

1070 Brookside Circle Traffic Compliance Letter

Project:

1070 Brookside Circle

Castle Rock, Colorado

Prepared For:

Kan N Lovett

6930 S. Robertsdale Way

Aurora, CO 80016

Prepared By:

Bulldog Engineering, LLC

Windsor, Colorado 80550

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1.0 Introduction

The purpose of this Traffic Letter is to evaluate the proposed traffic generated by the proposed changes required for the site improvements located at 1070 Brookside Circle in Castle Rock, Colorado.

2.0 Proposed Development

This Traffic Letter is for the proposed site improvements project located at 1070 Brookside Circle in Castle Rock, Colorado. See Figure 1: Vicinity Map and Figure 2: Proposed Site Improvements. The existing development was previously used as a garden center and is being proposed to be used for trailer sales/rentals, or for the purposes of the traffic analysis, used automobile sales.

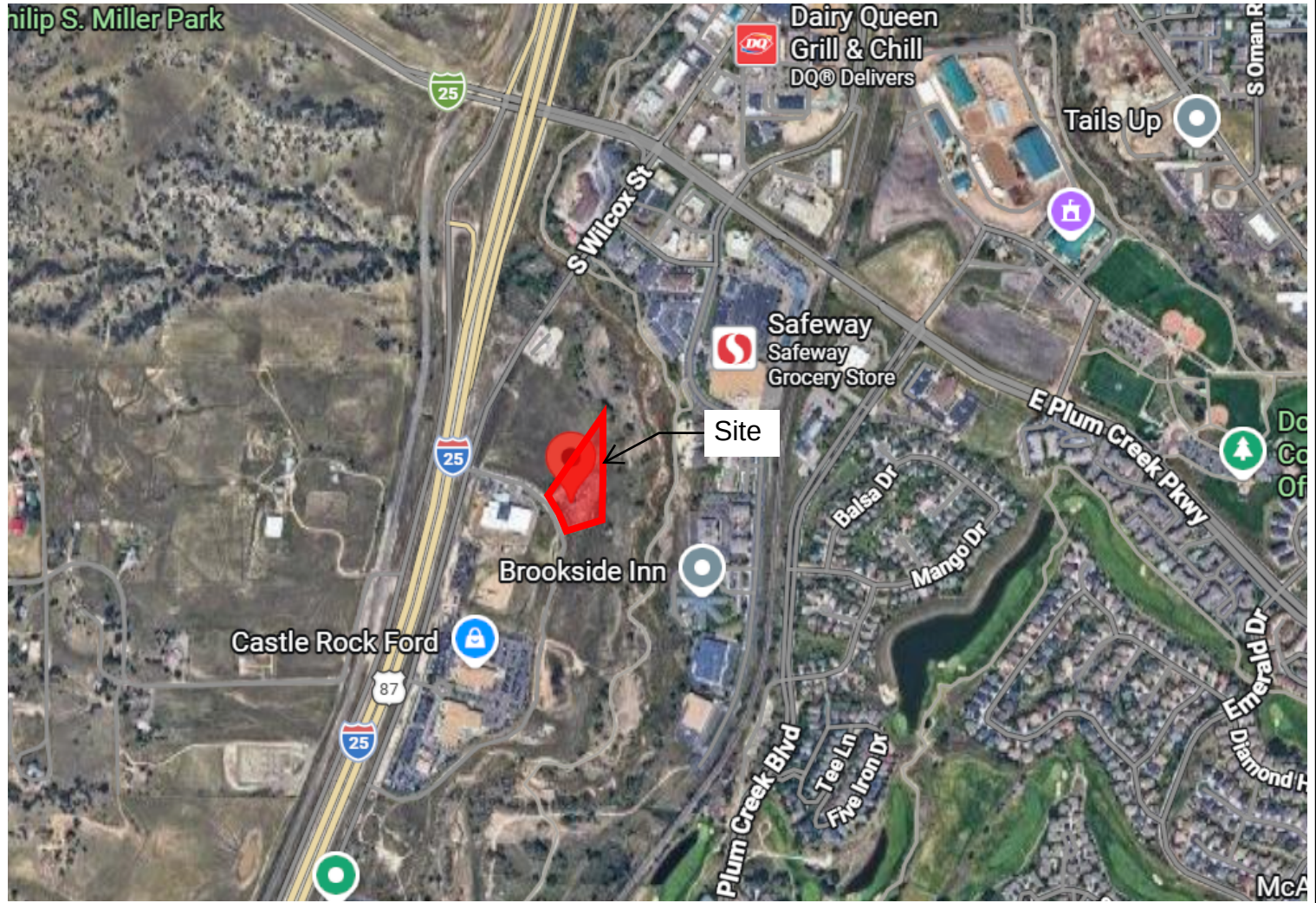
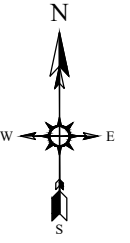
3.0 Trip Generation

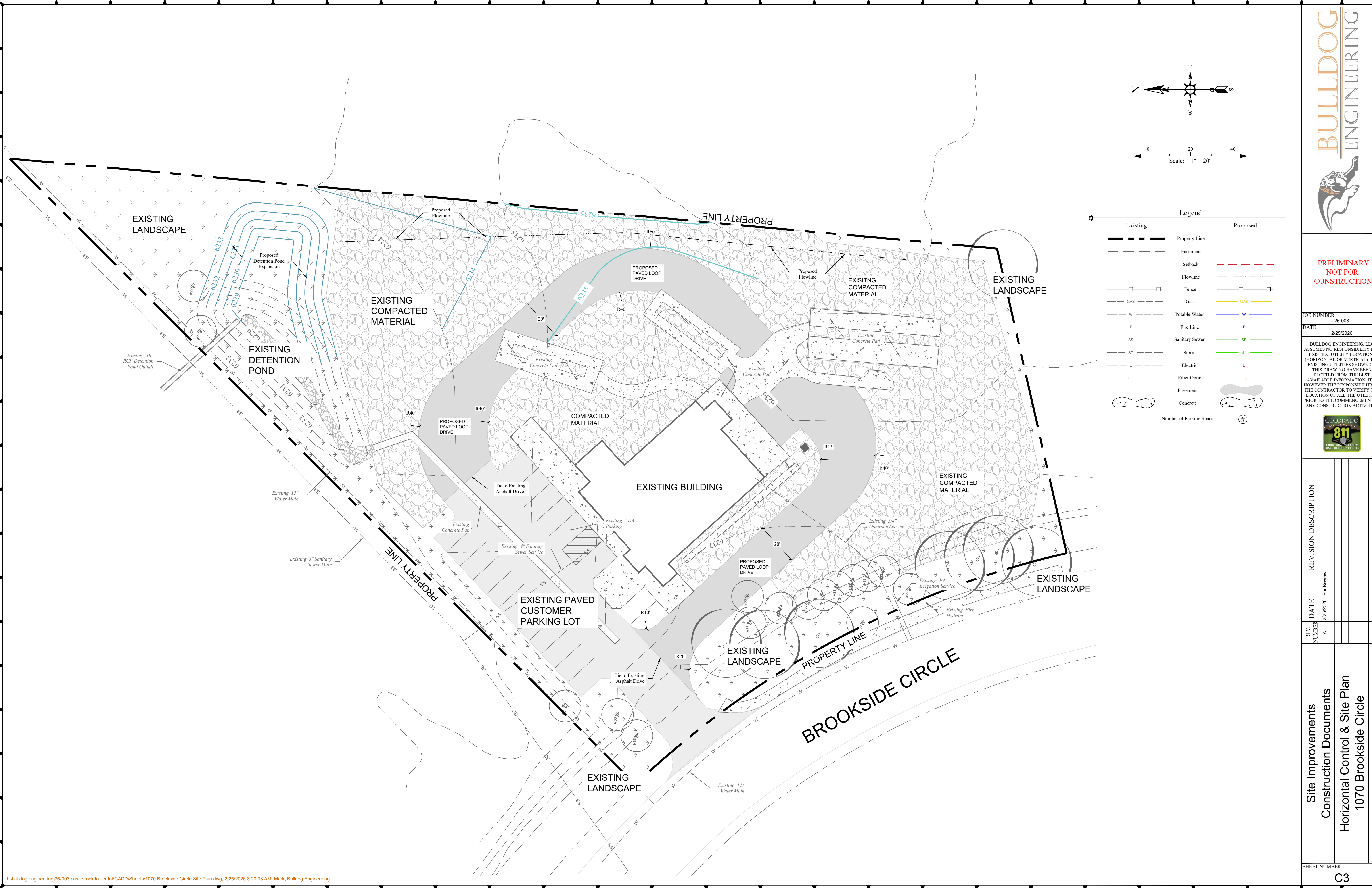
Site generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the Trip Generation Report published by the Institute of Transportation Engineers (ITE). ITE has established trip generation rates in nationwide studies of similar land uses.

For the purposes of this traffic analysis, we have analyzed the existing traffic demand for the existing use of a garden center vs the proposed traffic demand when used for trailer sales/rentals.

Per the ITE, the existing garden center generated approximately 645 daily trips, 10 AM total peak hour trips, and 27 PM total peak hour trips. See Table 1: Trip Generation for Existing Use.

Per the ITE, the proposed use is anticipated to generate approximately 349 daily trips, 9 AM total peak hour trips, and 15 PM total peak hour trips. See Table 2: Proposed Trip Generation for Proposed Use.







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JOB NUMBER
25-008

DATE
2/25/2026

BULLDOG ENGINEERING, LLC ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS (HORIZONTAL OR VERTICAL). THE EXISTING UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS HOWEVER THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL THE UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.



REV. NUMBER	DATE	REVISION DESCRIPTION
A	2/25/2026	For Review

Site Improvements
Construction Documents

Horizontal Control & Site Plan
1070 Brookside Circle
Castle Rock, CO

SHEET NUMBER
C3

Table 1: Trip Generation for Existing Use (ITE 10th Edition)

ITE Code	Land Use	Size	Average Daily Trips		AM Peak Hour Trips						PM Peak Hour Trips					
			Rate	Total	Rate	% In	In	% Out	Out	Total	Rate	% In	In	% Out	Out	Total
817	Nursery (Garden Center)	3.87 KSF	*	645	2.43	50	5	50	5	10	6.94	50%	13	50%	14	20
Total				645			5		5	10			13		14	27

KSF = Thousand Square Feet

Table 1: Proposed Trip Generation for Proposed Use (ITE 10th Edition)

ITE Code	Land Use	Size	Average Daily Trips		AM Peak Hour Trips						PM Peak Hour Trips					
			Rate	Total	Rate	% In	In	% Out	Out	Total	Rate	% In	In	% Out	Out	Total
841	Automobile Sales (Used)	3.87 KSF	*	349	2.13	76	7	24	2	9	3.75	47%	7	53%	8	15
Total				349			7		2	9			7		8	15

KSF = Thousand Square Feet

* The Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition does not provide detailed data on Average Daily Trips (ADT) or AM Peak Hour Trips for the Automated Car Wash land use (ITE Code 948). As such, the PM peak hour data was used for the AM peak hour and 10 times the PM peak hour was used for ADT.

4.0 Site Access Evaluation

The project site is located at 1070 Brookside Circle in Castle Rock, Colorado. Vehicle access to the project site is proposed from Brookside Circle, along the southwest side of the site. The access to the project site is appropriate based upon the existing road network and location of the project site. See Figure 2: Proposed Site Improvements.

5.0 Conclusions

Based upon the review of the project's trip generation and site access, it can be determined that the proposed use is appropriate from a traffic engineering perspective as it will decrease the traffic demand from the existing use of the site. The site access, proposed land use, and size is appropriate from a traffic engineering perspective. The project's peak hour site generated traffic is appropriate and the site access points will not create a negative traffic impact upon the adjacent roadway system. See Tables 1 and 2.

APPENDIX

Land Use: 817

Nursery (Garden Center)

Description

A nursery or garden center is a free-standing building with an outside storage area for planting or landscape stock. The nurseries surveyed primarily serve the general public. Some have large greenhouses and offer landscaping services. Most have office, storage, and shipping facilities. Nurseries are characterized by seasonal variations in trip characteristics. Nursery (wholesale) (Land Use 818) is a related use.

Additional Data

Outside storage areas are not included in the overall gross floor area measurements. However, if storage areas are located within the principal outside faces of the exterior walls, they are included in the overall gross floor area of the building.

The sites were surveyed in the 1980s and the 2010s in California and Vermont.

Source Numbers

205, 240, 926

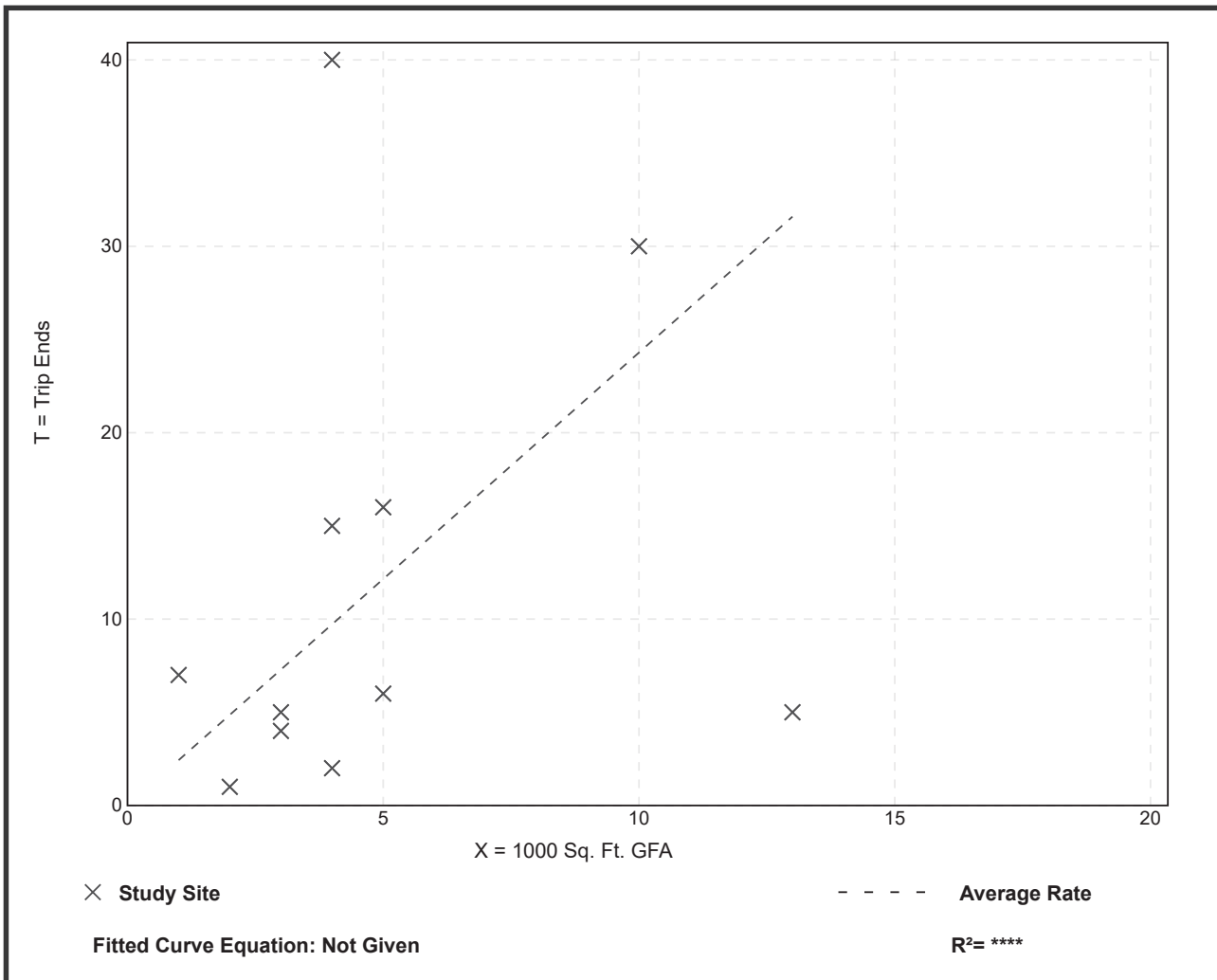
Nursery (Garden Center) (817)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 11
 1000 Sq. Ft. GFA: 5
 Directional Distribution: Not Available

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.43	0.38 - 10.00	2.68

Data Plot and Equation



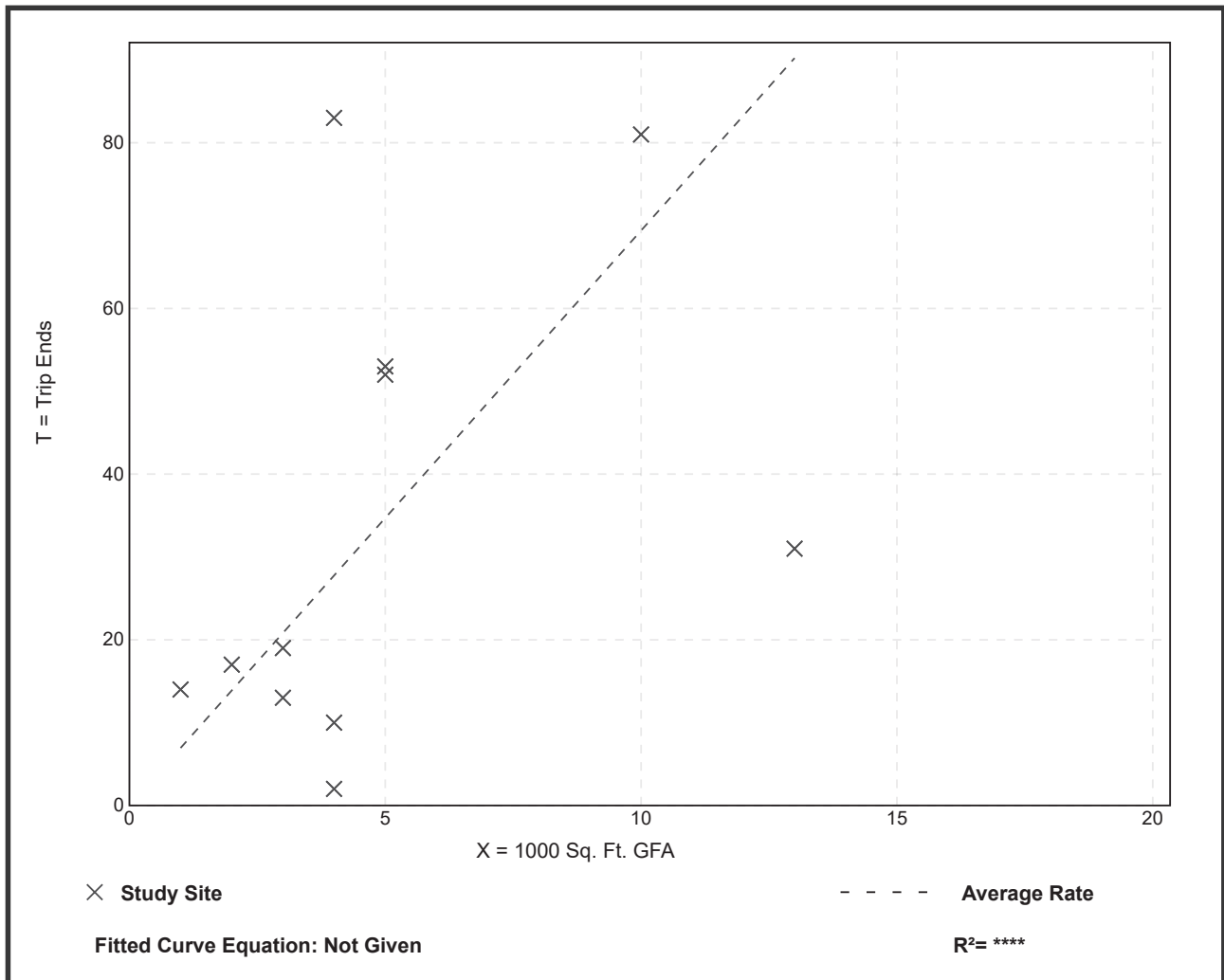
Nursery (Garden Center) (817)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 11
 1000 Sq. Ft. GFA: 5
 Directional Distribution: Not Available

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
6.94	0.50 - 20.75	5.52

Data Plot and Equation



Land Use: 841

Automobile Sales (Used)

Description

A used automobile sales dealership is typically located along a major arterial street characterized by abundant commercial development. The sale or lease of used cars is the primary business at these facilities; however, automobile services and parts sales may also be available. Some dealerships also include leasing options, truck sales, and servicing. Automobile sales (new) (Land Use 840) and recreational vehicle sales (Land Use 842) are related uses.

Additional Data

Time-of-day distribution data for this land use are presented in Appendix A. For the 14 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 9:45 and 10:45 a.m. and 4:30 and 5:30 p.m., respectively.

The sites were surveyed in the 2010s in Texas.

Source Numbers

880, 881

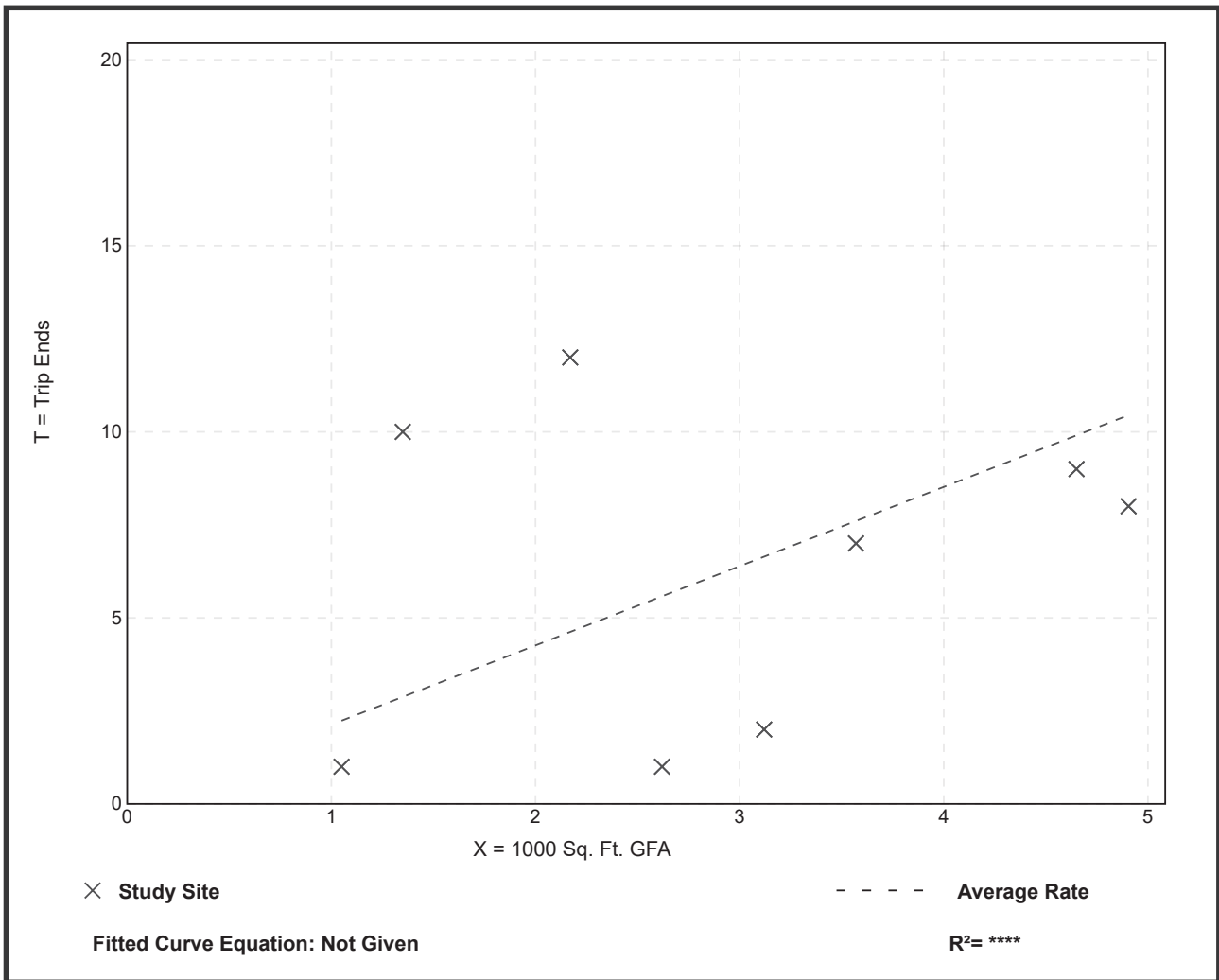
Automobile Sales (Used) (841)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 8
 1000 Sq. Ft. GFA: 3
 Directional Distribution: 76% entering, 24% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.13	0.38 - 7.41	1.98

Data Plot and Equation



Automobile Sales (Used) (841)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 14
 1000 Sq. Ft. GFA: 2
 Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.75	0.56 - 8.15	2.28

Data Plot and Equation

