



LSC TRANSPORTATION CONSULTANTS, INC.

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Mr. Steve Monahan
CLIF II, LLC
1101 5th Ave #300
San Rafael, CA 94901

City of Santa Rosa
Engineering Division

OCT 06 2017

Planning & Economic
Development Department

RE: Industrial Drive Cannabis Cultivation – Trip
Generation Evaluation (LSC Job #177420)

Dear Mr. Monahan:

Per your request, LSC Transportation Consultants, Inc. has prepared an analysis of the traffic generation for the proposed renovation of the building at 3320 Industrial Drive in Santa Rosa, California. The exterior of the building and access to the building will remain unchanged. The building's previous use was a food bank and the proposed project would convert the interior of the building to commercial cannabis cultivation.

First, a qualitative driver sight distance analysis will be discussed. Then the trip generation analysis will be provided.

Driver Sight Distance

LSC staff performed a sight distance analysis at the existing loading dock driveway based on site photos and satellite imagery available through Google Earth. It was determined that no plants or landscaping were hindering the sight distance at this location. Additionally, given that Industrial Drive is straight and flat, no sight distance is lost to curves or hills. As driver sight distance of greater than 400 feet is provided along Industrial Drive at this location, no driver sight distance deficiencies are identified. Furthermore, the project applicant anticipates the largest vehicle to access the loading dock will be a 24-foot van. The length of the loading dock driveway is at least 30 feet (from the building to the sidewalk), which would accommodate a 24-foot van or typical single-unit truck. The project applicant indicates that semi-trucks are not expected to be on site. As such, vehicles using the loading dock are not expected to hinder the driver sight distance.

Previous Trip Generation

A food bank was the previous use at the project site. As standard Institute of Transportation Engineer (ITE) trip generation rates are not available for this land use, a 'person-trip analysis' will be conducted. The person trip analysis will be based on the number of employees, donations, and food distributions. According to information provided by the project applicant, an estimated maximum of 10 employees were on site at one time. Dividing this by an average vehicle occupancy rate of approximately 1.10 employees per vehicle (per US Census data for the Santa Rosa area) generates 9 employee vehicles. With an estimated half of the employees making a lunch trip (or another trip to/from the site during the day), an

average of 3 trips are made for each employee vehicle for a total of 27 daily one-way vehicle-trips. On a busy day it is estimated about 20 vehicles make a donation, 1 large semi-type truck makes a donation, and 20 persons in vehicles pick up food distributions. These 41 vehicles each make 2 one-way trips for a total of 82 daily vehicle-trips. Adding these trips to the 27 employee trips, yields a total of 109 daily one-way vehicle-trips. The ratio of daily trips occurring in the peak hour is assumed to be similar to that of a light industrial use. Per the 'Light Industrial' ITE rate for daily and peak hour trip generation rates, 15 percent of the daily trips were assumed to be made during the PM peak hour. Therefore 16 trips would have occurred in the PM peak hour, as shown in Table A.

Proposed Trip Generation

As there is not a standard ITE trip generation rate for cannabis cultivation, a person-trip analysis was conducted to estimate the number of trips. The basis for the person-trip analysis is the number of employees associated with the proposed project. The maximum number of employees on site at one time is 20 employees. In addition, up to three delivery or product transport trucks will visit the site over a busy week.

Although it is more usual to use an average day to estimate trip generation, a busy day will be used in this analysis to show the worst case scenario. Assuming 1.10 employees per vehicle, 18 employee vehicles access the site for commuting purposes on a busy day for the 20 employees. With an estimated half of the employees making a lunch trip (or another trip to/from the site during the day), an average 3 trips will be made for each employee vehicle for a total of 54 daily one-way vehicle-trips. Additionally, one delivery or product transport vehicle is expected to visit the site over a day, generating 2 more daily one-way vehicle-trips. Adding these 2 trips to the 54 employee trips yields a total of 56 one-way vehicle-trips on a busy day, as shown in Table A.

TABLE A: Industrial Drive Cannabis Cultivation - Trip Generation						
Land Use Category	Quantity	Unit	Project Generated Vehicle Trips at Site Access			
			Daily	PM Peak Hour		Total
				In	Out	
Previous Use						
Food Bank	20	KSF	109	2	14	16
Proposed Use						
Cannabis Cultivation	20	KSF	56	1	7	8
Net Trip Generation with Project			-53	-1	-7	-8
KSF = 1,000 Square Feet						
Source: LSC Transportation Consultants, Inc.						

PM peak hour trip generation for the cannabis cultivation use can be estimated based on its percent of the daily traffic. The ratio of daily trips occurring in the peak hour is assumed to be similar to that of a light industrial use, per the 'Light Industrial' ITE rate for daily and peak hour trip generation rates would be

appropriate. This indicates that 15 percent of the daily trips are made during the PM peak hour. Applying this percentage to the 56 daily vehicle-trips estimates indicates that 8 one-way vehicles trips would be generated in the PM peak hour, as shown in Table A.

Conclusions

As shown in Table A, the proposed use generates fewer trips than the previous use, resulting in a net reduction in trips associated with the proposed project. There will be approximately 53 less one-way vehicle-trips over a busy day and 8 less trips in the PM peak hour. Additionally, it was determined that adequate driver sight distance is provided at the existing loading bay driveway.

Please contact our office at (530) 583-4053 if you have any questions or comments pertaining to this analysis.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By: Sara T. Hawley
Sara Hawley, PE, Principal

