August 7, 2018

Mr. Robert Upton
Campus Property Group
12555 Dunbar Road
Glen Ellen, CA 95442

Focused Traffic Study for the Acacia Villages Project

Dear Mr. Upton;

W-Trans has completed a focused study that addresses the potential traffic impacts associated with the proposed residential development project to be located at 746 Acacia Lane in the City of Santa Rosa.

Existing Conditions

The site is a single 2.5-acre parcel with one existing single-family dwelling with access along Acacia Lane. The remainder of the parcel, surrounding the existing house, is undeveloped. The proposed project site is bounded to the north and east by existing residences and to the south by the planned extension of Winding Creek Avenue. The existing segment of Acacia Lane fronting and continuing north of the project site is unpaved.

Project Description

The proposed project would result in construction of 19 cottage homes and 6 single-family homes for a total of 25 residences. The project will provide 30 covered parking spaces and 26 uncovered spaces for vehicle parking. The existing single-family dwelling on the site would be demolished to make way for the project.

Trip Generation

Trips associated with both the proposed and existing use were estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10th Edition, 2017 for Single-Family Detached Housing (ITE LU#210). The expected trip generation potential for the proposed project is indicated in Table 1, and results in a net increase of 227 trips per day, including 18 trips during the a.m. peak hour and 24 during the p.m. peak hour compared to existing volumes.

Table 1 – Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Existing											
Single-Family Dwelling	1 sfd	9.44	9	0.74	1	0	1	0.99	1	1	0
Proposed											
Single Family Dwelling	25 sfd	9.44	236	0.74	19	5	14	0.99	25	16	9
Net Difference			**227**		**18**	**5**	**13**		**24**	**15**	**9**

Note: sfd=single family dwelling

Because the project would result in fewer than 50 new trips during either peak hour, under the City's criterion as published by the City of Santa Rosa in the *Standard Guidance for the Preparation of Traffic Impact Analysis,* May 10, 2007, only a focused traffic study is required. Further, given the limited number of peak hour trips that the project

would be expected to generate, it is reasonable to conclude that its impact on traffic operation will be less-than-significant.

Alternative Modes

Pedestrian Facilities

Given the proximity of the project site to the transit stops located on Sonoma Highway at Acacia Lane, it is reasonable to assume that some project residents would want to use transit for travel to and from the project site. Additionally, some residents may wish to walk to the commercial developments on Sonoma Highway. There is an existing sidewalk on the west side of Acacia Lane that terminates approximately 200 feet south of the project frontage, though there is a grassy shoulder continuing to the north to near where Winding Creek Avenue would intersect. As proposed, the project would provide sidewalks along its entire frontages with Acacia Lane and Winding Creek Avenue; however, various gaps in the sidewalk network along Acacia Lane would still exist.

Finding – Sidewalk facilities serving the site will be discontinuous, even with improvements proposed as part of the project, though given the low volume of traffic in the area, these facilities are expected to be adequate.

Recommendation – The project should pave the fronting roadways and provide sidewalks along their street frontages, as proposed.

Bicycle Facilities

There are currently no designated bicycle facilities in the immediate project vicinity, though SR 12 has shoulders of at least six feet in width delineated by an edge line stripe that are used by cyclists. Bicyclists share the road with vehicles on all other streets in the surrounding area, though it is noted that the provision of a Class III bike route on Acacia Lane is listed as a future project in the 2010 *Santa Rosa Bicycle and Pedestrian Master Plan*. According to the City of Santa Rosa's Municipal Code, Chapter 20.36.040, single family dwellings are not required to provide bicycle storage; however, based on the site plan, all units will have at least one covered parking space that can be used to store bicycles.

Finding – Bicycle facilities serving the project site are adequate.

Transit Facilities

Sonoma County Transit (SCT) and Santa Rosa CityBus provide fixed route bus service in the City of Santa Rosa and have stops located on both sides of Sonoma Highway, within one-quarter-mile of the site. CityBus Route 4/4B provides loop service to destinations throughout the City of Santa Rosa seven days a week. SCT Routes 30 and 34 also operate seven days a week and provide regional service to destinations throughout Santa Rosa and Sonoma Valley.

Dial-a-ride, also known as paratransit, or door-to-door service, is available for those who are unable to independently use the transit system due to a physical or mental disability. SCT Paratransit is designed to serve the needs of individuals with disabilities within Sonoma and the greater County of Sonoma area. CityBus paratransit is contracted out to MV Transportation and is designed to serve the needs of individuals with disabilities within three-quarters of a mile from existing CityBus routes.

Finding – Transit facilities serving the project site are adequate.

Parking

As proposed, the project would provide 30 covered spaces and 26 uncovered spaces, all of which will be located on-site. Street parking along the project frontage can accommodate 12 vehicles.

Acacia Village qualifies for a "density bonus," which under State law results in reduced parking requirements. Parking requirements are set forth in Section 20-31.090 of the *Santa Rosa City Code* for projects that quality for a density bonus. The number of vehicle parking spaces required for single-family dwellings is two spaces per unit for homes with three bedrooms or less and 2.5 spaces per unit with four bedrooms or more. One of these spaces must be covered and the remaining spaces may be uncovered. It is noted that the proposed Acacia Village development would include nine homes that could have three or four bedrooms; therefore, the City rate for four-bedroom dwellings was conservatively applied to these nine units. As shown in Table 2, based on the City's requirements, this translates to a required parking supply of 25 on-site covered spaces and 33 spaces that may be covered or un-covered for the 25-unit development. The total required supply, assuming all nine of the three- or four-bedroom units have four bedrooms, is therefore 58 spaces under the City's code for projects with a density bonus.

Table 2 – Parking Analysis

Land Use	Units	Rate	Parking Spaces Required
City Parking Requirements			
Single-Family Dwellings (two to three bedrooms)	10 du	2 spaces/du, one of which must be covered	10 covered, 10 uncovered
Single-Family Dwellings (three or four bedrooms)*	9 du	2.5 spaces/du, one of which must be covered	9 covered, 14 uncovered
Single-Family Dwellings (four or more bedrooms)	6 du	2.5 spaces/du, one of which must be covered	6 covered, 9 uncovered
ITE Parking Demand Estimate			
Single-Family Detached Housing	25 du	2.14 spaces / du	54
Proposed Parking Supply			**56**

Notes: du = dwelling units; * Assumes four bedrooms

The proposed project experiences a shortfall of two spaces under the City's requirements. It is noted that if four of the nine units that were assumed to have four bedrooms instead have three bedrooms, this would reduce the required supply by two spaces and the 56-space supply would be adequate to meet the City's requirements.

Because the parking supply as proposed is less than that required under the City's code for projects that qualify for the density bonus, the anticipated actual parking demand was estimated using standard rates published by ITE in *Parking Generation*, 4th Edition, 2010, for "Single-Family Detached Housing" (ITE LU#210). The expected 85th percentile peak parking demand for the proposed project is 54 parking spaces, which is less than the proposed parking supply. Because the total proposed supply of 56 on-site spaces exceeds the projected peak demand of the project, it is anticipated that the parking supply as proposed will be adequate. Further, it is noted that the 12 additional on-street parking spaces along Acacia Lane created by the project and not included in the parking supply would provide overflow capacity if needed.

Site Access

The segment of Acacia Lane along the project frontage is currently under construction so a site visit was not conducted. The site would be accessed via two full-access driveways located on Acacia Lane and on the proposed extension of Winding Creek Avenue. It was assumed the proposed Winding Creek Avenue extension would be a public street conforming to City of Santa Rosa requirements. Given that Winding Creek Avenue would terminate at Acacia Lane, the Winding Creek Avenue approach should be stop-controlled.

Sight Distance

At driveways a substantially clear line of sight should be maintained between the driver of a vehicle waiting on the driveway and the driver of an approaching vehicle. Adequate time must be provided for the waiting vehicle to either cross, turn left, or turn right, without requiring the through traffic to radically alter their speed. Sight distances along the future Winding Creek Avenue extension fronting the project driveway were evaluated using the existing geometry of Winding Creek Avenue and assuming a residential speed limit of 25 miles per hour (mph). As mentioned previously, because of the construction a site visit was not conducted; however, sight distances were measured based on aerial photography available on Google Earth.

Sight distances along Acacia Lane from the project access point were evaluated based on stopping sight distance criteria contained in the *Highway Design Manual* published by Caltrans. For speeds of 25 mph, the recommended stopping sight distance is 150 feet. Based on a review of aerial photography, sight lines at the driveway on Acacia Lane are clear for more than 170 feet in both directions, which would be adequate for the anticipated travel speeds. Similarly, sight lines from the driveway located on Winding Creek Avenue exceed 150 feet in both directions. To maintain adequate sight distance, it is noted that any vegetation near the project's driveways should be trimmed down to a height of less than three feet and trees trimmed up so that nothing hangs below a height of seven feet from the surface of the roadway.

Conclusions and Recommendations

- The proposed project is expected to generate an average of 236 new trips daily, including 19 during the morning peak hour and 25 during the p.m. peak hour. Compared to the existing single-family dwelling, the proposed project results in a net increase of 227 daily trips, on average, with 18 occurring during the morning peak hour and 24 during the evening peak hour.

- The proposed supply of 56 on-site parking spaces exceeds the projected peak parking demand for the proposed use so is anticipated to be adequate. Twelve on-street vehicle parking spaces along Acacia Lane would provide overflow parking if necessary.

- Both access driveways are expected to operate acceptably, with adequate sight lines. Vegetation and trees near driveways should be trimmed so they do not block sight lines.

- The Winding Creek Avenue approach to the intersection with Acacia Lane should be stop-controlled.

We hope this information is adequate to address the issue of potential traffic impacts associated with the proposed land use. Please contact us if you have any further questions. Thank you for giving us the opportunity to provide these services.

Sincerely,

Kevin Rangel, EIT
Assistant Engineer

Steven J. Weinberger, PE, PTOE
Principal

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