



September 19, 2019

Mr. Jesse Narvaez
Green Qi LLC
925 Piner Road
Santa Rosa, CA 95403

Focused Traffic Study for the Green Qi Project

Dear Mr. Narvaez;

W-Trans has completed a focused traffic study that addresses the potential traffic and parking impacts associated with the proposed change in land use for 925 Piner Road in the City of Santa Rosa.

Project Description

The proposed project would result in repurposing an existing 4,184 square-foot commercial building currently occupied by the Live Musicians Co-Op recording studio to a cannabis micro-business facility. As proposed, the project would include a 2,034 square-foot dispensary with 1,088 square feet of retail space, a 478 square-foot waiting room, and 468 square feet of office, employee, and administrative space. Also provided on-site would be 330 square feet of manufacturing space, 745 square feet of cultivation floor area, and 1,075 square feet of distribution space. The facility would be open to the public between the hours of 9:00 a.m. and 9:00 p.m. seven days a week and would be staffed by up to five employees and one manager during peak operating hours. The dispensary would include a delivery service to reduce the trip generation potential and parking demand made by repeat customers. The site has 11 marked parking spaces that would remain with the project.

Trip Generation

The proposed project would have multiple different cannabis-related uses on the same site so the trip generation potential for all the components of the project were considered individually. The anticipated daily and p.m. peak hour trip generations for the dispensary were estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10th Edition, 2017 for "Marijuana Dispensary" (LU #882). Because ITE rates for "Marijuana Dispensary" were developed based on data collected at sites that open for business at 8:00 a.m. and dispensaries in the City of Santa Rosa are not allowed to open for business until 9:00 a.m., custom a.m. peak hour trip generation rates specific to the City of Santa Rosa were developed based on data collected at three existing dispensaries in the City. A spreadsheet summarizing the data collected and derivation of the applied a.m. peak hour rates is enclosed.

Numerous trip generation rates and categories contained in the *Trip Generation Manual* were explored in determining the potential trip generation associated with the cultivation, distribution, and manufacturing uses. Since cultivation and distribution could both be classified as light industrial uses, standard rates for "General Light Industrial" (LU #110) were applied. Standard ITE Rates for "Manufacturing" (LU #140) were considered for application to the 330 square feet of cannabis manufacturing space proposed; however, due to the small floor area dedicated to this use, breaking it out separately from the distribution and cultivation uses would result in zero peak hour trips which does not seem reasonable. Therefore, trips generated by the manufacturing use were also estimated using standard rates for "General Light Industrial."

Based on application of these rates, the proposed project would be expected to result in 525 daily trips on average, including seven trips during the a.m. peak hour and 45 trips during the p.m. peak hour, as shown in Table 1. It is noted no existing trip credits were given as there are no readily applicable ITE rates for a recording studio; therefore, the resulting trip generation estimate is conservative, though based on field observations the existing trips appear to be minimal.

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
Marijuana Dispensary	2.034 ksf	252.70	514	2.40	5	5	0	21.83	44	22	22
General Light Industrial	2.150 ksf	4.96	11	0.70	2	1	1	0.63	1	0	1
Total			525		7	6	1		45	22	23

Note: ksf = 1,000 square feet

Because the project would result in less than 50 new peak hour trips, whether trips associated with the existing use are deducted or not, an operational analysis is not required per the City's *Standard Guidance for the Preparation of Traffic Impact Analysis*.

Delivery Consideration

Trip generation data collected at an existing comparable dispensary in the City of Santa Rosa with a delivery service indicates that the standard rates presented in the *Trip General Manual* adequately reflect the presence of a delivery option as such a service may reasonably be expected to reduce the trip generation potential of a dispensary. Deliveries are intended to serve multiple customers in one trip, so the trips associated with several customers that would otherwise visit the site are replaced by a single round trip made by the delivery vehicle. The trip generation data collected at a comparable dispensary in Santa Rosa with a delivery service indicated that the site generates 14.79 trips per 1,000 square feet during the weekday p.m. peak hour, compared to the standard ITE rate of 21.83 trips per 1,000 square feet, which is approximately 32 percent higher.

Standard ITE rates were used for the p.m. peak hour because the sample size of one site is inadequate and data needs to be collected at additional dispensaries with a delivery service to confirm the rates before using them to estimate the trip generation potential of a proposed project. However, it is worth noting that if rates for the dispensary with a delivery service were applied instead of ITE rates the proposed project would be expected to generate 14 fewer trips during the p.m. peak hour resulting in a total of 31 trips instead of 45. Further, the data was collected in December, which is the busiest time of the year for retail businesses, so the rates are likely higher than would be experienced in other months. Finally, at the time the data was collected, there were only three dispensaries operating within the City of Santa Rosa. As more dispensaries are approved and open for business, customers will have more options and there will be fewer trips made to any one dispensary so rates will likely decrease over time.

Site Access

The proposed project would take access from the existing driveway on Piner Road approximately 270 feet east of Piner Place. Piner Road has two travel lanes in each direction adjacent to the driveway and a center two-way left-turn lane (TWLTL) helps facilitate left-turn movements into the site. The posted speed limit in the project vicinity is 35 miles per hour (mph). Based on traffic count data available on the City of Santa Rosa's Traffic Engineering webpage, the segment of Piner Road along the project frontage has an average daily traffic (ADT) volume of approximately 25,000.

Sight Distance

Sight distances along Piner Road at the existing driveway were evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distance at driveways is based on stopping sight distance, with the approach travel speeds used as the basis for determining the recommended sight distance.

For the posted speed limit of 35 mph, the recommended stopping sight distance is 250 feet. Based on a review of field conditions, sight lines at the project driveway extend more than 250 feet in both directions, so are adequate for speeds in excess of 35 mph. Because there is a TWLTL that provides a place for drivers turning left into the site to wait for a gap without impeding through traffic, following stopping sight distance is not a consideration though given the straight, flat alignment of Piner Road, sight lines exceed 600 feet providing clear visibility for all traffic movements.

Finding – Sight distances along Piner Road at the project driveway are adequate.

On-site Circulation

No changes are proposed to on-site circulation, which would be expected to continue operating acceptably as all existing drive aisles and parking stalls are in compliance with City design standards.

Finding – On-site circulation would continue to operate acceptably.

Parking

Parking was evaluated to determine if the proposed supply would be adequate to satisfy City requirements. As proposed, the project would provide eleven parking spaces on-site, one of which would be ADA accessible. Employee shifts would be staggered to accommodate on-site parking and employees would be encouraged to ride a bicycle or use public transportation options to reduce the project's parking demand. Additionally, an electric vehicle charging station would be added to the site.

Section 20-36.00 of the City Code requires cannabis retail uses to provide parking at a rate of one space for every 250 square feet of floor area. Based on the dispensary size of 2,034 square feet, eight parking spaces would need to be provided on-site to satisfy City requirements. Cannabis cultivation and distribution uses require parking at a rate of one space per 1,000 square feet and cannabis manufacturing requires one parking space for every 350 square feet of floor area. Based on these requirements, the remaining 2,150 square feet of the project dedicated to cultivation, distribution, and manufacturing would need a supply of three parking spaces bringing the total required supply up to 11 spaces. The proposed parking supply and City requirements are shown in Table 2.

Table 2 – Parking Summary

Land Use	Units	Rate	Parking Spaces
City Required Parking			
Cannabis – Retail	2,034 sf	1 space/250 sf	8
Cannabis – Cultivation	745 sf	1 space/1,000 sf	1
Cannabis – Distribution	1,075 sf	1 space/1,000 sf	1
Cannabis – Manufacturing	330 sf	1 space/350 sf	1
<i>Total City Requirements</i>			<i>11</i>
Proposed Supply			11

Notes: sf = square feet

The total supply proposed would be adequate to satisfy the number of spaces required by standard City rates. It is noted that because the project is located on a connected pedestrian network and is within a quarter-mile walking distance of transit stops located east of the site, the anticipated parking demand is lower than would be expected for a site without good pedestrian, bicycle, and transit access.

Finding – The on-site parking supply would be adequate to meet City requirements.

Bicycle Parking

The project should provide bicycle parking consistent with the requirements for the specific uses outlined in Section 20-36.040 of the City Code which states that one bicycle parking space should be provided for every 5,000 square feet of floor area for cannabis dispensaries. The project site plan does not identify the provision of bicycle parking or storage facilities.

Recommendation – The applicant should ensure that secure parking to accommodate at least one bicycle is provided on-site.

Conclusions and Recommendations

- The proposed project would be expected to result in fewer than 50 new trips during each peak hour, so an operational analysis is not required per the City's *Standard Guidance for the Preparation of Traffic Impact Analysis*.
- Sight distances along Piner Road at the project driveway are adequate to accommodate all turns into and out of the site.
- On-site circulation would continue to operate acceptably.
- The proposed on-site parking supply is adequate to satisfy City requirements.
- The project should provide at least one bicycle parking space on-site.

We hope this information is adequate to address the potential traffic and parking issues associated with the proposed project. Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

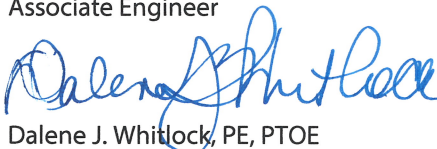
Sincerely,



Kevin Rangel, EIT
Assistant Engineer III



Cameron Nye, EIT
Associate Engineer



Dalene J. Whitlock, PE, PTOE
Senior Principal



DJW/cn-kr/SRO517.L1

Enclosure: Santa Rosa Cannabis Dispensary Trip Generation Data

City of Santa Rosa Dispensary Rates

City of Santa Rosa Dispensary Rates							AM PEAK HOUR (8-9)							
LOCATION	No. of Units	Units	Land Use Number	Land Use No./Type	DATE	Setting/Location	Trip Rate per Unit	Number of Trips	In (%)	In (Rate)	In (Trips)	Out (%)	Out (Rate)	Out (Trips)
SPARC Santa Rosa	3.8	ksf	882	Marijuana Dispensary	12/18/2018	General Urban/Suburban	4.47	17	88%	3.95	15	12%	0.53	2
SPARC Santa Rosa	3.8	ksf	882	Marijuana Dispensary	12/19/2018	General Urban/Suburban	4.21	16	94%	3.95	15	6%	0.26	1
							AVERAGE							
							4.34		91%	3.95		9%	0.39	
Sonoma Patient Group	1.17	ksf	882	Marijuana Dispensary	12/12/2018	General Urban/Suburban	1.71	2	100%	1.71	2	0%	0.00	0
Sonoma Patient Group	1.17	ksf	882	Marijuana Dispensary	12/17/2018	General Urban/Suburban	1.71	2	100%	1.71	2	0%	0.00	0
							AVERAGE							
							1.71		100%	1.71		0%	0.00	
Alternatives	4.8	ksf	882	Marijuana Dispensary	12/18/2018	General Urban/Suburban	1.46	7	86%	1.25	6	14%	0.21	1
Alternatives	4.8	ksf	882	Marijuana Dispensary	12/19/2018	General Urban/Suburban	0.83	4	100%	0.83	4	0%	0.00	0
							AVERAGE							
							1.15		93%	1.04		7%	0.10	
							3 LOCATION AVERAGE							
							2.40		95%	2.23		5%	0.17	
							ITE RATES							
							10.44		56%	5.85		44%	4.59	