



181 WEST HIGH STREET  
SOMERVILLE, NJ 08876

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# TRAFFIC IMPACT STATEMENT

## FOR

# TERRAVET ROCKAWAY, LLC

### PROPOSED ANIMAL HOSPITAL EXPANSION

BLOCK 84, LOT 21  
328 US ROUTE 46  
BOROUGH OF ROCKAWAY  
MORRIS COUNTY, NEW JERSEY

JULY 7, 2022

GARY W. DEAN, P.E., P.P.  
NJ LICENSE No. 33722



DOUGLAS J. POLYNIK, P.E.  
NJ LICENSE No. 44905

## INTRODUCTION

Dolan & Dean Consulting Engineers, LLC (D&D) has prepared this Traffic Impact Statement in support of the proposed expansion of the Rockaway Animal Hospital on a site designated as Lot 21 in Block 84 along Woodland Avenue and US Route 46 in the Borough of Rockaway, Morris County. The site is currently developed with a 9,435 square foot animal hospital operated by Terravet Rockaway, LLC and known as the Rockaway Animal Hospital. Under the development program, the existing building will be razed, and a new 12,523 square foot building will be constructed for continued operation by the Rockaway Animal Hospital. Access is proposed via one full-movement driveway along Woodland Avenue.

D&D has been retained by the applicant to prepare a Traffic Impact Statement to address trip generation characteristics of the animal hospital, and to review access, on site circulation, and loading.



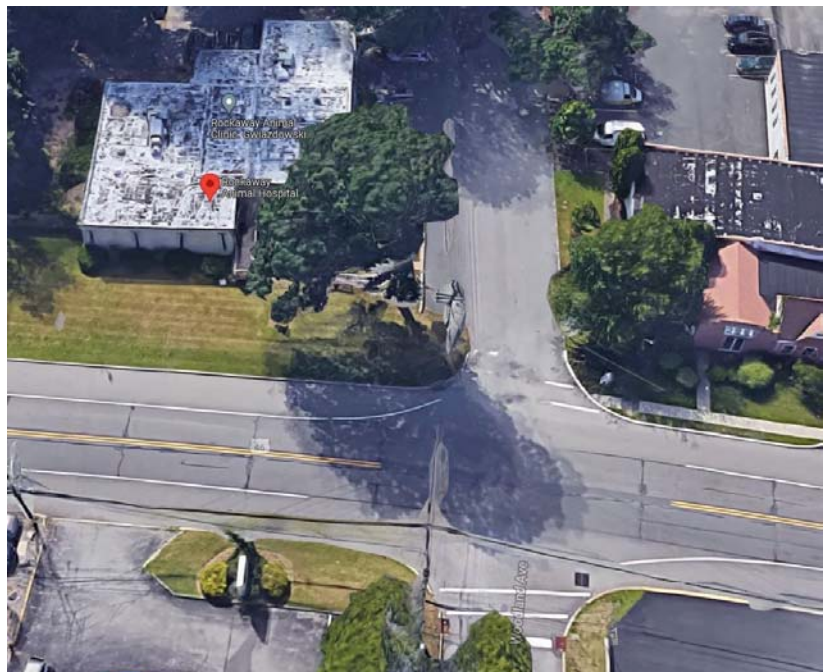
## EXISTING CONDITIONS

The site is designated as Lot 21 in Block 84 in the G-B (General Business) and HT/LI (High Tech/Light Industrial) Zones and is located in the eastern corner of the intersection formed by Woodland Avenue and US Route 46.

Woodland Avenue is a local roadway under municipal jurisdiction. The roadway begins to the northwest at Meadowview Avenue then continues southeast for approximately 370-feet before intersecting US Route 46. The roadway then continues for approximately 760-feet past US Route 46, before reaching its terminus at a dead-end. One travel lane is provided in each direction. Within the general site vicinity (southeast of US Route 46), parking is permitted along both sides of Woodland Avenue. The roadway has an assumed, statutory speed limit of 25 miles per hour. Sidewalks are not provided.

US Route 46 is designated as an Urban Principal Arterial under NJDOT jurisdiction with a general east-west orientation. One lane of travel is provided in both directions with a shoulder of variable width. Sidewalks are not provided, and parking is not permitted along the roadway. The posted speed limit is 40 miles per hour.

The Woodland Avenue intersection with US Route 46 is a 4-leg STOP controlled intersection where US Route 46 has the right of way.



## TRAFFIC CHARACTERISTICS OF THE WAREHOUSE

Data compiled by the Institute of Transportation Engineers (ITE) is typically used to forecast trip generation for new developments. Based on review of the 11<sup>th</sup> Edition of the ITE Trip Generation Manual, Land Use Code 640 – “Animal Hospital/Veterinary Clinic” is applicable to the proposed use. Trip generation calculations are appended and summarized below.

TABLE I  
TRIP GENERATION PROJECTIONS  
12,523 SF ANIMAL HOSPITAL

Morning Peak Hour			Evening Peak Hour		
Enter	Exit	Total	Enter	Exit	Total
32	16	48	21	32	53

As previously mentioned, the site is currently occupied by a 9,435 square foot animal hospital. Table II shows the overall traffic comparison between the existing and proposed animal hospital and net traffic increases.

TABLE II  
TRIP GENERATION COMPARISON

Building Use	Size	Morning Peak Hour	Evening Peak Hour
Existing	9,435 SF	36	38
Proposed	12,523 SF	48	53
Traffic Increase		+12	+15

As noted, the projected traffic increase (conservatively assuming the new building could accommodate new patients) are minimal and represent at most – one new traffic movement every four to five minutes over a peak hour. This type of impact is insignificant from a traffic engineering perspective and would have no material impact on the adjacent roadway system. Intersection and roadway operations would not be affected by such a small traffic increase.



The ITE Manual of Transportation Engineering Studies provides guidelines regarding when a traffic impact study is appropriate for a new development. It is well recognized that small traffic generators do not materially affect traffic operations below a certain traffic generation threshold. Specifically and as further adopted by NJDOT in their Highway Access Management Code (NJAC 16:47), ITE recommends that detailed traffic impact studies need only be performed when a proposed development is projected to generate 100 or more new peak hour trips.

As shown in Table II above, the current operation and proposed expansion of the Rockaway Animal Hospital operates with peak hour traffic volumes well below 100 trips – in fact approximately only 50% of the minimum threshold when a Traffic Impact Study might have relevance. The net impacts of only 15 additional peak trips would not warrant the need for more detailed findings, as the conclusions will be the same – that the proposed use will not have a negative traffic impact on the roadway system or affect safe site ingress or egress.

When compared to the existing facility, the proposed animal hospital will produce one additional vehicle movement every 4 minutes during the critical evening peak hour. Such an impact can be considered negligible from a traffic engineering perspective and will not negatively impact the area roadway network.



## SITE PLAN REVIEW

The Site Plan prepared by Houser Engineering, LLC was reviewed with regard to site access, on-site circulation, and loading:

- One full-movement site driveways will be provided along Woodland Avenue, allowing direct access to the parking lot, loading zone and building entry. This design represents a substantial improvement over the current conditions that features, multiple ill-defined access points and permits direct, parking maneuvering on Woodland Avenue with perpendicular parking. The proposed design consolidates access and provides more parking in a conventional design contained entirely on-site.
- The site plan has been designed in accordance with recognized design guidelines, to promote safe and efficient ingress, egress and on-site circulation for all expected vehicles that may access the site.

Based on this review, it is concluded that safe and efficient access and circulation can be provided to the site with reasonable and prudent driver behavior.

As demonstrated by the minimal increase in trip generation between the existing and proposed facilities, the proposed animal hospital will not have a measurable impact on the surrounding roadway network.

Consequently, from a traffic engineering perspective, the site is particularly well suited for the proposed development and will have no detrimental impact on area traffic conditions.



# TECHNICAL APPENDIX

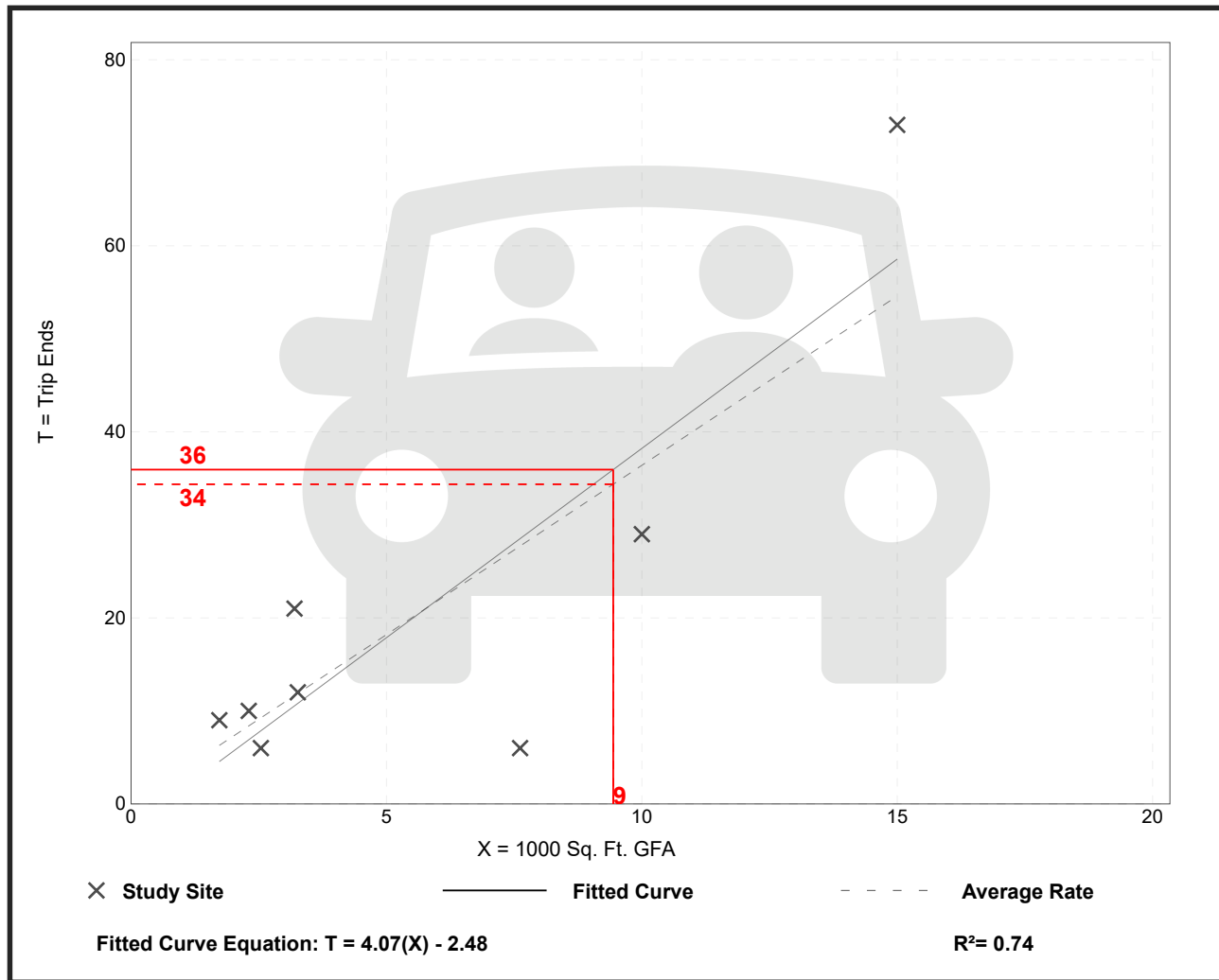
# Animal Hospital/Veterinary Clinic (640)

**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  
 Avg. 1000 Sq. Ft. GFA: 6  
 Directional Distribution: 67% entering, 33% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.64	0.79 - 6.56	1.78

## Data Plot and Equation





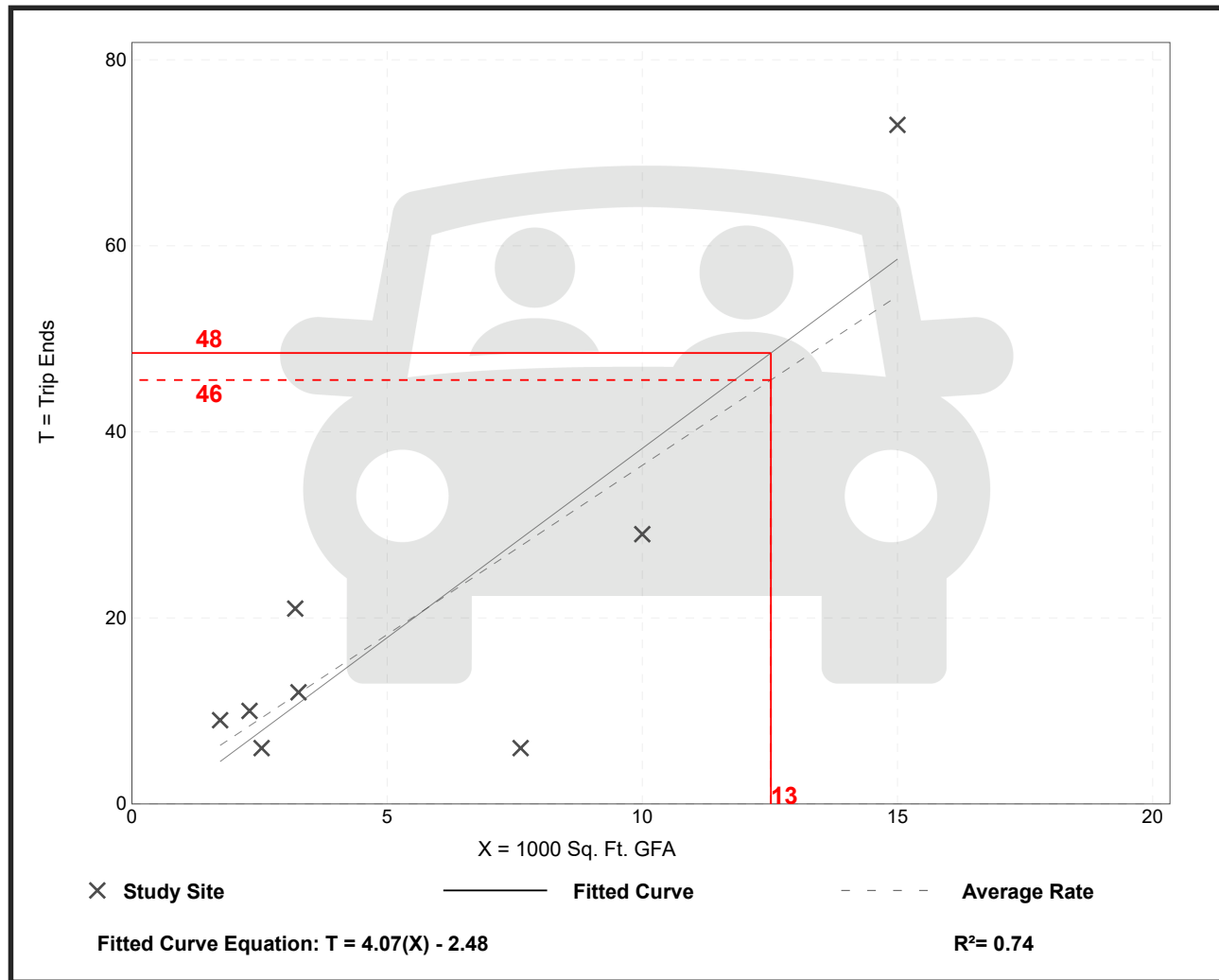
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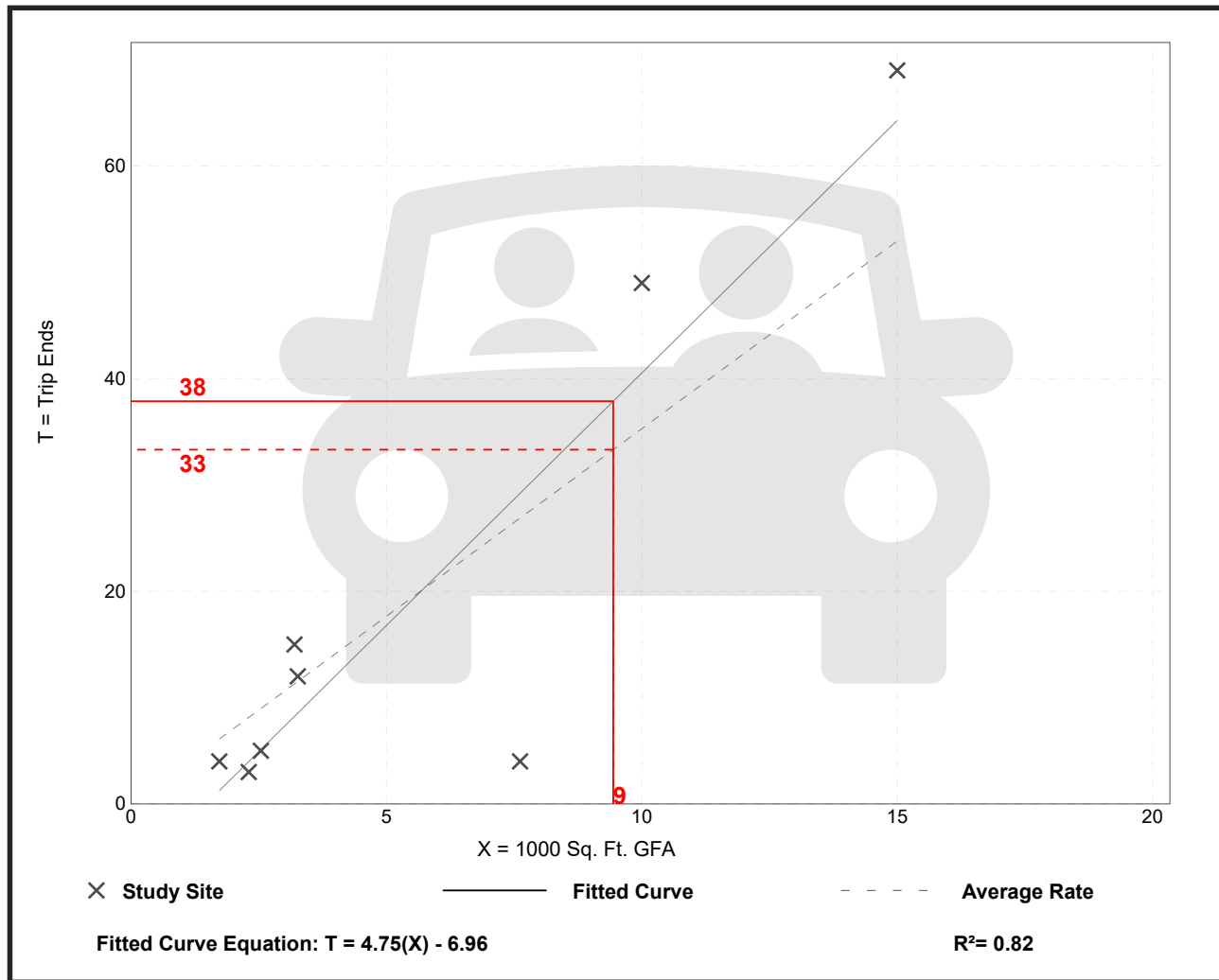
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**On a: Weekday,**  
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**One Hour Between 4 and 6 p.m.**  
**Setting/Location: General Urban/Suburban**  
 Number of Studies: 8  
 Avg. 1000 Sq. Ft. GFA: 6  
 Directional Distribution: 40% entering, 60% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.53	0.53 - 4.90	1.80

## Data Plot and Equation



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