



September 25, 2019

Ms. Sharon Kovalsky, AIA
AplosGroup
2841 Cleveland Avenue, Suite 6
Santa Rosa, CA 95403

Focused Traffic Study for 2220 Mercury Way

Dear Ms. Kovalsky;

W-Trans has completed a focused analysis that addresses the potential trip generation, parking demand, and access conditions associated with the proposed cannabis dispensary, manufacturing, and distribution facility to be located at 2220 Mercury Way in the City of Santa Rosa.

Project Description

The proposed project includes development of a 9,989 square-foot cannabis manufacturing, distribution and retail facility composed of 4,102 square feet of manufacturing and commercial kitchen space, 543 square feet of office area, 667 square feet of retail space, and 4,677 square feet of warehouse storage, distribution, and processing area. The retail portion of the project would be open to both medical and recreational users and a delivery service is proposed. A total of 18 full-time employees are envisioned across all uses. The facility would operate between 8:00 a.m. and 8:00 p.m., with retail services open to the public between 9:00 a.m. and 7:00 p.m. seven days a week. The project site plan is enclosed for reference.

Trip Generation

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 mostly open for business between 7:00 and 9:00 a.m. and dispensaries in the City of Santa Rosa are not allowed to open for business until after 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 two existing dispensaries in the City. A spreadsheet summarizing the data collected and derivation of the applied a.m. peak hour rates is enclosed.

Data was also collected during the p.m. peak hour at three local dispensaries in the County of Sonoma (two in Santa Rosa and one in Cotati) and the resulting rates were consistent with ITE rates, though slightly lower, for the evening peak period so ITE rates were retained for this analysis due to the larger sample size that was used to develop the standard rates. It should be noted that for the purpose of estimating the trip generation for the dispensary component of the project, the office space was included in the dispensary floor area calculations since it is typical for dispensaries to have accessory office space.

Rates for "Manufacturing" (LU #140) were applied to the proposed manufacturing and commercial kitchen space and since processing, distribution, and storage uses could be classified as light industrial uses, standard ITE Rates for "General Light Industrial" (LU #110) were applied to the warehouse floor area.

As shown in Table 1, the proposed project would be expected to generate an average of 345 trips per day with nine trips during the a.m. peak hour and 32 trips during the p.m. peak hour. Because the project would be expected to generate fewer than 50 new trips during either peak hour, per the City's *Standard Guidance for the Preparation of Traffic Impact Analysis*, an operational analysis is not required.

2,744 (FOR DEN) -ITE

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 892	1.210 ksf	252.70	306	*2.72	3	3	0	21.83	26	13	13
✓ Manufacturing 140	4.102 ksf	3.93	16	0.62	3	2	1	0.67	3	1	2
✓ General Light Industrial 110	4.677 ksf	4.96	23	0.70	3	3	0	0.63	3	0	3
Total Project Trips		345		9	8	1		32	14	18	

Note: ksf = 1,000 square feet; * = custom rate based on data collected in the City of Santa Rosa

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 ITE *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, not increase it. Deliveries are intended to serve multiple customers in one trip, so the trips associated with several customers that would otherwise visit the site individually 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. The delivery service rates as sampled was approximately 32 percent lower than the ITE rate, making application of the ITE rates conservative.

Standard ITE rates were used for the p.m. peak hour because the sample size of one site is inadequate and it is preferred that data be collected at additional local 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 eight fewer trips during the p.m. peak hour. Further, at the time the data was collected there were only five dispensaries operating within Sonoma County and only one of those had a delivery service. 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.

Access Analysis

The site would be accessed by a new driveway on the southern side of Mercury Way to be located approximately 200 feet west of Apollo Way. Adjacent to the project site Mercury Way is 44 feet wide and has a single travel lane in each direction; street parking is prohibited in the eastbound direction along the project frontage. No speed limit is posted so the *prima facie* speed limit of 25 mph applies. As proposed, the driveway would connect to a drive aisle that would extend south to the southern end of the property and then west behind the building. Surface parking would be located on the outside of the drive aisle. The drive aisle would be 26 feet wide, which meets City of Santa Rosa fire access standards and all parking stalls would be in compliance with City design standards for both standard and compact parking spaces.

Finding – Site access and on-circulation would be adequate.

Sight Distance

Sight distances along Mercury Way at the proposed driveway location were evaluated using sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distance for driveways is based on stopping sight distance, with approach travel speeds used as the basis for determining the recommended sight distance. For speeds of 25 mph, the recommended stopping sight distance is 150 feet. Based on a review of field conditions, sight distance extends more than 300 feet to the west and approximately 200 feet

to the east to the Mercury Way/Apollo Way intersection, which exceeds the minimum recommended distance. No parking is permitted along the project frontage, so sight lines are not impacted by parked vehicles.

Additionally, as Mercury Way is straight and flat near the project site, adequate sight lines are available for a following driver to observe and react to a vehicle stopped to turn left or slowing to turn right into the project driveway.

Finding – Adequate stopping sight distance is available on Mercury Way to accommodate all turns into and out of the driveway.

Recommendation – Any new signage to be installed along the project frontage should be placed outside of the vision triangle at the driveway. ✓

Parking

Parking was evaluated to determine if the proposed supply of 21 vehicle spaces would be adequate to satisfy City requirements. Section 20-36.040 of the Santa Rosa City Code requires vehicle parking at a rate of one space for every 250 square feet of floor area for cannabis retail uses, one space for every 350 square feet for cannabis manufacturing uses, and one space for every 1,000 square feet for cannabis distribution uses. Again, to be consistent with the trip generation analysis, the office floor area was included in the parking calculations for the dispensary component. Based on these requirements and the floor area that would be dedicated to each use, 21 parking spaces would need to be provided on-site to meet City Code. As shown in Table 2, the proposed parking supply would be adequate to satisfy City requirements.

Table 2 – Parking Summary

Land Use	Units	Rate	Parking Spaces
City Required Parking			
Cannabis – Retail	1,210 sf	1 space/250 sf	4.8
Cannabis – Manufacturing	4,102 sf	1 space/350 sf	11.7
Cannabis – Distribution	4,677 sf	1 space/1,000 sf	4.7
Total City Requirements			*21.2 (21)
Proposed Supply			21

Notes: sf = square feet; *City Code requires rounding down to the nearest whole number for fractions below 0.5

Although the proposed supply would meet City requirements, it should be noted that project patrons would have use of numerous street parking spaces along the northern side of Mercury Way which could accommodate up to 20 parked vehicles between Apollo Way and the driveway to the Kaiser Permanente offices, so should demand temporarily exceed the on-site supply there would be off-site parking options in the project vicinity. Additionally, the project site would be within walking distance of the Santa Rosa City Bus stop on the southeast corner of Corporate Center Parkway/Mercury Way and would be connected to the transit stop by a separated sidewalk along the entirety of Mercury Way.

Finding – The proposed parking supply would be adequate to meet City requirements and there are numerous opportunities to park on Mercury Way in the project vicinity should there be excess demand.

Bicycle Parking

The proposed bicycle parking supply was also evaluated with respect to City requirements. Santa Rosa City Code requires cannabis retail uses to provide bicycle parking at a rate of one space for every 5,000 square feet of floor area, while cannabis manufacturing and distribution uses are required to provide one bicycle space for every 7,000 and 14,000 square feet of floor area, respectively. Based on these requirements, a single bicycle parking space

Northside?
NO PARKING ON SOUTHSIDE MERCURY WAY

PEDESTRIAN ACCESS / FRONTAGE IMPROVEMENTS
Mercury Way - close sidewalk gap w/ existing sidewalk

would be required for all three uses collectively. As shown on the site plan, the project would provide a bike rack with room to accommodate three bicycles near the entrance to the dispensary, which would be more than adequate to satisfy City requirements. In addition to the bike rack, it is recommended that three covered bicycle lockers be provided on-site to encourage employees to ride their bicycle to work, rather than drive.

Finding – The proposed bicycle parking supply would be more than adequate to satisfy City requirements.

Recommendation – Three covered bicycle lockers should be provided on-site to encourage employees to use a bicycle to reach the site.

Conclusions and Recommendations

- The proposed project would be expected to result in 345 trips per day on average, including nine trips during the morning peak hour and 32 trips during the evening peak hour. Because the project would result in fewer than 50 new peak hour trips, an operational analysis is not required.
- Site access and on-site circulation would operate acceptably, as proposed.
- Adequate stopping sight distance is available on Mercury Way at the project driveway.
- Any new signage to be installed along the project frontage should be placed outside of the vision triangle of motorists on the driveway.
- The proposed vehicle and bicycle parking supplies would meet City requirements.
- Three long-term bicycle lockers should be provided on-site to encourage employees to bike to work.

We hope this information is adequate to address the potential traffic and parking issues 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.

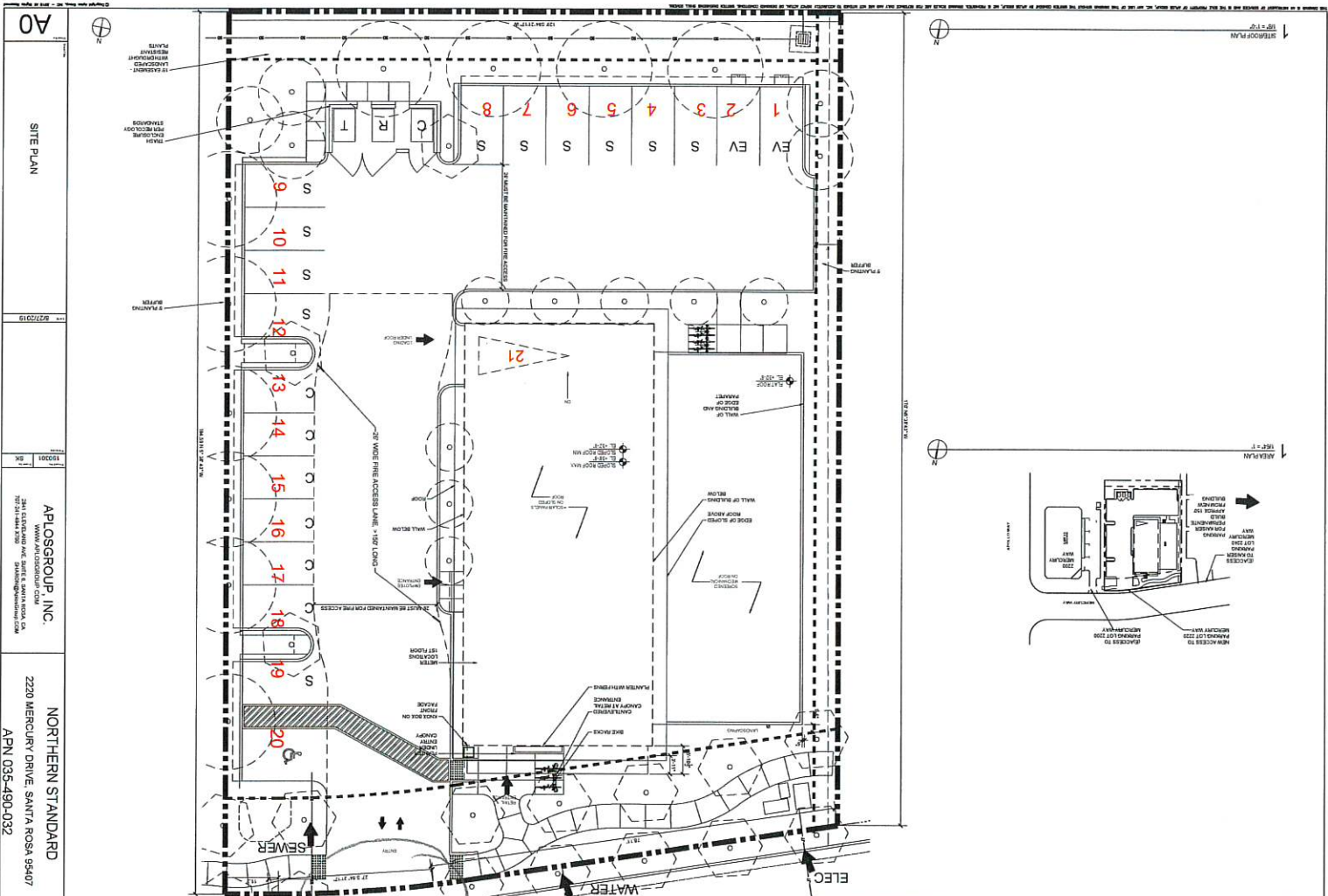
Sincerely,

Cameron Nye, EIT
Associate Engineer

Dalene J. Whitlock, PE, PTOE
Senior Principal

DJW/cn/SRO530.L1

Enclosure: Site Plan
Sonoma County Cannabis Dispensary Trip Generation Data



A0

SITE PLAN

APLOGROUP, INC.
 2841 ESTABLISHMENT AVE. SUITE E, SANTA ROSA, CA
 707 241 9847 7200 SHANNON@APLOGROUP.COM

NORTHERN STANDARD
 2220 MERCURY DRIVE, SANTA ROSA, CA 95407
 APN 035-490-032

M/D

COUNTY OF SONOMA DISPENSARY RATES																															
No. of Units	Land Use Number	DATE	Setting/Location	Trip Rate per Unit of Trips	Number of Trips	In (%)	Out (%)	In (Rate)	Out (Rate)	In (Trips)	Out (Trips)	AM PEAK HOUR (8-9)																			
												Trip Rate per Unit of Trips	Number of Trips																		
Units	Units	DATE	Setting/Location	Trip Rate per Unit of Trips	Number of Trips	In (%)	Out (%)	In (Rate)	Out (Rate)	In (Trips)	Out (Trips)	PM PEAK HOUR (4-6)																			
												Trip Rate per Unit of Trips	Number of Trips																		
38	882	12/18/2016	General Urban/Suburban	4.47	17	88%	12%	3.95	0.53	2	20.00	76	42%	8.42	32	58%	11.58	44													
38	882	12/18/2016	General Urban/Suburban	4.21	16	84%	6%	3.95	0.26	1	23.88	90	44%	10.53	40	56%	13.16	50													
48	882	12/18/2016	General Urban/Suburban	4.34	91%	3.95	9%	0.39	21.88	43%	9.47	57%	12.37	32	48%	8.67	32	48%	8.67												
48	882	12/18/2016	General Urban/Suburban	1.46	7	85%	14%	0.21	14.58	70	54%	7.92	38	46%	6.67	32	46%	6.67	32												
48	882	12/18/2016	General Urban/Suburban	0.93	4	100%	0%	0.00	15.00	72	56%	8.33	40	44%	6.67	32	44%	6.67	32												
679	882	8/17/2019	General Urban/Suburban	1.15	93%	1.04	7%	0.10	14.79	55%	8.13	45%	6.67	68	49%	11.74	68	49%	11.74												
679	882	8/17/2019	General Urban/Suburban						26.94	140	51%	12.44	72	51%	13.82	80	51%	13.82	80												
AVERAGE														25.56	50%	12.78	50%	12.78	50%	10.92	51%	10.61	50%	10.92							
SONOMA COUNTY 3 LOCATION AVERAGE														2.74	92%	2.49	56%	5.85	8%	4.59	44%	20.73	21.83	49%	10.13	50%	10.92	51%	10.61	50%	10.92