

To: Brandy Williams
City of Fountain – City Engineer

From: Austin Rose, PE

Date: 12 July 2021

Re: **Walmart Market Fulfillment Center
Traffic Conformance Letter**



INTRODUCTION

This memorandum provides the results of a traffic conformance analysis performed in support of an approximately 24,000 square foot (SF) expansion and a 7,000 SF parking lot renovation in the City of Fountain, Colorado.

The subject property is currently occupied by a Walmart Supercenter and is proposing an expansion and remodel. The proposed expansion is part of a 14.57-acre site. It is located east of Venetucci Boulevard and south of Walmart Heights. Walmart Heights is a private drive that provides access to Walmart and Sam's Club.

The Walmart development is located in the southeast corner of the Walmart Heights and Venetucci Boulevard. The site location is shown on Figure 1.



Figure 1 – Site Location



TRIP GENERATION AND RECOMMENDATIONS

The client, Walmart, is proposing to reallocate 45 parking spaces for the 24,000 SF automated equipment expansion and 54 parking stalls for the 7,000 SF fulfillment center canopy. Four (4) new van pickup stalls and one box truck stall are also being proposed along the back side of the expansion. The expansion is proposed to consist solely of automated equipment used to fulfill online pickup orders – there will not be any additional retail space added as part of this project. The center is expected to operate seven (7) days a week between the hours of 8 AM and 8 PM. A full-size plan can be found in Attachment I.

As the expansion will only be machinery rather than retail space, trip generation should be expected to lower than typical retail use. For conservative estimates, a maximum of 50% of typical retail trip generation as provided by the Institute of Transportation Engineer's (ITE) Trip Generation 10th edition rates/equations was consulted. Of the forecasted trips, a majority will be existing customers who opt to pickup rather than shop in store, a portion will be newly generated traffic, and a lesser portion will be those who would have ordered online anyways but opt to pickup in person rather than wait for it to be delivered. A projected breakdown is provided in Table 1.

Table 1 – 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	
Shopping Center (full)	820	24,000	SF	102	62	164	91	98	189	2,278
Shopping Center (50%)	820	24,000	SF	51	31	82	46	49	95	1,139
Existing Traffic		60%		30	20	50	28	29	57	683
New Traffic		30%		15	10	25	14	15	29	342
Online Sales		10%		5	3	8	5	5	10	114
New Trip Total		(Online + New)		20	13	33	19	20	39	456

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 10th Edition

As shown in Table 1, the proposed site development is projected to generate, 33 net new weekday AM and 39 net new weekday PM peak hour vehicle trips as well as 456 net new weekday daily trips.

Access to the Walmart site is provided via multiple access locations along Venetucci Boulevard. The intersection of South Academy Boulevard and Venetucci Boulevard operates under signalized control. The newly expected generated trips are projected to have nominal effect on the signal. As there are multiple access points via Walmart Heights, new net trips per access points would also be nominal. No significant impact to the surrounding existing network is anticipated with the proposed development.

CONCLUSIONS

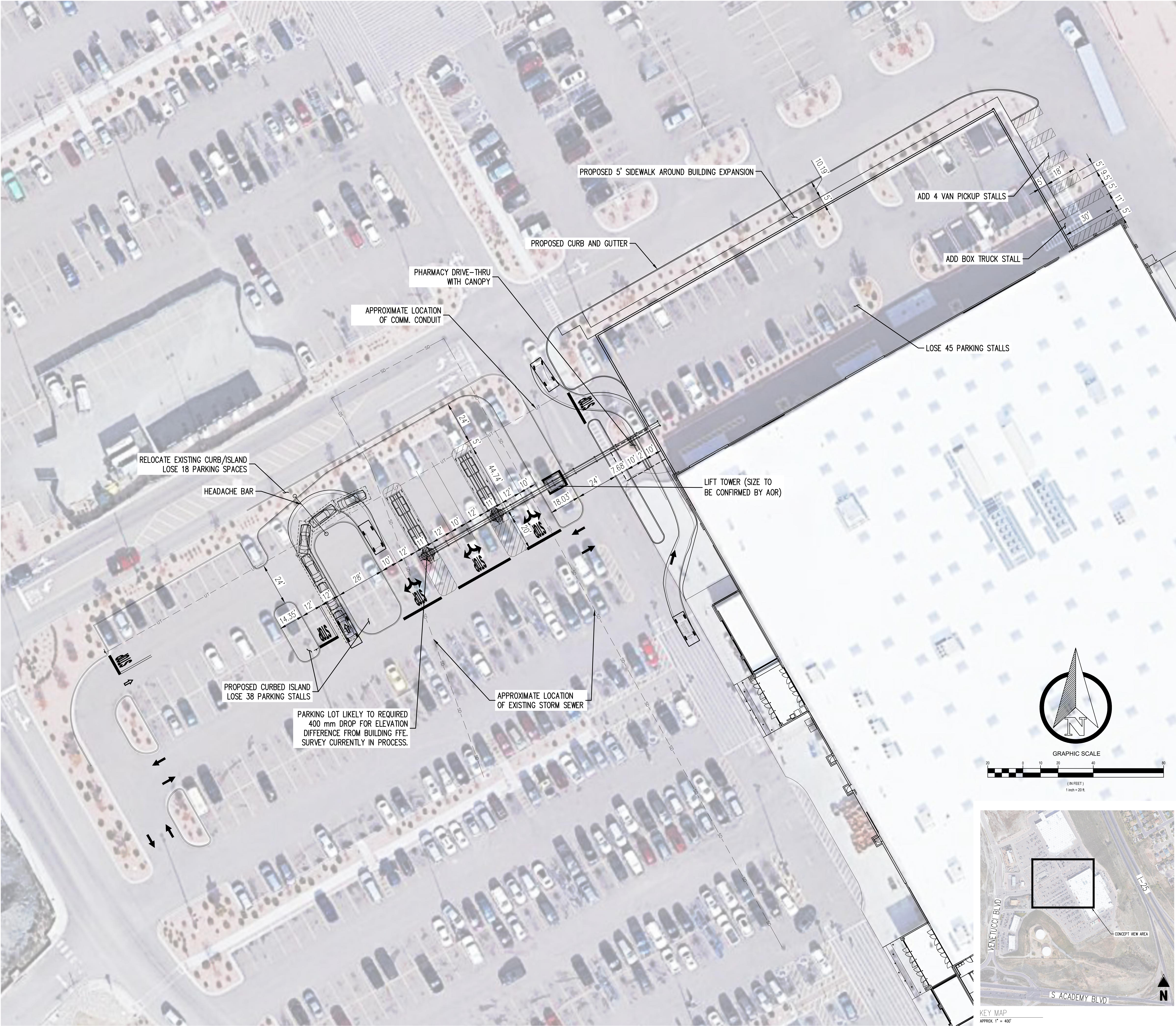
The conclusions of this comparative analysis are as follows:

1. The subject site is part of the Walmart development in the City of Fountain, Colorado.
2. The site is currently being proposed with the following expansion:
 - 24,000 SF automated equipment expansion
 - 7,000 SF online fulfillment center canopy
3. Trip generation rate for the proposed use would generate 33 net new weekday AM and 39 net new weekday PM peak hour vehicle trips as well as 456 net new weekday daily trips.
4. The net increase to the signal at South Academy Boulevard and Venetucci Boulevard and at the access points along Walmart Heights is expected to be nominal. No significant impact is anticipated with the proposed fulfillment center.

We trust that the information contained herein satisfy the request of the City of Fountain. If you have any questions or need further information, please contact Austin Rose at AustinRose@gallowayus.com or 303-770-8884.

Attachment I

Site Plan



DESIGN / CODE SUMMARY

EXPANSION SIZE:
±23,900SF

PORTAL / STALLS:
N/A

COMPRESSOR HOUSE:
TBD

MODULAR PICKUP EXISTING:
N/A

REDUCTION OF PARKING STALLS:
-97

ENTITLEMENT SUMMARY:
TBD

DISCLAIMERS

- * PRELIMINARY DESIGN CONCEPT ONLY
- * AHJ CODE DETERMINATION NOT COMPLETED AS OF 06/29/2021
- * CEC HAS REVIEWED AS OF 06/29/2021
- * WALMART CM PARTNERS HAVE NOT REVIEWED TO VERIFY/APPROVE AS OF 06/29/21
- * WALMART CM PARTNERS HAVE NOT REVIEWED TO VERIFY/APPROVE AS OF 06/29/21
- * TRUCK TRAFFIC ENTERS FROM VENETUCCI BLVD. ON EITHER SIDE OF SITE AND DOES NOT PASS THROUGH THE MFC AREA.
- * CEC TO COORDINATE UTILITY LOAD CONFORMANCE LETTER. TBD.

SCOPE TRIP:	TBD
PROJECTED ENTITLEMENT SUBMITTAL:	TBD
PROJECTED ENTITLEMENT APPROVAL:	TBD
PROJECTED PWO:	TBD
PROJECTED PERMIT APPROVAL:	TBD
POSSESSION DATE:	TBD
CONSTRUCTION COMPLETE:	TBD

Walmart
MFC EXTERNAL SITE PLAN CONCEPT
07/01/2021

#3018
FOUNTAIN, CO