

**Constitution Storage PCD No. P-225
& P-2224**

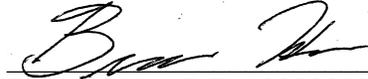
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Traffic Impact Studies

Traffic Engineer's Statement

The attached traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



Brian Horan P.E. #0053042

7-12-22

Date

Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.



Brian Kearney, Senior Development Manager

Self-Storage Division

Johnson Development Associates, Inc.

101 N. Pacific Coast Hwy, Suite 308 El Segundo, CA 90245

7/12/22

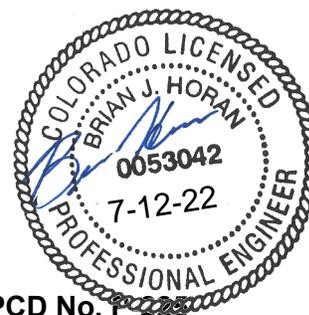
Date

To: Elizabeth Nijkamp
Engineer Manager, El Paso County

From: Brian Horan, PE

Date: April 11, 2022
Revised: June 10, 2022
Revised: July 12, 2022

Re: **Constitution Storage: Traffic Memorandum; PCD No. P-2223
& P-2224 El Paso County, CO**



INTRODUCTION

This memorandum provides the results of a traffic analysis performed in support of an approximately 3.72-acre lot located in El Paso County, Colorado. Generally, the site is located south of Constitution Avenue, east of Peterson Road, and west of Canada Drive. The site is further identified as El Paso County parcel number 5405218002 and is currently vacant. The site location is shown on Figure 1.

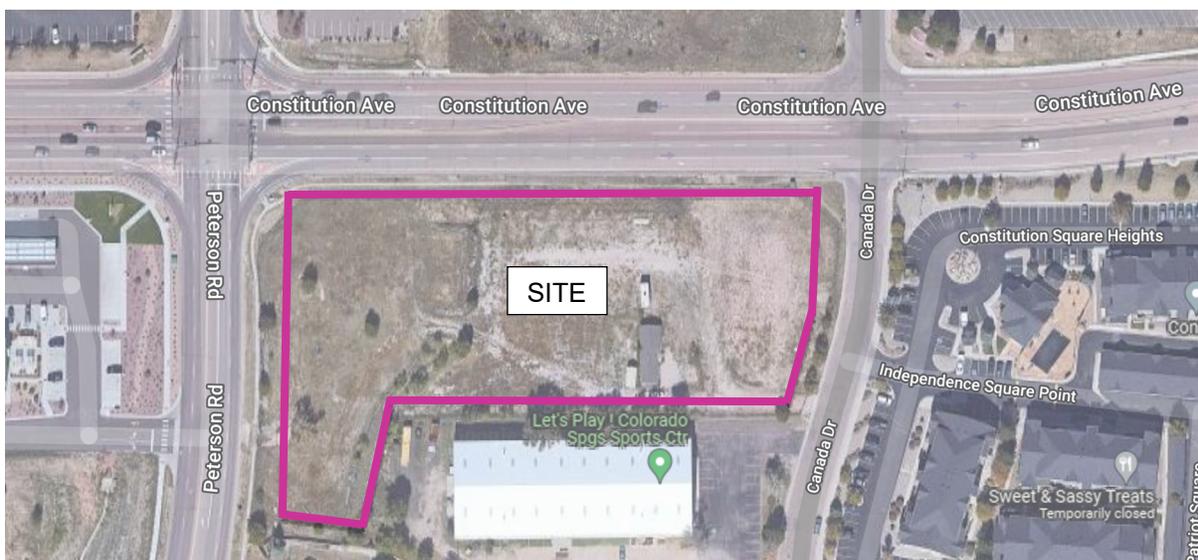


Figure 1 – Site Location

The Applicant, Johnson Development Associates, proposes to develop the site with a 109,033 square foot self storage (mini warehouse) use with 944 storage units. A full-sized copy of the site plan is provided as Attachment I. The following memorandum has been prepared for the County of El Paso as requested. The purpose is to determine the traffic forecasted by the proposed project and potential impacts to the surrounding roadways. A narrative for the study area for adjacent roadways, intersection and accesses is provided in the existing conditions section below.



EXISTING CONDITIONS

As shown on the site plan provided as Attachment 1, the site is proposed to be accessed via one right-in/right-out (RIRO) movement access along Peterson Road and one full movement access along Canada Drive. Peterson Road and Constitution Avenue provide regional access to the property. No roadway improvements were identified in the area.

Constitution Avenue is constructed as a four-lane roadway divided by a raised median and auxiliary turn lanes provided at intersections. It is classified as an arterial by El Paso County and provides east-west connectivity throughout the region with a posted speed limit of 45 mph in the vicinity of the subject site. The intersection of Constitution Avenue/Peterson Road operates under signalized control and the intersection of Constitution Avenue/Canada Drive operates under unsignalized control.

Peterson Road is constructed as a four-lane roadway divided by a two way left turn (TWLT) lane. It is classified as a minor arterial by El Paso County and provides north-south connectivity throughout the region with a posted speed limit of 35 mph in the vicinity of the subject site. The intersection of Peterson Road/Constitution Avenue operates under signalized control.

Canada Drive is constructed as an undivided two-lane roadway. It is classified as a local roadway by El Paso County and primarily provides north-south access to a number of residential units in the region with a posted speed limit of 25 mph in the vicinity of the subject site. The intersection of Canada Drive/Constitution Avenue operates under unsignalized control. ADTs and peak hour traffic along this roadway are consistent with the roadway section and operates with additional capacity available.

The Major Transportation Corridor Plan (MTCP) was reviewed to determine if any roadway improvements were anticipated in the immediate study area. No such improvements were identified. Additionally, at the time of this writing, no improvements from area development were identified that would impact the proposed development.

TRIP GENERATION

Trip generation forecasts for the site were based on rates/equations published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition and industry standard methodologies. The trip generation of the proposed development are provided in Table 1 below. The use is expected to generate 11 AM peak hour, 16 PM peak hour, and 170 average daily trips upon completion.

These trips would be divided among the two access points along Peterson Road and Canada Drive. This would represent less than 10 vehicles at any site entrance in or out of the site during the peak hour. As required by the County, an assessment of 20 year projections for this area would suggest minimal increase. Limited development or redevelopment options exist in the area that would increase traffic at the proposed entrances. It is anticipated that short and long range forecasts at the entrance would remain relatively consistent with existing conditions.

As mentioned above, the Applicant is proposing one RIRO movement access to the site via Peterson Road and one full movement access to the site via Canada Drive. Currently, Constitution Avenue has auxiliary lanes in both the east and westbound directions at the Canada Drive intersection. Based on the trip generation contained herein, the proposed development would not significantly impact the surrounding corridor.

Table 1

JDA - Constitution Storage

Site Trip Generation

Land Use	Land Use Code	Amount	Units	AM Peak Hour			PM Peak Hour			Average Daily Trips
				In	Out	Total	In	Out	Total	
<i>Proposed</i> ⁽¹⁾ Mini-Warehouse	151	944	UNITS	6	5	11	8	8	16	170

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 11th Edition

PROPOSED ACCESS LOCATIONS

As shown in Attachment I, the project proposes an access along Canada Drive and a right-in/right-out along Peterson Road. As shown in Table 1, the site would generate minimal peak hour trips. Assuming some distribution of trips to the entrances the accesses and surrounding intersections would experience fewer than 5 peak hour turning movements at any location.

The access at Peterson Road was requested to be specifically addressed. Due to the extremely low traffic to the proposed site the entrance would operate exceptionally during all times. No conflicts with the nearby signalized intersection at Peterson Road and Constitution Avenue would occur. The proposed right-in/right-out entrance would draw from the same lane as the northbound right at the signal. The northbound right movement at this signal is a free-flow movement with a dedicated lane. Therefore, no queueing occurs at this northbound right movement and vehicles entering the proposed site would never be blocked from entering or exiting the site.

A discussion of northbound peak hour traffic was requested during the second review of this memorandum. Traffic counts were unavailable for this intersection so the exact number is unknown. As mentioned previously, any northbound right traffic has a free flow movement and is not anticipated to be an issue. Any northbound through queues that would block the proposed entrance would additionally not be an issue. Exiting vehicles would queue onsite and not be a detriment to the surrounding network.

SAFETY

As requested by the County, accident data in the area was pulled as provided by the State. As shown in Figure 2 below, no accidents were reported in this area for the last 10 years. Due to the extremely low generation of trips the proposed use represents it is not anticipated to have an impact on safety to this area.

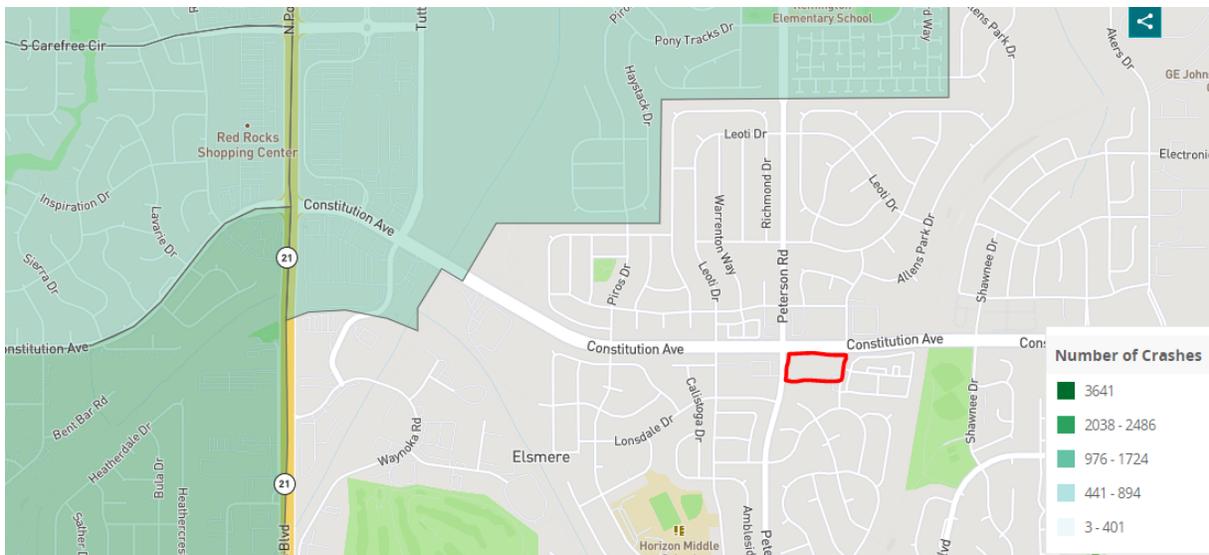


Figure 2 – Police Accident Data Map 2016-2022

Considerations for sight distance were also made at the proposed access along Peterson Road. Sight distance triangles are provided in Attachment 1. As shown on Attachment 1, sight distance at the intersection is available well beyond the required length due to the gradual curve in the roadway. No safety concerns are anticipated with the approval of the access along Peterson Road.

An autoturn analysis is also provided in Attachment 1. A WB 67 – Interstate Semi Trailer was utilized for this analysis. Although this vehicle is unlikely to ever be onsite it is the largest vehicle allowed on Colorado roads. Per CDOT freight and permitting specifications, “Colorado’s legal height limit is 14 foot

6 inches. All state highway structures with less than 14-foot, 6-inch vertical clearance may be found on the Vertical Clearances Map. Maximum width is 8'6" and legal weight is 80,000 pounds combined gross vehicle weight (GVW) on Interstate and 85,000 pounds on Non-Interstate highways. There is no overall length requirement for truck tractor semitrailer combinations as long as the trailer does not exceed 57 feet 4 inches." The WB 67 is the worst case vehicle for Colorado State roads and therefore was selected for the analysis.

CONCLUSIONS

The conclusions of this analysis are as follows:

1. The subject site is a standalone project in the County of El Paso, Colorado.
2. The proposed project is forecasted to generate 11 new AM trips, 16 new PM trips, and 170 new daily trips on average.
3. Auxiliary lanes current exists in both the east and westbound directions on Constitution Avenue at Canada Drive.
4. Based on the trip generation contained herein, the proposed mini warehouse use development would not significantly impact the surrounding roadways. Short and long range forecasts for the access locations would remain generally consistent with existing conditions.
5. No improvements are required or recommended above and beyond what is required on site for the construction of the use.
6. No safety concerns are anticipated with the approval of the access locations as shown.
7. Road Impact Fees will be due by the Applicant at the last land use approval consistent with the use and Impact Fee schedule.

We trust that the information contained herein satisfy the request of the County of El Paso, Colorado. If you have any questions or need further information, please contact Brian Horan at BrianHoran@GallowayUS.com or 303-770-8884.

Attachment I

Site Plan

