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Please add PCD File No. P-225

Memorandum

To: Elizabeth Nijkamp
Engineer Manager, El Paso County
From: Brian Horan, PE
Date: April 11, 2022
Re: **Constitution Storage: Traffic Memorandum
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.

Per ECM B.2.3.D please provide a narrative for the study area that includes adjacent roadways, intersections, and accesses.



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.

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 a minor 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.

Provide discussions for the proposed access on Peterson Road that justify the location of the access. From the EA meeting: "The TIS should look at the accident rate at this intersection. We would anticipate that the TIS would show us how you can have a restricted movement at this location and provide a safe street for all existing and turning traffic. All of this is then contingent upon a plat amendment being completed after a design has been justified through a TIS and conceptually approved by the County. Please include an autoturn exhibit for Peterson access." Provide an analysis on the crash history data for the intersection.

Please provide sight distance evaluations and recommendations, specifically for the access on Peterson Road. How is stacking in the northbound right turn lane towards Constitution affect the access point on Peterson Road? If access cannot be met because of traffic in the intersection vicinity determine what modifications would be required.

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

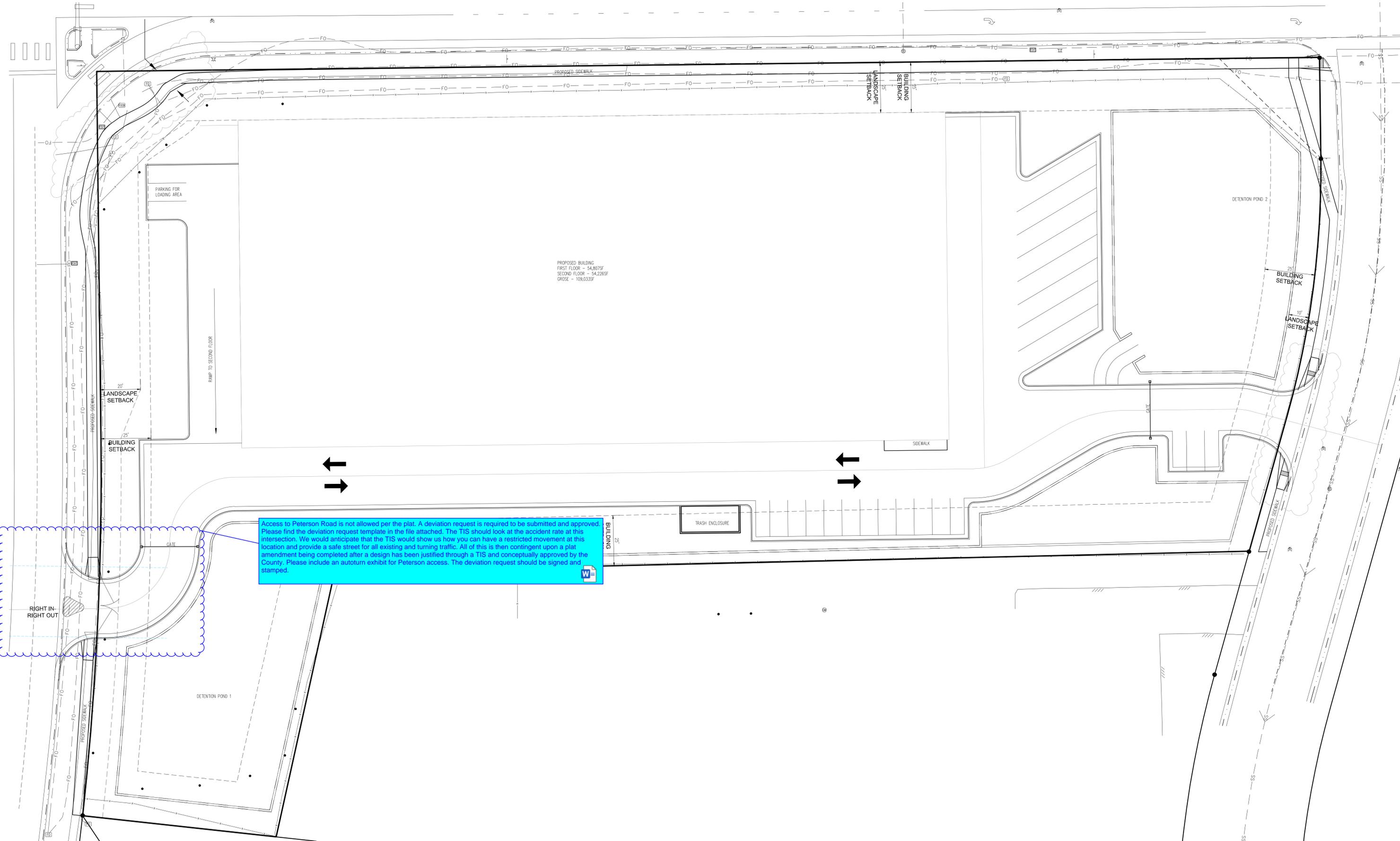
CONCLUSIONS

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. 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



Access to Peterson Road is not allowed per the plat. A deviation request is required to be submitted and approved. Please find the deviation request template in the file attached. The TIS should look at the accident rate at this intersection. We would anticipate that the TIS would show us how you can have a restricted movement at this location and provide a safe street for all existing and turning traffic. All of this is then contingent upon a plat amendment being completed after a design has been justified through a TIS and conceptually approved by the County. Please include an autoturn exhibit for Peterson access. The deviation request should be signed and stamped.

