



Department of Transportation
Division of Highway and Bridge Maintenance
360 Lincoln Avenue
Warwick, RI 02888

January 9, 2024

Derek L. Hug, P.E., PTOE
Pare Corporation
8 Blackstone Valley Place
Lincoln, RI 02865

Subject: Physical Alteration Permit (PAP) Applicability Request
1112 Reservoir Avenue, Cranston

Dear Mr. Hug:

We have reviewed your PAP applicability request (copy attached, received on December 22, 2023) for the proposed redevelopment of a former Pizza Hut location into a marijuana dispensary at 1112 Reservoir Avenue (Route 2) in Cranston.

Your letter states that the modifications proposed will be limited to the building structure itself with no alterations to driveway access, and no impacts to the State drainage system since there are no changes in site impervious, grading or drainage patterns. Your letter also includes an evaluation of the change in use with respect to traffic impacts and safety, which you concluded that there would be no significant impacts to Reservoir Avenue as a result of the proposed change. The report notes that there is overgrown vegetation within the State Right of Way adjacent the Pocasset River Bridge that should be trimmed to help improve sightline for the driveway, please be aware we have notified our roadside maintenance staff requesting that the overgrowth be addressed.

With that said, based on the information provided, we have determined that a Physical Alteration Permit is not required. If the project scope changes and results in any potential impacts to the State Highway Right-of-Way (ROW), please let us know so we can review and provide more guidance if necessary.

If you have any questions, please contact Pam Brooks P.E. at 401-734-4889.

Sincerely,

Matthew J. Ouellette, P.E.
Deputy State Highway Maintenance Operations Engineer

Enclosure(s): Request Letter received 12/22/23

cc: Brooks, Lapatin, Ouellette, Rocchio, Walusiak (w/o att)

December 15, 2023
Revised December 22, 2023

Mr. Sam Lapatin
Acting Managing Engineer
Rhode Island Department of Transportation
Division of Highway and Bridge Maintenance
360 Lincoln Avenue
Warwick, RI 02886

Re: **Physical Alteration Permit (PAP) Applicability Request**
1112 Reservoir Avenue
Cranston, Rhode Island
(Pare Project No.: 23211.00)

Dear Mr. Lapatin:

On behalf of Ancora Advisors, LLC, Pare Corporation (Pare) is requesting a determination of applicability for the proposed redevelopment of a former Pizza Hut location into a marijuana dispensary at 1112 Reservoir Avenue (Route 2) in Cranston, Rhode Island. Access to the property is to be provided through the existing driveways, which are not anticipated to be altered. Figure 1 shows the site location.

All substantial modifications to the site will be limited to the building structure itself. There are no plans to change any grading within the site, or to the amount of impervious area within the site. Therefore, there is no anticipation that there will be any change in drainage patterns onsite that may impact the state drainage system along Reservoir Avenue. A site plan for the project is enclosed.

As part of this request, Pare reviewed the anticipated trip generation for the proposed dispensary use and a safety review of the current access to Reservoir Avenue. Further discussion of those topics are in the following paragraphs.

Trip Generation

Trip generation for the proposed development was completed using the industry standard Institute of Transportation Engineers (ITE) *Trip Generation, 11th Edition*. The Trip Generation Manual provides traffic generation information for various land uses compiled from studies conducted by members nationwide. The proposed project consists of the redevelopment of an existing building previously used as Pizza Hut with an area of approximately 3,800 square feet into a medical dispensary. To determine the approximate trips generated with the proposed use in comparison to its previous use, trips were calculated using Land Use Code (LUC) 930 – Fast Casual Restaurant and compared to LUC 882 – Marijuana Dispensary.



PROJECT NO. 23211.00

DATE: DECEMBER 2023



**FIGURE 1
LOCUS MAP**

1112 RESERVOIR AVENUE
CRANSTON, RHODE ISLAND

A summary of the previous and anticipated site-generated trips from the site is provided in Table 1 below. Copies of the trip generation worksheets are enclosed. The proposed site is anticipated to generate an additional 35 trips during the morning peak hour, and an additional 20 trips during the afternoon peak hour. Over a 24-hour period on an average weekday, the proposed site is anticipated to generate an additional 433 trips.

Table 1: Trip Generation Summary

Land Use		Weekday, AM Peak Hour of Adjacent Street Traffic	Weekday, PM Peak Hour of Adjacent Street Traffic	Weekday, All Day
Existing Fast Casual Restaurant (LUC 930) – 3,800 SF	Enter	3	29	185
	Exit	<u>2</u>	<u>23</u>	<u>184</u>
	Total	5	52	369
Proposed Marijuana Dispensary (LUC 882) – 3,800 SF	Enter	21	36	401
	Exit	<u>19</u>	<u>36</u>	<u>401</u>
	Total	40	72	802
Additional Trips Generated	Enter	18	7	216
	Exit	<u>17</u>	<u>13</u>	<u>217</u>
	Total	35	20	433

Traffic Safety Analysis

On December 5, 2023, a spot speed study was conducted on Reservoir Avenue near the site driveway to assess driving speeds along it. A summary of the speed data results is shown in Table 2 below. The complete data log can be found attached. The most notable metric presented is the 85th percentile speed, which was utilized for the sight distance analysis. The largest 85th percentile speed of 34 miles per hour on Reservoir Avenue was rounded up to a design speed of 35 miles per hour to provide a more conservative analysis.

Table 1: Reservoir Avenue Speed Study Summary

	Posted Speed	Average Speed	True Median (50 th Percentile)	85 th Percentile	10 MPH Pace	% over Posted
Northbound	35	28	28	34	21-30	10
Southbound	35	27	27	33	21-30	2

Based on the speed data obtained, a design speed of 35 miles per hour was selected for Reservoir Avenue. According to the latest editions of the American Association of State Highway and Transportation Officials (AASHTO) publication *A Policy on the Geometric Design of Highways and Streets*, the minimum safe stopping sight distance for 35 miles per hour is 250 feet. A summary of the sight distance for the driveway can be seen in Table 3.

Table 3: Site Driveway Intersection Sight Distance Summary

		Required ISD (ft)	Desirable ISD (ft)	Measured ISD (ft)
Reservoir Avenue Driveway	Looking south (left)	250	335	216
	Looking north (right)	250	390	360

Sight distance looking left from the Reservoir Avenue driveway is limited due to the presence of overgrown vegetation and wooden fence around the property. To improve sight lines from this driveway, it is recommended to prune overgrown vegetation within the state highway right-of-way between the site and the adjacent bridge over the Pocasset River, which not only reduces sight distance from this driveway, but also partially blocks the sidewalk along Reservoir Avenue. Removal of this vegetation will restore sight distance to a value in excess of the minimum value and may exceed the desirable value.



Photo 1. Sight line looking southwest (left) from the Reservoir Avenue driveway



Photo 2. Sight line looking northeast (right) from the Reservoir Avenue driveway

In addition to the sight distance analysis, crash data was requested from the Cranston Police Department for the most recent three-year period for Reservoir Avenue along the site frontage. A breakdown of the crashes based on type and severity are listed in Table 4 below.

Mr. Sam Lapatin

(5)

Revised December 22, 2023

Table 4: Crash Data Summary

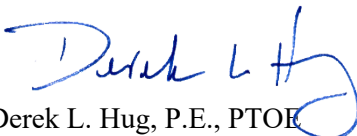
Roadways/Intersection	Total Crashes	Crash Severity		Crash Type					
		Non-Fatal Injuries	Fatalities	Rear End	Sideswipe	Head On	Single Vehicle	Angle	Other/Unknown
Reservoir Avenue at 1112 Reservoir Avenue	0	0	0	0	0	0	0	0	0
Reservoir Avenue at Delway Road	4	1	0	1	1	1	0	1	0
TOTAL	4	1	0	1	1	1	0	1	0

A total of 4 crashes occurred within the most recent three years, all at the intersection of Reservoir Avenue and Delway Road. One of these crashes resulted in non-fatal injury, while no fatalities were reported.

Based on the information provided above, Pare Corporation believes there will be no significant impacts on Reservoir Avenue (Route 2) as a result of the proposed change in use.

We trust the information contained above and enclosed will be sufficient for your review and determination of applicability. Please feel free to contact me at 401-578-8543 or dhug@parecorp.com if you have any questions or need additional information.

Sincerely,



Derek L. Hug, P.E., PTOE
Managing Engineer



12/22/2023

BSO/DLH/

c: David Pontarelli, Ancora Advisors, LLC

Enclosures: Site Plan
Trip Generation Worksheets
Speed Study Summary

No.	Revisions	Date

GENERAL NOTES

ENGINEER

SAB
Engineering

150 Amaral Street
Riverside, Rhode Island 02915
508-496-9564
sab@sabengineering.net

SEAL

STEVEN A. BOGLE
No. 02917
REGISTERED PROFESSIONAL ENGINEER
CIVIL

DATE: 11/15/23

PROJECT NO.: SAB-23

DRAWN BY: KMR

SCALE: NTS

CHECKED BY: SAB

PROJECT:

PROPOSED GRAVITY BLOCK RETAINING WALL AND PARKING PLAN

1112 RESERVOIR AVENUE
CRANSTON, RI

TITLE

LAYOUT PLAN

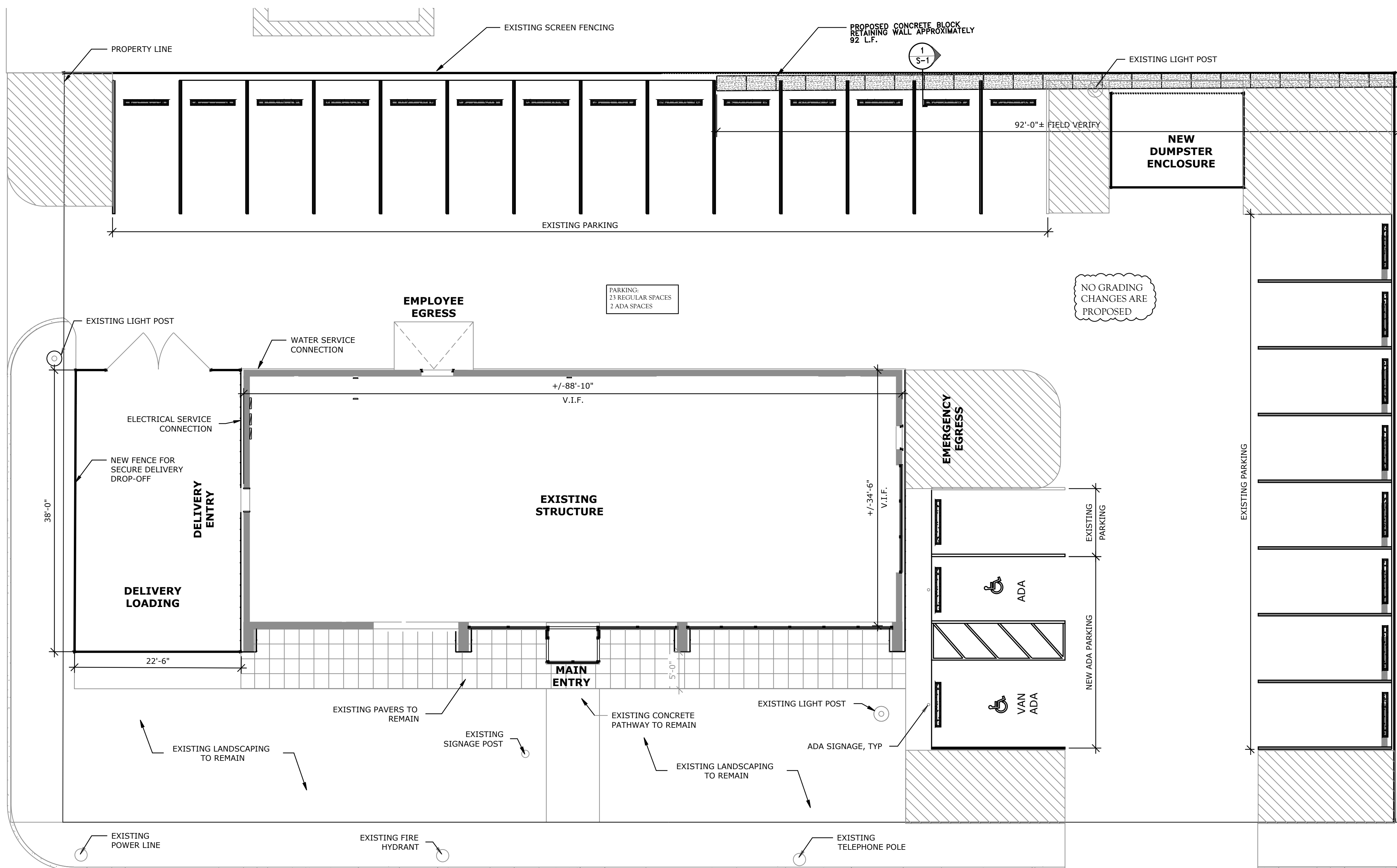
CLIENT

SHEET NO.

S-1

FOR PERMIT ONLY

DELWAY ROAD
TWO-WAY



RESERVOIR AVENUE

RETAINING WALL AND PARKING LAYOUT PLAN

NTS

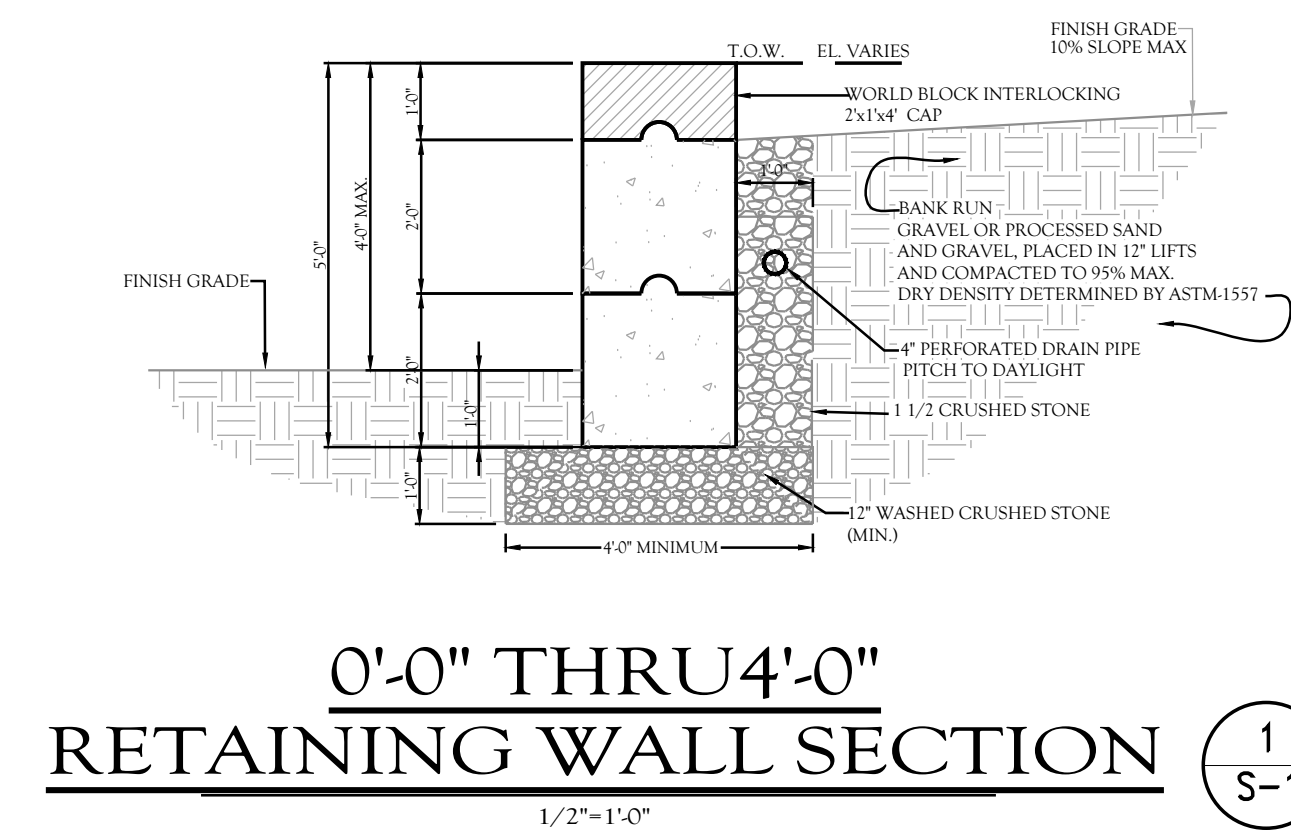
WORLD BLOCK RETAINING WALL NOTES

- ALL WALL CONSTRUCTION IS TO BE FIELD DOCUMENTED BY SAB ENGINEERING IN ORDER TO PROVE CONFORMANCE TO THESE CONSTRUCTION DOCUMENTS, PROPER COMPACTION OF SOILS AND THE PRESENCE OF DRAINAGE MATERIALS. COORDINATING THIS DOCUMENTATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONCRETE USED FOR WALL UNITS SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3 K.S.I. WALL UNITS SHALL COMPLY WITH WORLD BLOCK SPECIFICATIONS, ASTM C94 AND ACI-301-99, HAVE 4% - 7% ENTRAINED AIR, 3'-5" SLUMP, AND MUST BE PLACED AT A MINIMUM OF 50'.
- WALL CONSTRUCTION SHALL FULLY COMPLY WITH WORLD BLOCK STANDARD SPECIFICATIONS.
- UNDERDRAINS SHALL BE PERFORATED, 4" DIAMETER AND SHALL MEET THE REQUIREMENTS OF AASHTO M252 AND/OR ASTM P949. ALL DRAINS ARE TO PITCH A MINIMUM OF 1/8" PER FOOT. UNDERDRAINS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DRAINS NOT SPECIFIED TO TIE INTO THE SITE DRAINAGE SHALL DRAIN TO DAYLIGHT.
- RETAINED SOIL SHALL BE DETERMINED TO MEET OR EXCEED THE REQUIREMENTS BELOW IN THE ABSENCE OF A GEOTECHNICAL ENGINEERING STUDY. SOILS NOT MEETING THESE REQUIREMENTS SHALL BE EXCAVATED AND REPLACED WITH ACCEPTABLE SOILS. THE UNDERLYING SOILS SHALL BE INVESTIGATED FOR THE PRESENCE OF SOFT CLAYS TO A DEPTH OF 1.5 TIMES THE HEIGHT OF THE RETAINING WALL. IF WEAK SOILS ARE PRESENT, THEY SHALL BE EXCAVATED AND REPLACED WITH ACCEPTABLE SOILS.
LEVELING PAD SHALL BE 2" CRUSHED STONE WITH NO MORE THAN 5% PASSING A #200 SIEVE.
FREE DRAINING BACKFILL SOIL SHALL BE 1 1/2" CRUSHED STONE PLACED DIRECTLY BEHIND WALL FOR THE DEPTHS SPECIFIED ON PLANS (1'0" MIN.) AND SHALL EXTEND VERTICALLY FROM LEVELING PAD TO 4" BELOW TOP OF WALL. EXPOSED DRAINAGE STONE SHALL BE PROTECTED FROM FINE SOIL MIGRATION THROUGHOUT CONSTRUCTION.
BACKFILL SOIL BEYOND DRAINAGE ZONE SHALL BE CLEAN BANK RUN GRAVEL WITH NO MORE THAN 10% PASSING THE #200 SIEVE AND SHALL MEET OR EXCEED THE REQUIREMENTS BELOW. ORGANIC AND FROST SUSCEPTIBLE SOILS ARE NOT PERMITTED WITHIN A MIN. DISTANCE BEHIND THE WALL EQUAL TO THE HEIGHT OF THE WALL.
- ALL DRAINAGE AND FOUNDATION SOIL SHALL BE COMPACTED TO 95% OF ITS MAX. DRY DENSITY, AS DETERMINED BY ASTM D1557, USING HAND OPERATED PLATE COMPACTION EQUIPMENT. BACKFILL SOIL BEYOND CONSOLIDATION ZONE SHALL BE COMPACTED TO 95% OF ASTM D1557. CONTRACTOR SHALL ENSURE THAT FOUNDATION SOIL IS CAPABLE OF SUPPORTING A MIN. OF 3 K.S.F.
- THE FOLLOWING MINIMUM SOIL PROPERTIES WERE USED IN THE DESIGN:

SOIL WEIGHT (PCF)	FRICTION ANGLE (DEG)	
BACKFILL / INFILL SOIL	125	32
RETAINED SOIL	125	32
FOUNDATION SOIL	125	32
LEVELING PAD	125	40
FREE DRAINING BACKFILL	120	40
- ENSURE THAT THE FIRST COURSE OF WALL UNITS IS IN FULL CONTACT WITH THE LEVELING PAD. INSTALL NEXT COURSE OF UNITS SUCH THAT THE VERTICAL GAPS ARE STAGGERED BETWEEN ADJACENT COURSES.
- CONTRACTOR AND ENGINEER-OF-RECORD SHALL APPROVE/PROVIDE ALL ELEVATIONS AND INVERTS IN THESE PLANS PRIOR TO ORDERING MATERIAL.

GENERAL NOTES

- ALL MEASUREMENTS ARE TO BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.
- GRADING BEHIND RETAINING WALLS IS NOT TO EXCEED 14" (1" VERTICAL ON 10" HORIZONTAL).
- ALL EXCAVATION IS TO BE IN ACCORDANCE WITH THE RHODE ISLAND STATE BUILDING CODE AND OSHA REGULATIONS.
- RETAINING WALLS ARE TO BE NO HIGHER THAN SPECIFIED IN THE PROVIDED CROSS SECTION.
- ALL OF THE BASE PREPARATION SHALL BE OVERSEEN BY A REPRESENTATIVE FROM SAB ENGINEERING.



0'-0" THRU 4'-0"
RETAINING WALL SECTION
1/2" = 1'-0" 1
S-1

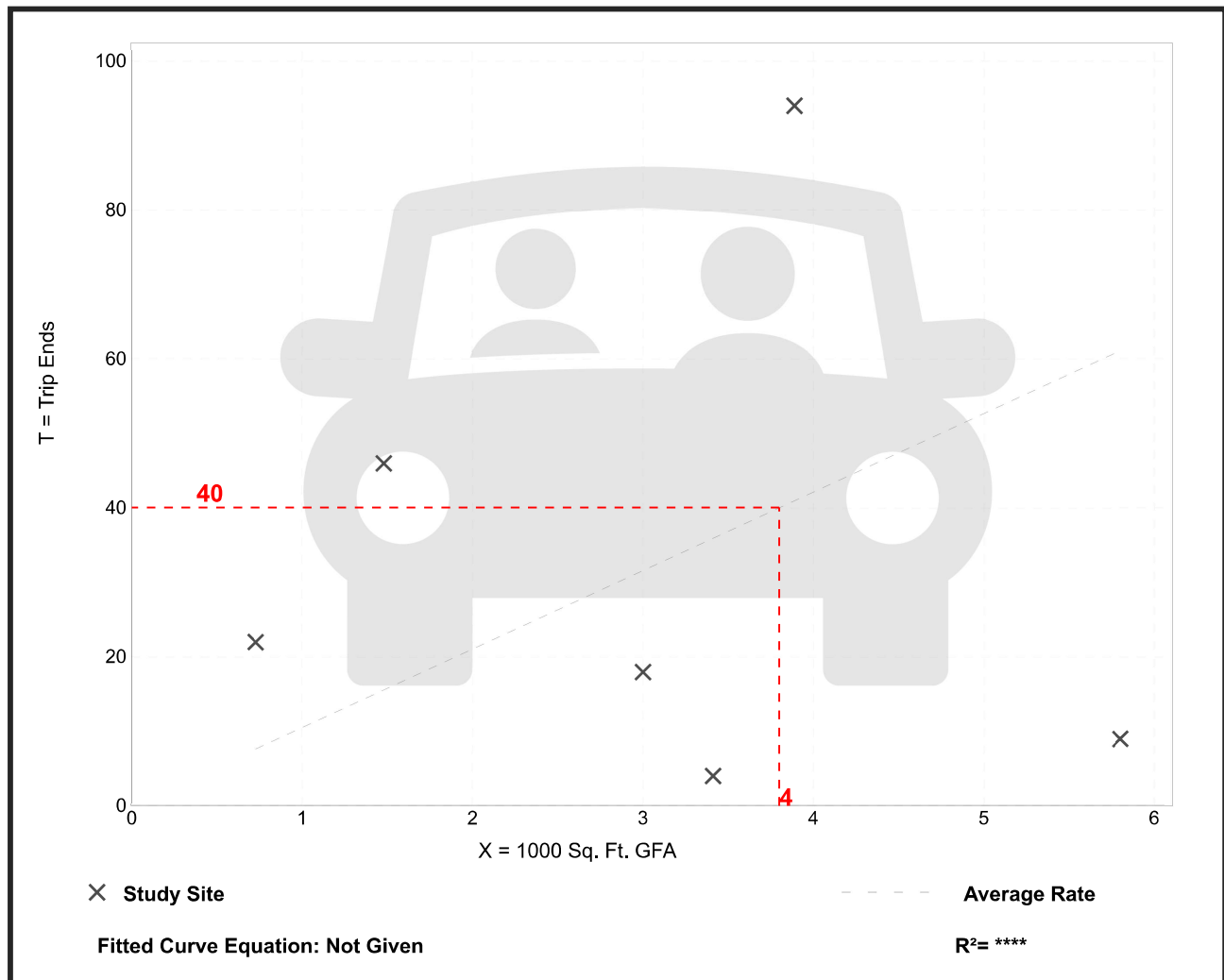
Marijuana Dispensary (882)

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: 6
 Avg. 1000 Sq. Ft. GFA: 3
 Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.54	1.17 - 31.08	12.69

Data Plot and Equation



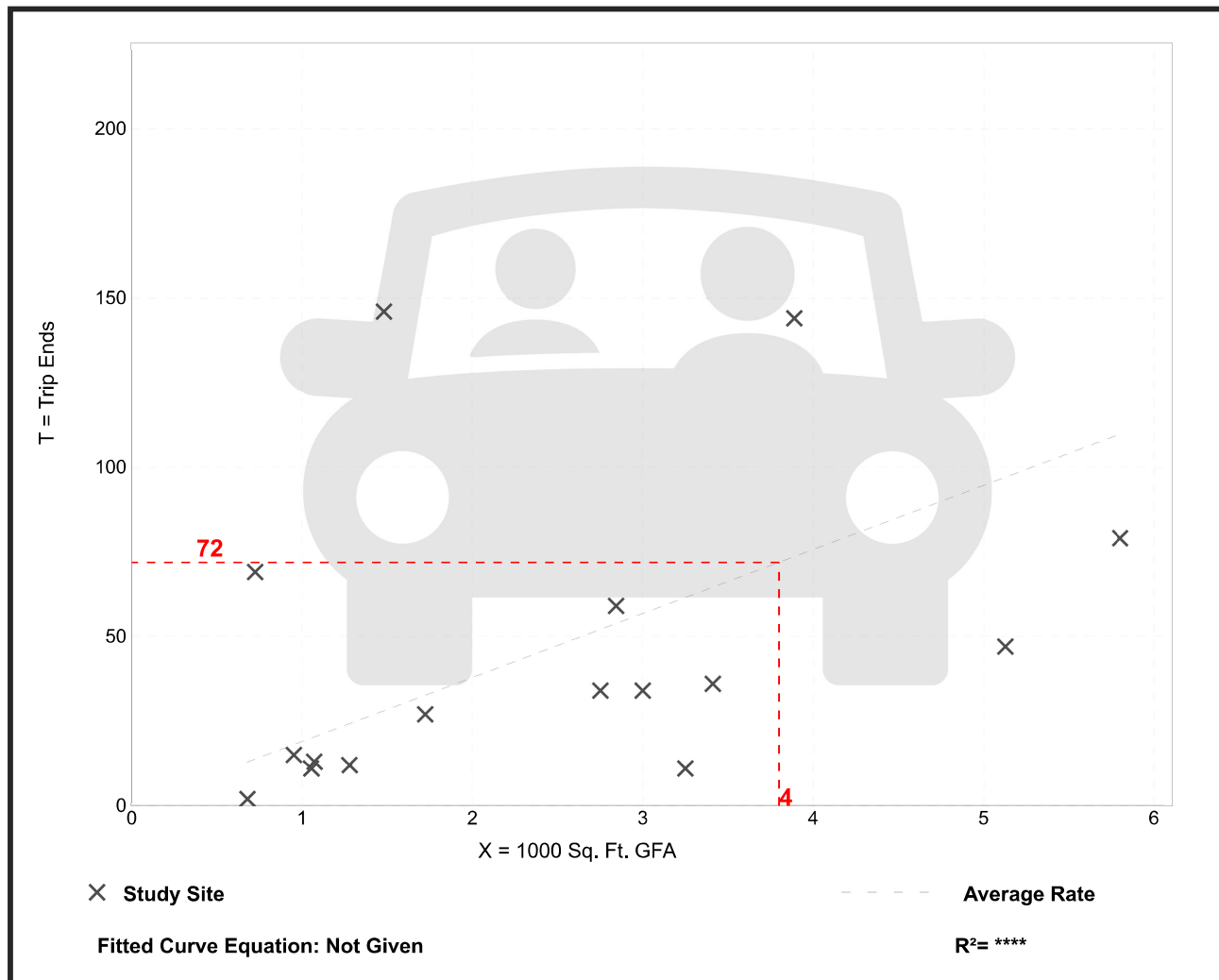
Marijuana Dispensary (882)

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: 16
 Avg. 1000 Sq. Ft. GFA: 2
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
18.92	2.94 - 98.65	21.73

Data Plot and Equation



Marijuana Dispensary (882)

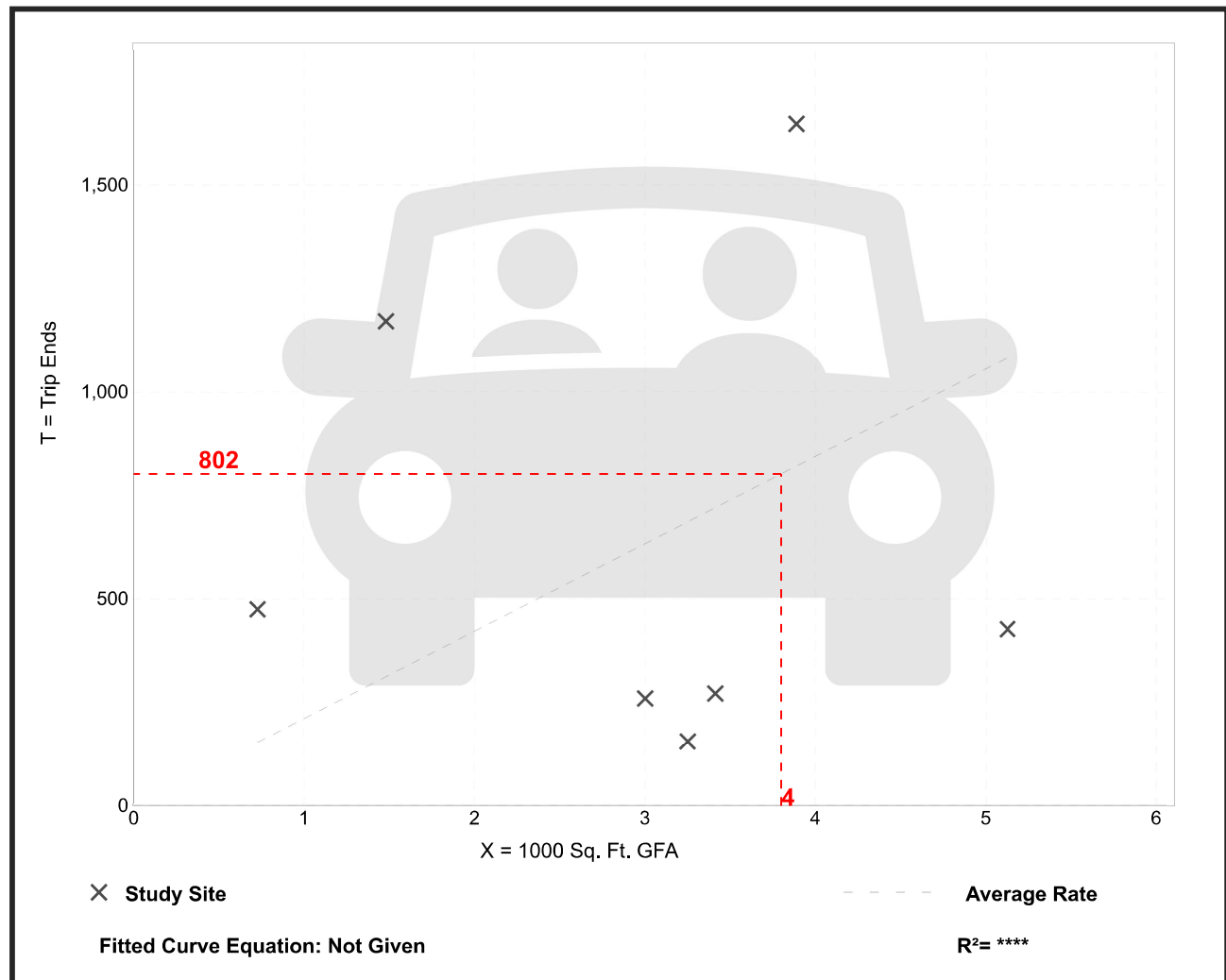
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 7
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
211.12	48.00 - 791.22	246.90

Data Plot and Equation



Fast Casual Restaurant (930)

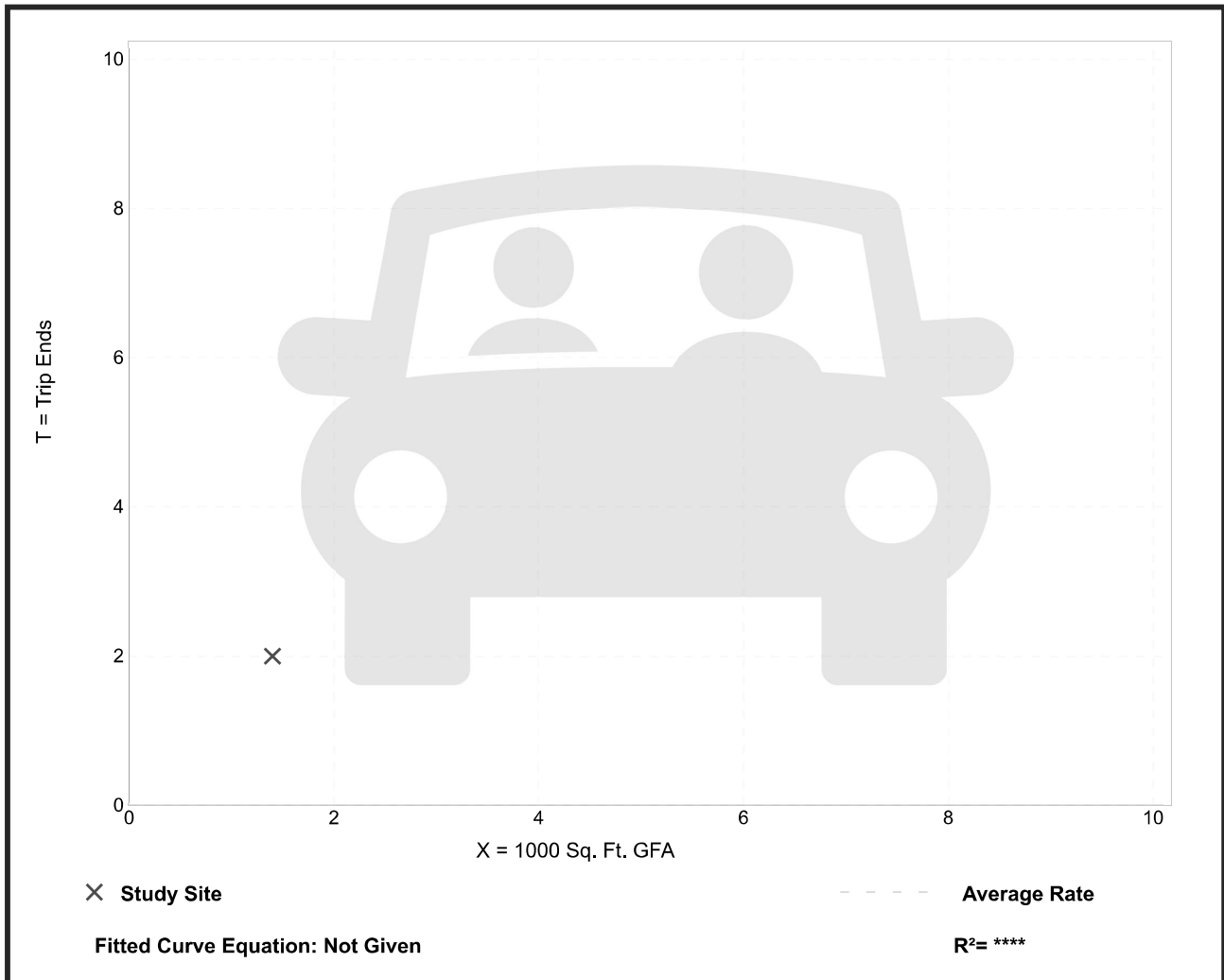
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 1
 Avg. 1000 Sq. Ft. GFA: 1
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.43	1.43 - 1.43	*

Data Plot and Equation

Caution – Small Sample Size



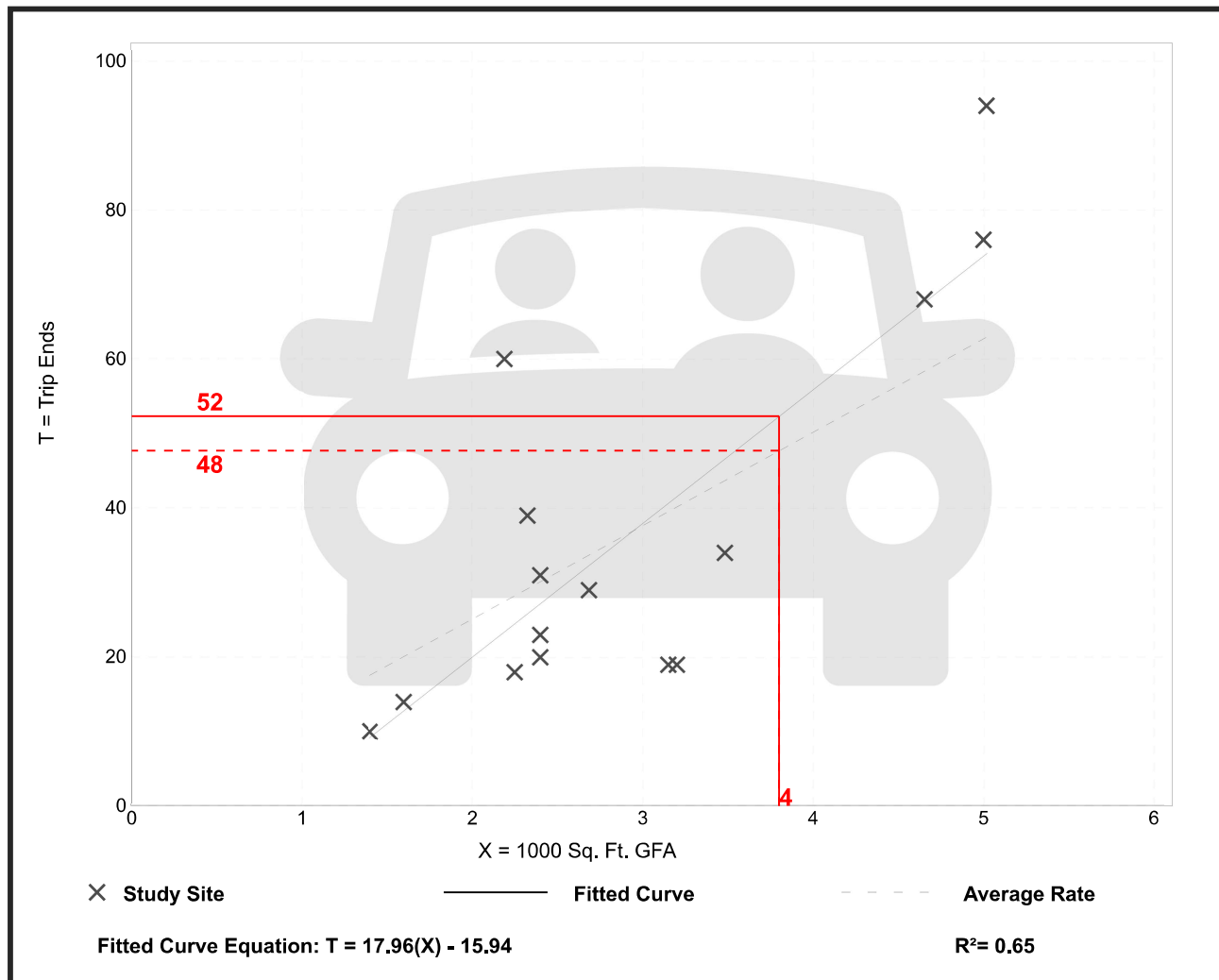
Fast Casual Restaurant (930)

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: 15
 Avg. 1000 Sq. Ft. GFA: 3
 Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
12.55	5.94 - 27.40	5.52

Data Plot and Equation



Fast Casual Restaurant (930)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

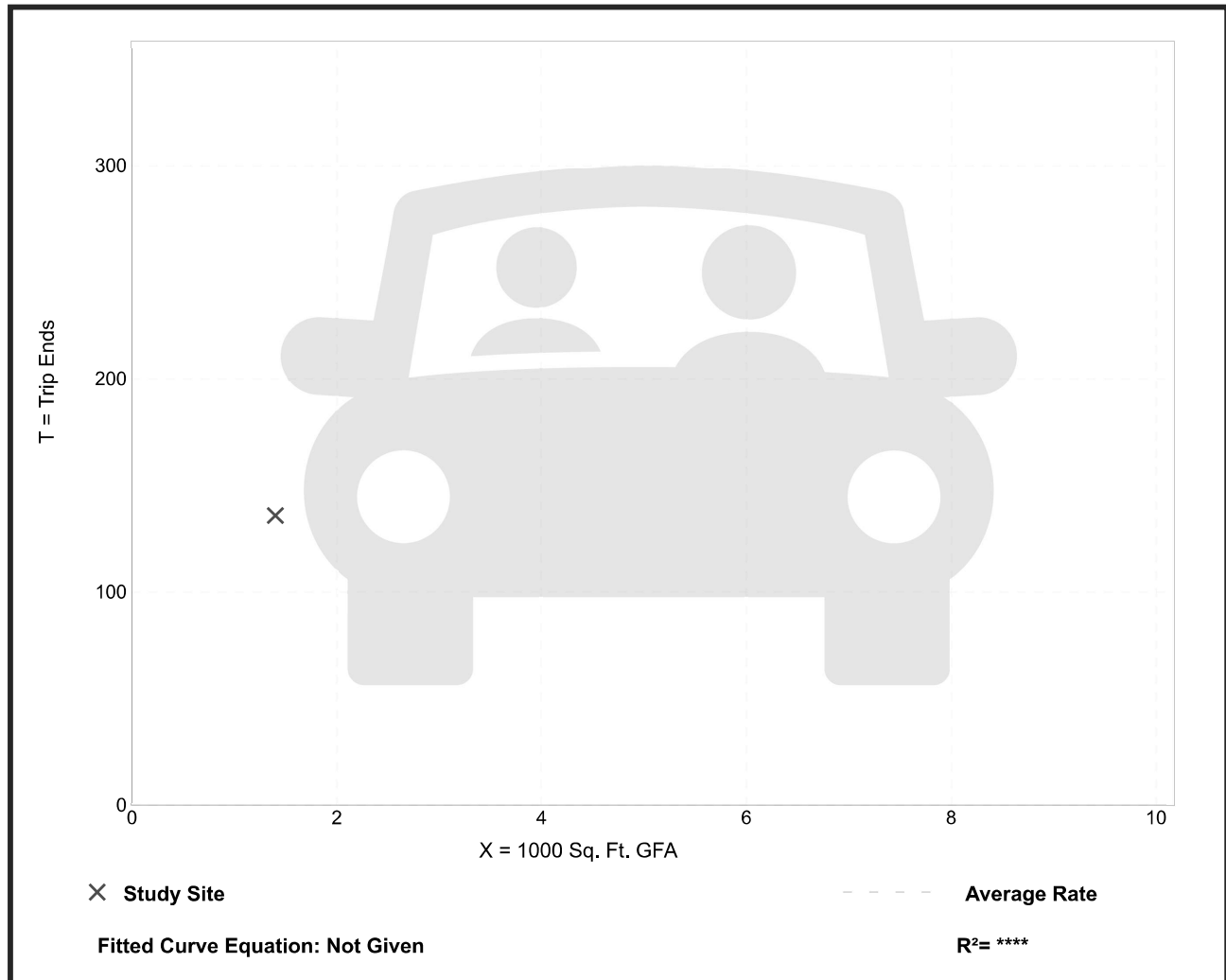
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. 1000 Sq. Ft. GFA: 1
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
97.14	97.14 - 97.14	*

Data Plot and Equation

Caution – Small Sample Size



Pare Corporation

8 Blackstone Valley Place
Lincoln, RI, 02865
401-334-4100
www.parecorp.com

Roadway: Reservoir Avenue
City/State: Cranston, RI
Weather: 35 and Clear
Taken By: BSO

File Name : 23211.00 1112 Reservoir Ave
Site Code : 23211.00
Start Date : 12/5/2023
Page No : 1

#	Northbound	Southbound
1	27	28
2	25	23
3	24	25
4	28	30
5	35	21
6	32	23
7	28	25
8	30	26
9	36	28
10	42	30
11	41	32
12	27	32
13	30	35
14	35	29
15	25	34
16	22	28
17	29	23
18	31	25
19	27	24
20	37	23
21	30	32
22	38	23
23	34	22
24	30	23
25	33	23
26	27	26
27	31	28
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54	21	22
55	23	24
56	28	23
57	29	27
58	27	35
59	25	27
60	23	22
61	31	29
62	29	28

Pare Corporation

8 Blackstone Valley Place
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 401-334-4100
 www.parecorp.com

File Name : 23211.00 1112 Reservoir Ave
 Site Code : 23211.00
 Start Date : 12/5/2023
 Page No : 2

#	Northbound	Southbound
63	26	35
64	25	38
65	27	22
66	21	28
67	29	23
68	24	28
69	26	27
70	43	35
71	38	32
72	24	32
73	28	34
74	23	25
75	25	27
76	31	24
77	26	26
78	35	22
79	30	26
80	31	28
81	23	23
82	32	30
83	30	35
84	21	34
85	23	27
86	23	29
87	21	28
88	22	27
89	28	24
90	24	32
91	23	34
92	35	32
93	32	30
94	28	28
95	26	27
96	46	33
97	35	35
98	32	30
99	33	24
100	25	25
101		

Class	Vehicle Count	85 Percentile	10 MPH Pace Speed	Number in Pace	Percent in Pace	Number of Vehicles Over 35 MPH	Percent of Vehicles Over 35 MPH	Average Speed	True Median (50th Percentile)
Northbound	100	34	21 - 30	69	69	10	10	28	28
Southbound	100	33	21 - 30	74	74	2	2	27	27
Summary	200	34	21 - 30	143	72	12	6	28	27