

2 FP- 02- SECOND FLOOR
1" = 10'-0"

TOTAL GROSS BUILDING AREA: 13,635 GSF

Seat locations/ numbers are representational and subject to change
Preliminary Design Concepts. Design Subject To Change. Not For Construction Purposes.

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SONOMA CHEESE FACTORY

APPA Development

2 West Spain Street, Sonoma, CA. 95476
A.P.N. # 018-162-004 & 018-162-022

REVISIONS

No.	Description	Date

PROJECT USE PERMIT DRAWINGS

Sheet Title

FLOOR PLANS (N)

Drawn By ER
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Scale:
Date: 06/25/2015
Project No. Project Number

A2.10
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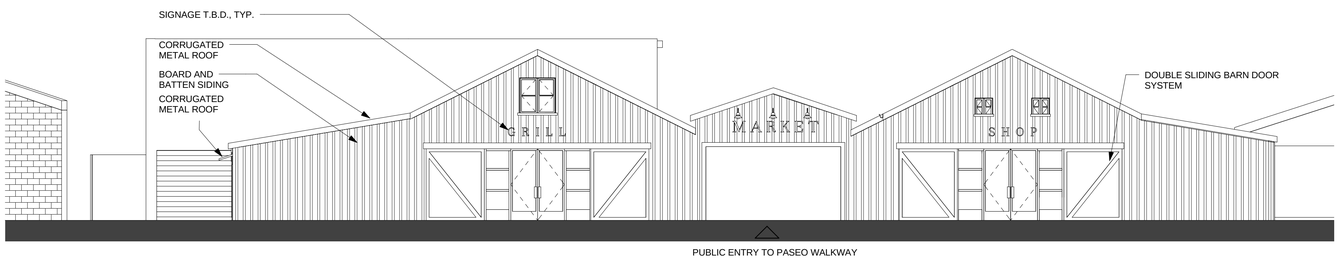
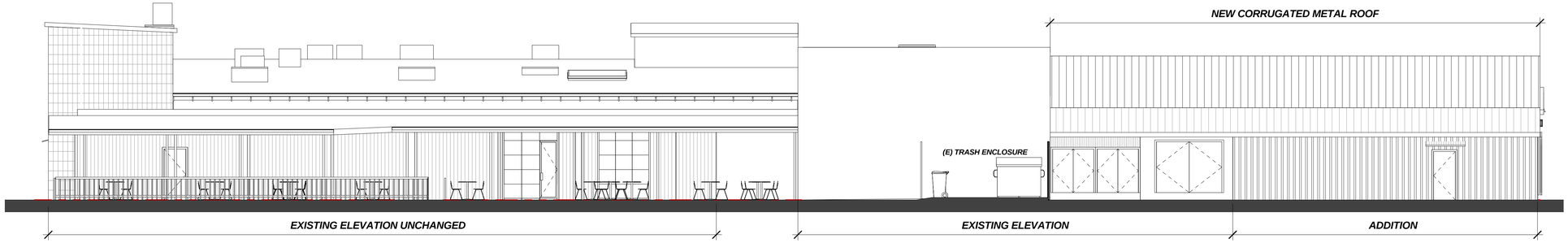
1 EE WEST - NEW EXTERIOR COURTYARD
1/8" = 1'-0"

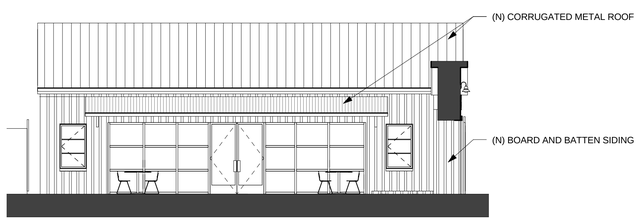


2 EE- NORTH - VIEW FROM CASA GRANDE PARKING LOT
1/8" = 1'-0"

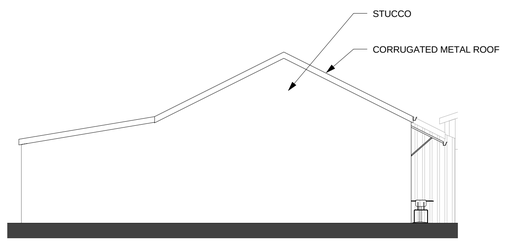
3 EE-SOUTH ELEVATION - VIEW FROM WEST SPAIN STREET
1/8" = 1'-0"



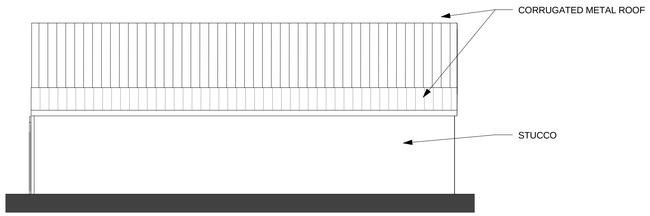
4 EE-EAST ELEVATION
1/8" = 1'-0"



5 EE - EAST ELEVATION
1/8" = 1'-0"



6 EE - SOUTH ELEVATION
1/8" = 1'-0"



7 EE - WEST ELEVATION
1/8" = 1'-0"

AN INTEGRATED SIGNAGE PACKAGE WILL BE SUBMITTED FOR REVIEW UNDER A SEPARATE APPLICATION

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SONOMA CHEESE FACTORY

APPA Development

2 West Spain Street, Sonoma, CA. 95476
A.P.N. # 018-162-004 & 018-162-022

REVISIONS

No.	Description	Date

PROJECT USE PERMIT DRAWINGS

Sheet Title

EXTERIOR ELEVATIONS

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SONOMA CHEESE FACTORY
2 WEST SPAIN STREET
SONOMA, CALIFORNIA

HISTORIC RESOURCE EVALUATION

[14156]
Prepared for
RossDrulisCusenbery Architecture Inc.

PAGE & TURNBULL
imagining change in historic environments through design, research, and technology

NOVEMBER 6, 2014

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I. INTRODUCTION

This Historic Resource Evaluation (HRE) has been prepared at the request of Michael B. Ross of RossDrulisCusenbery Architecture Inc. in advance of potential alterations at 2 West Spain Street (APN 4348-016-033) in Sonoma, California **(Figure 1)**. 2 West Spain Street was constructed in 1945; the building has previously been attributed to Pero D. Canali, but is likely the work of architect Pietro G. Canali.[1] The building was constructed to serve as a cheese factory and retail store for cheese maker Celso Viviani. The building continues to serve as a retail store for the cheese company that Viviani founded.

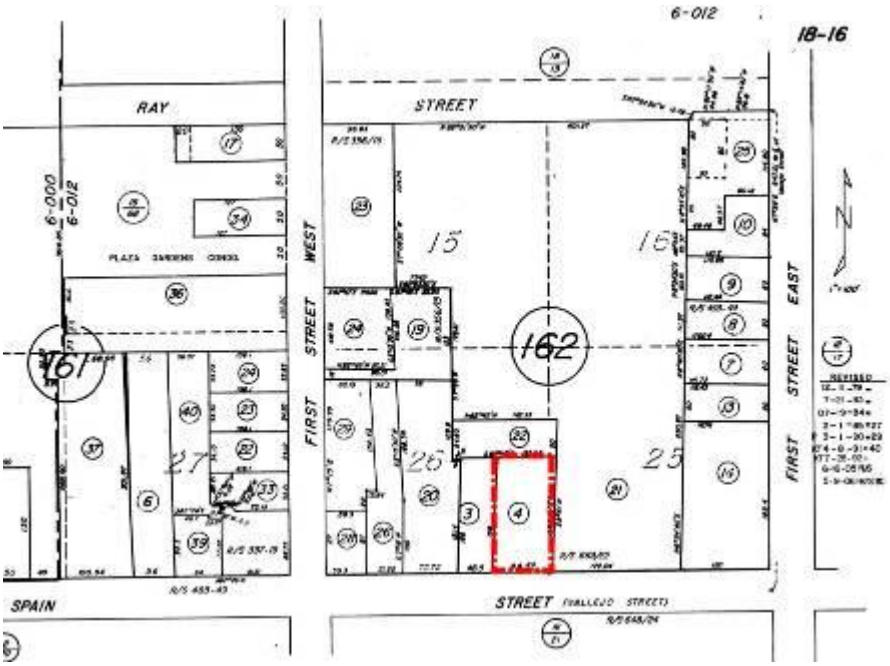

Figure 1: Assessor's Parcel Map of 2 West Spain Street, Sonoma, California, outlined in red. Source: Sonoma County Assessor, edited by Page & Turnbull.

SUMMARY OF DETERMINATION

The building at 2 West Spain Street was built in 1945 for Celso Viviani to serve as the factory, retail space, and office for the Sonoma Cheese Factory. When this company was established in 1931 by Viviani and Tom Vella, it was the first dedicated cheese making company in Sonoma. The building, which has previously been attributed to Pero D. Canali, is likely the work of Pietro G. Canali, an Italian architect who lived and worked in the Bay Area between 1925 and 1969.

The building is not currently listed as a National Historic Landmark, and is not on the National Register of Historic Places; although the building is within the boundaries of the Sonoma Plaza National Historic District, it is not a contributor to that district due to its contemporary era of construction. The building is not on the California Register of Historical Resources (California Register), and has not been assigned a California Historical Resource Status Code. The building is not a Sonoma County Historic Landmark, and has not been surveyed by the Sonoma League for Historic Preservation.

[1] This attribution is published without citation in Katherine Thompson Hill, *Sonoma Valley: The Secret Wine Country* (Guilford, CT; Globe Pequot Press, 2005), 95, and has been republished in additional secondary sources.

The building does appear to be eligible for the California Register; this report finds the building to be significant under evaluative Criterion 1 (Events) for its association with the development of the cheese industry in Sonoma. Despite some alterations to the building that postdate its identified period of significance (1945-1968), the building retains sufficient integrity to convey its historic appearance. Therefore, his report finds that 2 West Spain Street is eligible for listing on the California Register.

Character defining features of the building that enable it to convey its historic appearance and significance include its distinctive orange tile cladding, all fenestration at the primary (south) façade and the south portions of the east and west facades, metal awnings over primary entrances, and the massing and footprint of the building as it was originally constructed, which includes the front (south) two-story retail and office portion and the center one-story factory section. Agglomerative additions at the rear of the building are not considered to be character defining features of the building, as they are utilitarian in design, were partially constructed outside of the identified period of significance, and are no longer used for cheese production,

METHODOLOGY

This Historic Resource Evaluation provides a review of previous historical surveys and ratings, site description, historic context statement, construction chronology, and evaluation of the property's eligibility for listing on the California Register of Historical Resources (California Register.) A finding of eligibility for listing on the California Register brings any planned projects at the site under the regulatory framework of the California Environmental Quality Act (CEQA.)

Page & Turnbull prepared this report using research collected at various repositories, including the Sonoma County Library, the City of Sonoma Building Department, the Sonoma County Assessor's Office, the Sonoma League for Historic Preservation, and the Sonoma County Historical Society. Online research repositories that were used include Ancestry.com, the California Digital Newspaper Archive, the Online Archive of California, and the online Sanborn Map catalogue of the San Francisco Public Library.

A site visit was conducted on August 6, 2014 to examine and document the design and material condition of the building. All photographs in this report were taken by Page & Turnbull in August 2014 unless otherwise noted.

II. PAST EVALUATIONS

NATIONAL HISTORIC LANDMARKS

The National Historic Landmarks program is the highest level of designation for historic and cultural resources. This program is administered by the Secretary of the Interior and the National Park Service and is reserved for buildings, sites, structures, objects, and districts that demonstrate exceptional value, quality, and significance in illustrating the heritage of the United States.

The property at 2 West Spain Street has not been individually listed as a National Historic Landmark. The building does fall within the boundaries of the Sonoma Plaza National Historic Landmark District. Designated in 1961, the Sonoma Plaza National Historic Landmark District encompasses the Sonoma Plaza itself and adjacent properties that are most significant to the early development of Sonoma, from its founding as a Mexican settlement through the Bear Flag Revolution and the resulting integration of California into the United States. Although the building at 2 West Spain Street falls within these boundaries and is adjacent to several of the listed properties, it is not included as a resource of the National Historic Landmark District. The building was not age-eligible for listing when the Landmark District was evaluated; generally, properties are considered for landmark status when they are more than fifty years old, and the building was only sixteen years old in 1961. Additionally, the primary significance of the Landmark District relates to the Mexican War, and to architecture of the period 1832-1860. 2 West Spain Street has no relation to either of those areas of significance, and would therefore not be likely to be included in an updated evaluation of this Landmark District.

NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places (National Register) is the nation's most comprehensive inventory of historic resources. The National Register is administered by the National Park Service and includes buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

The property at 2 West Spain Street has not been individually listed on the National Register. The building does fall within the boundaries of the Sonoma Plaza Historic District, which was listed on the National Register in 1974 and underwent a boundary increase in 1992. This Historic District includes and expands beyond the area included in the Sonoma Plaza National Historic Landmark District to include many of the adjacent side streets to the Sonoma Plaza. In the 1992 boundary increase nomination, eighty-eight resources were identified as contributors, while fifty-eight were recognized as non-contributors. The building at 2 West Spain Street was listed as resource #108 and identified as a non-contributor because its date of construction is outside the established period of significance (1835-1944.)

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (California Register) is an inventory of significant architectural, archaeological, and historical resources in the State of California. Resources can be listed in the California Register through a number of methods. State Historical Landmarks and National Register-listed properties are automatically listed in the California Register. Properties can also be nominated to the California Register by local governments, private organizations, or citizens. The evaluative criteria used by the California Register for determining eligibility are closely based on those developed by the National Park Service for the National Register of Historic Places.

2 West Spain Street has not been individually listed or previously found eligible for the California Register. The Sonoma Plaza Historic District is listed in the California Register automatically because it is listed in the National Register.

CALIFORNIA HISTORICAL RESOURCE STATUS CODE

Properties listed or under review by the State of California Office of Historic Preservation are assigned a California Historical Resource Status Code (Status Code) of "1" to "7" to establish their historical significance in relation to the National Register of Historic Places (National Register or NR) or California Register of Historical Resources (California Register or CR). Properties with a Status Code of "1" or "2" are either eligible for listing in the California Register or the National Register, or are already listed in one or both of the registers. Properties assigned Status Codes of "3" or "4" appear to be eligible for listing in either register, but normally require more research to support this rating. Properties assigned a Status Code of "5" have typically been determined to be locally significant or to have contextual importance. Properties with a Status Code of "6" are not eligible for listing in either register. Finally, a Status Code of "7" means that the resource has not been evaluated for the National Register or the California Register, or needs reevaluation.

2 West Spain Street has not been assigned a Status Code, indicating that it has not been reviewed by the State Office of Historic Preservation.

SONOMA COUNTY HISTORIC LANDMARKS

In 1974, the Sonoma County Landmarks Commission was created under Ordinance No. 1768. The same ordinance established procedures to designate Historic Structures and Historic Districts. According to the Landmarks Commission By-Laws, Historic Landmarks must meet the criteria for eligibility adopted by the Landmarks Commission, which are based on National Register eligibility criteria. Of the 173 Sonoma County Historic Landmarks, twenty-six are in the City of Sonoma, none of which are located within any registered historic districts.

2 West Spain Street is not a designated Sonoma County Historic Landmark and is not located within a registered Sonoma County historic district.

SONOMA LEAGUE FOR HISTORIC PRESERVATION INVENTORY OF HISTORIC STRUCTURES

The Sonoma League for Historic Preservation maintains an inventory of historic structures in the City of Sonoma. According to the League's web site, "In 1978, with a grant from the County Landmarks Commission, the League began preparing the Sonoma Valley Historical Resources Survey [also known as the Inventory of Historic Structures] under the auspices of the City and County of Sonoma. The survey is an inventory of historic properties and includes structures from Kenwood to the Carneros Region. Each survey document provides important information that identifies and describes the property including its past and present owners, physical appearance of the structure, and the historical or architectural significance of the site including people and events associated with it."[2]

2 West Spain Street is not listed in the Sonoma League for Historic Preservation Inventory of Historic Structures, because it was not fifty years of age at the time of the survey.

[2] "Preservation," published at the *Sonoma League for Historic Preservation* web site, accessed at http://sonomaleague.org/historical.html in August 16, 2011.

CITY OF SONOMA DEVELOPMENT CODE

According to Section 19.10.030.C2 of the City of Sonoma Development Code, the Historic Overlay zone "is intended to preserve structures that are historically and/or culturally significant…The Design Review Commission shall review any new commercial buildings and additions or exterior changes to existing commercial buildings [within the Historic Overlay zone]."

The Development Code identifies two types of structures eligible for adaptive reuse: officially designated structures and structures with potential historical value. According to Section 19.42.020 of the code, "In addition to officially designated structures, there are other structures that may have historical value because of their age (usually more than 50 years old), and their contribution to the overall historic character of the community due to their unique architectural scale and style, use of design details, form, materials, proportion, as may be documented through listing on the Sonoma League for Historic Preservation's inventory of historic structures. Such structures shall only be eligible for adaptive reuse if located within the Historic Overlay zone."[3]

2 West Spain Street is located within the Historic Overlay Zone and therefore any additions or exterior changes to the building will be reviewed by the Design Review Commission.

III. ARCHITECTURAL DESCRIPTION

2 WEST SPAIN STREET

2 West Spain Street is located on a 13,058 square foot rectilinear lot on the north side of West Spain Street between First Street East and First Street West **(Figure 2)**. The lot was laid out as part of the original town plan, established by General Mariano Guadalupe Vallejo in 1835. The town site was the last in California to be organized in the Iberian tradition outlined by the *Laws of the Indies,* the governing document for town planning in Spanish territories since its proclamation in 1573 CE.[4] Although the lot has been in use since 1835, the current building at this address was constructed in 1945 and designed in a transitional style that includes both Streamline Moderne and International elements. The building has previously been attributed to Pero D. Canali, but is more likely the work of architect Pietro G. Canali.

Figure 2: 2 West Spain Street aerial view facing north, yellow arrow indicates the subject property, the footprint of which is highlighted in yellow. Source: Bing Maps, edited by author.

[3] Article IV (General Site Planning and Developmental Standards), Chapter 19.42 (Historic Preservation and Infill in the Historic Zone), *City of Sonoma Development Code* (February 2005), 4.27-28.
[4] Ibid., 28.

The building is generally rectangular in form, and is of varying heights: the front mass of the building is two stories, the center and largest mass is one high bay story in height, and the rear portion of the building is the site of several agglomerative additions, which are of varying heights between one and two stories. The front and center portions of the represent the original historic massing of the building: the rear portion of the building was constructed at varying more contemporary dates (further detailed later in this report.)The roof of the front mass is slightly up-pitched; the roof of the center mass is low pitched gable, with a north-south ridge-line, and the rear additions are generally flat roofed with some shed roof projections. The building is clad in a variety of materials that will be described within the following façade-specific descriptions.

Primary (South) Façade

The primary façade faces south onto West Spain Street and is set back slightly from the lot line. The façade is two stories in height and arranged symmetrically **(Figure 3)**. The façade is clad in large rectangular vertically-oriented glazed orange tile. The vertical perimeters of the facade and the up-pitched roofline project from the plane of the façade and give the facade a "framed" character. Additionally, the façade includes four full-height, white stucco-clad metal ribs, which begin at the ground with a shallow profile and increase in depth as they reach the projecting roofline.

Figure 3: Primary (south) facade, facing north.

These four ribs are grouped in two pairs, an arrangement that visually divides the façade in to three equal bays. Each pair of ribs frames one of the building's two primary entrances, located left and right of center **(Figure 4)**. These primary entrance doors are fully glazed wood doors, accessed via short concrete ramps. Above each door, a flat metal awning with rounded corners spans the width of the door and incorporates the ribs that frame the door. The edge of the metal awning includes painted signage: historic photographs indicate that the awnings were originally topped by neon signage.

The center bay of the first story features a tripartite window group. The window group includes, at center, a thirty-three-lite glass block window, flanked by two fixed plate glass windows, all with metal sash. The plate glass windows include etched or applied signage, and the entire window group is sheltered by a metal and canvas retractable awning. Above the awning, the façade includes a painted wood sign.

Figure 4: Primary facade, primary entrances, facing northwest.

At left, the façade includes a plaque that was placed by the Native Sons of the Golden West on June 8, 2008 and dedicates the building to Celso Viviani, who founded the Sonoma Cheese Factory **(Figure 5)**. In front of the first story of the primary façade, at far left and right there are low wood planters with foliage and mature trees **(Figure 6)**. There are also two wood benches and several tables and chairs for outdoor dining.

Figure 5: Primary facade, plaque, facing north.

Figure 6: Primary facade, planter at right, facing northeast.

At the second story, the primary façade includes three window groups, one in each bay. All groupings consist of multi-lite fixed and casement windows with metal sashes and slim flush surrounds. The center window group includes 24 panes, including three three-lite casement windows **(Figure 7)**. The window groups at left and right are identical, include twenty panes, and incorporate two three-lite casement windows **(Figure 8)**.

Figure 7: Primary facade, second story center window group, facing north.

Figure 8: Primary facade, second story left window group, facing northwest.

The primary façade terminates with the overhang of the up-pitched roof, which is composed of stucco-clad metal. The front edge of the overhang is curved similar to the vertical ribs that carry it **(Figure 9)**. The roofline overhangs both the vertical ribs and the projecting corner perimeters of the building. The roofline is finished with a flat metal weather stripping.

Figure 9: Primary facade, roofline, facing northwest.

East Façade

The east façade of the building faces directly onto the open courtyard in front of the Blue Wing Inn and the historic adobe Servant's Quarters, both of which are included in the discontiguous group of buildings that make up Sonoma State Historic Park (further described below in Surrounding Neighborhood). The east facade runs the full depth of the lot and includes the two-story front (left, or south) portion of the building, a long one story portion at the middle, and several additions of varying one-to-two story height that form the rear (right, or north) portion of the building **(Figure 10)**.

Figure 10: East facade, front and center portions of the building, facing west.

The left portion of the east façade is two stories, clad predominantly in the same tile that is at the primary façade, and includes applied letter signage at the second story. The only fenestration at this portion of the east façade is a partially glazed metal door at the first story, which is sheltered by a one-story open porch that spans the front and middle sections of the building, This open porch is a contemporary addition (1974) and shelters an outdoor food preparation and eating area. The porch is constructed of wood post-and-beam supports that carry a corrugated aluminum shed roof **(Figure 11)**.

Figure 11: East facade, open porch, facing north.

The center portion of the east façade is one story and is clad in stucco, which has been laid over the existing tile cladding as part of a seismic retrofit. (This stucco treatment also covers a small portion of the first story of the front section of the east façade.) Fenestration at the center portion of the east façade is located towards the rear (right) of the section, and includes two full-height multi-lite windows with anodized aluminum sashes: at left there are eleven lites and a fully glazed door, and at right there are fifteen lites **(Figure 12, 13)**. A restroom door is located at the far rear (right) (**visible in Figure 14)**.

Figure 12: East facade, center portion, left multi-lite window with door, facing west.

Figure 13: East facade, center portion, right multi-lite window, facing west.

The rear portion of the east façade includes several additions with distinct massings and heights. These were constructed agglomeratively, after the front and center portions of the building were complete, between 1959 and 1981. These additions will be described here individually from left (front, or south) to right (rear, or north.) The first mass is one story in height, clad in stucco and capped with a slightly sloped shed roof with overhanging eaves. The south façade of this mass includes a restroom door, a drinking fountain, and a high vertically oriented metal sash sliding window **(Figure 14)**. The east façade of this mass has no fenestration, and the north and west facades abut other portions of the building.

Figure 14: East facade, rear portion, south facade of first one-story mass where it meets the middle portion of the building, including restroom doors, facing northwest.

The adjoining mass to the north is two stories in height and is flush at its east façade with the one-story mass to the south. This massing is clad in vertically-scored rough stucco and has a flat roof with a slim metal coping at the roofline **(Figure 15)**. This mass has no fenestration at its east façade and a roll-up metal vehicular door at its north façade. This mass's northeast corner includes a metal gate that connects to a post at the lot line and separates the front, pedestrian activity from the rear, automotive and industrial activity at the site. The upper portion of the north façade has no fenestration, and the south and west facades abut other portions of the building.

The next mass is one story in height, constructed of painted cinderblock, and capped with a flat roof with broadly projecting eaves with wood rafter braces **(Figure 16)**. The east façade includes two pairs of wood doors at left, above which the façade is covered by corrugated aluminum, and one larger pair of wood doors at right. The north façade of this massing includes a metal door topped by a blinded transom.

At the far right (north, or rear) of the east façade is the one-story rear addition of the building; it has no fenestration on this facade (partially visible, **Figure 16**).

Figure 15: East facade, rear portion, two-story mass, facing southwest.

Figure 16: East facade, third mass, facing southwest.

Rear (North) Façade

The rear façade of the building faces north onto a surface parking lot that is accessed at 1st Street East. This portion of the building includes several agglomerative additions and expresses the functionality of the building's former factory use, rather than the formal organization of commercial use at the primary façade. The addition that forms the rear façade is constructed of painted cinderblock, and is one story in height with a slightly sloped shed roof **(Figure 17)**. From left to right, the façade includes a metal door with a sliding rail above, a pair of metal doors topped by a vertically paneled blind transom (this may have been a vehicular entrance at one time), and three evenly spaced square blinded windows with cinderblock sills. At the center of the facade, a narrow, mezzanine-level mass projects above the roof **(Figure 18)**. This mass is constructed of plywood and includes two square windows at its east side. The roof of this mass has two turbine vents. At the east (right) side of this façade is a fenced utility yard and a shed-roofed porch that projects from the west side of the building and shelters exterior tanks and related equipment **(Figure 19)**. The utility yard contains a well with associated pumps, and a concrete platform that shows the footprints of the tanks used in the cheese making process that have been removed (**Figure 20, 21)**.

Figure 17: Rear (north) facade, facing south.

Figure 18: Rear (north) facade, mezzanine mass, facing southwest.

Figure 19: Rear (north) facade, fenced utility yard and open porch at right (west), facing south.

Figure 20: Utility yard at rear of building, containing well and pumps, facing northwest.

Figure 21: Utility yard at rear/west of building, concrete platform showing former footprint of cheese-making tanks, facing southeast.

West Façade

The west façade, similarly to the east façade, runs the full depth of the lot and includes the two-story front (right, or south) portion of the building, a broad one-story portion at the middle, and several additions of varying one-to-two story height at the rear (left, or north) **(Figure 22)**. The front (right) portion of the west façade is two stories, clad partially in the same tile that is at the primary façade and partially in stucco at the first story. This stucco cladding is contemporary and was applied over the existing tile as part of a seismic retrofit. This portion of the façade includes two three-lite metal-sash casement windows at the first story, deeply set within the stucco and with tile visible around their frames **(Figure 23)**. At the second story there is an eight-lite metal-sash window grouping, containing fixed and casement windows.

The middle portion of the west façade includes no fenestration except for a metal entry door towards the rear **(Figure 24)**.

The west façade of the building faces onto a narrow paved driveway, beyond which is the one-story facade of 8 West Spain Street (Mary's Pizza Shack). This driveway historically provided access to the utility yard at the rear of the building, it is now fenced about twenty feet from the curb cut. is the driveway is owned by the owners of 2 West Spain Street.

Figure 22: West facade, facing northeast.

Figure 23: West facade, front (right, or south) portion first story windows, facing east.

Figure 24: West facade, middle portion, metal entry door towards the rear (north), facing southeast.

The rear portion of the west facade includes the west and south facing facades of previously described additions, and are not visible from any public right of way. As previously described, these masses are of varying heights between one and two stories and have flat roofs. Façade details here include rough vertically scored stucco, vertical wood siding, and a pair of large wood leaf doors that formerly provided vehicular access to the building **(Figure 25)**.

Figure 25: West facade, rear (north) portion, taken from the roof, facing north.

ROOF

The roof of the building is covered in a variety of roofing materials, and includes a variety of vents and ductwork, as well as several blind shed dormers, dome skylights, and a monitor skylight at the ridgeline of the roof **(Figure 26, 27).** At the front of the building, the north façade of the second story includes two three-lite metal sash casement windows flanked by three-lite sidelights **(Figure 28, 29)**.

Figure 26: Roof, facing north.

Figure 27: Roof, including monitor skylight, facing west.

Figure 28: Roof, window at left side of north façade of second story, facing south.

Figure 29: Roof, window at right side of north façade of second story, facing south.

SURROUNDING NEIGHBORHOOD

2 West Spain Street is located within the boundaries of the Sonoma Plaza Historic District, which was placed on the National Register in 1976 and expanded in 1992. As described in the 1992 nomination,

> The District is essentially a commercial and residential district with relatively few intrusions. Topographically, the area is very flat with a grid pattern of streets that extends out from the central plaza. The large square plaza contains many mature trees which gives the space a very bucolic atmosphere although the buildings facing the Plaza are primarily commercial. The tangential side streets, which are primarily residential, are also lined with tall mature trees furthering this atmosphere. The commercial buildings range in height from 1 to 4 stories. The residential buildings are primarily one story with some two story buildings scattered throughout the district… The district in its past had the look of a small country town center. It essentially still retains that character.[5]

[5] "Sonoma Plaza Historic District: National Register Boundary Increase," *National Park Service*, NRIS Reference No: 92000293 (1992): 4, accessed online at http://pdfhost.focus.nps.gov/docs/NRHP/Text/92000293.pdf. on July 1, 2014.

2 West Spain Street is on the north side of Spain Street, directly across from Sonoma Plaza, which is also designated as a National Historic Landmark. The property is also directly adjacent to a portion of Sonoma State Historic Park. Unlike other state parks, Sonoma State Historic Park is not defined by a continuous border but rather is a collection of resources throughout the City of Sonoma. 2 West Spain Street is set among many of these resources, located directly west of the two story adobe known as the Servants Quarters, and the two story Victorian building known as the Blue Wing Inn. Other properties in the surrounding neighborhood include hotels, retail locations, restaurants, and businesses that cater to tourists, conveying Sonoma's role as a picturesque destination within the Sonoma County region . Many of the buildings that house these operations are one-to-two story commercial blocks that vary in architectural style from Spanish Colonial, Mission Revival, Monterrey, Italianate, Romanesque, folk traditional, Beaux-Arts, and others.

Figure 30: Sonoma Plaza at left, Sonoma Cheese Factory at right, facing west.

Figure 31: Sonoma State Historic Park at right, Sonoma Cheese Factory at left, facing northwest.

IV. HISTORIC CONTEXT

CITY OF SONOMA HISTORY

Prehistory

Sonoma Valley was once occupied by Coast Miwok and Patwin peoples, and most authorities consider the Coast Miwok to have been the dominant tribe.[6] The Coast Miwok territory was centered in Marin and Sonoma counties and encompassed an area spanning approximately 1,400 square miles.[7] The modern City of Sonoma falls within the northeastern portion of Coast Miwok territory, and the area surrounding Sonoma's central plaza is near the location of the ancient Coast Miwok village of Huchi.[8]

Hispanic Period

In the mid-eighteenth century, Spanish explorers and missionaries arrived in Sonoma Valley. During the earliest years of Spanish control, Alta California was loosely administered by the Viceroy of New Spain in Mexico City. However, during the latter half of the eighteenth century and the early nineteenth century, Spain reinforced its claim to Alta California by encouraging the establishment of a chain of Franciscan missions along the coast and inland valleys from San Diego north to the Golden Gate. The first mission was established in San Diego in 1769. By 1776, Father Junipero Serra

[6] Alfred L. Kroeber, "Some New Group Boundaries in Central California," *University of California Publications in American Archaeology and Ethnography,* Volume 47, Number 2 (Berkeley, California: 1957).
[7] Isabel Kelly, "Coast Miwok," in *Handbook of the North American Indians,* Robert F. Heizer, editor, (Washington, D.C.: Smithsonian Institution, 1978).
[8] Samuel A. Barrett, *The Ethnography of Pomo and Neighboring Indians,* (Berkeley: University of California Press, 1908).

had established Mission Dolores in Yerba Buena (now San Francisco). The Spanish Viceroy ultimately decided to build missions in the region north of the Golden Gate, provoked by the establishment of a Russian fur trading and farming settlement at Fort Ross, in present-day Sonoma County in 1812.[9]

In 1823, Father Jose Altimira devised a plan to found a new mission north of the Golden Gate. Altimira and his men sailed across San Pablo Bay and rowed up the Sonoma River to the site of the present-day City of Sonoma. Impressed with the fecund soil of the well-watered and oak-studded plain, Altimira selected this location for California's last mission—and the only one established during Mexican rule, which had begun in 1821. On 4 July 1823, Father Altimira officially founded Mission San Francisco Solano de Sonoma, naming it after St. Francis Solano, a missionary to the Peruvian Indians. Within a few years,approximately 1,300 Indians lived at the *rancheria* adjacent to the mission. In 1826, a bloody neophyte revolt broke out, which resulted in the complete destruction of the first mission complex and Father Altimira's departure from Sonoma.[10]

Although Mission San Francisco Solano de Sonoma was rebuilt in 1827, it did not survive for much longer. The missions of California, like the missions on all Spanish colonial frontiers, were intended to be temporary institutions. When the work of Christianization and acculturation was deemed to be finished, the missionaries were replaced by secular clergy and the mission lands distributed among the former neophytes. This process was known as secularization. The constitution of the Republic of Mexico endorsed the equality of all Mexicans regardless of race. Mexican liberals concluded that the missions—which denied basic liberties to the Indians—were unconstitutional. Meanwhile, native-born *Californios* saw the missions as an obstacle to the economic development of the province; they believed that the missions' control of prime agricultural lands and the indigenous labor force impeded the growth of private ranches and farms. In 1834, Governor José Figueroa issued a proclamation ordering the secularization of the California missions. Although enacted to benefit the Indians, the act was in actuality little more than a badly disguised land grab. After secularization, Figueroa appointed the young Commandante Mariano Guadalupe Vallejo as the *mayordomo* of Mission Sonoma. Although his responsibilities theoretically included overseeing the transferal of half of the mission lands to the former neophytes, Vallejo instead distributed the land among his friends.

In addition to disposing of mission lands, Vallejo was also charged with building a presidio, or military settlement, at Sonoma.[11] In 1835, with assistance from Captain William A. Richardson, he laid out the Pueblo de Sonoma according to the *Laws of the Indies*, a set of guidelines used to lay out most Spanish settlements in the New World. Vallejo centered the pueblo on an eight-acre plaza southwest of Mission Sonoma. He then laid out a grid of wide streets around the plaza. This street pattern was codified in the O'Farrell-Huspeth survey of 1847 and survives today. Each block contained four lots, or *solares*. Each *solar* measured 100 x 100 *varas* (275' x 275') square. Vallejo also constructed a two-story adobe barracks, a three-story lookout tower on the north side of the Plaza, and a sumptuous adobe *palacio* for himself.[12] From 1835 to 1839, Sonoma grew quite slowly, populated almost exclusively by soldiers who had decided to stay after finishing their duty at the garrison. Vallejo worked hard to encourage Mexican settlers to come to the remote frontier settlement, convinced that the settlement would eventually become the center of Mexican power in Alta California.[13]

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[9] Robert A. Thompson, *Historical and Descriptive Sketch of Sonoma County, California* (San Francisco: 1877), 9.
[10] Ibid., 10.
[11] Ibid., 191.
[12] Ernest L. Finley, *History of Sonoma County, California: Its People and Its Resources* (Santa Rosa, California: Press Democrat Publishing Company, 1937), 192.
[13] Ibid., 195.

American Period

Few Americans or other foreigners lived in Sonoma during the period of Mexican rule. This began to change quickly during the early 1840s, as Americans began making their way overland to California. Even heavily Mexican towns like Sonoma underwent a dramatic change in demographics as hundreds of American settlers began ranching and starting businesses in town. Several of the more prominent English-speaking settlers in Sonoma included Jacob P. Leese, John Fitch, James Cooper, John Wilson, and Mark West.[14]

Vallejo was sympathetic to the American settlers, but the Mexican government wanted the intruders expelled. Their suspicion of American intent to claim this land was well founded: beginning in 1845, Army Topographical Service lieutenant John C. Fremont, who was stationed in Sacramento on a mapmaking mission, began to encourage settlers to rebel against Mexican rule.[15] Under Fremont's self-decreed instructions, a party of men rode from Sutter's Fort to Sonoma, seized the town, arrested Vallejo, and on June 14, 1846 declared a California Republic. This revolt ushered in the short-lived independent Bear Flag Republic and paved the way for California's accession to the United States less than a month later. Vallejo was released soon afterwards. The following week, Californians learned that the United States had declared war on Mexico. Two years later, when the Spanish-American War ended in the treaty of Guadalupe Hidalgo, California and the rest of the Southwest were ceded by Mexico to the United States.

The City of Sonoma was incorporated in 1883.[16] The region attracted many visitors to resorts that touted the benefits of natural hot springs. California's wine industry, which was first established in the nineteenth century at Mission Sonoma, surged during the twentieth century, and the City of Sonoma has become well-known for its wine and picturesque setting.[17] The City continues to be a popular destination for tourists from the Bay Area and around the world.

HISTORY OF 2 WEST SPAIN STREET

Located on the north side of West Spain Street across from Sonoma Plaza, the site of 2 West Spain Street is in the center of both historic and contemporary Sonoma. The earliest private residence in Sonoma, the adobe home of General Mariano Guadalupe Vallejo, was constructed here in 1835 and was known as Casa Grande.[18] This building burned down in 1867, and the site included a blacksmith and wagon shop as early as 1888. According to the Sanborn Fire Insurance Map drawn that year, the blacksmith building had a rectangular footprint, was one story in height, and included a broad front awning, a shed at the rear, and a tank in the yard behind the building **(Figure 32)**. The building was directly across the street from the rail depot of the Sonoma Valley Railroad, and during this time the adobe building east of the property, now known as the Servants Quarters, was described as tenement housing.

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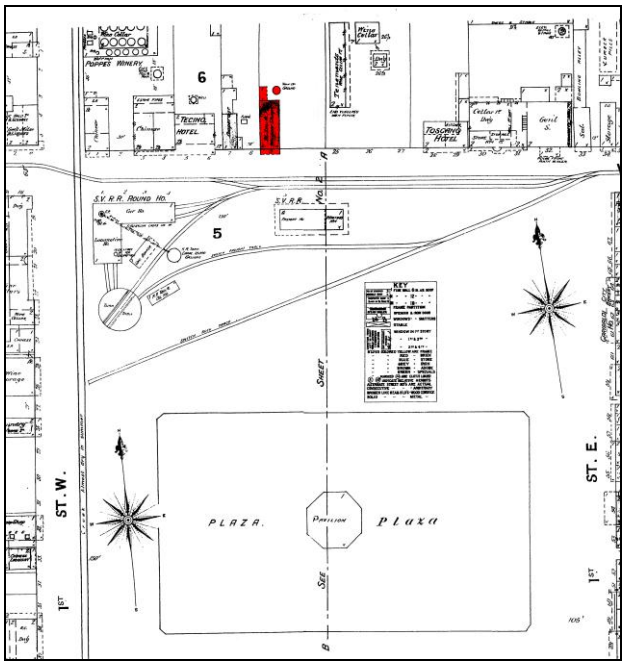
[14] Thompson, 12.
[15] "The Bear Flag Revolt", published online by the Sonoma Valley Visitors Bureau, accessed at http://www.sonomavalley.com/sonoma-bear-flag-republic.html on August 13, 2014.
[16] "History," published online by the City of Sonoma, accessed at http://www.sonomacity.org/default.aspx?PageId=3 on August 13, 2014.
[17] "Recent History," published online by the Sonoma Valley Visitors Bureau, accessed at http://www.sonomavalley.com/index.php/Table/Recent-history/ on August 13, 2014.
[18] "Spain Street-Historical Establishment", published online by the Spain Street History Project, accessed at http://spainstreet.com/historical-establishment on August 13, 2014.



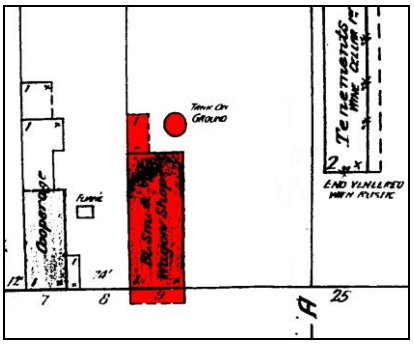
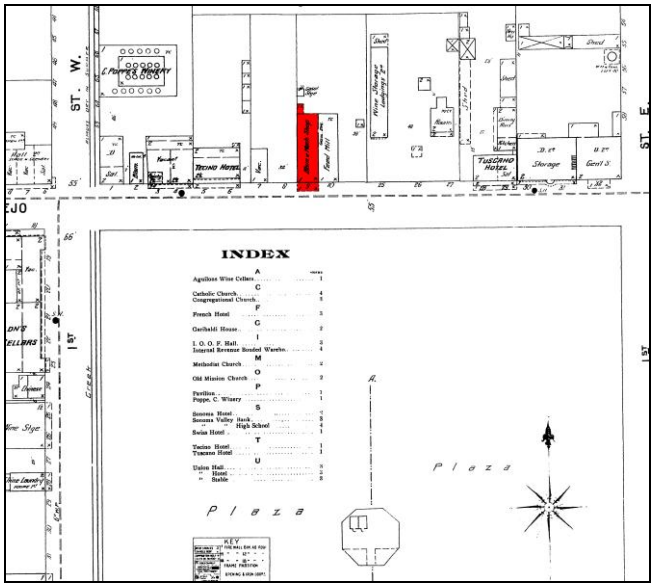


Figure 32: Sanborn Fire Insurance Map, 1888, edited by author. At left is a view of the area with the subject lot highlighted. Detail above.

By 1905, the building still housed a blacksmith, but was described as including a machine shop rather than a wagon shop **(Figure 33)**. A new building of similar size had been constructed directly adjacent to the building's east wall used as a feed mill. The rail depot had been removed from the Plaza by this time, and the Servants Quarters building to the east was used for wine storage and lodging.



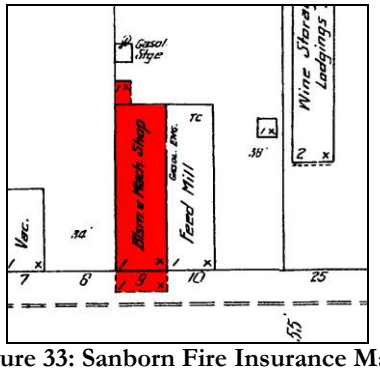
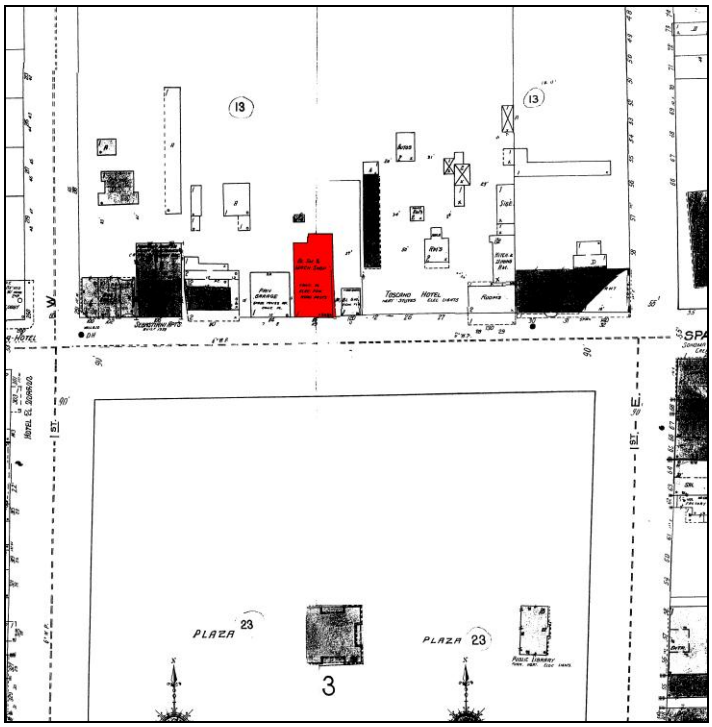


Figure 33: Sanborn Fire Insurance Map, 1905, edited by author. At left is a view of the area with the subject lot highlighted. Detail above.

The building's use remained the same at least through 1941, as recorded by the Sanborn Map from that year **(Figure 34)**. The footprint of the building had expanded to include the former feed mill to the east. Buildings had been constructed by this time directly to the east and west of the property.



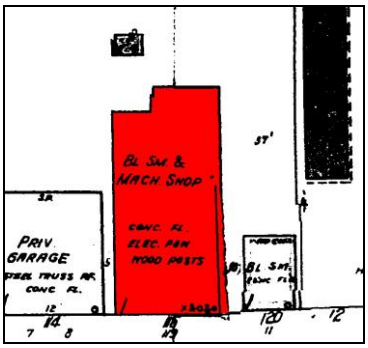


Figure 34: Sanborn Fire Insurance Map, updated to 1941, edited by author. At left is a view of the area with the subject lot highlighted. Detail above.

Although a demolition permit has not been recovered, it appears that the earlier building was razed sometime between 1941 and 1944. According to a published history of the Sonoma Cheese Factory and the plaque that is located on the front façade of the extant building at 2 West Spain Street, Italian immigrant Celso Viviani began construction of a factory for his cheese-making company here in 1944. The building has been attributed to Pero D. Canali, but was likely the work of architect Pietro G. Canali. (This discrepancy is described further in a later section of this report.) Construction was completed by 1945, and the Sonoma Cheese Factory opened that year.

Figure 35: The Sonoma Cheese Factory, circa 1945-1950. Lawrence "Pete" Viviani, son of Celso Viviani, is standing in front of the building; the awning bears the name "Sonoma Valley Cheese [either Company or Factory]" at this time. Source: Sonoma Cheese Factory.

In its appearance, the building has undergone very few changes since it was constructed in 1945. In 1974, the outdoor open-air eating porch was added to the east perimeter of the building. Several iterative changes have been made at the rear of the building to adapt to changes in the method of cheese production and distribution. Interior changes have been made as well to modernize and upgrade the retail space at the front of the building. Overall, however, the building largely conveys its appearance as it looked when it was constructed in 1945.

THE VIVIANI FAMILY AND THE SONOMA CHEESE FACTORY

2 West Spain Street was constructed for Celso Viviani in 1945 and has remained in the ownership of the Viviani family. Celso Viviani was born in 1886 in Stazzema, a small town in the province of Lucca in northern Italy.[19] According to a published family history, the Viviani family traces its roots in Lucca from the 11th century; over time, many Vivianis were members of the consulate, and one was an assistant to Galileo.[20] Celso Viviani immigrated to the United States in 1910 at the age of 24 and traveled directly to Sonoma after landing in New York City. Described at this time as a laborer, Viviani's passage was paid by his brother, who was already living in Sonoma. Viviani left his wife Maria and two children (son Dino and daughter Clamila) behind, but sent for them to join him in Sonoma in 1912.

In Sonoma, Viviani worked an early morning shift in the foothill quarries north of town, in addition to spending full days running the distillery at the winery owned by fellow Italian immigrant Samuele Sebastiani..[21] After Prohibition began in 1920, commercial winemaking was no longer possible, and Viviani learned to make cheese. His first job was at the Sonoma Mission Creamery, which had been established by Joseph Vella and John Iacono in 1915.[22] While there, Viviani met Gaetano "Tom" Vella, younger brother of Joseph Vella, who was also learning to make cheese. In 1931, after several years of training, Viviani and Vella partnered to establish the Sonoma Valley Creamery, one of the earliest dedicated cheese-making companies in the Sonoma Valley. Their production facility was located in an old brewery on Second Street East that had gone out of business during Prohibition. Perhaps these men were following precedent in naming their new company a "creamery;" since they only produced cheese, the company name quickly evolved to the Sonoma Valley Cheese Factory, and then the Sonoma Cheese Factory.

During the 1930s, the company acquired two production plants in Oregon and one in Marin County. Viviani and Vella focused on harder, Italian-style cheeses, as well as more quickly produced soft cheese products like cream cheese and cottage cheese. During the years leading up to the start of World War II, the company ran production around the clock. In 1944, construction began on the company's new headquarters, located at 2 West Spain Street in Sonoma. The new building was designed by a fellow Italian immigrant, architect Pietro G. Canali, and included a large factory production space, a small retail area, and second-story office. The building was completed and opened in 1945. At this time, Viviani and Vella amicably dissolved their partnership, with Viviani retaining the new company headquarters on West Spain Street and the production plant in Marin. Tom Vella moved to several locations in Sonoma before 1969, when he purchased the old stone building and former brewery on Second Street East where the Sonoma Valley Creamery had gotten its start.. As of 2014, the Vella Cheese Company continues to operate under family ownership at this location.

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[19] New York Passenger Lists, 1820-1957 for Celso Viviani, accessed at www.ancestry.com on August 13, 2014.
[20] No Author, *Sonoma Cheese Factory: A History* (no publisher information, no date, approx. 1982) unpaginated.
[21] Ibid.
[22] Hill, *Sonoma Valley: The Secret Wine Country*, 45.

After World War II, Celso Viviani's son Lawrence "Pete" Viviani returned from military service in the Pacific to work in the family business. Business remained brisk: for a decade after the close of the War, the company sold its entire output, mostly cottage cheese and cream cheese, to the Kraft Cheese Company. As dairy farming became more industrialized, however, the historically fluctuating pattern of milk availability changed. This change compelled the company to shift production to harder cheeses, including Sonoma Jack, for which they are still best known. By the end of the 1950s, further changes in milk availability and cheese production necessitated major mechanical additions to the factory, including new facilities to house an evaporator and milk dryer.

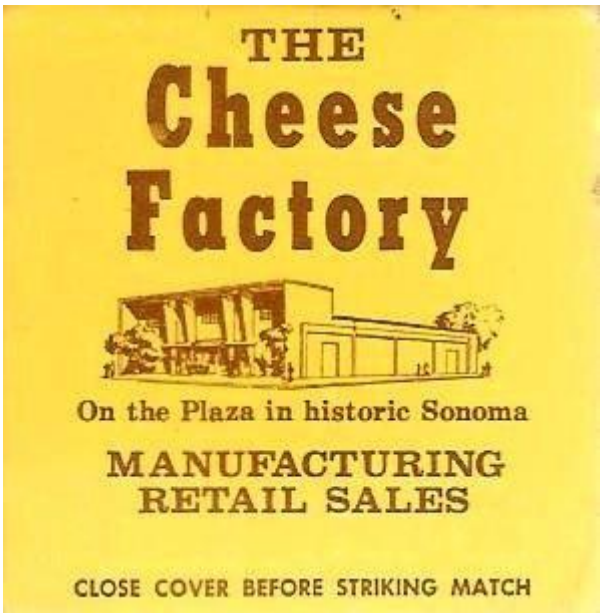

Figure 36: Sonoma Cheese Factory matchbook, no date, estimated between 1945 and 1959 (no rear additions). Source: Flickr user J. L Ordez.

When Celso Viviani died in 1955, Pete Viviani had been running operations at the Sonoma Cheese Factory already for several years. Navigating the changes in dairy production and supply patterns proved difficult through the 1960s, and the company nearly closed down. At the end of the 1960s, Pete relocated to the Yucatan Peninsula in Mexico with his wife Jackie and their two youngest children, and they spent two and a half years constructing a new dairy and cheese production plant. Under the auspices of Mexico's "Breakfast for Children" program, the factory produced powdered milk and cheese.

During these years, the Sonoma factory was operated by Pete Viviani's oldest son David. Along with business partner Fred Harland, David Viviani creatively reassessed his family's faltering business and made changes that eventually made the company profitable again. Viviani and Harland started a sandwich concession at Sonoma Valley High School using their cheese as a primary ingredient. After success there, they expanded to a county-wide route. The company ramped up its marketing efforts in order to aggressively promote the company's Sonoma Jack brand, as well as Sonoma Valley wines **(Figures 37, 38)**.

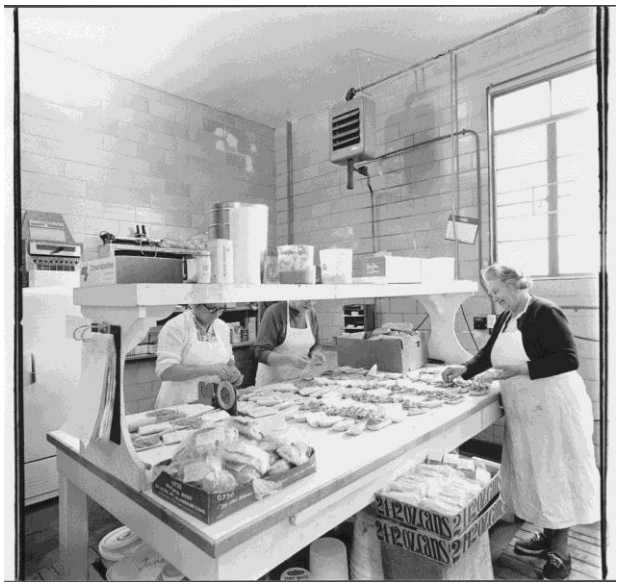

Figure 37: Sandwich making at the Sonoma Cheese Factory, 1972. Source: Sonoma County Library Digital Image Collection.

Figure 38: Retail sales at the Sonoma Cheese Factory, 1972. Source: Sonoma County Library Digital Image Collection.

The company continued to grow after Pete Viviani returned from Mexico in 1971 and decided to increase cheese production. During the 1970s, the entire Sonoma Valley economy received a general boost, as the oil embargo led many Bay Area tourists to stay closer to home and "discover" nearby destinations, such as Sonoma. As the general notoriety of the Sonoma Valley's wine region increased, the Sonoma Cheese Factory's fortuitously-named Sonoma Jack cheese rose in popularity as well. As described by David Viviani, naming their cheese after their hometown "was a good move, because Sonoma became famous. We were lucky."[23] During these decades, the Sonoma Cheese Factory had several dozen employees. In 1981, during a celebration of the company's fiftieth year in business, the company became the first California producer of hot pepper Jack cheese, which remains one of their best selling products.

In 2001, production was permanently halted at the factory in Sonoma after a dangerous bacterium was found in a cheese sample. After this time, the majority of the company's cheeses were produced at a factory site in Crescent City, California. In 2002, the company's operations were split between Pete Viviani, who remained in charge of retail operations, and his son David Celso Viviani who headed up cheese production. In 2005, specialty food manufacturer Monterey Gourmet Foods purchased an 80 percent stake in the Sonoma Cheese Factory, although ownership of the building at 2 West Spain Street remained with the Viviani family. In the absence of the need for factory production space, the retail portion of the building underwent a major expansion in 2005. At this time, the Sonoma Cheese Factory employed 14 people, with annual sales of $4 million, and the retail shop was a center of the Sonoma Plaza retail shopping area, with over 400,000 visitors a year.[24]

Lawrence "Pete" Viviani died in Sonoma in June 2009, very shortly after the Native Sons of the Golden West placed a plaque on the front of the Sonoma Cheese Factory building at 2 West Spain

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[23] "'Pete' Viviani of Sonoma Cheese Factory Dies at 85", *The Sonoma Valley Sun,* June 5, 2009. Accessed online at http://news.sonomaportal.com/2009/06/05/%E2%80%9Cpete%E2%80%9D-viviani-of-sonoma-cheese-factory-dies-at-85/ on August 17, 2014.

[24] Erin Allday, "Sonoma Cheese Factory Sold—Monterey Company Buys 80% Stake, Retail Store Not Part of Deal" *The Press Democrat* (Santa Rosa), July 1, 2005.

Street. The plaque dedicates the building to Celso Viviani, founder of the Sonoma Cheese Factory and patriarch of one of Sonoma's first and most enduring cheese-making families.

CONSTRUCTION HISTORY

Since it was constructed in 1945, the building has undergone a series of alterations, primarily at the rear of the building and in the interior, in order to adapt to changing needs of the cheese production process, as well as to improve and expand the retail use of the building. The table below lists all of the alterations to the building that are on file with the City of Sonoma Building Department.

Date	Owner	Scope of Alterations
29 September 1958	L.P. Viviani	A building permit was issued to cut a frame and fenestrated doorway for access to a refrigerator. The contractor listed is John S. Moll. (Building Permit Application #960)
29 June 1959	L.P. Viviani	A building permit was issued to remove an existing four-inch hollow tile wall. The contractor listed is John S. Moll. (Building Permit Application #1034)
26 October 1959	L.P. Viviani	A building permit was issued to "erect a basalite block building adjacent to the existing boiler room for purposes of installing milk drying and storing equipment." The contractor listed is John S. Moll. (Building Permit Application #1064)
9 November 1959	L.P. Viviani	A plumbing permit was issued for the addition of floor drains and a house sewer. The work was completed by Sonoma Plumbing & Heating. (Plumbing Permit Application #62)
3 May 1960	L.P. Viviani	A building permit was issued to install shelving, acoustical tile wall paneling, and a new door. The additions were listed for use in an office space, and the work was completed by John S. Moll. (Building Permit Application #1114)
27 March 1961	L.P. Viviani	A building permit was issued to add approximately 1350 square feet of area to a dryer plant, for an evaporator, compression room, and tank storage. The contractor listed is John S. Moll. (Building Permit Application #1216)
27 March 1961	L.P. Viviani	A plumbing permit was issued for the addition of floor drains and a sink, to be completed by John S. Moll (Plumbing Permit Application # 90)
21 October 1963	L. Viviani	A building permit was issued for the construction of a "15M Gal. Milk Storage Tank." The contractor listed is C.M. Peterson. (Building Permit Application #1607)
10 October 1966	L. Viviani	A building permit was issued for interior alterations to the existing retail sales store. The contractor listed is John Lobsigner. (Building Permit Application #2286)
22 August 1974	Viviani	A building permit was issued for the addition of an outdoor eating area. The permit was approved with suggestion of altering the design for a trellis to be placed over the eating area. The contractor listed is Victor Pardini. (Building Permit Application #4095)
27 August 1976	Pete Viviani	A building permit was issued to replace existing roof timbers within the facility. (Building Permit Application #4369)
27 August 1976	Viviani	A building permit was issued for the alteration of sectional, tar and gravel built-up roofing at the rear of the building. (Building Permit Application #4400)
25 October 1976	Sonoma	A building permit was issued for unspecified construction

	Cheese Factory	work with an expense of $8,000. (Building Permit Application #4640)
25 October 1976	Sonoma Cheese Factory	A building permit was issued for the addition of an air-conditioning unit. (Building Permit Application #4641)
26 October 1976	Sonoma Cheese Factory	A building permit was issued for electrical remodeling work including the addition of the new sub panel, new plugs and new lights. The contractor listed is Frontline Electric. (Building Permit Application #4646)
28 July 1977	Peter Viviani	A building permit was issued for unspecified remodeling work with a cost of $18,800. (Building Permit Application #4650)
15 June 1981	Sonoma Cheese Factory	A building permit was issued to relocate an existing wall. The contractor listed is Victor Pardini. (Building Permit Application #7206)
10 November 1981	Sonoma Cheese Factory/Pete Viviani	A building permit was issued for an addition to the building and remodeling work. The contractor listed is Victor Pardini, and the permit lists the project cost at $1,000. (Building Permit Application #7350)
18 January 1982	Sonoma Cheese Factory	A building permit was issued to tear off the existing roof and reroof with four-ply built-up roofing with a glazed surface. (Building Permit Application #7401)
2 July 1984	Pete Viviani	A building permit was issued to demolish and reconstruct the driveway, including the installation of sewer drains, presumably after a code violation which was recorded in April of 1984. The contractor listed is Victor Pardini. (Building Permit Application #8206)
21 September 1989	Sonoma Cheese Factory	A building permit was issued to add an awning over the front entrance. The work was completed by Redwood Empire Awning, and included drawings that specify retractable coverings with dimensions of 12'-6" by 6'. (Building Permit Application #9794)
19 May 2005	Sonoma Cheese Factory	A building permit was issued for tenant improvement and expansion of the existing store. The permit lists the cost of the project at $70,000. A design for the expansion was completed by William L. Dimick, and the contractor listed is D. Prescott Construction. (Building Permit Application #17034)

PIETRO CANALI

Although 2 West Spain Street has been previously attributed to Pero D. Canali, extensive research has not revealed any record of a practicing architect, designer or builder in California or on the West Coast with this name. It appears likely that building has been misattributed and is actually the work of architect Pietro G. Canali, an Italian-American immigrant who lived in the Bay Area between 1924 and 1969 and practiced architecture between 1924 and the 1940s.

Pietro Giuseppe Canali (1897-1969)[25] was born in Chiari, in the Lucca region of Northern Italy and traveled to the United States with his wife Laura (nee Fillipi) in 1924. At the time of his immigration,

[25] Pietro Giuseppe Canali was referred to in print (City Directories, U. S. Federal Census, newspaper article, and U. S. Naturalization records) at various points during his life as Pietro G. Canali, Peter G. Canali, and Peter D. Canali.

Canali had been living in Nancy, France, and was already trained as an architect, perhaps at the Ecole des Beaux Arts campus located in Nancy. Both Canalis spoke Italian and French. After arrival in New York City, they traveled on to San Francisco, where, by 1925, Canali was employed as an architect with the firm Ashley & Evers. In 1930, the Canalis has two sons and were living on Union Street, and Pietro Canali was listed in the City Directory that year as an architect with no firm affiliation. In 1931 the Canalis lived in San Mateo, and they remained on the San Francisco Peninsula for the next ten years. Pietro Canali became a naturalized citizen of the United States in 1937; Laura was naturalized in 1942. In 1942, the Canalis were living in San Francisco again, and Pietro Canali, who was by this time referred to as Peter, was employed as a building contractor rather than an architect.

Shortly after the outbreak of World War II, President Roosevelt issued Executive Order 9066; while this order is most widely remembered for its call for internment of Japanese and Japanese-American "enemy aliens," it also enabled the Wartime Civil Control Administration to order Italian and German immigrants and naturalized citizens of Italian and German heritage to leave the Pacific Coast Military Zone.[26] In October 1942, Pietro G. Canali, along with seventeen other Italians and Germans, was ordered to leave his home in San Francisco. Although it is not known where the Canalis moved during the years they were away from the Bay Area, in 1948 they returned and were listed in the San Francisco City Directory as living on El Camino Del Mar in the wealthy Seacliff neighborhood. Pietro Canali's occupation was not listed in city directories at any point after this time.

In 1962, Laura Canali died in San Francisco, and Pietro Canali appears to have moved to Sonoma sometime after her death. In 1967 in Sonoma, he remarried a woman named Vella Paris, and he died two years later in Sonoma at the age of 71.

Very little has been uncovered in the course of extensive research regarding Canali's architectural practice. He was one of several productive but poorly remembered architects who designed homes in the newly developed Marina District of San Francisco in the second half of the 1920s.[27] This new neighborhood included a fairly high concentration of Italians, and Canali possibly worked with these clients. Presuming that Canali did leave his home when he was ordered to by the Wartime Civil Control Administration, he may not have been living in the Bay Area during the years when the building at 2 West Spain Street was designed and constructed. However, because no evidence indicates that any architect practicing in the Bay Area or on the West Coast had the name Pero D. Canali; because of the similarity between the name "Pero D. Canali" and Pietro G. Canali (who was also sometimes listed in city directories as Pietro D. Canali); because both Pietro G. Canali and Celso Vivani were Italians from nearby towns in the Lucca region of Northern Italy; and because Canali was known to have lived in Sonoma later in his life; it appears very likely that 2 West Spain Street was designed by Pietro G. Canali. As of the completion of this report, 2 West Spain Street is this architect's only identified project.

CHEESE-MAKING IN SONOMA

The grassy hills of Sonoma and Marin counties have been used to graze herds of dairy cattle since the mid-19th century, when Swiss-Italian and Irish immigrants lured to the San Francisco Bay Area during the Gold Rush established dairies on the sparsely forested green hills around Petaluma, Marshall and Tomales. Cool, foggy weather and abundant water allowed grass to grow nearly year-round, and well-fed dairy cattle produced thousands of gallons of milk and tons of butter for the burgeoning city of San Francisco and the entire Northern California region. Even before the

[26] "Italian Americans in California", published inline by the Bancroft Library, accessed at http://bancroft.berkeley.edu/collections/italianamericans/exhibit_room04_03.html on August 11, 2014.
[27] Christopher VerPlanck, "After the Fair Was Over: Marina District Development Takes Off" *Heritage News*, Fall 2007, 5.

construction of the Golden Gate Bridge, Sonoma and Marin dairymen shipped milk and butter down the Petaluma River and out of Tomales and Drake's bays into nearby San Francisco harbors.

Although Spanish priests made small amounts of cheese from Mission livestock in the early 1800s, the first production cheese-maker in what would become Sonoma County was Petaluma's Marin French Cheese Company, which was established in 1865 and remains America's longest continually operating cheese company.[28] However, few other cheese-making companies were established in the area through the end of the nineteenth century, due largely to lack of demand: America was not a cheese eating country, and the small demand for cheese was met by imports from Europe.

Modern cheese-making in the city of Sonoma traces its origins to the Sonoma Mission Creamery, which was founded by Joseph Vella and John Iacono in 1915.[29] Vella and Iacono had already established cheese plants in nearby Tomales, Nicasio, and Half Moon Bay when they opened their Sonoma business on First Street West. Here, trucks delivered cream and milk from the area's farms, and the butter and cheese that was produced was then sold in San Francisco under the brand "Valley of the Moon." Celso Viviani began to learn to make cheese at this creamery in the early 1920s, after Prohibition drove him out of the commercial distillery where he had been working. In 1924, Tom Vella, younger brother of Joseph Vella, arrived in Sonoma from Italy and also began to make cheese at the Sonoma Mission Creamery. In 1931, Viviani and Tom Vella and established the first dedicated cheese making company in Sonoma, inside a former brewery on Second Street East. They called their new company the Sonoma Valley Creamery, a name that quickly shifted to the Sonoma Valley Cheese Factory and later the Sonoma Cheese Factory.

Viviani and Vella made cheese together for over ten years before dividing their business in the late 1940s. During this time and in the decades after they separated their partnership, they trained a generation of cheese-makers, including family members as well as others that went on to establish cheese companies in Sonoma, the Sonoma Valley, and adjacent Marin County.[30] Both families continue to own and operate the cheese companies that were established by their forbearers. The Vella Cheese Company is located at the former brewery on Second Street East, where the company was first located. In 2006, Ignacio Vella, the son of Tom Vella, was honored with a lifetime achievement award from the American Cheese Society, and upon his death in 2009, he was referred to by cheese makers around the country as the "godfather of artisan cheese movement."[31] Celso Viviani's grandson David Celso Viviani likewise received a Hall of Fame/Lifetime Achievement Award from the California Cheese and Butter Association for recognition of his family's contribution to the development of cheese making in California.[32]

Over the last two decades, Sonoma and Marin counties have become a well-established premier cheese region; over two dozen cheese makers produce artisanal, hand-crafted cheeses, and the area hosts two cheese festivals.[33] From the wave of artisanal companies that were established in 1970s like

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[28] "History", published at the Marin French Cheese website, accessed at http://www.marinfrenchcheese.com/ on August 17, 2014.
[29] Hill, 83.
[30] Nicolas Grizzle, "Cheese Please Me", published at Bohemian.com, accessed online at http://www.bohemian.com/northbay/festival-des-fromage/Content?oid=2568838&storyPage=3 on August 17, 2014.
[31] Susie Rodriguez, "80 Years of Making Cheese", *The Sonoma Press Democrat*, March 17, 2012. Accessed online at http://sonoma.towns.pressdemocrat.com/2012/03/news/80-years-of-making-cheese/ on August 17, 2014.
[32] "David Celso Vivani, Recipient" California Cheese and Butter Association website, accessed at http://www.cacheeseandbutter.org/index.php?page=past_conventions on August 17, 2014.
[33] Stett Hollbrook, "Praise Cheeses", published at Bohemian.com, accessed online at http://www.bohemian.com/northbay/praise-cheeses/Content?oid=2281641 on August 17, 2014.

Matos Cheese Factory and Redwood Hill Farms, to more recently established favorites like Cowgirl Creamery and Achadinha Cheese Company, cheese-making runs a close second to wine making in the Sonoma Valley in terms of its tourism appeal and agricultural-related economic output. Many of the area's contemporary cheese-makers trace their education and training to the factories of the Vella Cheese Company and the Sonoma Cheese Factory.[34]

V. EVALUATION

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (California Register) is an inventory of significant architectural, archaeological, and historical resources in the State of California. Resources can be listed in the California Register through a number of methods. State Historical Landmarks and National Register-listed properties are automatically listed in the California Register. Properties can also be nominated to the California Register by local governments, private organizations, or citizens. The evaluative criteria used by the California Register for determining eligibility are closely based on those developed by the National Park Service for the National Register of Historic Places.

In order for a property to be eligible for listing in the California Register, it must be found significant under one or more of the following criteria:

- *Criterion 1 (Events)*: Resources that are associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

- *Criterion 2 (Persons)*: Resources that are associated with the lives of persons important to local, California, or national history.

- *Criterion 3 (Architecture)*: Resources that embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic values.

- *Criterion 4 (Information Potential)*: Resources or sites that have yielded or have the potential to yield information important to the prehistory or history of the local area, California, or the nation.

The following section examines the eligibility of 2 West Spain Street, Sonoma, California for listing in the California Register.

Criterion 1 (Event)

2 West Spain Street appears to be significant under Criterion 1 (Events) for its association with the emergence of the cheese-making industry in Sonoma, California. The building was constructed in 1945 to serve as the first purpose-built headquarters of the Sonoma Valley Creamery, which became the Sonoma Valley Cheese Factory, and then the Sonoma Cheese Factory. This company was established by Celso Viviani and Tom Vella, both Italian immigrants who learned the craft of cheese-making while employed at the Sonoma Mission Creamery, which was founded by Tom Vella's brother Joseph Vella and John Iacono in 1915. When Celso Viviani and Tom Vella established their business in 1931, it was the first dedicated cheese-making company in the town of Sonoma. When

[34] Nicolas Grizzle, "Cheese Please Me"

the company was established, it operated out of a converted brewery on Second Street East. After thirteen years, most of which were very busy in the lead-up to World War II, the company built a new headquarters building, located right on the Plaza. The new building included factory space as well as retail and office space. Although Viviani and Vella dissolved their business partnership shortly after the building was constructed, Viviani continued to operate the Sonoma Cheese Factory at this location. Lawrence "Pete" Viviani took over control of the business prior to Celso Viviani's death in 1955, and the company is still operated by Pete Viviani's son David Viviani.

A generation of cheese makers, including many Viviani and Vella family members as well as others, was trained in the craft of cheese making at the Sonoma Cheese Factory as well as at the Vella Cheese Company. Many of these cheese makers went on to establish cheese companies in Sonoma, the Sonoma Valley, and adjacent Marin County. Over the last two decades, Sonoma and Marin counties have become a well-established premier cheese region; over two dozen cheese makers produce artisanal, hand-crafted cheeses, and the area hosts two cheese festivals.[35] For its role as the first dedicated cheese-making company in Sonoma, and the influence the Sonoma Cheese Company has had on the emergence of cheese making as an industry in Sonoma and the Sonoma and Marin County region, 2 West Spain Street appears eligible for the California Register under Significance Criterion 1 (Events).

The period of significance for this Criterion begins in 1945 when the building was constructed and ends in 1968, when Pete Viviani moved to Mexico and the Sonoma Cheese Factory expanded its business model to include sandwich concession and a broader retail focus; however, the tradition of cheese making continued in this building until 2001.

Criterion 2 (Person)

2 West Spain Street does not appear to be significant under Criterion 2 (Persons) for its association with the lives of persons important to local, California or national history. The building can be said to be associated with Celso Viviani, who along with Tom Vella founded the Sonoma Valley Creamery and participated in the early development of the cheese making industry in Sonoma. However, Viviani's significance is more accurately characterized as contributing to a pattern (the emergence of the cheese making industry), rather than specifically and individually important. The significance of Celso Viviani, as a person who contributed to the emergence of the cheese making industry in Sonoma, is discussed (and determined significant) under Criterion 1 (Events). For this reason, the building does not appear to be eligible for the California Register under Significance Criterion 2 (Persons).

Criterion 3 (Architecture)

West Spain Street does not appear to be significant under Criterion 2 (Architecture) as a building that embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values. The building was completed in 1945 and is designed in a transitional style that includes both Streamline Moderne and International design elements. Streamline Moderne style was prevalent from 1935 to 1950, and was an architectural expression of that era's embrace of the speed and sleekness of machine technology.[36] The emergence of this style overlapped with the economic depression of the 1930s and the decline in construction during World War II: due to this, relatively few buildings were constructed in the Streamline Moderne style. The style was most common in the San Francisco Bay Area in residential construction

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[35] Stett Hollbrook, "Praise Cheeses"

[36] Mary Brown, San Francisco Planning Department, "San Francisco Modern Architecture and Landscape Design Historic Context Statement" adopted by the San Francisco Preservation Commission, January 2011, accessed online at http://commissions.sfplanning.org/hpcpackets/2011.0059U.pdf on August 17, 2014.

and commercial storefront modernization. The primary character-defining features for this style include smooth stucco or concrete façade surfaces, rounded corners and curved surfaces, flat roof with coping at the roofline, and a horizontal orientation and asymmetrical façade.

2 West Spain Street includes some Streamline Moderne design elements such as a flat roof (or near-flat, at the front two-story portion of the building), and the stucco-clad rounded ribs at the primary façade. However, the building does not include such character defining features of the Streamline Moderne style including smooth stucco or concrete façade surfaces, rounded façade corners, horizontal orientation, or asymmetrical façade. Lacking these features, the building cannot be said to embody the distinctive characteristics of the Streamline Moderne style.

2 West Spain Street also includes some International design elements. International style architecture was prevalent from 1935 to 1965, and was an outgrowth of a movement in Europe that sought to establish a formal and functional theory of architecture for the modern age. As many of these architects came to the United States in the years directly before World War II, these ideas worked their way into the architecture of the American postwar building boom. 2 West Spain Street includes several influences of this style, including a rectangular massing with strong right angles and simple cubic form, lack of ornamentation, and cantilevered roof overhang. However, it does not include the style's character-defining features such as horizontal bands of windows, emphasis on horizontality, smooth stucco or concrete cladding, corner windows, and brightness, often achieved through white paint. The building cannot be said to embody the distinctive characteristics of the International style.

Although original building permits and plans for the building have not been recovered, 2 West Spain Street appears likely to have been designed by architect Pietro G. Canali, an Italian architect about whom little information has been uncovered. Canali appears to have practiced architecture in the Bay Area between 1924 and 1942, designing homes in the newly developed Marina District of San Francisco in the second half of the 1920s. As of the completion of this report, 2 West Spain Street is this architect's only attributed project, and he cannot be described as a master architect.

Overall, 2 West Spain Street includes some design elements of both Streamline Moderne and International style architecture, and cannot be described as embodying the distinctive characteristics of either of these styles. Likewise, it is not the work of a master architect, and it does not include façade detail or treatment that can be described as having high artistic value. For these reasons, the building does not appear to be eligible for the California Register under Significance Criterion 3 (Architecture).

Criterion 4 (Information Potential)

This property was not assessed for its potential to yield information important in prehistory or history, per National Register and California Register Criterion 4 (Information Potential). This Criterion is typically reserved for archeological resources. The analysis of 2 West Spain Street for eligibility under Criterion 4 (Information Potential) is beyond the scope of this report.

CHARACTER DEFINING FEATURES

For a property to be eligible for historical register designation, the essential physical features (or character-defining features) that enable the property to convey its historic identity must be evident. These distinctive character-defining features are the physical traits that commonly recur in property types or architectural styles. A property must clearly contain enough of those characteristics to be considered a true representative of a particular type, period, or method of construction, and these features must also retain a sufficient degree of integrity (discussed in the following section). Characteristics can be expressed in terms such as form, proportion, structure, plan, style, or materials.

The character defining features of 2 West Spain Street include:

- The building's generally rectangular footprint and massing, including two story portion at the south (front) and one high bay story at the center portion. These portions convey the building's historic factory, retail, and office use. Fenestration pattern and material at the first and second story of the primary (south) façade and at the front (south) portion of the east and west facades, including two doors, plate glass windows, glass block windows at the first story, and multi lite windows at the second story.
- Flat metal awnings with rounded corners above the two primary entrances of the building.
- Rectangular vertically-oriented glazed orange tile cladding at the primary (south) façade and front (south) portions of the east and west facades.
- Four full-height white stucco-clad metal ribs at the primary façade.
- Slightly up-pitched roof at the two-story front (south) portion of the building, including the curved white stucco-clad overhang.
- Projecting vertical perimeters of the primary (south) façade.

Features that are not considered character defining features of 2 West Spain Street include those that were added after the period of significance (1945-1968), as well as features that represent agglomerative utilitarian construction, and are no longer used for cheese production, including:

- Agglomerative additions to the north (rear) portion of the building that were constructed between 1959 and 1981. These agglomerative additions are utilitarian in design and construction, and are no longer used for cheese production, and are therefore not considered character defining features of the building at this time.
- Stucco cladding at the east and west facades.
- All material elements of the one-story open porch at the east façade.
- Full-height multi-lite windows with anodized aluminum sash at the east façade.

INTEGRITY

In addition to qualifying for listing under at least one of the California Register criteria for historic significance, a resource must also retain historic integrity. Integrity is defined as "the authenticity of an historical resource's physical identity by the survival of certain characteristics that existed during the resource's period of significance," or more simply defined as "the ability of a property to convey its significance."[37] A building or structure must stand up under seven variables, or aspects, which define integrity - location, design, setting, materials, workmanship, feeling and association. According to the National Park Service's *National Register Bulletin Number 15: How to Apply the National Register Criteria for Evaluation,* the aspects of integrity are defined as follows:

- *Location* is the place where the historic property was constructed.

- *Design* is the combination of elements that create the form, plan, space, structure and style of the property.

- *Setting* addresses the physical environment of the historic property inclusive of the landscape and spatial relationships of the building(s).

[37] California Office of Historic Preservation, *Technical Assistance Series No. 7: How to Nominate a Resource to the California Register of Historical Resources* (Sacramento, CA: California Office of State Publishing, 4 September 2001), p. 11

- *Materials* refer to the physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the historic property.

- *Workmanship* is the physical evidence of the crafts of a particular culture or people during any given period in history.

- *Feeling* is the property's expression of the aesthetic or historic sense of a particular period of time.

- *Association* is the direct link between an important historic event or person and an historic property.

To retain historic integrity, a property will often possess several, if not all of the aforementioned aspects. Specific aspects of integrity may also be more important, depending on the criteria for which it is significant.

2 West Spain Street retains integrity of location because it is has not been moved and is still located at the site where it was constructed. It also retains integrity of setting; despite some updates to storefronts along the surrounding streetscape, the majority of the buildings on the block, including the Plaza on the southern side of the street, predate the construction of 2 West Spain Street and reflect the setting of the block from the building's period of significance (1945-1968). The building also retains integrity of association, because it was constructed to function as the cheese factory and retail location for Viviani's Sonoma Cheese Factory. It served that use for 56 years until cheese production stopped here in 2001, and it remains in operation as the retail location of the Sonoma Cheese Factory. The property retains integrity of feeling, because the combined lack of change at the property (of material, setting, and use) allows the building to continue to express the era in which it was constructed.

The building generally retains integrity of design, material, and workmanship, despite some changes that have taken place that postdate the period of significance (1945-1968). The primary façade expresses no notable changes since the building was constructed, and no permitted changes to the primary façade have been recorded. Several iterative changes have been made at the rear of the building to adapt to changes in the method of cheese production and distribution over the years. Interior changes have been made as well to modernize and upgrade the retail space at the front of the building. In 1974, the outdoor open-air eating porch was added to the east perimeter of the building, which would be removable without affecting the integrity of the building. New fenestration at the rear portion of the east façade is not reversible but affects a proportionally small portion of the building. Undated stucco cladding that has been added to the east and west facades does cover a fairly large percentage of the building's original cladding. However, it appears that the building's original tile cladding is extant under the stucco, and the stucco is located at the side facades beginning at a line several feet back from the front of the building. Overall, these changes have a minimal effect on the building's overall integrity of design, materials and workmanship. The building retains sufficient integrity to convey its associations with the significant history of cheese production in the Sonoma Valley.

VI. CONCLUSION

2 West Spain Street was built in 1945 for Celso Viviani to serve as the factory, retail space, and office for the Sonoma Cheese Factory, a company that, when it was established in 1931 by Viviani and Tom Vella, was the first dedicated cheese-making company in Sonoma. The building, which has previously been attributed to Pero D. Canali, is likely the work of architect Pietro G. Canali, an Italian architect who lived and worked in the Bay Area between 1925 and 1969. The building appears to be eligible for the California Register; this report finds the building to be significant under evaluative Criterion 1(Events) for its association with the development of the cheese industry in Sonoma. Despite some alterations to the building that postdate the building's period of significance (1945-1968), the building retains sufficient integrity to convey its associations with the significant history of cheese production in the Sonoma Valley. Therefore, it is the finding of this report that 2 West Spain Street is eligible for listing on the California Register.

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July 9, 2015
Agenda Item #4

M E M O

To: Planning Commission

From: Planning Director Goodison

Re: Study session on the update of the Circulation Element, including review and discussion of updated policies

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Background

A General Plan is a state-mandated document that sets forth a community's vision and goals with regard to its future development. Under the law, it is intended to be a comprehensive document that addresses land use, circulation, housing, open space preservation, and other aspects of the community in a cohesive manner. Last year, the City began the process of updating the Housing Element and the Circulation Elements of its General Plan, with consultant assistance from the M-Group and W-Trans. The updates of the two Elements have been on separate tracks, because the adoption of the Housing Element is subject to a State-mandated timetable that does not apply to the Circulation Element. For this reason, the Housing Element update was prioritized in the schedule and was completed in March 2015. Now that work on the Housing Element is complete, the focus is on the Circulation Element and the preparation of a downtown parking study.

As it has been some time since the Planning Commission has discussed the Circulation Element update and as the composition of the Commission has changed, it seems appropriate to review the overall objectives and tasks associated with the update. The purpose of the Circulation Element is to coordinate development of the city circulation system with existing and planned land uses. Areas of particular focus include pedestrian, bicycle, and transit improvements, as well as auto use. The Circulation Element serves as the policy basis for the development of an integrated circulation system and it specifies the improvements necessary to resolve existing deficiencies and accommodate planned growth. The element emphasizes the importance of promoting alternatives to auto use as a means of avoiding the need for or minimizing road improvements while maintaining adequate service levels.

A key objective of the Circulation Element update is to ensure that it complies with State General Plan guidance concerning "Complete Streets" principles, as this will be necessary to qualify for many types of transportation improvement funding. The term "Complete Streets" describes a comprehensive, integrated transportation network with infrastructure and design that allows safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, children, youth, and families.

The update of the Circulation Element includes the following components:

- Updated traffic counts and existing intersection LOS for the street segments and intersections addressed in the current Circulation Element (16 intersections and 22 street segments). (Complete.)

- Updated traffic projections for the year 2020 and the year 2040 based on updated land use information and the Sonoma County Traffic Model. (Complete.)

- Identification of needed intersection and roadway improvements. (Draft recommendations are nearly complete.)

- Development of updated information on bicycle use and bicycle facilities, pedestrian use and pedestrian facilities, and transit use and transit facilities. (Complete.)

- Analysis of existing polices and programs in the Circulation Element and to identify needed revisions and additions. (Draft recommendations are complete and are presented to the Planning Commission for review.)

- Analysis of the intersections of Broadway/West Napa Street and West Napa Street/First Street West with respect to traffic and pedestrian safety conditions and develop options for improving those intersections. (A joint study session of the Planning Commission and the Traffic Safety Committee was conducted on this subject last September. Direction was given to provide additional information and options.)

A related task is the preparation of a downtown parking study assessing existing parking resources and community needs to determine future parking needs and goals for a parking management plan. Elements of this study include the following:

- Conducting an inventory/survey of existing off-street parking and on-street parking supply, utilization and duration/turnover (usage) within the study area. (Complete)

- Determining current parking needs and deficiencies and estimating future parking needs. (In progress)

- Conducting public outreach to identify and prioritize parking issues/problems. (In progress.)

- Evaluating spillover effects on surrounding neighborhoods. (In progress.)

- Developing recommendations for parking management goals. (In progress.)

The Parking Management Plan is not actually part of the Circulation Element update, but its findings and recommendations will help inform policies and programs in the Circulation Element related to the downtown area.

Review of Updated Policies

As discussed above, a key task of the update is to review and revise the policies of the Circulation Element, especially with respect to ensuring that they embody the principles of “complete streets.” To this end, the consultants have prepared a draft set of updates for review by the Planning Commission.

Recommendation

Staff recommends that the Planning Commission provide discuss and provide feedback on the draft updated policies.

Enclosures (previously distributed):

1. Draft updated policies
2. Circulation Element Background Report

Goal 1: Maintain a Citywide Roadway System that Provides for the Safe and Efficient Movement of People and Goods to All Parts of Sonoma

Policies

Existing Circulation Element Policies to be Maintained or Modified

3.1 Promote safety for all users of the street system.

3.5 Maximize efficient use of the existing circulation system and avoid widening streets to the extent possible.

New Policies to be Added

Policy 1x: Ensure that the City's circulation network is a well-connected system that effectively accommodates vehicular and non-vehicular traffic in a manner that considers the context of surrounding land uses and the needs of all roadway users.

Policy 1x: When analyzing the circulation network, consider the needs of all users including those with disabilities, ensuring that pedestrians, bicyclists, and transit riders are considered at an equal level to motor vehicle drivers.

Policy 1x: Consider all transportation improvements as opportunities to enhance safety, access, and mobility.

Policy 1x: Design intersections to provide adequate and safe access for all users including pedestrians, bicyclists, and motorists of all ages and abilities, and in a manner that is appropriate for the surrounding land use and cultural context.

Policy 1x: Consider the use of roundabouts and mini-roundabouts to maximize intersection efficiency, maintain continuous but moderate traffic flow, reduce accident severity, and enhance pedestrian and cyclist circulation.

Policy 1x: Establish a motor vehicle Level of Service (LOS) standard of LOS D at intersections. The following shall be taken into consideration in applying this LOS standard:

- Efforts to meet the vehicle LOS standard shall not result in diminished safety for other modes including walking, bicycling, or transit (see Policy 1.x *[next policy listed below]*).
- At signals, roundabouts, and all-way stop-controlled intersections, the LOS D standard shall be applied to the overall intersection operation and not that of any individual approach or movement.
- At unsignalized intersections, levels of service shall be determined for both controlled movements and for the

overall intersection. Controlled movements operating at LOS E or LOS F are considered acceptable if the intersection is projected to operate at LOS C or better overall, and/or if the "Peak Hour" signal warrant outlined in the California Manual on Uniform Traffic Control Devices is not met.

- Levels of service shall be calculated using the average hourly delay for all vehicles entering the intersection, and assessed for the entire peak hour (60 minutes) rather than the peak 15-minute period (PHF=1.0).
- The five intersections surrounding the historic Sonoma Plaza shall be exempt from vehicle LOS standards in order to maintain the historic integrity of the Plaza and prioritize non-auto modes.

Policy 1x: Intersections may be exempted from the vehicle LOS standards established in Policy 1x in cases where the City Council finds that the infrastructure improvements needed to maintain LOS D operation (such as roadway or intersection widening) would be in conflict with goals of for improving multimodal circulation, or would lead to other potentially adverse environmental impacts. For those locations where the City allows a reduced motor vehicle LOS or queuing standard, additional multimodal improvements and/or transportation demand management (TDM) measures may be required in order to reduce impacts to mobility.

Policy 1x: Ensure that new development contributes its proportional share of the cost of improvements necessary to address cumulative transportation impacts on the multimodal circulation network.

Existing Policies to be Deleted

3.7 Ensure that new development mitigates its traffic impacts. *(Replaced with updated wording)*

Implementation Measures

Existing Implementation Measures to be Maintained or Modified

3.5.2 Work with the County of Sonoma and the Sonoma Valley Citizens Advisory Commission to monitor potential traffic impacts of proposed development, to identify options for circulation improvements, and to implement methods of alleviating traffic congestion, such as improved signal timing along Highway 12.

3.6.1 Prioritize and implement circulation improvements through the five-year capital improvement program.

3.7.2 Require development projects to mitigate circulation impacts through installation of necessary associated improvements or payment of in-lieu fees, consistent with a nexus between the level of impact and

required improvements and/or contributions.New Implementation Measures to be Added

Implementation Measure 1x: Continually seek opportunities to fund maintenance of and improvements to the circulation network, including through pursuit of grant monies.

Implementation Measure 1x: Complete the following roadway improvements to maintain the safety and efficiency of the current circulation system, and to support buildout of the General Plan.

- List of improvements to be determined

Implementation Measure 1x: Prepare and adopt a transportation impact fee program that establishes a mechanism for new development to pay its proportional share of circulation improvements.

Implementation Measure 1x: Monitor ongoing efforts to establish multimodal LOS methodologies and assess whether implementation of multimodal LOS is appropriate for application in Sonoma. Should the City deem a multimodal LOS methodology to be suitable for application, the LOS standards described in Policy 1.x shall be amended to include quantitative evaluation of designated non-auto modes where deemed applicable.

Implementation Measure 1x: Routinely monitor collision trends in order to proactively respond to safety problems and changing conditions. Prioritize locations with high collision rates for safety improvements.

Implementation Measure 1x: Review plans for new or modified intersections to ensure that lane configurations are limited where possible to provide for moderate speeds and pedestrian and cyclist safety, and that curb extensions are installed where appropriate to reduce driving speeds and shorten pedestrian crossing distances.

Implementation Measure 1x: As part of the development review process, the Planning and Public Works Departments shall review development projects to ensure that developers:

- Construct transportation improvements along property frontages when appropriate
- Address the project's proportional share of impacts to the City's circulation network through payment of traffic mitigation and other fees
- For local project-related circulation impacts requiring improvements that are not included in an adopted impact fee program, either complete the necessary improvements or pay a proportional share of the cost
- Provide for complete streets to the extent feasible, facilitating walking, biking, and transit modes

- Fund transportation impact studies that identify on-site and off-site project effects and mitigation measures
- Provide adequate emergency vehicle access

Implementation Measures to be Deleted

3.5.3 Evaluate alternative design approaches to reduce congestion at the intersection of Fifth Street West/West Napa Street and other impacted locations. *(Unsure why this location is specifically highlighted)*

3.7.1 Establish a traffic impact fee. *(Replaced with updated wording)*

3.10.1 Adopt a specific Level of Service standard for the Plaza that reflects the community's desire not to install traffic signals in that area. *(Replaced with exemption for Plaza in LOS policy)*

Goal 2: Create Circulation Network that Supports and Encourages Travel by Non-Automobile Modes

Policies

Existing Circulation Element Policies to be Maintained or Modified

1.1 Preserve and establish short-cuts that give pedestrians and bicyclists alternatives to traveling along major streets.

1.2 Eliminate gaps and obstructions in the sidewalk system.

1.3 Improve pedestrian circulation and safety at major intersections.

1.4 Establish a system of hiking trails through major public open space.

2.1 Promote bicycling as an efficient alternative to driving.

2.2 Implement the extensions and upgrades to the bicycle network identified in the City's Bicycle and Pedestrian Master Plan, with a focus on establishing safe routes to popular destinations.

2.3 Expand the availability of sheltered bicycle parking and other bicycle amenities.

2.4 Resolve potential conflicts between bicycles and vehicles and pedestrians.

2.5 Incorporate bicycle facilities and amenities in new development.

3.3 Promote transit use and improve transit services.

3.6 Improve city streets as necessary to preserve safety and expand opportunities for alternative means of transportation.

3.8 Ensure that new development complements and extends the historic street grid pattern, where feasible, while minimizing cut-through traffic.

New Policies to be Added

Policy 2x: Work with utility providers to reduce or eliminate barriers to pedestrian and bicyclist mobility created by utility infrastructure.

Policy 2x: Prioritize pedestrian safety and convenience when considering circulation improvements near the Sonoma Plaza.

Policy 2x: Create an accessible circulation network that is consistent with guidelines established by the Americans with Disabilities Act (ADA).

Policy 2x: Prioritize bicycle and pedestrian safety for students traveling to and from school.

Policy 2x: Coordinate with Sonoma County Transit to maintain existing and, where feasible, build new lighted and sheltered seating facilities at bus stops.

Policy 2x: Ensure that adequate lighting is provided at all bus stops.

Implementation Measures

Existing Implementation Measures to be Maintained or Modified

1.1.1 Require the preservation or replacement of cut-through paths in conjunction with proposed development projects.

1.2.1 Create and fund pedestrian and bicycle improvement categories in the five-year Capital Improvement Program as a mechanism for identifying, budgeting, and implementing specific pedestrian and bicycle improvements, including constructing pathways and repairing and completing sidewalks.

1.3.2 Monitor and prioritize the need for pedestrian improvements through the Traffic Safety Committee.

2.1.1 Work with Caltrans, the County of Sonoma, Sonoma County Transit, Sonoma County Bicycle Coalition, and the SCTA to coordinate bicycle improvements within Sonoma Valley, to provide connections to regional routes, and to incorporate bicycle facilities such as carriers and racks on transit buses and at bus stops.

2.1.2 Work with schools and other interested organizations to establish safe bike routes and to promote bicycle use, registration, safety, and etiquette in accordance with the Police Department bicycle education program.

2.2.3 Require development projects to provide all rights-of-way and improvements necessary to comply with the Bicycle and Pedestrian Master Plan and Development Code requirements pertaining to bicycle and pedestrian amenities.

2.3.1 Implement Development Code requirements for bicycle access and amenities in commercial and multi-unit residential developments and update the provisions as necessary.

3.3.1 Work with Sonoma County Transit to improve transit coverage and headways on routes serving Sonoma.3.3.2 Construct attractive and consistently designed bus shelters along Highway 12 and other transit corridors.

New Implementation Measures to be Added

Implementation Measure 2x: Review traffic signal timing plans to ensure adequate crossing times for all users at signalized intersections.

Implementation Measure 2x: Review all transportation improvements to ensure installation in accordance with current accessibility standards.

Implementation Measure 2x: Review transportation corridors to identify barriers encountered by persons with disabilities, including locations with damaged sidewalk surfaces and non ADA-compliant curb cuts and ramps, and address such obstacles in the Capital Improvement Program as funding permits.

Implementation Measure 2x: Coordinate with the Sonoma Valley Unified School District to fund new Safe Routes to School plans for schools within the City of Sonoma.

Implementation Measure 2.x: Prepare an inventory of bicycle and pedestrian facilities at signalized intersections, and develop a program to install crosswalk actuators, bicycle detectors with stencils, and bicycle safety signs as appropriate where they currently do not exist.

Implementation Measures to be Deleted

1.3.1 Install crosswalk actuators and improve bicycle safety signs at all signalized intersections and bikeway crossings. *(Replaced as action item with modified text)*

2.2.1 Earmark Circulation Improvement Fee funds for bikeway system and facility improvements. *(Incorporated into other policy/policies)*

2.2.2 Prioritize and implement bicycle and trail improvements through the five-year Capital Improvement Program and the Bicycle and Trail Implementation Plan. *(Incorporated into other policy/policies)*

Goal 3: Coordinate circulation and land use patterns to ensure safe and convenient access to activity centers while maintaining Sonoma's neighborhoods and small-town character.

Policies

Existing Circulation Element Policies to be Maintained or Modified

3.2 Encourage a mixture of uses and higher densities where appropriate to improve the viability of transit, pedestrian and bicycle travel.

3.4 Encourage shared and "park once" parking arrangements that reduce vehicle use.

3.9 Protect residential areas by keeping traffic speeds low and discouraging through truck traffic.

3.10 Improve parking availability and traffic and pedestrian circulation around the Plaza area while maintaining the historic, small-town character of the area.

New Policies to be Added

Policy 3x: Recognize the role of streets not only as vehicle routes but also as parts of a system of public spaces, with quality landscaping, street trees, and bicycle and pedestrian amenities.

Policy 3x: If necessary, utilize traffic calming techniques to control vehicle speeds on residential streets as well as on collector streets within residential areas.

Implementation Measures

Existing Implementation Measures to be Maintained or Modified

3.5.1 Work collaboratively with Caltrans to ensure that the City's vision for the design and implementation of Highway 12 improvements is achieved.

3.9.1 Evaluate requests and proposed approaches to traffic calming through the Traffic Safety Committee.

3.9.2 Establish and enforce truck routes and regulations that apply to all heavy vehicles, including delivery trucks and tour buses.

3.10.2 Work with the State Parks Department to retain and expand the use of the Casa Grande lot for public parking.

3.10.3 Provide maps, signage, entrance lighting, and other improvements that advertise off-street public parking.

3.10.4 Work with property-owners to acquire land and/or develop public off-street parking to serve the Plaza area.

3.10.5 Explore the feasibility of creating a downtown improvement district to fund acquisition and development of parking as well as other types of improvements.

New Implementation Measures to be Added

none

Implementation Measures to be Deleted

none

GOAL 4: Effectively Integrate the City's Circulation System with Surrounding Regional Networks

Policies

New Policy to be Added

Policy 4x: Actively work with Sonoma County and SCTA in coordinating improvements to major roads in the unincorporated areas surrounding Sonoma.

Policy 4x: Continue to consult with Caltrans and Sonoma County on transportation planning, operations, and funding to improve automobile and non-automobile circulation on the Sonoma Highway corridor.

Implementation Measures

New Implementation Measure to be Added

Implementation Measure 4x: Provide land use and circulation data to the Sonoma County Transportation Authority (SCTA) as requested, and coordinate with SCTA in implementing and updating the regional Comprehensive Transportation Plan.

Circulation Element Update Background Report

Prepared for the

City of Sonoma

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October 8, 2014

Balancing Functionality and Livability
Traffic Engineering • Transportation Planning

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Appendix

A Intersection Level of Service Calculations

Setting

Urban Context

Sonoma is a compact city set in a semi-rural atmosphere with a small town feel. The city is located between Petaluma and Napa and is located along State Route (SR) 12, which stretches from the Sonoma County coast to the California Central Valley.

Sonoma's circulation system is largely dominated by SR 12 as it enters and exits the city's northwest and southern borders, and passes directly by the town's historic downtown square. The highway serves as the main transportation corridor connecting the town to western Sonoma County including Santa Rosa and US 101, Napa County including the City of Napa and SR 29, and Solano County including Fairfield and I-80. Regional traffic associated with this important east-west route creates traffic congestion through the middle of Sonoma during peak commute hours and on summer weekends.

Travel Characteristics

Census Journey to Work

Data from the 2010 US Census and 2008-2012 American Community Survey (ACS) were utilized to illustrate Journey to Work (JTW) statistics for Sonoma. According to the 2010 US Census, Sonoma's population was about 10,648 people. Year 2012 ACS data indicates that there are approximately 4,626 workers 16 years of age or older. The ACS reports that the majority of Sonoma's workforce, 67 percent of workers, drive to work alone, whereas about 11 percent of people walk or bike, 2 percent use transit or taxis, 9 percent carpool, and the remaining 11 percent work from home. Table 1 provides an overview of City of Sonoma's JTW mode split data compared to countywide statistics for Sonoma County and the State of California.

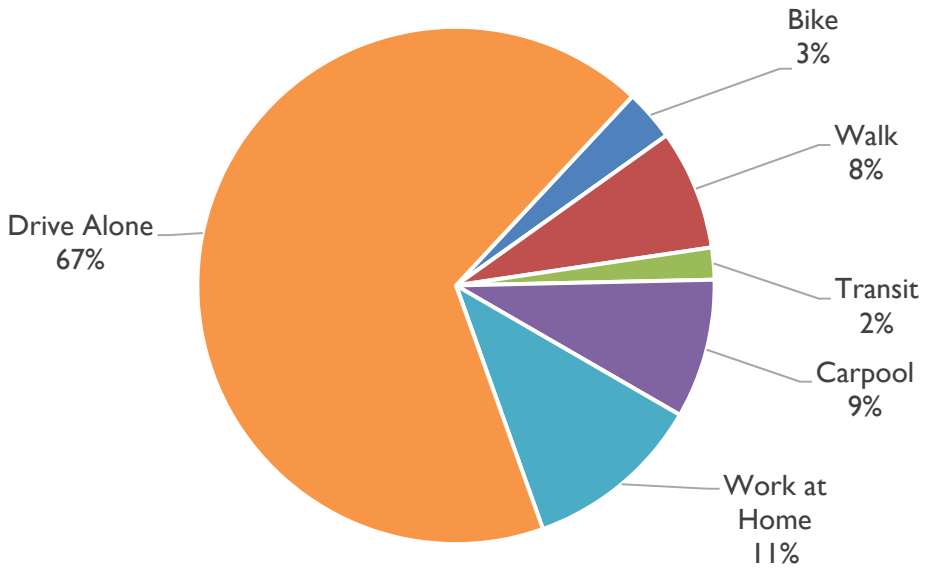

Table 1
Demographic and Journey to Work Data – 2010 US Census

	Sonoma	Countywide	California
Population	10,648	483,878	37,253,956
Employed persons	4,626 [1]	219,015 [2]	16,282,943 [1]
Mode Split			
Drove Alone	67.4%	76.5%	73%
Bike	3.2%	0.8%	1.1%
Walk	7.5%	2%	2.8%
Public Transit	0.9%	1.9%	5.1%
Carpool	8.7%	10.3%	11.5%
Motorcycle	0.2%	0.2%	0.3%
Other	0.9%	0.4%	0.9%
Worked at Home	11.2%	7.9%	5.2%

Notes: [1] Sonoma and State modal choice data obtained from 2008-2012 ACS 5-year estimates
[2] County modal choice data obtained from 2010 ACS 1-year estimates

Of the approximately 4,110 workers in Sonoma 16 years old or older who work *outside* the home, 39 percent, or 1,594 workers, have a travel time to work of 15 minutes or less. Travel time to work for Sonoma residents and the rest of the California workforce is shown in Table 2 below.

Table 2
2012 Travel Time to Work

	Sonoma [1]		California [1]
	Number	**Percentage**	**Workforce**
Workforce	4,110	100%	15,466,086
Travel Time	**Number**	**Percentage**	**Percentage**
Less than 15 minutes	1,594	38.8%	25.2%
15 to 29 minutes	843	20.5%	35.8%
30 to 44 minutes	529	12.9%	21.1%
45 minutes or more	1,144	27.8%	17.9%

Note: [1] Sonoma and State travel time data obtained from 2008-2012 ACS 5-year estimates

Vehicle Miles Traveled

A common indicator used to quantify the amount of motor vehicle use in a specified area is Vehicle Miles Traveled (VMT). VMT represents the total number of miles driven by persons traveling to and from a defined regional area, which for the purposes of this study is the City of Sonoma. Many factors affect VMT including the average distance residents commute to work, school, and shopping, as well as the proportion of trips that are made by non-automobile modes. Areas that have a diverse land use mix and ample facilities for non-automobile modes, including transit, tend to generate lower VMT than auto-oriented suburban areas.

Sophisticated travel demand models such as the SCTM\10 travel demand model operated by the Sonoma County Transportation Authority (SCTA) are needed to produce VMT estimates. The model's 2010 "base condition" scenario, which relies on existing travel characteristics and the built environment (such as land use quantities and patterns), estimates that approximately 277,700 vehicle miles of travel are generated daily within the City of Sonoma. This estimate reflects trips beginning or ending within the City of Sonoma and does not include regional traffic passing through the area (such as traffic on SR 12).

Existing Circulation Network

Complete Streets

An overarching theme that will carry through the Circulation Element Update process is that of "complete streets." The complete streets movement is an ideology and methodology that, with appropriate policy and backing by agencies, redefines how we use our streets and how we spend our money to improve them. This is accomplished by balancing allocation of space in the roadway right-of-way to provide safe and effective facilities that can be used for all modes and by all users. Complete streets are designed and operated to empower users of all ages and abilities to safely move along and across streets in a community, regardless of how they are traveling. As the National Complete Streets Coalition simply states, "Complete Streets are streets for everyone." They make it easy to walk to the market, take the bus to work, and bike to the park.

Complete Streets are comprised of elements that make getting around safer and more efficient. Roadways designed using a complete streets approach may include sidewalks, bike lanes or cycle tracks, wide paved shoulders in rural and semi-rural areas, special bus lanes, accessible and comfortable transit stops, frequent and safe crossing opportunities, median islands, mid-block pedestrian and bicycle crossings, accessible pedestrian signals, curb extensions or "bulb outs," narrower travel lanes, roundabouts and many other possible treatments that are selected based on the context of surrounding land uses and activities.

Roadway Network

Following is a description of the primary roadway corridors within the City of Sonoma. Figure 1 shows the average daily traffic (ADT) of road segments throughout the city.

West Napa Street is part of SR 12 and connects Sonoma Highway from Santa Rosa on the northwest side of the City to the north-south portion of SR 12 (Broadway) that continues onto Napa. West Napa Street runs east-west, generally has 11-foot travel lanes, and includes two way left-turn lanes on the majority of the segment. The posted speed limit is 25 mph.

East Napa Street begins at the Sonoma Plaza and continues east until its intersection with Eighth Street East. Beyond the Plaza, the street generally runs through residential neighborhoods, includes on-street parking, and has a posted speed limit of 25 mph.

West Spain Street runs parallel to West Napa Street, but carries a lower volume of vehicles per day. The road is approximately 38 feet wide, includes on-street parking, and has posted speed limits of 25 or 30 mph.

Broadway (SR 12) is designated as an Urban Principal Arterial by the County of Sonoma. It runs north-south, has 10.5-foot travel lanes and narrow shoulders near the south end and 12-foot travel lanes, room for on-street parking, and two way left-turn lanes near the north end. The posted speed limit is 25 miles per hour (mph).

Sonoma Highway is the portion of SR 12 that goes through the City of Sonoma. It runs north-south in the section in the northwest part of the City, has 11-foot travel lanes, two way left-turn lanes, and a posted speed limit of 30 mph.

Napa Road is designated as an Urban Principal Arterial by the County of Sonoma. The road runs east-west between Broadway (SR 12) and Sonoma's eastern city limits, has 12-foot travel lanes, and a posted speed limit of 40 mph.

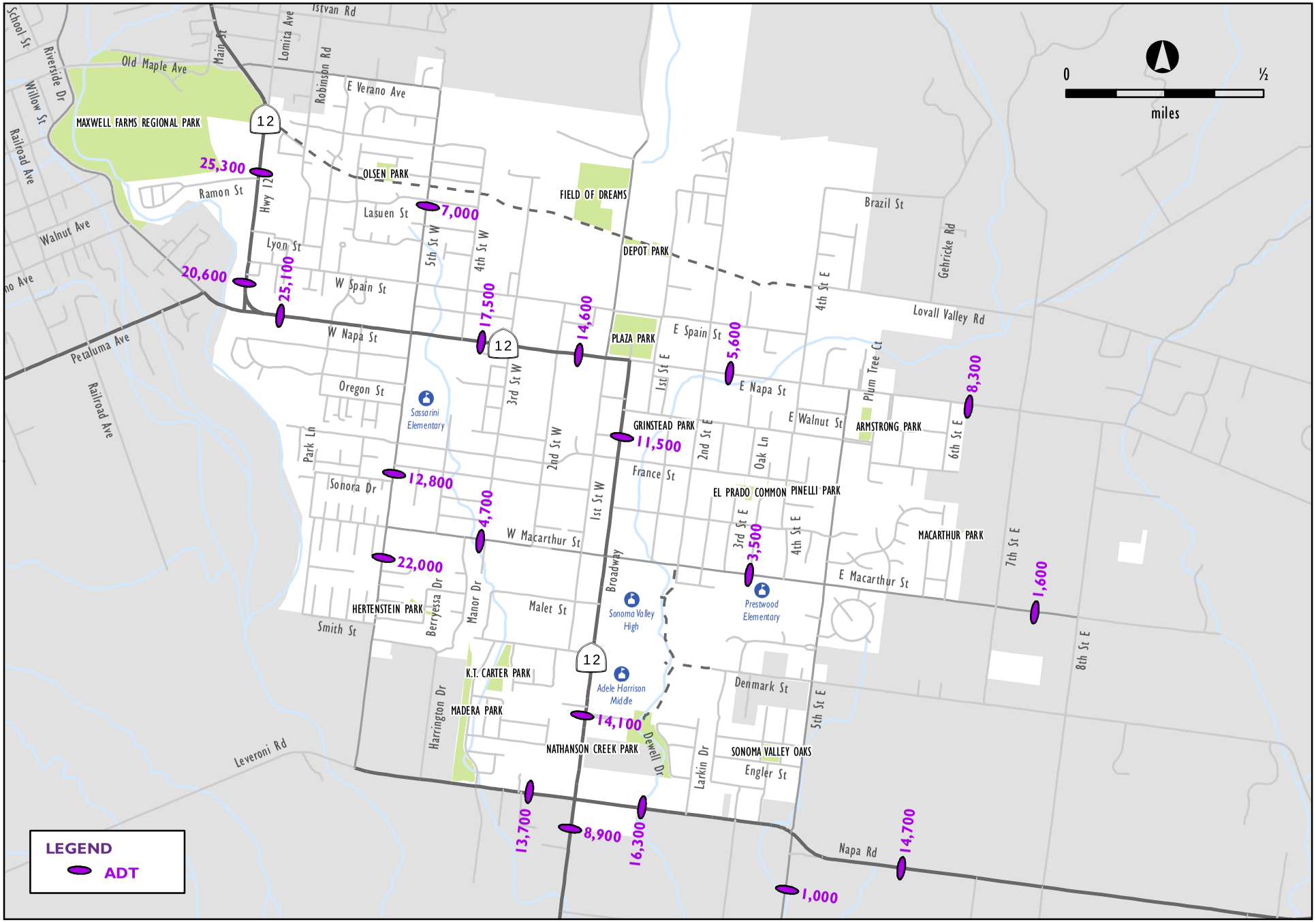

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Figure 1 - Roadway Segment Average Daily Traffic (ADT)

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Leveroni Road is designated as a Rural Minor Arterial by the County of Sonoma and runs east-west from the City's western limits to Broadway, where it turns into Napa Road. The road has 12-foot travel lanes, some on-street parking, and a posted speed limit of 45 mph.

West MacArthur Street is parallel to West Napa Street and Leveroni Road, has 10-foot travel lanes, five-foot bike lanes, on-street parking along the north side of the street, and a posted speed limit of 25 mph.

East MacArthur Street runs east-west from Broadway to the City's eastern limits. The road is approximately 40 feet wide, has on-street parking, and a posted speed limit of 25 mph.

Fifth Street East runs north-south, is 40 feet wide, has room for on-street parking, and a range of posted speed limits between 25 and 40 mph.

Fifth Street West runs north-south, has 10-foot travel lanes, five-foot bike lanes south of West Napa Street, on-street parking, and two-way left-turn lanes. The posted speed limit varies between 25 and 40 mph on Fifth Street West.

Verano Avenue runs east-west and connects northwest Sonoma with the unincorporated El Verano area of Sonoma County. The avenue is 40 feet wide, has room for on-street parking, and has a posted speed limit of 25 mph.

Traffic Volume Patterns

As in many communities, vehicular traffic volumes in Sonoma tend to peak during weekday commute periods. 48-hour traffic volume counts on Broadway and West Napa Street reveal these trends. Broadway has a peak in bi-directional traffic nearing 1,100 vehicles per hour for several hours during the afternoon and evening commute. Bi-directional volumes on West Napa show a similar trend, averaging approximately 1,300 vehicles per hour during the same afternoon time period. The existing segment volumes are shown in Plate 1 and Plate 2.

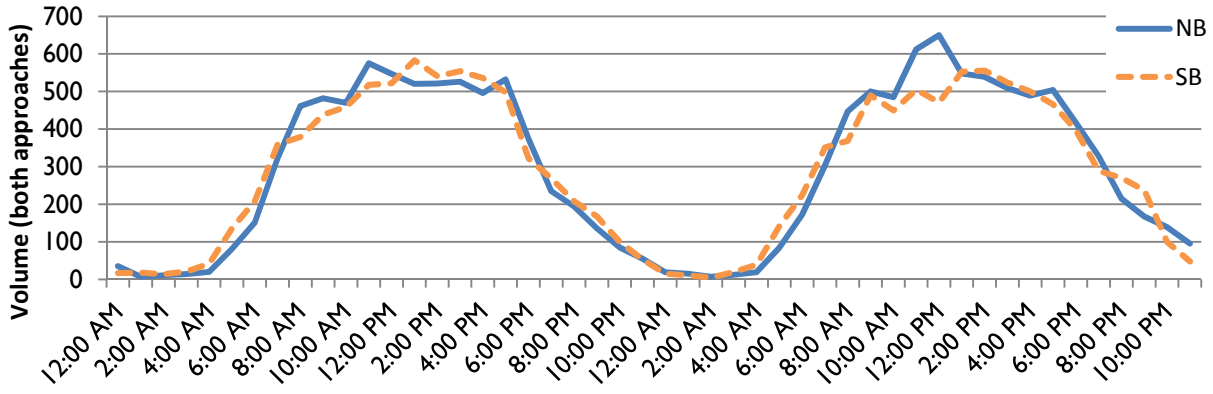


Plate 1 – 48-Hour Count on Broadway from Woodworth Lane to Newcomb Street

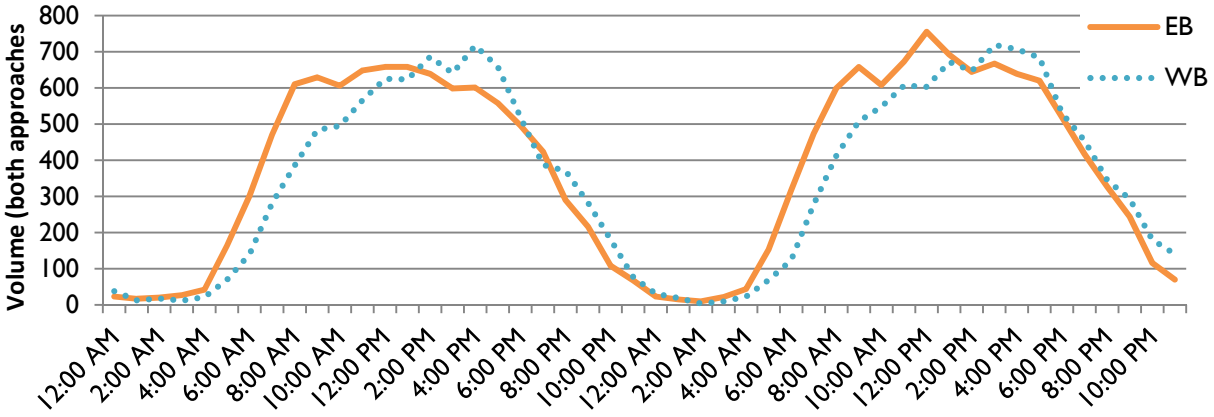


Plate 2 – 48-Hour Count on West Napa Street from Fourth Street West to Third Street West

Public Transportation System

Sonoma County Transit

Sonoma County Transit is the primary transit provider in Sonoma; it provides regularly-scheduled fixed-route service to major activity centers and transit hubs within the City limits. Four Sonoma County Transit routes serve the City of Sonoma. An exhibit showing bus routes in and surrounding the City is provided in Figure 2.

Route 30 travels between Santa Rosa, Oakmont/Kenwood, Glen Ellen, and Sonoma Valley/Sonoma. The route operates Monday through Friday between 5:15 a.m. and 9:30 p.m. with approximately hour–and-a-half to two-hour headways. Weekend service operates between 7:15 a.m. and 8:15 p.m. with approximately three-hour headways. Route 30 stops at Fifth Street West/West Napa Street and Sonoma Plaza in Sonoma.

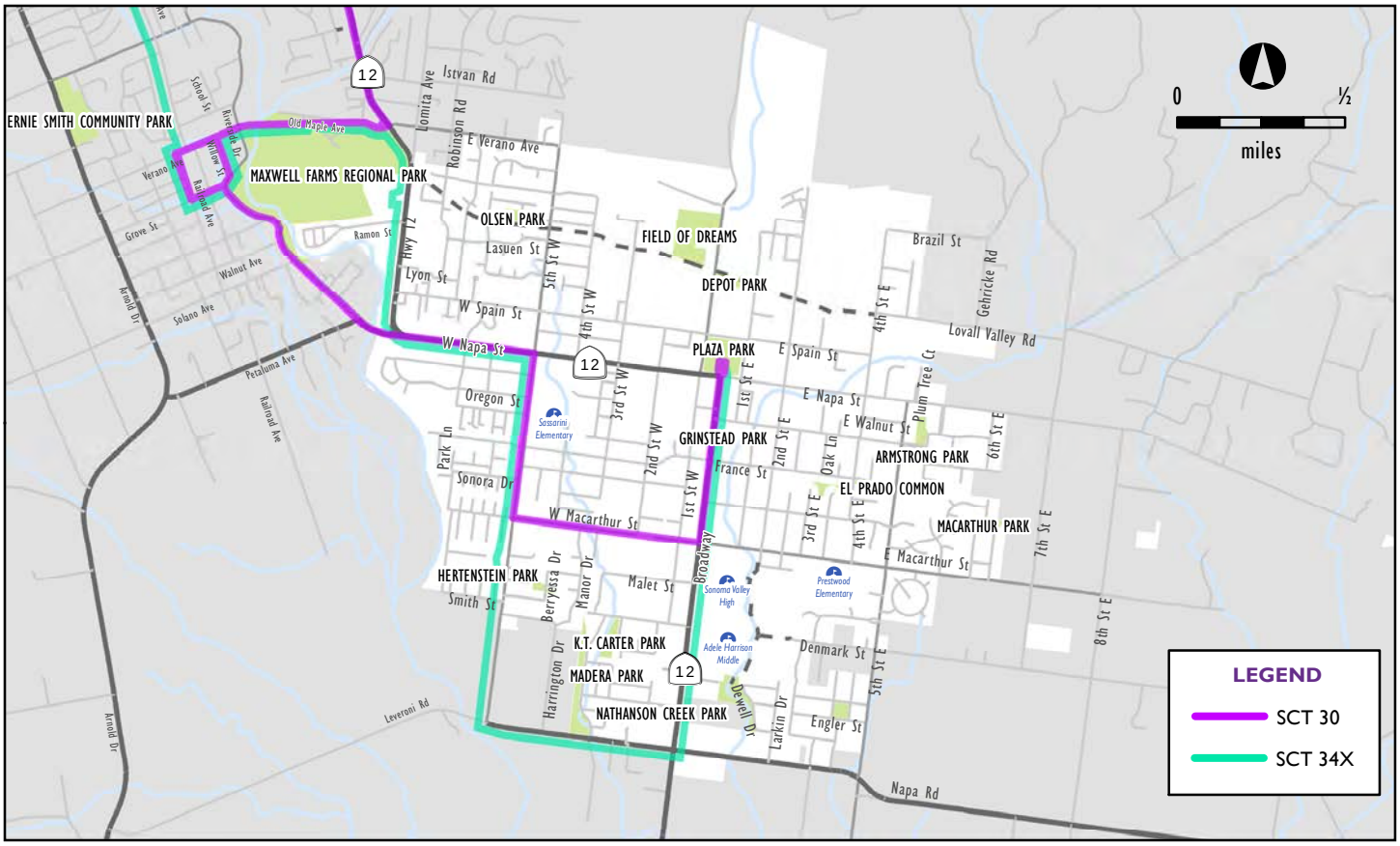
Route 32 is the Sonoma Valley Local Service and is provided Monday through Friday between 7:45 a.m. and 5:00 p.m. with approximately forty-five minute headways. Saturday service operates between 9:30 a.m. and 2:15 p.m. The route operates throughout the city limits and into the neighboring Sonoma Valley areas.

Route 34X is the express route that connects and provides service from Santa Rosa to Sonoma during a.m. peak hours and from Sonoma to Santa Rosa during p.m. peak hours. Route 34X operates Monday through Friday between 6:45 a.m. and 8:00 a.m. and between 4:35 and 5:45 p.m. There is no weekend service for this route.

Route 38 provides services connecting San Rafael to the Sonoma Valley area. Route 38 operates Monday through Friday during the a.m. and p.m. peak commute hours. The route operates along SR 37, through Sonoma Valley and up to Sonoma Highway.

Sonoma County Transit staff indicated that all service routes in Sonoma operate well within maximum capacity levels. System wide, SCT carried over 1.3 million passengers in 2013.

Sonoma County Transit maintains shelters at nine bus stops within Sonoma, and three additional stops have benches. Front loading bicycle racks, which typically accommodate three bicycles, are provided on all fixed route transit buses that operate in Sonoma County. Bicycle rack spaces are available on a first come, first served basis. When the front loading racks are full, drivers can accommodate bicycles inside



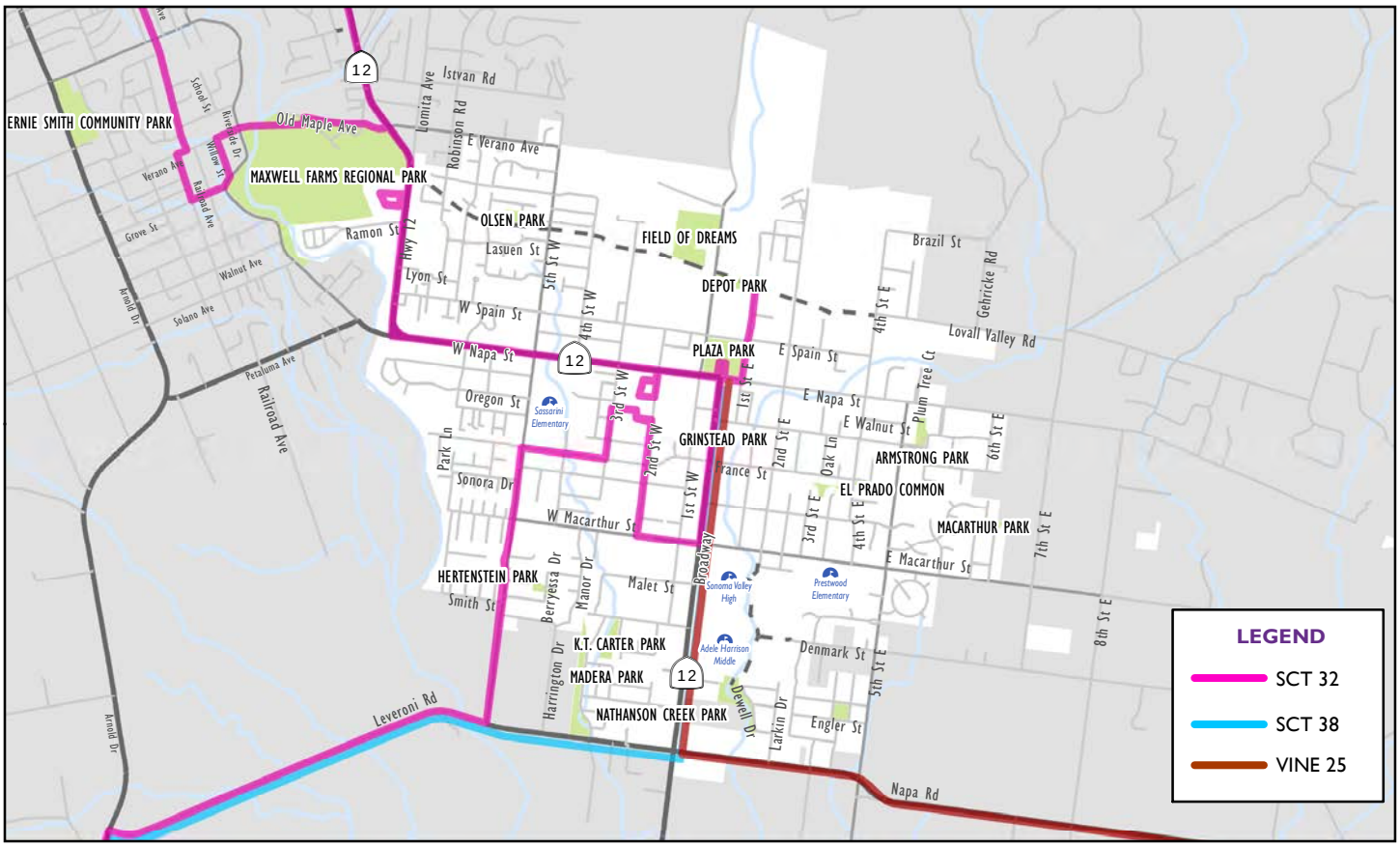


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Figure 2 - Transit Facilities

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the bus at their discretion; however, in the event that it is the last scheduled bus of the day, bicycles are permitted inside the vehicle.

VINE Transit

VINE Transit is the primary transit operator in Napa County. VINE route 25 connects the Sonoma Plaza with the Soscol Gateway Transit Center in downtown Napa, which is VINE's main transit transfer hub. Route 25 operates six times daily on weekdays.

Paratransit

Paratransit, also known as dial-a-ride or door-to-door service, is available for those that are unable to independently use the transit system due to a physical or mental disability. Individuals must be registered and certified as ADA eligible before using the service. Paratransit operators are required by the ADA to service areas within three-quarters of a mile of their respective, public fixed-route service. Volunteer Wheels serves as the ADA paratransit operator for Sonoma County Transit and the City of Sonoma. Service hours are Monday through Friday from 5:00 a.m. to 11:00 p.m. and Saturday and Sunday from 7:00 a.m. to 9:00 p.m. Ride reservations can be scheduled daily.

Taxi Service

Taxi service in Sonoma is provided by private operators that serve the greater Sonoma County area and beyond. Taxi service is available 24 hours a day, seven days a week by calling in a service request.

Bicycle and Pedestrian System

The following section describes the bicycle and pedestrian network and activities in Sonoma. Bicycle and pedestrian volumes were collected during the weekday p.m. peak hour in June 2014 at all 16 study intersections. These bicycle and pedestrian volumes are shown in Figures 3 and 4, respectively.

Bicycle Facilities

Bicycle circulation in Sonoma is supported by an existing network of multi-use paths, on-street bike lanes, and bicycle routes. Notable facilities include the Sonoma City Trail, which runs from SR 12/ Lomita Ave to Fourth Street/Lovall Valley Road. Other Class I trails include the Nathanson Creek Trail with connection between Fine Avenue and East MacArthur Street, the Fryer Creek Trail which stretches from Leveroni Road to Arroyo Way and connects with the Hertenstein Park trail, and the Sonoma Creek Path which parallels the waterway to Riverside Drive. The City's *Bicycle and Pedestrian Master Plan*, a map excerpt of which is shown in Figure 5, expands upon the existing network to create a robust bicycle circulation system in Sonoma. The Plan includes important bicycle facility improvements such as proposed Class II bike lanes on SR 12, as well as proposed Class II bike lanes on Fifth Street East and Leveroni Road/Napa Road and Class III bike lanes on major streets on the east side of Sonoma.

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal infrastructure, curb ramps, and streetscape amenities. The *Sonoma Bicycle and Pedestrian Master Plan* identifies one Pedestrian District in Sonoma (an area of high activity where pedestrian improvements should be prioritized), which is around the Sonoma Plaza, near Sonoma City Hall, and located in the center of the city. The boundaries of this district are Spain Street, First Street East, First Street West, and Napa Street. Nearly complete sidewalk coverage, accessible curb ramps, and marked crosswalks are provided along arterial streets in Sonoma. Mid-block crossings are provided around the Sonoma Plaza, as well as marked crosswalks at the adjacent intersections.

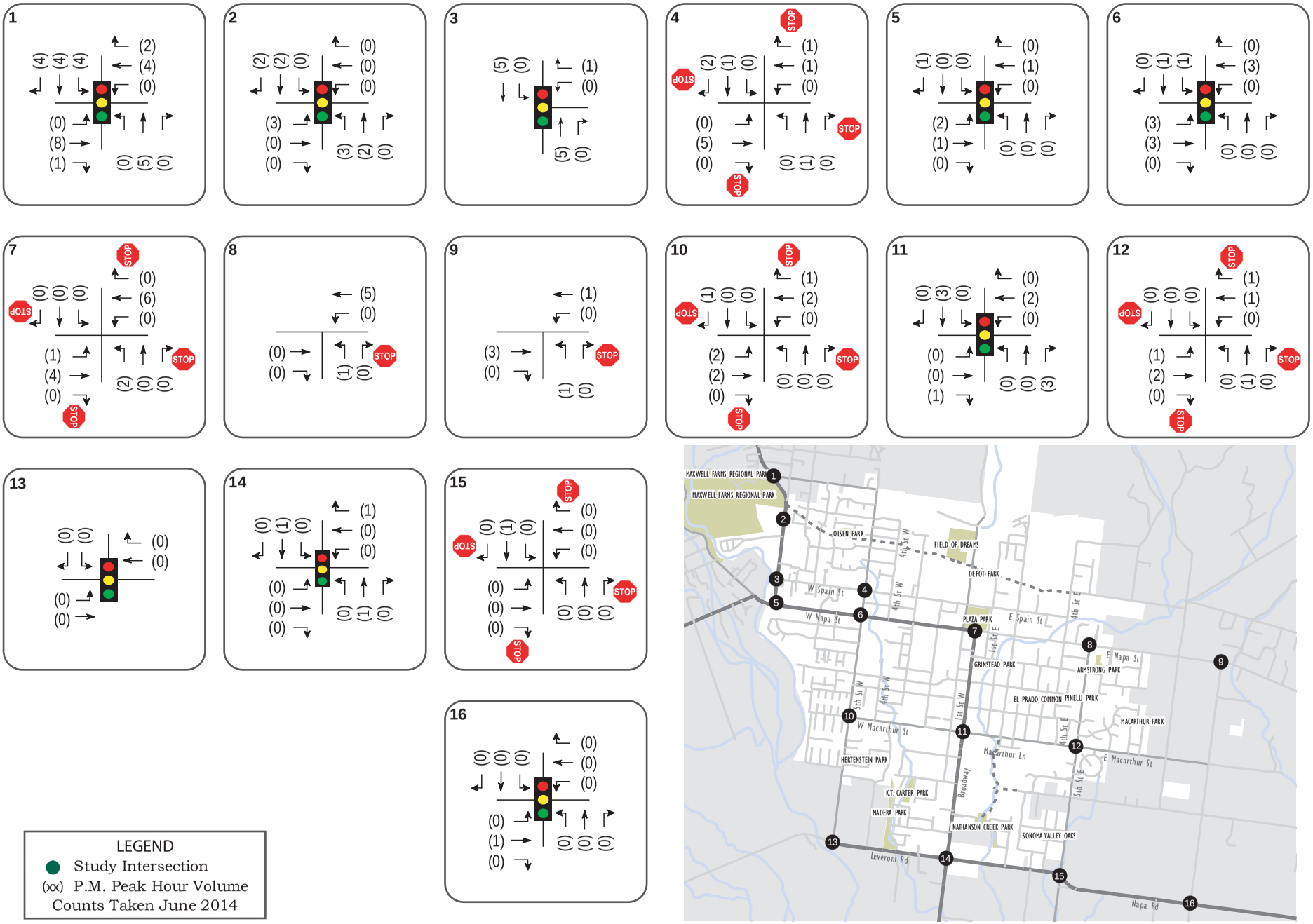

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Figure 3 – Bicycle Volumes

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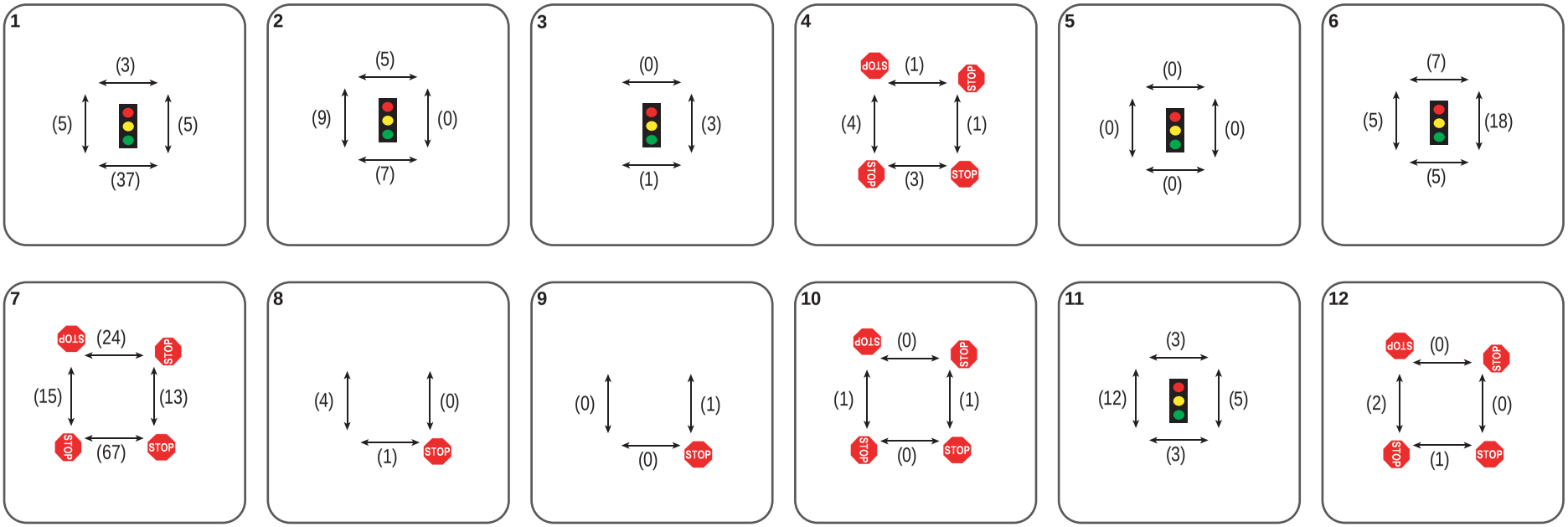

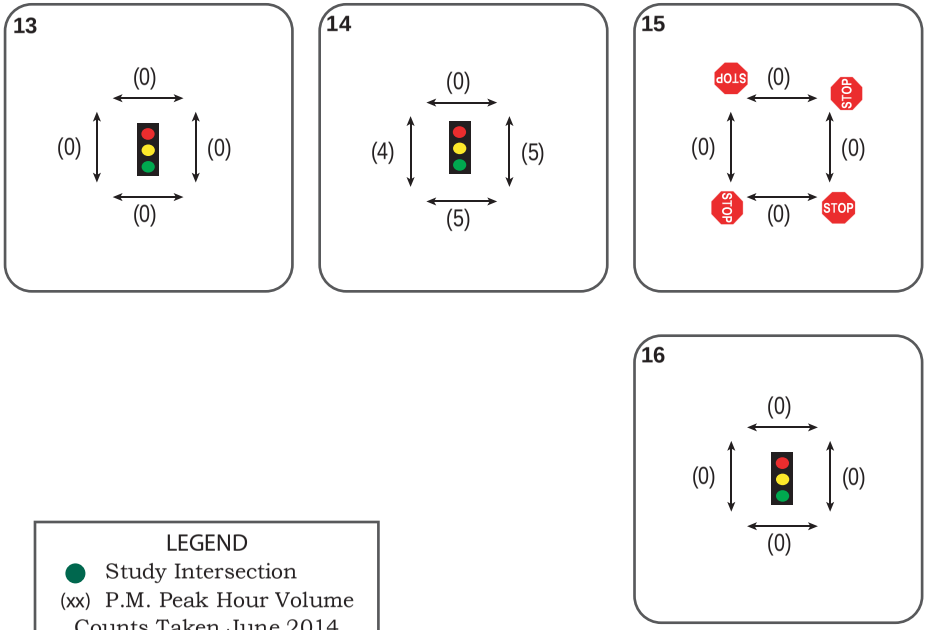

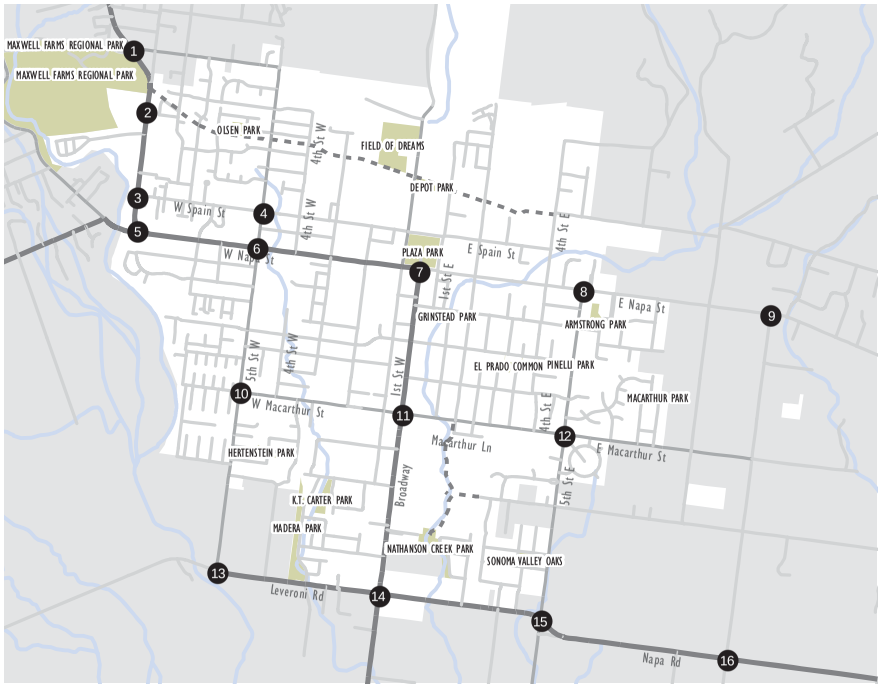

LEGEND
● Study Intersection
(xx) P.M. Peak Hour Volume Counts Taken June 2014

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Figure 4 – Pedestrian Volumes

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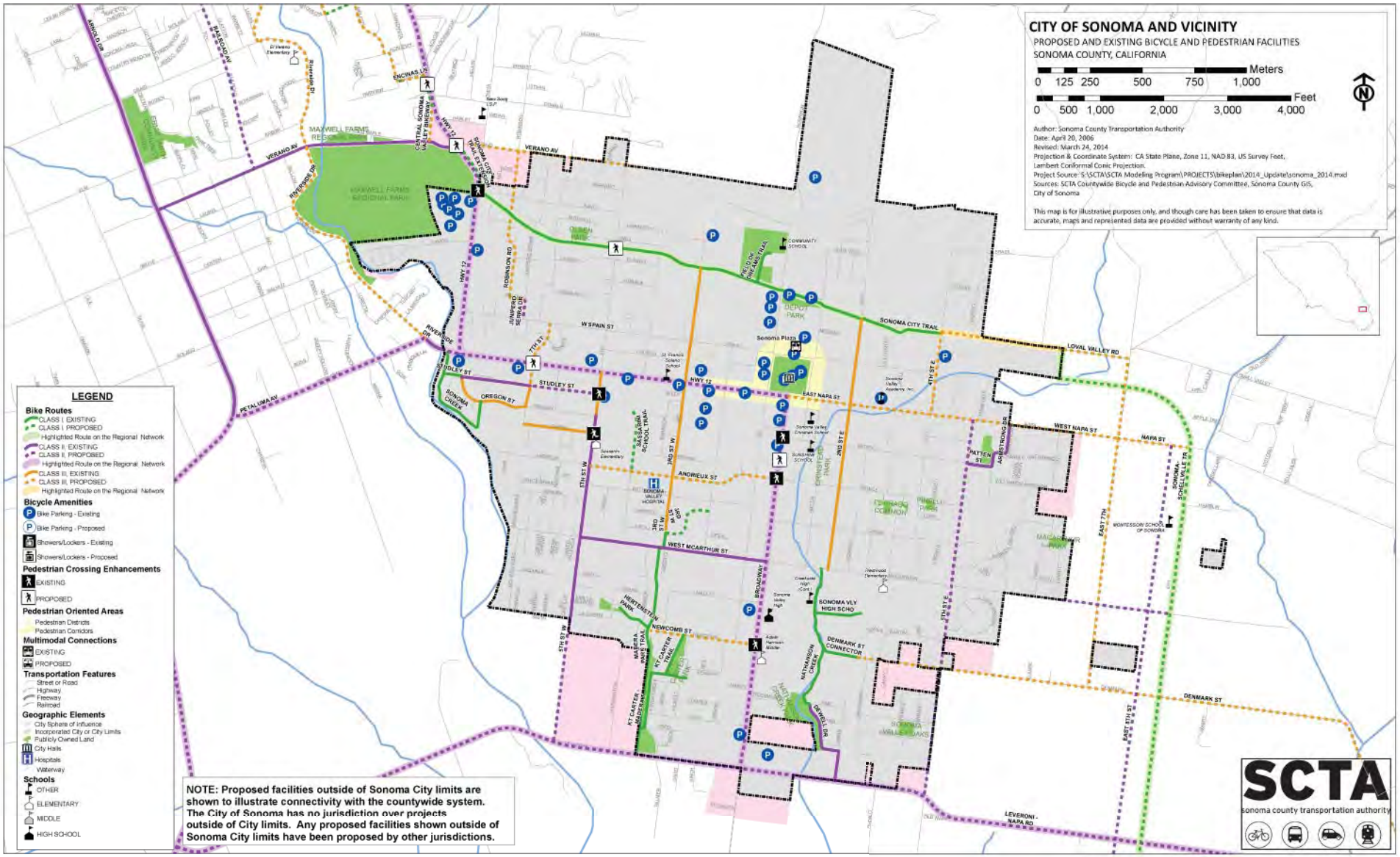

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Figure 5 – Pedestrian and Bicycle Master Plan

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Sidewalks in Sonoma generally range from four to six feet in width. Wider sidewalks and a variety of pedestrian amenities are provided throughout the Plaza area including accessible pedestrian ramps, pedestrian scale lights, benches, street trees, sidewalk dining, and public art, among others. Sidewalks are also provided in most of Sonoma's single family residential neighborhoods, in multi-family residential developments, and in commercial developments. Traffic signals throughout the City include pedestrian phasing.

While the pedestrian network is generally well-developed in Sonoma, there are some locations where gaps in the sidewalk network can be found, as depicted in Figure 6. Sidewalks generally do not exist on streets located just outside the city limits, where the speed limits are 40 to 45 mph.

Goods Movement System

Section §10.60.040 of the Sonoma Municipal Code designates truck routes on Broadway (SR 12) and the portion of Napa Street (SR 12) west of Broadway. Few industrial, manufacturing, warehouse, or freight terminal uses exists within the City of Sonoma. Winery-related uses generate a modest amount of truck traffic, and several larger commercial uses such as Friedman's and grocery stores also generate some truck traffic, though these uses are generally located along the SR 12 corridor which is a designated truck route. The Northwestern Pacific Railroad currently maintains its operations yard approximately two miles to the southeast of the City, but provides no service within the City of Sonoma.

Electric Charging Stations

Two ChargePoint charging stations are provided at the 152 East Napa Street public parking lot. The stations are equipped for Level 1 and 2. Free charging is available to the public.

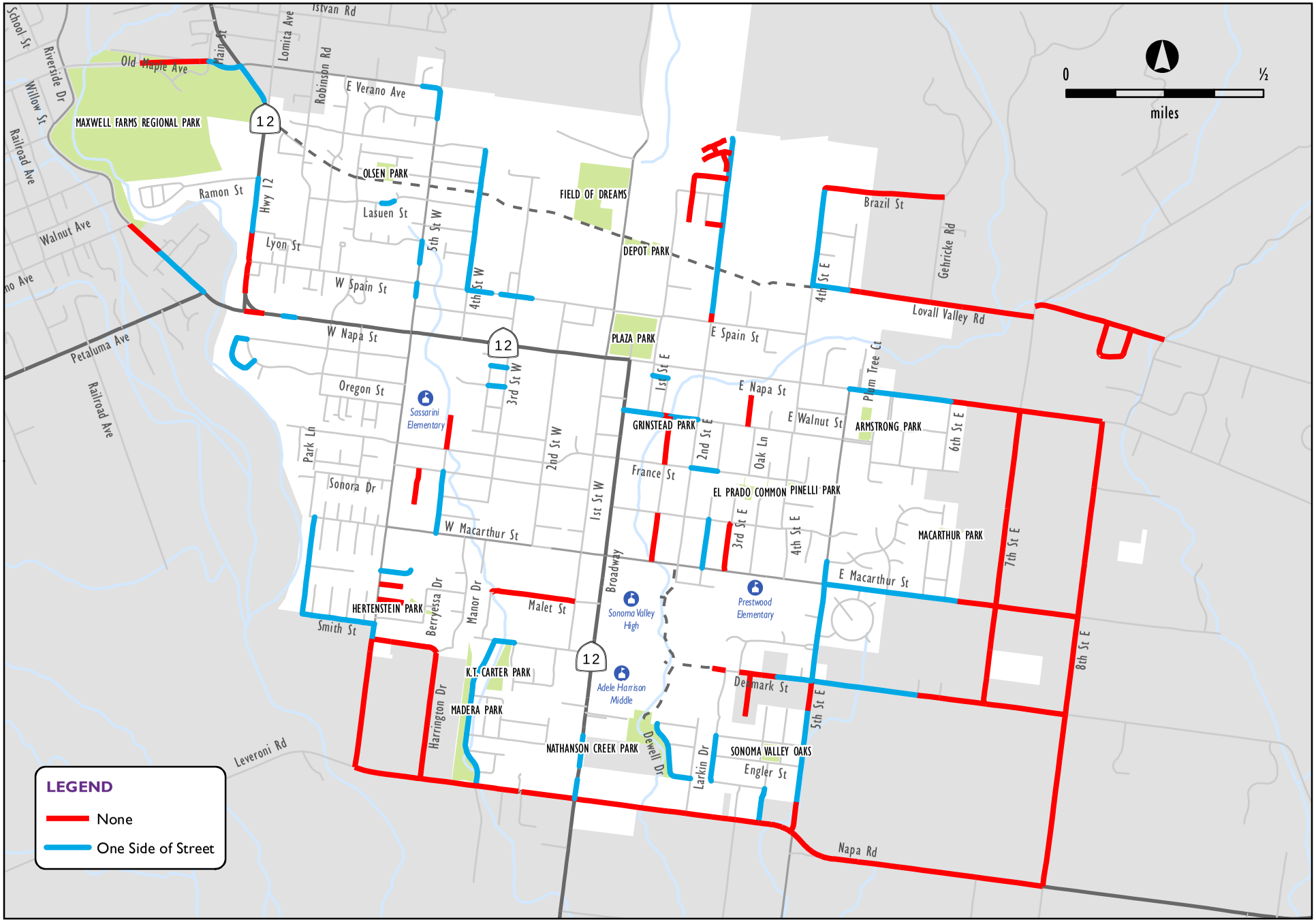

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Figure 6 - Sidewalk Network Completeness

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Regulatory Framework

Local

The City of Sonoma General Plan along with a variety of regional, state and federal plans, legislation, and policy directives provide guidelines for the safe operation of streets and transportation facilities in Sonoma. While the City of Sonoma has primary responsibility for the maintenance and operation of transportation facilities within the City, Sonoma staff works on a continual basis with responsible regional, state, and federal agencies including the County of Sonoma, SCTA, Metropolitan Transportation Commission (MTC), and California Department of Transportation (Caltrans) to maintain, improve, and balance the competing transportation needs of the community and the region.

Sonoma General Plan

The Sonoma General Plan is a long-range comprehensive planning document required by state law and adopted by the City in 2006 to set policy and guide future growth, development, and conservation of resources. The following General Plan goals, objectives, and policies are relevant to circulation in Sonoma.

> ***Goal CE-1: Provide a safe walking environment throughout Sonoma.***
>
> *Policies 1 through 4 aim to guide pedestrians to routes away from major streets, provide safe sidewalks and crosswalks, and establish a system of hiking trails*
>
> ***GOAL CE-2: Establish Sonoma as a place where bicycling is safe and convenient.***
>
> *Policies 1 through 5 support bicycling as an alternative mode of transportation with plans to extend the bike facility network in the City, increase bike storage, and address conflicts between bicycles, vehicles, and pedestrians.*
>
> ***GOAL CE-3: Minimize vehicle trips while ensuring safe and convenient access to activity centers and maintaining Sonoma's small-town character.***
>
> *Policy 1 aims to promote safety while policies 2 through 4 encourage mixed use development, public transit, and shared parking. Policies 5 through 9 focus on the road geometrics in favor of slower speeds and more alternative mode use, and policy 10 promises to preserve the small-town character of the downtown area.*

Bicycle and Pedestrian Master Plan

The 2008 *Sonoma Bicycle and Pedestrian Master Plan* was developed as a component of the Sonoma County Transportation Authority's *Countywide Bicycle and Pedestrian Master Plan*. The Countywide Plan, which underwent an update in 2014, was prepared to foster local and regional coordination, to plan primary facilities that connect Sonoma County's communities, and to develop long-term system planning. The Plan establishes bicycle and pedestrian policy for Sonoma and the larger Countywide Bicycle System, along with bicycle and pedestrian infrastructure projects, and programmatic improvements.

Through a collaborative planning process, a vision, goals and objectives were approved by all ten jurisdictions in Sonoma County, including Sonoma. Each City's plan is distinct and tailored to the needs of that community. The plans are designed to guide the development and maintenance of bicycle and pedestrian facilities, to enhance non-motorized mobility, reduce traffic congestion, and improve safety, access, air quality, and the quality of life. The principal goals and objectives from the *SCTA Countywide*

Bicycle and Pedestrian Plan, 2014 are summarized below, and the map of proposed and existing bicycle and pedestrian facilities in Sonoma is shown in Figure 5.

Principal Goal: To develop and maintain a comprehensive countywide bicycle and pedestrian transportation system, which includes projects, programs, and policies that work together to provide safe and efficient transportation opportunities for bicyclists and pedestrians.

Objective 1.0: The Countywide Bicycle and Pedestrian Network
Establish a comprehensive countywide bicycle and pedestrian transportation system.

Objective 2.0: Design
Utilize accepted design standards and complete streets for the development of bicycle and pedestrian facilities.

Objective 3.0: Multimodal Integration
Develop and enhance opportunities for bicyclists and pedestrians to easily access other modes of public transportation.

Objective 4.0: Comprehensive Support Facilities
Encourage the development of comprehensive support facilities for walking and bicycling.

Objective 5.0: Education and Promotion
Develop programs and public outreach materials to promote bicycle and pedestrian safety and the benefits of bicycling and walking.

Objective 6.0: Safety and Security
Create countywide pedestrian and bicycle networks that are, and are perceived to be, safe and secure.

Objective 7.0: Land Use
Encourage smart growth land use strategies by planning, designing and constructing bicycle and pedestrian facilities in new development.

Objective 8.0: Planning
Plan for the ongoing expansion and improvement of the countywide bicycle and pedestrian system.

Objective 9.0: Maintenance
Maintain and/or improve the quality, operation, and condition of bicycle and pedestrian infrastructure.

Objective 10.0: Funding
Maximize the amount of funding for bicycle and pedestrian projects and programs throughout Sonoma County, with an emphasis on implementation of these objectives.

State and Regional

State of California Complete Streets Act

On September 30, 2008, Governor Schwarzenegger signed Assembly Bill (AB) 1358, the California Complete Streets Act of 2008, into law. As of January 2011, AB 1358 requires any substantive revision of the circulation element of a city or county's general plan to identify how they will safely accommodate the circulation of all users of the roadway including pedestrians, bicyclists, children, seniors, individuals with disabilities, and transit riders, as well as motorists.

Caltrans Deputy Directive 64-R1: Complete Streets – Integrating the Transportation System

In 2001, Caltrans adopted Deputy Directive (DD) 64; a policy directive related to non-motorized travel throughout the state. In October 2008, DD 64 was strengthened to reflect changing priorities and challenges. DD 64-R1 states:

> *The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.*
>
> *The Department develops integrated multimodal projects in balance with community goals, plans, and values. Addressing the safety and mobility needs of bicyclists, pedestrians, and transit users in all projects, regardless of funding, is implicit in these objectives. Bicycle, pedestrian, and transit travel is facilitated by creating "complete streets" beginning early in system planning and continuing through project delivery and maintenance and operations. Developing a network of "complete streets" requires collaboration among all Department functional units and stakeholders to establish effective partnerships.*
>
> *Providing safe mobility for all users, including motorists, bicyclists, pedestrians and transit contributes to the Department's vision: "Improving Mobility across California."*

Successful long-term implementation of this policy is intended to result in more options for people to go from one place to another, less traffic congestion and greenhouse gas emissions, more walkable communities (with healthier, more active people), and fewer barriers for older adults, children, and people with disabilities.

Caltrans Director's Policy 22 (DP-22), "Director's Policy on Context Sensitive Solutions"

Director's Policy 22, a policy regarding the use of "Context Sensitive Solutions" on all state highways, was adopted by Caltrans in November of 2001. The policy reads:

> *The Department uses "Context Sensitive Solutions" as an approach to plan, design, construct, maintain, and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. Context sensitive solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders.*
>
> *The context of all projects and activities is a key factor in reaching decisions. It is considered for all State transportation and support facilities when defining, developing, and evaluating options. When considering the context, issues such as funding feasibility, maintenance feasibility, traffic demand, impact on alternate routes, impact on safety, and relevant laws, rules, and regulations must be addressed.*

The policy recognizes that "in towns and cities across California, the State highway may be the only through street or may function as a local street," that "these communities desire that their main street be an economic, social, and cultural asset as well as provide for the safe and efficient movement of people and goods," and that "communities want transportation projects to provide opportunities for enhanced non-motorized travel and visual quality." The policy acknowledges that addressing these needs will assure that transportation solutions meet more than just traffic and operational objectives.

Caltrans Traffic Impact Study Guide

The Caltrans *Guide for the Preparation of Traffic Impact Studies*, 2002, includes criteria for evaluating the effects of land use development and changes to the circulation system on State highways. In Sonoma,

Caltrans oversees operation on SR 12 and would like to maintain a target LOS at the transition between LOS C and LOS D. Improvements and/or mitigation measures shall maintain peak-hour level of service "C" or better on roads and state highway facilities and a peak-hour level of service "D" or better at local intersections.

Metropolitan Planning Commission

The current Regional Transportation Plan (RTP) produced by MTC, *Plan Bay Area*, was adopted in 2013. Plan Bay Area sets forth regional transportation policy and provides capital program planning for all regional, State, and Federally funded projects. In addition, Plan Bay Area provides strategic investment recommendations to improve regional transportation system performance over the next 25 years. Investments in regional highway, transit, local roadway, bicycle, and pedestrian projects are set forth. Plan Bay Area includes no roadway improvement projects within or immediately adjacent to the City of Sonoma, though it does include regional funding to implement Sonoma County's Safe Routes to School program, implement bicycle and pedestrian improvements countywide, and enhance bus service frequencies in the County.

Comprehensive Transportation Plan for Sonoma County

SCTA acts as the countywide planning and programming agency for transportation-related issues in Sonoma County. SCTA plays a leading role in transportation by securing funds, providing project oversight, and initiating long term planning activities. Every four years the SCTA updates the Sonoma Comprehensive Transportation Plan (CTP), a multi-modal transportation plan that documents existing conditions and prioritizes regional transportation needs throughout Sonoma County for the next 25 years. The CTP establishes countywide goals, objectives, and policies for improving mobility on Sonoma County's streets, highways, transit systems, and bicycle/pedestrian facilities, as well as strategies to reduce transportation related impacts.

Measure M

Measure M, the Traffic Relief Act for Sonoma County, was passed by Sonoma County voters in November 2004. Measure M assesses a quarter-cent sales tax on purchases made throughout the County to provide direct funding for local transportation projects. The funds are dedicated to the specific programs and projects specified in the Traffic Relief Act including maintaining local streets, fixing potholes, widening US 101, improving interchanges, restoring and enhancing transit, supporting the development of passenger rail, and building safe bicycle and pedestrian routes. While no major Measure M projects exist within the City of Sonoma, two nearby County projects include funding to improve the intersection of SR 121 and SR 116 along with funding to improve Arnold Drive. Funding for Local Street Projects (LSP) from Measure M can be used by the City of Sonoma for pothole repairs, maintaining traffic and directional striping and signage, removal of encroaching vegetation along roadways for safety and access, and maintaining and repairing drainage facilities along roadways to prevent flooding.

Capacity Analysis

Data Collection

Traffic volumes were obtained in June 2014. Operating conditions during the p.m. peak period were evaluated to capture the highest volumes on the local transportation network. 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

The following 16 study intersections were identified as those most critical to Sonoma's local circulation system and its connectivity to the regional transportation network. The locations of the study intersections are shown in Figure 7.

1. Sonoma Highway (SR 12)/Verano Avenue
2. Sonoma Highway (SR 12)/Maxwell Village Shopping Center
3. Sonoma Highway (SR 12)/West Spain Street
4. Fifth Street West/West Spain Street
5. Sonoma Highway (SR 12)/Riverside Drive/West Napa Street
6. Fifth Street West/West Napa Street (SR 12)
7. Broadway (SR 12)/Napa Street
8. East Napa Street/Fifth Street East
9. Eighth St East/East Napa Street
10. Fifth Street West/West MacArthur Street
11. Broadway (SR 12)/MacArthur Street
12. Fifth Street East/East MacArthur Street
13. Fifth Street West/Leveroni Road
14. Broadway (SR 12)/Leveroni Road/Napa Road
15. Fifth Street East/Napa Road
16. Eighth Street East/Napa Road

The existing p.m. peak hour traffic volumes are shown in Figure 8.

Study Roadway Segments

The road network in Sonoma's Planning Area is made up of five types of roadways, each of which serves a different primary function:

- *State Highway* – SR 12 is considered an arterial, though it is unique among local roadways in that it is the primary route for through traffic, commuters, and tourists, while also serving as an important cross-town route for local trips made within Sonoma.
- *Arterials* – These streets carry traffic to and from the highway and to major commercial and public destinations. Volumes are heavy compared to collectors and local streets.
- *Collectors* – These link arterials to local streets and commercial and public destinations. In some cases a collector may also serve as a lesser link to the highway.
- *Local Streets* – Typically residential streets, these provide access to neighborhoods and individual parcels within them. They are generally developed with curb, gutter, and sidewalk.
- *Rural* – These carry traffic to outlying districts. They are generally not developed with curb, gutter, or sidewalk.

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Figure 7 - Study Intersections

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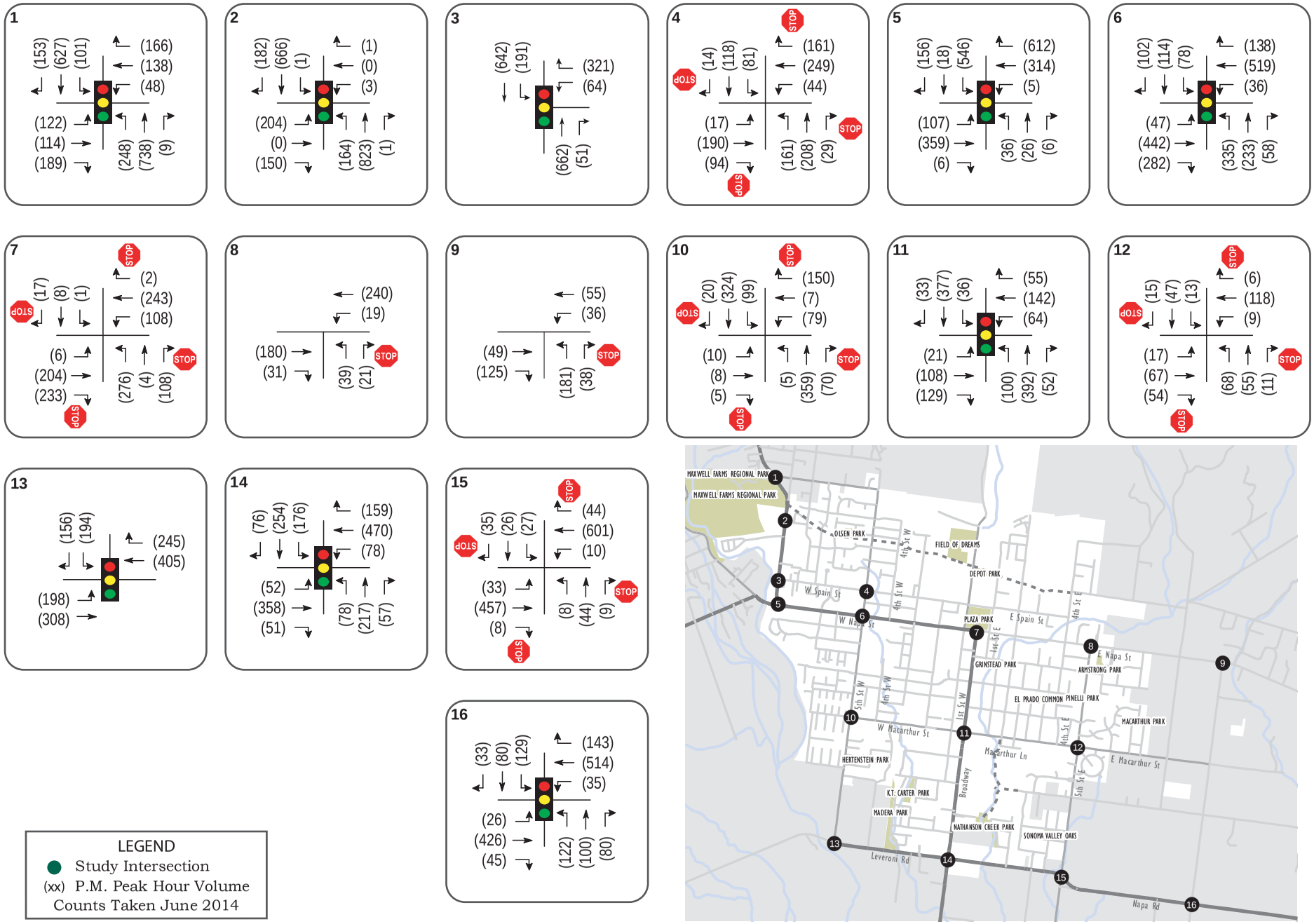

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Figure 8 – P.M. Peak Hour Traffic Volumes

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The following 12 study segments were identified as those most critical to Sonoma's local circulation system and its connectivity to the regional transportation network.

1. West Napa Street (SR 12)
2. East Napa Street
3. West Spain Street
4. Broadway (SR 12)
5. Sonoma Highway (SR 12)
6. Napa Road
7. Leveroni Road
8. West MacArthur Street
9. East MacArthur Street
10. Fifth Street East
11. Fifth Street West
12. Verano Avenue

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.

Intersections

The study intersections were analyzed using methodologies 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 Levels of Service for side-street stop controlled intersections were 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 the controlled approach with the highest delay.

The study intersections with stop signs on all approaches were analyzed using the "All-Way Stop-Controlled Intersection" methodology from the HCM. This methodology evaluates delay for each approach based on turning movements, opposing and conflicting traffic volumes, and the number of lanes. Average vehicle delay is computed for the intersection as a whole, and is then related to a Level of Service.

The Levels of Service for intersections controlled by a traffic signal were evaluated using the signalized methodology from the HCM. This methodology is based on factors including traffic volumes, green time for each movement, phasing, whether or not the signals are coordinated, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology.

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	All-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. Upon stopping, drivers are immediately able to proceed.	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 15 seconds. Drivers may wait for one or two vehicles to clear the intersection before proceeding from a stop.	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 15 to 25 seconds. Drivers will enter a queue of one or two vehicles on the same approach, and wait for vehicle to clear from one or more approaches prior to entering the intersection.	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 25 to 35 seconds. Queues of more than two vehicles are encountered on one or more approaches.	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 35 to 50 seconds. Longer queues are encountered on more than one approach to the intersection.	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 50 seconds. Drivers enter long queues on all approaches.	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

Roadway Segments

The City of Sonoma's 2006 Circulation Element utilizes a roadway segment level of service methodology that is based on a comparison of bi-directional p.m. peak hour traffic volumes to that particular roadway's theoretical capacity when it is operating at LOS D. Newer methodologies for determining urban street levels of service have been developed for the 2010 HCM, though these methodologies generally emphasize operation at signalized intersections along the corridor, and assume that analyzed streets are indeed characterized by a series of signals. Because this does not typify Sonoma's key corridors, nor Sonoma's future vision for its streets, the same traffic volume-based methodology that was applied in the 2006 Circulation Element has been carried forth into the current evaluation.

Table 4 classifies main roads in Sonoma according to the functional types defined above and summarizes each study segment's typical peak hour capacity and p.m. peak hour volume.

Table 4
Roadway Segment Characteristics

Roadway Segment	Class	Lanes/ Direction	Speed Limit	Turn Pockets	Capacity (vehicles)
W Napa St (SR 12)					
1. Riverside Dr to Fifth St W	Arterial	1	25	yes	880
2. Fifth St W to Second St W	Arterial	1	25	yes	880
3. Second St W to Broadway (SR 12)	Arterial	1	25	no	645
E Napa St					
4. First St E to Fifth St E	Collector	1	25	no	660
W Spain St					
5. Fifth St W to Sonoma Hwy (SR 12)	Collector	1	25	no	660
Broadway (SR 12)					
6. Watmaugh Rd to Napa/Leveroni Rd	Arterial	2	45	yes	1020
7. Napa/Leveroni Rd to MacArthur St	Arterial	1	25/35	yes	755
8. MacArthur St to W Napa St (SR 12)	Arterial	2	25	yes	1460
Sonoma Highway (SR 12)					
9. Riverside Dr to W Spain St	Arterial	1	30	yes	855
10. W. Spain St to Maxwell Village Ctr	Arterial	1	30	yes	795
Napa Rd					
11. Broadway (SR 12) to Fifth St E	Arterial	1	40	yes	945
12. Fifth St E to Eighth St E	Arterial	1	45	no	970
Leveroni Rd					
13. Broadway (SR 12) to Fifth St W	Arterial	1	45	yes	965
W MacArthur St					
14. Broadway (SR 12) to Fifth St W	Collector	1	25	no	565
E MacArthur St					
15. Broadway to City Limits	Collector	1	25	no	565
16. City Limits to Eighth St E	Collector	1	35	no	620
Fifth St E					
17. E Napa St to Napa Rd	Local	1	25/30/40	no	650
18. Napa Rd to E Watmaugh Rd	Rural	1	35	no	545
Fifth St W					
19. Verano Ave to W Spain St	Collector	1	25	no	565
20. Andrieux St to W MacArthur St	Arterial	1	30	yes	685
21. W MacArthur St to Leveroni Rd	Arterial	1	30/40	yes/no	795
Verano Ave					
22. Sonoma Hwy (SR 12) to Fifth St W	Collector	1	25	no	560

Note: Capacity is measured in vehicles per hour per direction

Level of Service Standards

The City allows a minimum operation of LOS D for intersections and allows an exception for reduced LOS at intersections within the downtown area in order to preserve the historic character of the plaza.

Intersection Operation

Currently, 14 of the 16 study intersections are operating acceptably. The Fifth Street West/West Spain Street intersection and Fifth Street East/Napa Road intersections are currently operating unacceptably at LOS E. A summary of the intersection level of service calculations is contained in Table 5. LOS Calculations are included in Appendix A.

Table 5
Existing PM Peak Hour Intersection Levels of Service

Intersection *Approach*	Control Type	PM Peak Hour	
		Delay	LOS
1. Sonoma Hwy (SR 12)/Verano Ave	Signal	22.7	C
2. Sonoma Hwy (SR 12)/Maxwell Village Ctr	Signal	18.3	B
3. Sonoma Hwy (SR 12)/W Spain St	Signal	26.0	C
4. Fifth St W/W Spain St	AWSC	**40.0**	**E**
5. Sonoma Hwy (SR 12)/Riverside/W Napa St	Signal	15.9	B
6. Fifth St W/W Napa St (SR 12)	Signal	37.3	D
7. Broadway (SR12)/Napa St	AWSC	32.2	D
8. E Napa St/Fifth St E	TWSC	1.7	A
Northbound Approach		*12.3*	*B*
9. Eighth St E/E Napa St	TWSC	6.1	A
Northbound Approach		*12.3*	*B*
10. Fifth St W/W MacArthur St	AWSC	17.1	C
11. Broadway (SR 12)/MacArthur St	Signal	17.4	B
12. Fifth St E/E MacArthur St	AWSC	8.9	A
13. Fifth St W/Leveroni Rd	Signal	11.6	B
14. Broadway (SR 12)/Leveroni Rd/Napa Rd	Signal	36.7	D
15. Fifth St E/Napa Rd	AWSC	**39.5**	**E**
16. Eighth St E/Napa Rd	Signal	21.5	C

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; AWSC=All-Way Stop-Controls; TWSC=Two-Way Stop-Controls; Results for minor approaches to stop-controlled intersections are indicated in *italics*; **Bold** = deficient operation

Roadway Segment Operation

Of the 22 roadway segments evaluated within and adjacent to the City, the majority of streets are carrying traffic volumes that are within a range of operation that is indicative of LOS D or better. Two exceptions include the segment of West Napa Street between Riverside Drive and Fifth Street West, and the segment

of Sonoma Highway between Maxwell Village Center and West Spain Street. Both of these streets are segments of SR 12, which as indicated above carries both regional traffic as well as local traffic, and are subject to particularly high traffic demands that are beyond the control of the City of Sonoma. A summary of existing roadway segment operation during the p.m. peak hour is shown in Table 6.

Table 6
Summary of PM Peak Hour Roadway Segment Operation

Roadway Segment	Capacity per direction	NB/EB Volume	SB/WB Volume
W Napa St (SR 12)			
1. Riverside Dr to Fifth St W	880	**1000**	**975**
2. Fifth St W to Second St W	880	725	725
3. Second St W to Broadway (SR 12)	645	615	585
E Napa St			
4. First St E to Fifth St E	660	195	290
W Spain St			
5. Fifth St W to Sonoma Hwy (SR 12)	660	375	420
Broadway (SR 12)			
6. Watmaugh Rd to Napa/Leveroni Rd	1020	390	380
7. Napa/Leveroni Rd to MacArthur St	755	635	570
8. MacArthur St to W Napa St (SR 12)	1460	560	460
Sonoma Highway (SR 12)			
9. Riverside Dr to W Spain St	855	750	805
10. W Spain St to Maxwell Village Center	795	**1015**	**965**
Napa Rd			
11. Broadway (SR 12) to Fifth St E	945	660	675
12. Fifth St E to Eighth St E	970	630	670
Leveroni Rd			
13. Broadway (SR 12) to Fifth St W	965	620	640
W MacArthur St			
14. Broadway (SR 12) to Fifth St W	565	205	235
E MacArthur St			
15. Broadway (SR 12) to City Limits	565	170	225
16. City Limits to Eighth St E	620	80	60
Fifth St E			
17. E Napa St to Napa Rd	650	150	125
18. Napa Rd to E Watmaugh Rd	545	60	50
Fifth St W			
19. Verano Ave to W Spain St	565	400	295
20. Andrieux St to W MacArthur St	685	550	480
21. W MacArthur St to Leveroni Rd	795	460	430
Verano Ave			
22. Sonoma Hwy (SR 12) to Fifth St W	560	195	305

Notes: **Bold** values represent locations where volumes are indicative of roadway operation below LOS D

Collision History

The collision histories for the study intersections were 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 July 1, 2007 through June 30, 2012.

The collisions were analyzed using the Transportation Injury Mapping System (TIMS) developed by UC Berkeley. TIMS does not report "Property damage only" vehicle collisions, however the more severe collisions are reported and these are the ones that would be more likely to indicate the geometric/driver behavior issues at certain intersections. The area of town with the highest number of collisions is SR 12 between the Plaza and the western town limits.

There were five or more reported collisions in the vicinity of the Broadway (SR 12)/MacArthur Street intersection and at least two collisions at many intersections along SR 12 through Sonoma. There were six reported pedestrian collisions along West Napa Street; one each at Riverside Drive, Fifth Street West, First Street West, First Street East, Second Street East, and Third Street East. There were also a few collisions involving pedestrians on Broadway and West Spain Street. The majority of reported bicycle collisions occurred along SR 12 and Fifth Street West.

A summary of the collision histories at the study intersections where collisions have occurred over the five-year evaluation period is shown in Table 7.

Table 7
Study Intersection 5-Year Collision History (2007-2012)

Intersection	Total Collisions	Bicycle Collisions	Pedestrian Collisions
1. SR 12/Verano Ave	0	0	0
2. SR 12/Maxwell Village Shopping Center	3	1	1
3. SR 12/W Spain St	3	0	0
4. Fifth St W/W Spain St	2	0	0
5. SR 12/Riverside/W Napa St	2	0	1
6. Fifth St W/W Napa St	3	1	1
7. Broadway (SR 12)/Napa St	1	0	0
9. Fifth St W/MacArthur St	2	0	0
10. Broadway (SR 12)/MacArthur St	5	0	1
13. Broadway (SR 12)/Leveroni Rd/Napa Rd	5	0	0

Collision Types

The California Office of Traffic Safety (OTS) prepares an annual ranking of collision performance compared to other comparably sized cities statewide. The OTS rankings were analyzed for 2011 and broken down to the top, middle and bottom third of comparably sized cities, with the "top" third representing the best safety record, or fewest collisions. These rankings, as well as general collision trends, are described for the following categories.

Injury/Fatalities

Of the 161 collisions reported citywide, all resulted in some type of injury, but none resulted in fatal injuries. Compared to other comparably sized cities, Sonoma performed in the bottom third (i.e, in the third of cities with the poorest safety record) for total fatal and injury collisions. During 2011 there were130 reported collisions that resulted in one injury, 20 reported collisions that resulted in two injuries, six collisions that resulted in three injuries, and five collisions that resulted in four injuries.

Bicyclists

Citywide, there were 20 reported collisions involving bicyclists. All of these collisions resulted in injuries, but no fatalities. Seven of these collisions involved an automobile right-of-way violation and five involved a traffic signal or sign issue. About half of the collisions occurred along the Sonoma Highway corridor and four reported collisions occurred on Fifth Street West. The majority of bicycle collisions occurred in locations where either a bicycle lane or wide shoulder is provided. Compared to other comparably sized cities, Sonoma performed in the bottom third for overall bicycle-involved collisions as well as for bicyclists under the age of 15 years old.

Pedestrians

According to OTS rankings, Sonoma performed in the middle third of comparably-sized cities overall for collisions involving pedestrians, including for pedestrians under the age of 15 years old and over 65 years old. A total of 21 reported collisions involved pedestrians, all of which resulted in injuries, but none were fatal. The majority of collisions occurred within the downtown area where pedestrian activity is highest. Of the 21 pedestrian-involved collisions, 16 occurred at intersections with the remaining five occurred at mid-block locations. Thirteen of the intersections that experienced pedestrian collisions have sidewalks on all approaches as well as marked crosswalks.

Study Participants and References

Study Participants

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Appendix A

Intersection Level of Service Calculations

HCM 2010 Signalized Intersection Summary
1: Sonoma Hwy (SR 12) & Verano Ave

7/31/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	112	114	189	48	138	166	248	738	9	101	627	153
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	186.3	186.3	186.3	190.0	186.3	186.3	186.3	182.7	190.0	186.3	183.4	190.0
Adj Flow Rate, veh/h	115	118	107	49	142	103	256	761	0	104	646	0
Adj No. of Lanes	1	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	258	456	378	127	335	379	300	1878	0	133	1557	0
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.17	0.54	0.00	0.08	0.45	0.00
Sat Flow, veh/h	1126	1863	1543	304	1369	1546	1774	3563	0	1774	3576	0
Grp Volume(v), veh/h	115	118	107	191	0	103	256	761	0	104	646	0
Grp Sat Flow(s),veh/h/ln	1126	1863	1543	1673	0	1546	1774	1736	0	1774	1742	0
Q Serve(g_s), s	8.3	4.4	4.8	2.2	0.0	4.6	12.1	11.1	0.0	5.0	10.8	0.0
Cycle Q Clear(g_c), s	16.1	4.4	4.8	7.8	0.0	4.6	12.1	11.1	0.0	5.0	10.8	0.0
Prop In Lane	1.00		1.00	0.26		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	258	456	378	462	0	379	300	1878	0	133	1557	0
V/C Ratio(X)	0.45	0.26	0.28	0.41	0.00	0.27	0.85	0.41	0.00	0.78	0.41	0.00
Avail Cap(c_a), veh/h	361	627	519	609	0	520	494	1878	0	255	1557	0
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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.3	26.2	26.4	27.4	0.0	26.3	34.8	11.6	0.0	39.2	16.2	0.0
Incr Delay (d2), s/veh	1.2	0.3	0.4	0.6	0.0	0.4	7.7	0.7	0.0	9.5	0.8	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	2.3	2.1	3.9	0.0	2.0	6.5	5.5	0.0	2.8	5.4	0.0
LnGrp Delay(d),s/veh	35.5	26.5	26.8	28.0	0.0	26.7	42.4	12.3	0.0	48.6	17.0	0.0
LnGrp LOS	D	C	C	C		C	D	B		D	B	
Approach Vol, veh/h		340			294			1017			750	
Approach Delay, s/veh		29.7			27.5			19.9			21.4	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.5	50.6		25.1	18.6	42.5		25.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.4	46.6		29.0	24.0	35.0		29.0
Max Q Clear Time (g_c+I1), s	7.0	13.1		18.1	14.1	12.8		9.8
Green Ext Time (p_c), s	0.1	12.7		2.4	0.5	10.6		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.7
HCM 2010 LOS	C

Timing Report, Sorted By Phase
1: Sonoma Hwy (SR 12) & Verano Ave

7/31/2014

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize						
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	16.4	50.6	33	28	39	33
Maximum Split (%)	16.4%	50.6%	33.0%	28.0%	39.0%	33.0%
Minimum Split (s)	9.5	30.5	30.5	9.5	33.5	32.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		19	19		22	21
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	16.4	67	0	28	67
End Time (s)	16.4	67	0	28	67	0
Yield/Force Off (s)	12.4	63	96	24	63	96
Yield/Force Off 170(s)	12.4	44	77	24	41	75
Local Start Time (s)	72	88.4	39	72	0	39
Local Yield (s)	84.4	35	68	96	35	68
Local Yield 170(s)	84.4	16	49	96	13	47

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	80

Splits and Phases: 1: Sonoma Hwy (SR 12) & Verano Ave

HCM 2010 Signalized Intersection Summary
2: Sonoma Hwy (SR 12) & Maxwell Village Shopping Center

7/31/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	204	0	150	3	0	1	164	823	1	1	666	182
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	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	186.3	186.3	186.3	186.3	186.3	190.0	186.3	182.7	190.0	186.3	182.7	186.3
Adj Flow Rate, veh/h	217	0	72	3	0	0	174	876	1	1	709	142
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	2
Cap, veh/h	312	328	274	7	8	0	191	2147	2	2	1727	766
Arrive On Green	0.18	0.00	0.18	0.00	0.00	0.00	0.11	0.60	0.60	0.00	0.50	0.50
Sat Flow, veh/h	1774	1863	1559	1774	1863	0	1774	3558	4	1774	3471	1539
Grp Volume(v), veh/h	217	0	72	3	0	0	174	427	450	1	709	142
Grp Sat Flow(s),veh/h/ln	1774	1863	1559	1774	1863	0	1774	1736	1826	1774	1736	1539
Q Serve(g_s), s	8.5	0.0	3.0	0.1	0.0	0.0	7.2	9.6	9.6	0.0	9.6	3.8
Cycle Q Clear(g_c), s	8.5	0.0	3.0	0.1	0.0	0.0	7.2	9.6	9.6	0.0	9.6	3.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	312	328	274	7	8	0	191	1048	1102	2	1727	766
V/C Ratio(X)	0.70	0.00	0.26	0.42	0.00	0.00	0.91	0.41	0.41	0.41	0.41	0.19
Avail Cap(c_a), veh/h	859	902	755	787	826	0	191	1048	1102	131	1727	766
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	26.5	37.0	0.0	0.0	32.8	7.8	7.8	37.1	11.8	10.3
Incr Delay (d2), s/veh	2.8	0.0	0.5	34.5	0.0	0.0	41.3	1.2	1.1	84.2	0.7	0.5
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	4.4	0.0	1.3	0.1	0.0	0.0	5.7	4.9	5.1	0.1	4.7	1.7
LnGrp Delay(d),s/veh	31.6	0.0	27.0	71.5	0.0	0.0	74.1	8.9	8.9	121.3	12.5	10.9
LnGrp LOS	C		C	E			E	A	A	F	B	B
Approach Vol, veh/h		289			3			1051			852	
Approach Delay, s/veh		30.4			71.5			19.7			12.4	
Approach LOS		C			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	48.9		17.1	12.0	41.0		4.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.5	39.5		36.0	8.0	37.0		33.0
Max Q Clear Time (g_c+I1), s	2.0	11.6		10.5	9.2	11.6		2.1
Green Ext Time (p_c), s	0.0	13.7		0.9	0.0	13.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.3
HCM 2010 LOS	B

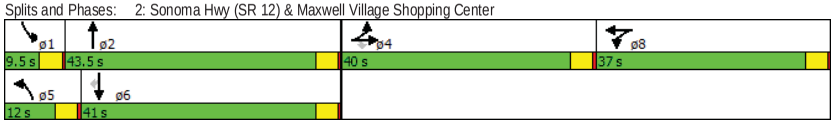
Timing Report, Sorted By Phase
2: Sonoma Hwy (SR 12) & Maxwell Village Shopping Center

7/31/2014

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize						
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	9.5	43.5	40	12	41	37
Maximum Split (%)	7.3%	33.5%	30.8%	9.2%	31.5%	28.5%
Minimum Split (s)	9.5	40	40	9.5	40.5	37
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		8	23		29	26
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	9.5	53	0	12	93
End Time (s)	9.5	53	93	12	53	0
Yield/Force Off (s)	5.5	49	89	8	49	126
Yield/Force Off 170(s)	5.5	41	66	8	20	100
Local Start Time (s)	118	127.5	41	118	0	81
Local Yield (s)	123.5	37	77	126	37	114
Local Yield 170(s)	123.5	29	54	126	8	88

Intersection Summary	
Cycle Length	130
Control Type	Actuated-Uncoordinated
Natural Cycle	130

Splits and Phases: 2: Sonoma Hwy (SR 12) & Maxwell Village Shopping Center



HCM 2010 Signalized Intersection Summary
3: Sonoma Hwy (SR 12) & W Spain St

7/31/2014

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	64	360	695	48	256	647
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	186.3	186.3	182.7	186.3	186.3	182.7
Adj Flow Rate, veh/h	69	249	747	40	275	696
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	4	2	2	4
Cap, veh/h	324	289	933	789	311	1333
Arrive On Green	0.18	0.18	0.51	0.51	0.18	0.73
Sat Flow, veh/h	1774	1583	1827	1544	1774	1827
Grp Volume(v), veh/h	69	249	747	40	275	696
Grp Sat Flow(s),veh/h/ln	1774	1583	1827	1544	1774	1827
Q Serve(g_s), s	3.0	13.9	30.8	1.2	13.8	15.2
Cycle Q Clear(g_c), s	3.0	13.9	30.8	1.2	13.8	15.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	324	289	933	789	311	1333
V/C Ratio(X)	0.21	0.86	0.80	0.05	0.88	0.52
Avail Cap(c_a), veh/h	496	443	933	789	350	1333
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	36.1	18.5	11.2	36.7	5.4
Incr Delay (d2), s/veh	0.3	10.4	7.2	0.1	21.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	6.9	17.2	0.5	8.5	8.1
LnGrp Delay(d),s/veh	32.0	46.5	25.6	11.3	57.7	6.8
LnGrp LOS	C	D	C	B	E	A
Approach Vol, veh/h	318		787			971
Approach Delay, s/veh	43.4		24.9			21.2
Approach LOS	D		C			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	50.5				70.5		20.6
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	18.0	44.5				66.5		25.5
Max Q Clear Time (g_c+I1), s	15.8	32.8				17.2		15.9
Green Ext Time (p_c), s	0.2	7.4				15.6		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	26.0
HCM 2010 LOS	C

Timing Report, Sorted By Phase
3: Sonoma Hwy (SR 12) & W Spain St

7/31/2014

Phase Number	1	2	6	8
Movement	SBL	NBT	SBT	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize				
Recall Mode	None	Max	Max	None
Maximum Split (s)	22	48.5	70.5	29.5
Maximum Split (%)	22.0%	48.5%	70.5%	29.5%
Minimum Split (s)	9.5	24.5	22	29.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5
Minimum Initial (s)	5	5	5	5
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7		7
Flash Dont Walk (s)		13		18
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	22	0	70.5
End Time (s)	22	70.5	70.5	0
Yield/Force Off (s)	18	66.5	66.5	96
Yield/Force Off 170(s)	18	53.5	66.5	78
Local Start Time (s)	78	0	78	48.5
Local Yield (s)	96	44.5	44.5	74
Local Yield 170(s)	96	31.5	44.5	56

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 3: Sonoma Hwy (SR 12) & W Spain St

Intersection	
Intersection Delay, s/veh	40
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	15	201	89	0	57	264	194	0	161	270	35
Peak Hour Factor	0.90	0.92	0.92	0.92	0.90	0.92	0.92	0.92	0.90	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	16	218	97	0	62	287	211	0	175	293	38
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	1
HCM Control Delay	29.5	68.8	27.4
HCM LOS	D	F	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	5%	11%	100%	0%
Vol Thru, %	0%	89%	66%	51%	0%	93%
Vol Right, %	0%	11%	29%	38%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	161	305	305	515	100	142
LT Vol	0	270	201	264	0	132
Through Vol	0	35	89	194	0	10
RT Vol	161	0	15	57	100	0
Lane Flow Rate	175	332	332	560	109	154
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.427	0.756	0.729	1	0.283	0.378
Departure Headway (Hd)	8.792	8.212	7.913	7.471	9.37	8.821
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	410	441	457	487	384	407
Service Time	6.538	5.958	5.961	5.548	7.122	6.572
HCM Lane V/C Ratio	0.427	0.753	0.726	1.15	0.284	0.378
HCM Control Delay	18	32.4	29.5	68.8	15.8	16.9
HCM Lane LOS	C	D	D	F	C	C
HCM 95th-tile Q	2.1	6.3	5.8	13.4	1.1	1.7

HCM 2010 AWSC
4: Fifth St W & W Spain St 7/31/2014

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	100	132	10
Peak Hour Factor	0.90	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	109	143	11
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	16.4
HCM LOS	C

Lane

City of Sonoma - Housing and Circulation Element Update
PM Peak Hour Existing Conditions
Synchro 8 Report
W-Trans

HCM 2010 Signalized Intersection Summary
5: Riverside Dr/W Napa St (SR 12) & Sonoma Hwy (SR 12)

7/31/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	107	359	6	5	314	612	36	26	6	546	18	156
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		0.98	1.00		1.00	1.00		1.00	1.00		0.98
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	193.7	186.3	190.0	190.0	183.9	190.0	190.0	186.3	190.0	182.7	186.3	190.0
Adj Flow Rate, veh/h	109	366	6	5	320	0	37	27	3	557	18	86
Adj No. of Lanes	1	1	0	0	1	0	0	1	0	2	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	4	2	2
Cap, veh/h	366	652	11	67	651	0	57	42	5	1269	104	496
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.00	0.06	0.06	0.06	0.38	0.38	0.38
Sat Flow, veh/h	1098	1827	30	7	1826	0	993	725	81	3375	276	1320
Grp Volume(v), veh/h	109	0	372	325	0	0	67	0	0	557	0	104
Grp Sat Flow(s),veh/h/ln	1098	0	1857	1833	0	0	1799	0	0	1688	0	1596
Q Serve(g_s), s	4.9	0.0	9.2	0.0	0.0	0.0	2.1	0.0	0.0	7.1	0.0	2.5
Cycle Q Clear(g_c), s	12.8	0.0	9.2	7.9	0.0	0.0	2.1	0.0	0.0	7.1	0.0	2.5
Prop In Lane	1.00		0.02	0.02		0.00	0.55		0.04	1.00		0.83
Lane Grp Cap(c), veh/h	366	0	663	718	0	0	103	0	0	1269	0	600
V/C Ratio(X)	0.30	0.00	0.56	0.45	0.00	0.00	0.65	0.00	0.00	0.44	0.00	0.17
Avail Cap(c_a), veh/h	1155	0	1997	2023	0	0	157	0	0	1269	0	600
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	14.8	14.4	0.0	0.0	26.4	0.0	0.0	13.3	0.0	11.9
Incr Delay (d2), s/veh	0.4	0.0	0.7	0.4	0.0	0.0	6.7	0.0	0.0	1.1	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	1.5	0.0	4.8	4.1	0.0	0.0	1.2	0.0	0.0	3.4	0.0	1.2
LnGrp Delay(d),s/veh	19.8	0.0	15.5	14.8	0.0	0.0	33.1	0.0	0.0	14.4	0.0	12.5
LnGrp LOS	B		B	B			C			B		B
Approach Vol, veh/h		481			325			67			661	
Approach Delay, s/veh		16.5			14.8			33.1			14.1	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		24.4		25.5		24.4		7.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		61.5		21.5		61.5		5.0
Max Q Clear Time (g_c+I1), s		14.8		9.1		9.9		4.1
Green Ext Time (p_c), s		5.6		2.3		5.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B

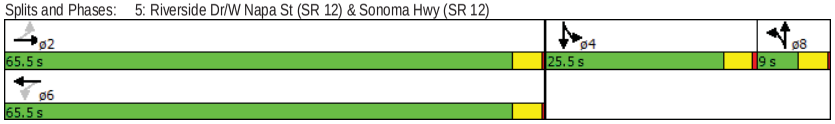
Timing Report, Sorted By Phase
5: Riverside Dr/W Napa St (SR 12) & Sonoma Hwy (SR 12)

7/31/2014

Phase Number	2	4	6	8
Movement	EBTL	SBTL	WBTL	NBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	None	Max	None	None
Maximum Split (s)	65.5	25.5	65.5	9
Maximum Split (%)	65.5%	25.5%	65.5%	9.0%
Minimum Split (s)	23.5	25.5	22	9
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5
Minimum Initial (s)	5	5	5	5
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7		
Flash Dont Walk (s)	12	14		
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	65.5	0	91
End Time (s)	65.5	91	65.5	0
Yield/Force Off (s)	61.5	87	61.5	96
Yield/Force Off 170(s)	49.5	73	61.5	96
Local Start Time (s)	0	65.5	0	91
Local Yield (s)	61.5	87	61.5	96
Local Yield 170(s)	49.5	73	61.5	96

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 5: Riverside Dr/W Napa St (SR 12) & Sonoma Hwy (SR 12)



HCM 2010 Signalized Intersection Summary
6: Fifth St W & W Napa St (SR 12)/Napa St (SR 12)

9/30/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	47	442	282	36	519	138	335	233	58	78	114	102
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		0.97	1.00		0.96	1.00		0.99	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	186.3	182.7	184.5	184.5	182.7	186.3	184.5	186.3	184.5	186.3	186.3	190.0
Adj Flow Rate, veh/h	50	470	300	38	552	147	356	248	62	83	121	109
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	4	3	3	4	2	3	2	3	2	2	2
Cap, veh/h	64	776	647	55	767	636	404	429	357	295	147	132
Arrive On Green	0.04	0.42	0.42	0.03	0.42	0.42	0.23	0.23	0.23	0.17	0.17	0.17
Sat Flow, veh/h	1774	1827	1523	1757	1827	1514	1757	1863	1551	1774	884	796
Grp Volume(v), veh/h	50	470	300	38	552	147	356	248	62	83	0	230
Grp Sat Flow(s),veh/h/ln	1774	1827	1523	1757	1827	1514	1757	1863	1551	1774	0	1680
Q Serve(g_s), s	3.0	21.6	15.3	2.3	27.2	6.8	21.2	12.8	3.5	4.4	0.0	14.3
Cycle Q Clear(g_c), s	3.0	21.6	15.3	2.3	27.2	6.8	21.2	12.8	3.5	4.4	0.0	14.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	64	776	647	55	767	636	404	429	357	295	0	279
V/C Ratio(X)	0.78	0.61	0.46	0.69	0.72	0.23	0.88	0.58	0.17	0.28	0.00	0.82
Avail Cap(c_a), veh/h	98	776	647	81	767	636	470	499	415	393	0	372
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.8	24.1	22.3	51.9	26.1	20.2	40.3	37.0	33.4	39.5	0.0	43.6
Incr Delay (d2), s/veh	19.1	3.5	2.4	14.1	5.8	0.8	15.7	1.2	0.2	0.5	0.0	10.6
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	1.8	11.6	6.8	1.3	14.9	3.0	12.1	6.8	1.5	2.2	0.0	7.5
LnGrp Delay(d),s/veh	70.9	27.6	24.7	66.0	31.9	21.0	56.0	38.3	33.7	40.0	0.0	54.3
LnGrp LOS	E	C	C	E	C	C	E	D	C	D		D
Approach Vol, veh/h		820			737			666			313	
Approach Delay, s/veh		29.2			31.5			47.3			50.5	
Approach LOS		C			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	7.4	50.0		22.0	7.9	49.5		28.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	46.0		24.0	6.0	45.0		29.0
Max Q Clear Time (g_c+I1), s	4.3	23.6		16.3	5.0	29.2		23.2
Green Ext Time (p_c), s	0.0	9.2		1.0	0.0	7.7		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	37.3
HCM 2010 LOS	D

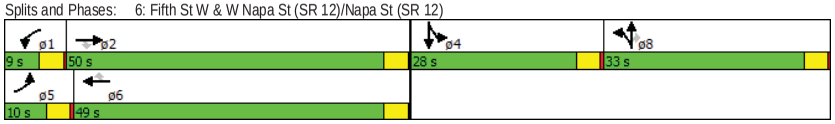
Timing Report, Sorted By Phase
6: Fifth St W & W Napa St (SR 12)/Napa St (SR 12)

9/30/2014

Phase Number	1	2	4	5	6	8
Movement	WBL	EBT	SBTL	EBL	WBT	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize						
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	9	50	28	10	49	33
Maximum Split (%)	7.5%	41.7%	23.3%	8.3%	40.8%	27.5%
Minimum Split (s)	9	36	28	9	25	31
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	1	1	1	1	1	1
Time To Reduce (s)	0.1	0.1	0.1	0.1	0.1	0.1
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		25	17		14	20
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	9	59	0	10	87
End Time (s)	9	59	87	10	59	0
Yield/Force Off (s)	5	55	83	6	55	116
Yield/Force Off 170(s)	5	30	66	6	41	96
Local Start Time (s)	110	119	49	110	0	77
Local Yield (s)	115	45	73	116	45	106
Local Yield 170(s)	115	20	56	116	31	86

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Uncoordinated
Natural Cycle	105

Splits and Phases: 6: Fifth St W & W Napa St (SR 12)/Napa St (SR 12)



Intersection	
Intersection Delay, s/veh	32.2
Intersection LOS	D

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	6	204	233	0	108	243	2	0	276	4	108
Peak Hour Factor	0.90	0.78	0.78	0.78	0.90	0.78	0.78	0.78	0.90	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	4	2	2	2	2	2	4	2	2
Mvmt Flow	0	8	262	299	0	138	312	3	0	354	5	138
Number of Lanes	0	0	1	1	0	0	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	1	1
HCM Control Delay	18.7	53.4	29.7
HCM LOS	C	F	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	3%	0%	31%	4%
Vol Thru, %	0%	4%	97%	0%	69%	31%
Vol Right, %	0%	96%	0%	100%	1%	65%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	276	112	210	233	353	26
LT Vol	0	4	204	0	243	8
Through Vol	0	108	0	233	2	17
RT Vol	276	0	6	0	108	1
Lane Flow Rate	354	144	269	299	453	33
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.803	0.276	0.562	0.562	0.933	0.083
Departure Headway (Hd)	8.174	6.93	7.512	6.777	7.424	8.974
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	442	518	479	532	489	398
Service Time	5.917	4.673	5.262	4.526	5.466	7.063
HCM Lane V/C Ratio	0.801	0.278	0.562	0.562	0.926	0.083
HCM Control Delay	36.8	12.3	19.5	17.9	53.4	12.9
HCM Lane LOS	E	B	C	C	F	B
HCM 95th-tile Q	7.3	1.1	3.4	3.4	11.1	0.3

HCM 2010 AWSC
7: Broadway (SR 12) & Napa St (SR 12) 7/31/2014

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	1	8	17
Peak Hour Factor	0.90	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	1	10	22
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	12.9
HCM LOS	B

Lane

City of Sonoma - Housing and Circulation Element Update
PM Peak Hour Existing Conditions
Synchro 8 Report
W-Trans

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	180	31	19	240	39	21
Conflicting Peds, #/hr	0	4	5	0	4	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	205	35	22	273	44	24

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	245	0	543	232
Stage 1	-	-	-	-	227	-
Stage 2	-	-	-	-	316	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1321	-	501	807
Stage 1	-	-	-	-	811	-
Stage 2	-	-	-	-	739	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1315	-	487	799
Mov Cap-2 Maneuver	-	-	-	-	487	-
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	721	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	564	-	-	1315	-
HCM Lane V/C Ratio	0.121	-	-	0.016	-
HCM Control Delay (s)	12.3	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	6.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	49	125	36	55	181	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	137	40	60	199	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	191	0	263	123
Stage 1	-	-	-	-	123	-
Stage 2	-	-	-	-	140	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1383	-	726	928
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	887	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1383	-	704	928
Mov Cap-2 Maneuver	-	-	-	-	704	-
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	860	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	735	-	-	1383	-
HCM Lane V/C Ratio	0.327	-	-	0.029	-
HCM Control Delay (s)	12.3	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.4	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	17.1
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	10	8	5	0	79	7	150	0	5	359	70
Peak Hour Factor	0.90	0.98	0.98	0.98	0.90	0.98	0.98	0.98	0.90	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	10	8	5	0	81	7	153	0	5	366	71
Number of Lanes	0	0	1	0	0	0	1	1	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	11	11.5	22.2
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	43%	92%	0%	100%	0%
Vol Thru, %	0%	84%	35%	8%	0%	0%	94%
Vol Right, %	0%	16%	22%	0%	100%	0%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	5	429	23	86	150	99	344
LT Vol	0	359	8	7	0	0	324
Through Vol	0	70	5	0	150	0	20
RT Vol	5	0	10	79	0	99	0
Lane Flow Rate	5	438	23	88	153	101	351
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.009	0.718	0.049	0.181	0.265	0.182	0.581
Departure Headway (Hd)	6.53	5.907	7.519	7.415	6.234	6.503	5.954
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	547	613	473	483	574	551	604
Service Time	4.281	3.658	5.613	5.178	3.996	4.254	3.705
HCM Lane V/C Ratio	0.009	0.715	0.049	0.182	0.267	0.183	0.581
HCM Control Delay	9.3	22.4	11	11.8	11.3	10.7	16.7
HCM Lane LOS	A	C	B	B	B	B	C
HCM 95th-tile Q	0	6	0.2	0.7	1.1	0.7	3.7

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	99	324	20
Peak Hour Factor	0.90	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	101	331	20
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	15.4
HCM LOS	C

Lane

HCM 2010 Signalized Intersection Summary
11: Broadway (SR 12) & MacArthur St

7/31/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	21	108	129	64	142	55	100	392	52	36	377	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	190.0	186.3	190.0	190.0	186.3	190.0	186.3	183.1	190.0	186.3	183.0	190.0
Adj Flow Rate, veh/h	23	119	102	70	156	41	110	431	53	40	414	36
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	77	237	186	145	276	65	145	1647	202	68	1570	136
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.08	0.53	0.53	0.04	0.49	0.49
Sat Flow, veh/h	81	905	708	306	1054	247	1774	3120	382	1774	3237	280
Grp Volume(v), veh/h	244	0	0	267	0	0	110	239	245	40	221	229
Grp Sat Flow(s),veh/h/ln	1694	0	0	1606	0	0	1774	1739	1762	1774	1738	1779
Q Serve(g_s), s	0.0	0.0	0.0	1.5	0.0	0.0	4.3	5.3	5.3	1.6	5.3	5.3
Cycle Q Clear(g_c), s	8.5	0.0	0.0	10.0	0.0	0.0	4.3	5.3	5.3	1.6	5.3	5.3
Prop In Lane	0.09		0.42	0.26		0.15	1.00		0.22	1.00		0.16
Lane Grp Cap(c), veh/h	500	0	0	486	0	0	145	918	931	68	843	863
V/C Ratio(X)	0.49	0.00	0.00	0.55	0.00	0.00	0.76	0.26	0.26	0.58	0.26	0.26
Avail Cap(c_a), veh/h	1053	0	0	1012	0	0	430	918	931	228	843	863
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	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	0.0	0.0	22.6	0.0	0.0	31.5	9.1	9.1	33.1	10.6	10.7
Incr Delay (d2), s/veh	0.7	0.0	0.0	1.0	0.0	0.0	7.9	0.7	0.7	7.7	0.8	0.7
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	4.2	0.0	0.0	4.7	0.0	0.0	2.4	2.7	2.8	0.9	2.7	2.8
LnGrp Delay(d),s/veh	23.0	0.0	0.0	23.6	0.0	0.0	39.4	9.7	9.8	40.8	11.4	11.4
LnGrp LOS	C			C			D	A	A	D	B	B
Approach Vol, veh/h		244			267			594			490	
Approach Delay, s/veh		23.0			23.6			15.2			13.8	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	41.0		22.4	9.7	38.0		22.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	37.0		42.0	17.0	29.0		42.0
Max Q Clear Time (g_c+I1), s	3.6	7.3		10.5	6.3	7.3		12.0
Green Ext Time (p_c), s	0.0	10.2		2.4	0.2	8.9		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	17.4
HCM 2010 LOS	B

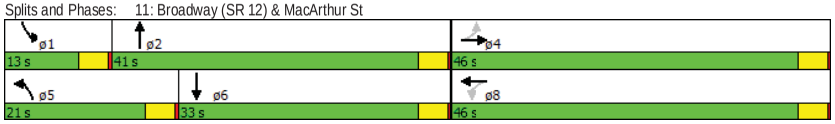
Timing Report, Sorted By Phase
11: Broadway (SR 12) & MacArthur St

7/31/2014

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize						
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	13	41	46	21	33	46
Maximum Split (%)	13.0%	41.0%	46.0%	21.0%	33.0%	46.0%
Minimum Split (s)	9.5	23.5	37.5	9.5	23.5	37.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		12	26		12	26
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	54	0	21	54
End Time (s)	13	54	0	21	54	0
Yield/Force Off (s)	9	50	96	17	50	96
Yield/Force Off 170(s)	9	38	70	17	38	70
Local Start Time (s)	79	92	33	79	0	33
Local Yield (s)	88	29	75	96	29	75
Local Yield 170(s)	88	17	49	96	17	49

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	75

Splits and Phases: 11: Broadway (SR 12) & MacArthur St



Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	17	67	54	0	9	118	6	0	68	55	11
Peak Hour Factor	0.90	0.83	0.83	0.83	0.90	0.83	0.83	0.83	0.90	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	20	81	65	0	11	142	7	0	82	66	13
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	8.8	9	9.3
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	51%	12%	7%	17%
Vol Thru, %	41%	49%	89%	63%
Vol Right, %	8%	39%	5%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	134	138	133	75
LT Vol	55	67	118	47
Through Vol	11	54	6	15
RT Vol	68	17	9	13
Lane Flow Rate	161	166	160	90
Geometry Grp	1	1	1	1
Degree of Util (X)	0.218	0.209	0.211	0.121
Departure Headway (Hd)	4.859	4.534	4.731	4.817
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	736	788	756	740
Service Time	2.908	2.581	2.777	2.872
HCM Lane V/C Ratio	0.219	0.211	0.212	0.122
HCM Control Delay	9.3	8.8	9	8.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.8	0.8	0.4

HCM 2010 AWSC
12: Fifth St E & E MacArthur St 7/31/2014

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	13	47	15
Peak Hour Factor	0.90	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	16	57	18
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	8.5
HCM LOS	A

Lane

City of Sonoma - Housing and Circulation Element Update
PM Peak Hour Existing Conditions
Synchro 8 Report
W-Trans

HCM 2010 Signalized Intersection Summary
13: Leveroni Rd & Fifth St W

7/31/2014

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	198	308	405	245	194	156
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	186.3	182.7	182.7	186.3	186.3	193.7
Adj Flow Rate, veh/h	208	324	426	171	204	72
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	4	2	2	2
Cap, veh/h	278	1149	679	588	300	278
Arrive On Green	0.16	0.63	0.37	0.37	0.17	0.17
Sat Flow, veh/h	1774	1827	1827	1583	1774	1647
Grp Volume(v), veh/h	208	324	426	171	204	72
Grp Sat Flow(s),veh/h/ln	1774	1827	1827	1583	1774	1647
Q Serve(g_s), s	4.4	3.2	7.6	3.0	4.3	1.5
Cycle Q Clear(g_c), s	4.4	3.2	7.6	3.0	4.3	1.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	278	1149	679	588	300	278
V/C Ratio(X)	0.75	0.28	0.63	0.29	0.68	0.26
Avail Cap(c_a), veh/h	986	2999	1799	1559	1210	1123
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	3.3	10.2	8.8	15.5	14.3
Incr Delay (d2), s/veh	4.0	0.1	1.0	0.3	2.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	1.6	4.0	1.3	2.3	1.5
LnGrp Delay(d),s/veh	20.0	3.4	11.2	9.0	18.2	14.8
LnGrp LOS	B	A	B	A	B	B
Approach Vol, veh/h		532	597		276	
Approach Delay, s/veh		9.9	10.6		17.3	
Approach LOS		A	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		28.9		10.7	10.2	18.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		65.0		27.0	22.0	39.0		
Max Q Clear Time (g_c+I1), s		5.2		6.3	6.4	9.6		
Green Ext Time (p_c), s		5.4		0.7	0.5	5.1		

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

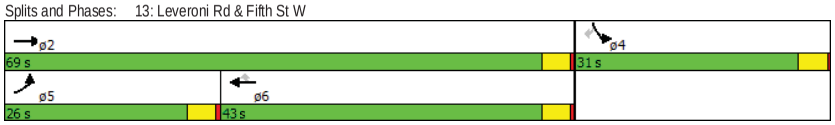
Timing Report, Sorted By Phase
13: Leveroni Rd & Fifth St W

7/31/2014

Phase Number	2	4	5	6
Movement	EBT	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize				
Recall Mode	None	None	None	None
Maximum Split (s)	69	31	26	43
Maximum Split (%)	69.0%	31.0%	26.0%	43.0%
Minimum Split (s)	22	30.5	9.5	33.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5
Minimum Initial (s)	5	5	5	5
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7		7
Flash Dont Walk (s)		19		22
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	69	0	26
End Time (s)	69	0	26	69
Yield/Force Off (s)	65	96	22	65
Yield/Force Off 170(s)	65	77	22	43
Local Start Time (s)	74	43	74	0
Local Yield (s)	39	70	96	39
Local Yield 170(s)	39	51	96	17

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	80

Splits and Phases: 13: Leveroni Rd & Fifth St W



HCM 2010 Signalized Intersection Summary
14: Broadway (SR 12) & Leveroni Rd/Napa Rd

7/31/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	52	358	51	78	470	159	78	217	57	176	254	76
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		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	184.5	184.5	190.0	184.5	184.5	190.0	184.5	183.1	190.0	184.5	183.1	190.0
Adj Flow Rate, veh/h	55	381	45	83	500	150	83	231	29	187	270	48
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	4	4	3	4	4
Cap, veh/h	72	620	73	106	547	164	106	746	92	221	948	166
Arrive On Green	0.04	0.38	0.38	0.06	0.40	0.40	0.06	0.26	0.26	0.13	0.32	0.32
Sat Flow, veh/h	1757	1616	191	1757	1358	407	1757	2912	361	1757	2950	516
Grp Volume(v), veh/h	55	0	426	83	0	650	83	137	123	187	158	160
Grp Sat Flow(s),veh/h/ln	1757	0	1807	1757	0	1765	1757	1739	1534	1757	1739	1727
Q Serve(g_s), s	2.8	0.0	17.5	4.3	0.0	32.0	4.3	5.8	6.0	9.6	6.2	6.4
Cycle Q Clear(g_c), s	2.8	0.0	17.5	4.3	0.0	32.0	4.3	5.8	6.0	9.6	6.2	6.4
Prop In Lane	1.00		0.11	1.00		0.23	1.00		0.24	1.00		0.30
Lane Grp Cap(c), veh/h	72	0	693	106	0	711	106	445	393	221	559	555
V/C Ratio(X)	0.76	0.00	0.61	0.78	0.00	0.91	0.78	0.31	0.31	0.85	0.28	0.29
Avail Cap(c_a), veh/h	111	0	774	157	0	802	145	445	393	249	559	555
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	0.0	22.8	42.5	0.0	25.9	42.5	27.6	27.6	39.3	23.2	23.3
Incr Delay (d2), s/veh	15.1	0.0	1.2	13.9	0.0	14.0	17.0	1.8	2.1	21.0	1.3	1.3
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	1.7	0.0	8.9	2.5	0.0	18.3	2.6	3.0	2.8	5.9	3.2	3.2
LnGrp Delay(d),s/veh	58.7	0.0	24.0	56.4	0.0	39.9	59.5	29.4	29.7	60.2	24.5	24.6
LnGrp LOS	E		C	E		D	E	C	C	E	C	C
Approach Vol, veh/h		481			733			343			505	
Approach Delay, s/veh		28.0			41.7			36.8			37.8	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	39.2	9.5	33.5	7.8	41.0	15.6	27.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.2	39.3	7.6	28.9	5.8	41.7	13.0	23.5
Max Q Clear Time (g_c+I1), s	6.3	19.5	6.3	8.4	4.8	34.0	11.6	8.0
Green Ext Time (p_c), s	0.0	4.7	0.0	5.7	0.0	3.0	0.1	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	36.7
HCM 2010 LOS	D

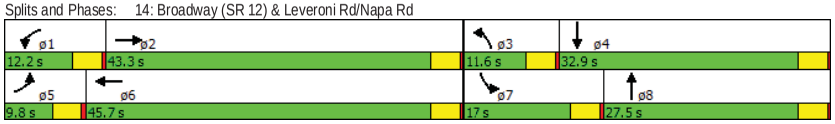
Timing Report, Sorted By Phase
14: Broadway (SR 12) & Leveroni Rd/Napa Rd

7/31/2014

Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize								
Recall Mode	None	None	None	Max	None	None	None	Max
Maximum Split (s)	12.2	43.3	11.6	32.9	9.8	45.7	17	27.5
Maximum Split (%)	12.2%	43.3%	11.6%	32.9%	9.8%	45.7%	17.0%	27.5%
Minimum Split (s)	9.5	38.5	9.5	30.5	9.5	35.5	9.5	27.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Minimum Initial (s)	5	5	5	15	5	5	5	15
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		27		19		24		16
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	12.2	55.5	67.1	0	9.8	55.5	72.5
End Time (s)	12.2	55.5	67.1	0	9.8	55.5	72.5	0
Yield/Force Off (s)	8.2	51.5	63.1	96	5.8	51.5	68.5	96
Yield/Force Off 170(s)	8.2	24.5	63.1	77	5.8	27.5	68.5	80
Local Start Time (s)	87.8	0	43.3	54.9	87.8	97.6	43.3	60.3
Local Yield (s)	96	39.3	50.9	83.8	93.6	39.3	56.3	83.8
Local Yield 170(s)	96	12.3	50.9	64.8	93.6	15.3	56.3	67.8

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 14: Broadway (SR 12) & Leveroni Rd/Napa Rd



Intersection	
Intersection Delay, s/veh	39.5
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	33	457	8	0	10	601	44	0	8	44	9
Peak Hour Factor	0.90	0.97	0.97	0.97	0.90	0.97	0.97	0.97	0.90	0.97	0.97	0.97
Heavy Vehicles, %	2	2	3	2	2	2	3	2	2	2	2	2
Mvmt Flow	0	34	471	8	0	10	620	45	0	8	45	9
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	23.4	58.2	11.1
HCM LOS	C	F	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	13%	100%	0%	100%	0%	31%
Vol Thru, %	72%	0%	98%	0%	93%	30%
Vol Right, %	15%	0%	2%	0%	7%	40%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	61	33	465	10	645	88
LT Vol	44	0	457	0	601	26
Through Vol	9	0	8	0	44	35
RT Vol	8	33	0	10	0	27
Lane Flow Rate	63	34	479	10	665	91
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.124	0.059	0.758	0.018	1	0.172
Departure Headway (Hd)	7.07	6.303	5.809	6.219	5.682	6.845
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	509	572	628	578	645	527
Service Time	5.077	4.003	3.509	3.934	3.397	4.852
HCM Lane V/C Ratio	0.124	0.059	0.763	0.017	1.031	0.173
HCM Control Delay	11.1	9.4	24.4	9	59	11.3
HCM Lane LOS	B	A	C	A	F	B
HCM 95th-tile Q	0.4	0.2	6.9	0.1	15.4	0.6

HCM 2010 AWSC
15: Fifth St E & Napa Rd 7/31/2014

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	27	26	35
Peak Hour Factor	0.90	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	28	27	36
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	11.3
HCM LOS	B

Lane

City of Sonoma - Housing and Circulation Element Update
PM Peak Hour Existing Conditions
Synchro 8 Report
W-Trans

HCM 2010 Signalized Intersection Summary
16: Eighth St E & Napa Rd

7/31/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	26	426	45	35	514	143	122	100	80	129	80	33
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		0.98	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	186.3	184.5	190.0	184.5	184.9	190.0	184.5	186.3	184.5	186.3	186.3	190.0
Adj Flow Rate, veh/h	29	468	36	38	565	135	134	110	33	142	88	20
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	3	3	3	3	3	3	2	3	2	2	2
Cap, veh/h	54	898	69	64	776	185	170	217	183	179	177	40
Arrive On Green	0.03	0.53	0.53	0.04	0.54	0.54	0.10	0.12	0.12	0.10	0.12	0.12
Sat Flow, veh/h	1774	1689	130	1757	1443	345	1757	1863	1568	1774	1470	334
Grp Volume(v), veh/h	29	0	504	38	0	700	134	110	33	142	0	108
Grp Sat Flow(s),veh/h/ln	1774	0	1819	1757	0	1788	1757	1863	1568	1774	0	1804
Q Serve(g_s), s	1.2	0.0	13.4	1.6	0.0	22.2	5.6	4.1	1.4	5.8	0.0	4.2
Cycle Q Clear(g_c), s	1.2	0.0	13.4	1.6	0.0	22.2	5.6	4.1	1.4	5.8	0.0	4.2
Prop In Lane	1.00		0.07	1.00		0.19	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	54	0	967	64	0	961	170	217	183	179	0	217
V/C Ratio(X)	0.54	0.00	0.52	0.59	0.00	0.73	0.79	0.51	0.18	0.79	0.00	0.50
Avail Cap(c_a), veh/h	133	0	1202	156	0	1206	313	914	770	274	0	842
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.6	0.0	11.3	35.4	0.0	13.1	32.9	30.9	29.7	32.8	0.0	30.7
Incr Delay (d2), s/veh	8.2	0.0	0.4	8.4	0.0	1.7	7.8	1.8	0.5	8.7	0.0	1.8
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	0.7	0.0	6.8	0.9	0.0	11.3	3.1	2.2	0.6	3.3	0.0	2.2
LnGrp Delay(d),s/veh	43.8	0.0	11.8	43.8	0.0	14.8	40.8	32.8	30.2	41.4	0.0	32.4
LnGrp LOS	D		B	D		B	D	C	C	D		C
Approach Vol, veh/h		533			738			277			250	
Approach Delay, s/veh		13.5			16.3			36.3			37.6	
Approach LOS		B			B			D			D	

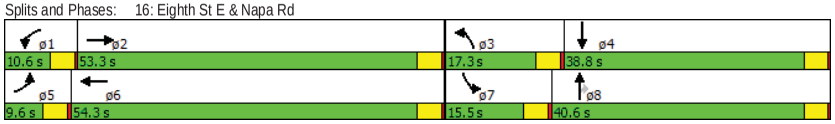
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	43.6	11.2	13.0	6.3	44.1	11.5	12.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.6	49.3	13.3	34.8	5.6	50.3	11.5	36.6
Max Q Clear Time (g_c+I1), s	3.6	15.4	7.6	6.2	3.2	24.2	7.8	6.1
Green Ext Time (p_c), s	0.0	18.7	0.1	2.5	0.0	15.9	0.1	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	21.5
HCM 2010 LOS	C

Timing Report, Sorted By Phase
16: Eighth St E & Napa Rd

7/31/2014

Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Maximum Split (s)	10.6	53.3	17.3	38.8	9.6	54.3	15.5	40.6
Maximum Split (%)	8.8%	44.4%	14.4%	32.3%	8.0%	45.3%	12.9%	33.8%
Minimum Split (s)	9.5	41.5	9.5	37.5	9.5	39.5	9.5	40.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		30		26		28		29
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	10.6	63.9	81.2	0	9.6	63.9	79.4
End Time (s)	10.6	63.9	81.2	0	9.6	63.9	79.4	0
Yield/Force Off (s)	6.6	59.9	77.2	116	5.6	59.9	75.4	116
Yield/Force Off 170(s)	6.6	29.9	77.2	90	5.6	31.9	75.4	87
Local Start Time (s)	109.4	0	53.3	70.6	109.4	119	53.3	68.8
Local Yield (s)	116	49.3	66.6	105.4	115	49.3	64.8	105.4
Local Yield 170(s)	116	19.3	66.6	79.4	115	21.3	64.8	76.4

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Uncoordinated
Natural Cycle	115

Splits and Phases: 16: Eighth St E & Napa Rd