

**Focused Traffic Study**

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October 5, 2018

Ms. Karen Massey  
Burbank Housing  
790 Sonoma Avenue  
Santa Rosa, CA 95404

## Focused Traffic Study for the Lantana Homes Project

Dear Ms. Massey;

W-Trans has completed a focused traffic study that addresses the potential traffic impacts associated with the proposed Lantana Homes project to be located at 2979 Dutton Meadow in the City of Santa Rosa.

### Project Description

The proposed project would include development of an affordable housing subdivision on a currently vacant parcel located on the west side of Dutton Meadow and north of Bellevue Avenue. The project would include 48 single family homes attached duet style, most of which would be accessed via a new public street that would form a loop on the south side of the proposed extension of Mojave Avenue west from Dutton Meadow. The extension of Mojave Avenue would add a new fourth leg to the existing Dutton Meadow/Mojave Avenue intersection.

### Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10<sup>th</sup> Edition, 2017. Although the proposed homes would be set up in duplexes, the 10<sup>th</sup> edition of the manual does not include the "Condominium" or "Townhome" land uses that were previously applied to duplexes so to provide conservative results, rates for "Single Family Detached Housing" (Land Use #210) were applied to the proposed units.

Based on application of these rates, the proposed project would be expected to generate an average of 453 trips per day, including 36 trips during the a.m. peak hour and 48 trips during the p.m. peak hour. These results are summarized in Table 1. Because the project is expected to generate fewer than 50 peak hour trips, under the City's *Standard Guidance for the Preparation of Traffic Impact Analysis*, a full traffic impact analysis is not required.

**Table 1 – Trip Generation Summary**

Land Use	Units	Daily		AM Peak Hour			PM Peak Hour		
		Rate	Trips	Trips	In	Out	Trips	In	Out
Single-Family Detached Housing	48 du	9.44	453	36	9	27	48	30	18

Notes: du = dwelling unit

### Access Analysis

As proposed, four homes would be accessed via Dutton Meadow, four homes would be accessed via Common Way (a future street that would border the west side of the site), ten homes would be accessed via an extension of Mojave Avenue, and the remaining thirty homes would have driveways connecting to a new public street that would loop south from the Mojave Avenue extension.

**Finding** – As proposed in the site plan, the streets providing access to the site would be of sufficient width to accommodate all anticipated vehicles and on-site circulation would be expected to operate acceptably for standard passenger vehicles as well as emergency response vehicles.

### Sight Distance

Sight distances along Dutton Meadow at the proposed Mojave Avenue extension were evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distance at intersections of public streets is based on corner sight distance with approach travel speeds as the basis for determining the recommended sight distance. Sight distance should be measured from a 3.5-foot height at the location of the driver on the minor road to a 4.25-foot object height in the center of the approaching lane of the major road. Set-back should be a minimum of 15 feet, measured from the edge of the traveled way.

For the posted speed limit of 35 miles per hour (mph) on Dutton Meadow near Mojave Avenue, the recommended sight distance is 385 feet. At the proposed western leg of Dutton Meadow/Mojave Avenue, sight distance extends more than 400 feet to both the north and south, which is more than adequate for the posted speed limit. It is noted that because the intersection is stop-controlled on all approaches, travel speeds were observed to be well below 35 mph.

**Finding** – Based on a review of field conditions, sight distance at the proposed fourth leg of Dutton Meadow/Mojave Avenue is more than adequate for the posted speed limit of 35 mph.

**Recommendation** – To maintain existing adequate sight lines, any new vegetation planted within the triangle created by the two streets and the required line of sight should be planted and maintained such that its foliage is less than three or more than seven feet off the ground.

### Parking

Based on the concept site plan, the proposed project would provide a total of 145 parking spaces, including 48 covered, 48 uncovered, and 49 on-street spaces. Per Section 20-36.040 of the City of Santa Rosa Zoning Code, the proposed parking supply is adequate to meet City standards. Although the proposed supply would be adequate to meet City requirements, because street parking would be restricted along ten homes located on the north side of the new public street, the anticipated peak demand was calculated using rates published in *Parking Generation*, 4<sup>th</sup> Edition, 2010 (ITE) to determine if the proposed supply would be adequate to accommodate the estimated peak demand. The source does not include rates for attached single-family affordable housing units, so rates for “Single-Family Detached Housing” were used to provide conservative results. Based on application of these rates, the project would experience a peak demand of 103 spaces which would occur on weekdays. The proposed parking supply, City requirements, and peak demand are shown in Table 2 and the project site plan is enclosed for reference.

**Table 2 – Parking Summary**

Land Use	Units	Rate	Parking Spaces
<b>City Required Parking</b>			
Attached Single-Family Dwelling (3-bedroom)	48 du	2.5 space/du	120
<b>ITE Peak Demand</b>			
Single-Family Detached Housing	48 du	2.14 space/du	103
<b>Proposed Parking Supply</b>			<b>145</b>

Notes: du = dwelling unit

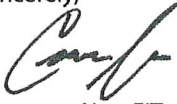
**Finding** – The proposed parking supply satisfies City standards as well as the peak demand calculated using standard ITE rates and is therefore adequate. It is noted that because all units would have a private garage, bicycle parking is not necessary.

**Conclusions and Recommendations**

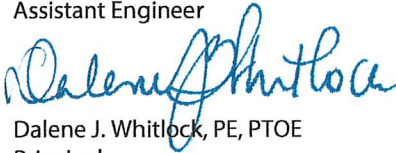
- The proposed project would be expected to result in an average of 453 new vehicle trips per day, including 36 trips during the a.m. peak hour and 48 trips during the p.m. peak hour. Because the project would result in fewer than 50 peak hour trips, a full traffic impact analysis is not required under the City's guidelines.
- On-site circulation as indicated on the site plan provided would be expected to operate acceptably.
- Sight distance at the proposed fourth leg to the Dutton Meadow/Mojave Avenue intersection is currently adequate for the posted speed limit. To retain exiting sight lines, it is recommended that any new vegetation along the project frontage with Dutton Meadow and within the sight triangle be planted and maintained such that all foliage is below three feet or more than seven feet off the ground.
- The proposed parking supply of 145 spaces is adequate to satisfy City requirements of 120 spaces and the estimated peak demand of 103 spaces.

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

Sincerely,



Cameron Nye, EIT  
Assistant Engineer



Dalene J. Whitlock, PE, PTOE  
Principal

DJW/cn/SRO455.L1

Enclosures: Site Plan



**PROJECT DATA**

**PROJECT LOCATION:**  
 DUTTON MEADOW and MOJAVE AVENUE EXTENSION  
 SANTA ROSA, CA

**ASSESSOR PARCEL #:**  
 043-121-013

**ZONING:**  
 R-3-1B

**SITE AREA (Gross):**  
 APPROX. 3.79 ACRES

**SITE AREA (Net Developable Acres):**  
 APPROX. 2.53 ACRES  
 (Deducts public streets and right-of-way)

**DENSITY**  
 (Based on Net Developable Acres): 19.0 UNITS per ACRE

**NUMBER OF HOMES:** 48

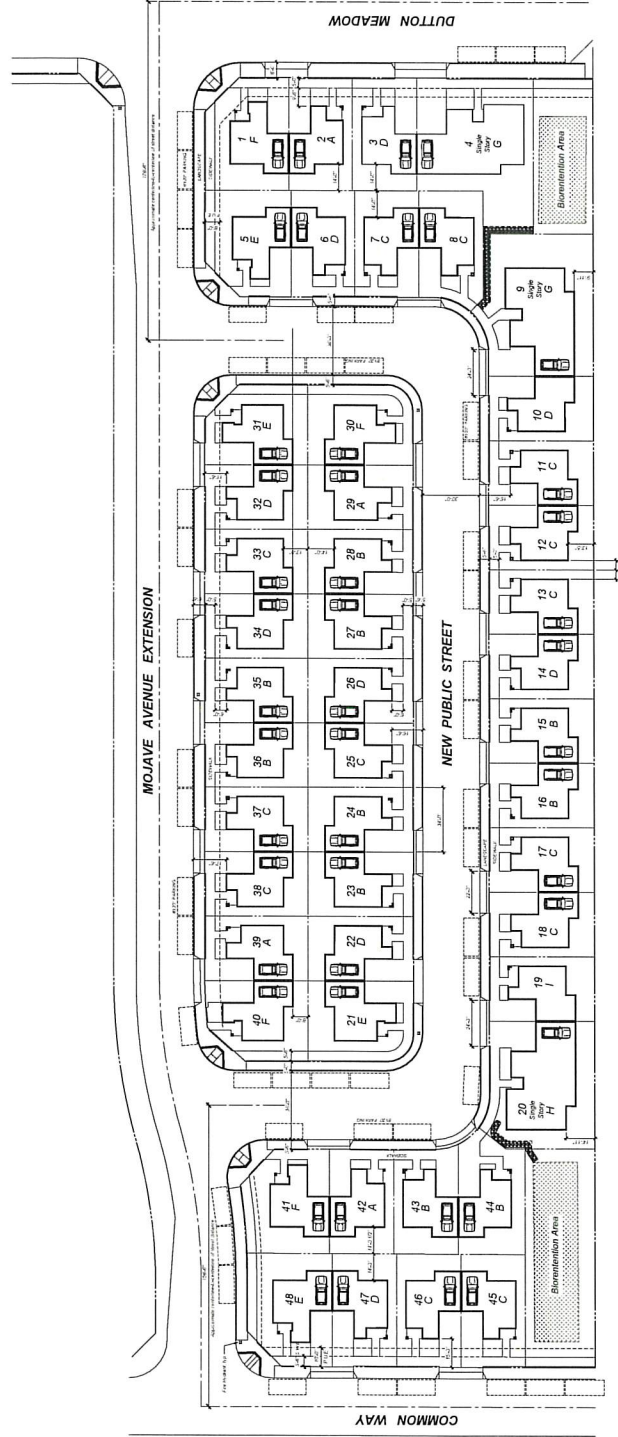
**PARKING:** 48

**DRIVEWAYS:** 48

**ON-STREET:** 49

**TOTAL:** 145

**VICINITY MAP**



**CONCEPTUAL SITE PLAN**

0' 15' 30' 60'  
 SCALE: 1" = 30'-0"



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