



MINUTES OF MEETING

TO: All attendees
FROM: Jonathan Geiger, Project Engineer
DATE: January 26, 2017
SUBJECT: Cubesmart Driveway Pre-Application Meeting
K&S Project No. 18299.00

| | | |
|-----------------|-------------------|--------------------------|
| Present: | Leanne Fernandez | FDOT, Marlin Engineering |
| | Djemcy Limage | FDOT, Marlin Engineering |
| | Roger Lemieux | FDOT, Marlin Engineering |
| | D.G. McGuire | Broward County |
| | Noemi Hew | Broward County Transit |
| | Bob Zuccaro, P.E. | K&S, Engineer |
| | Jonathan Geiger | K&S, Engineer |

Keith & Schnars "will rely on these notes as the approved record of matters discussed and conclusions reached during this meeting unless you send the author written notice to the contrary within seven calendar days of receipt date of these meeting minutes".

A Pre-Application meeting was held with Florida Department of Transportation (FDOT) and Broward County to discuss the proposed access/driveway design concept and to discuss driveway, utility, and drainage permit requirements.

1. K&S was informed that this meeting was to discuss access and driveway permitting only. K&S was provided the following FDOT contact information:
 - a. James Poole is to be contacted for questions regarding site drainage permitting.
 - b. Tim Brock is to be contacted for questions regarding site utility permitting.
2. D. McGuire informed K&S that Broward County requires the following:
 - a. The northern access driveway is required to be 90 degrees with Prospect Road.
 - b. A minimum of 100' of driveway is required before any gate.
 - c. A minimum of 50' of driveway is required before any point of conflict.
3. D. McGuire informed K&S that FDOT requires a new right-turn lane along Powerline Road; requirements are outlined in FDOT Index 301 Sheet 1.
 - i. The minimum length is to be 185' + queue.
 - ii. A queue analysis is required for the intersection of Prospect and Powerline.

4. D. Limage informed K&S that Peak Hour Volumes are required for the Driveway permit.
5. N. Hew informed K&S that the bus stop on Powerline road at the Northwest end of the site will need to be relocated South of the required right-turn lane.
 - a. The bus stop can be relocated between the exit driveway onto Powerline and the right turn lane if there is adequate space.
6. FDOT will require a landscape permit for landscaping and irrigation improvements done in FDOT right-of-way if more than sod is to be used.
7. The property to the South of the project site is owned by FDOT and no access easement will be required.
8. K&S to provide Peak Hour Volumes and forward to D. Limage for preparation of letter stating requirements for permit.
9. K&S will revise the conceptual site plan to incorporate the required changes for the driveway permit and submit with the permit application.

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January 27, 2017

Djemcy Limage, P.E.
Access Management- Traffic Operations
Marlin Engineering, FDOT District 4
3400 West Commercial Blvd.
Ft. Lauderdale, FL 33309

**RE: Trip Generation Report
Cubesmart-Oakland Park
West Prospect Road and Powerline Road
Keith & Schnars Project No. 18299**

Dear Mr. Limage,

This letter will serve as the Trip Generation Report for the proposed **Cubesmart-Oakland Park** project located at the southeast corner of the intersection of West Prospect Road and Powerline Road, Oakland Park, Florida.

The **Cubesmart-Oakland Park** is a proposed mini-storage facility with a gross floor area (GFA) of 108,866 square feet. This traffic statement provides an evaluation of the anticipated daily and peak-hour trips generated by the proposed facility.

The proposed project site plan is provided in **Attachment 1**.

TRIP GENERATION ANALYSIS

Daily and peak-hour trip rates and/or formula presented in the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, 9th Edition* were applied to the proposed facility. The ITE Land Use Code used is LUC 151 Mini-Warehouse. The corresponding ITE trip generation information for LUC 151 is provided in **Attachment 2**.

Table 1 presents the daily (weekday), AM peak-hour, and PM peak-hour trips. No trip internalization or transit reduction was applied.

As demonstrated in **Table 1**, the **Cubesmart-Oakland Park** is estimated to generate the following trips:

1. 272 weekday daily trips (136 inbound trips and 136 outbound trips);
2. 16 weekday AM peak-hour trips (9 inbound trips and 7 outbound trips); and
3. 28 weekday PM peak-hour trips (14 inbound trips and 14 outbound trips).

Table 1
Cubesmart-Oakland Park Trip Generation

| CUBESMART TRIP GENERATION | | | | | | | | | |
|-----------------------------------|---------|-------------|---------------|---|---------------|---------|-------|----------|-------|
| Land Use | Density | Units | Land Use Code | ITE 9 th Edition Trip Generation Rate or Formula | Two-Way Trips | Inbound | | Outbound | |
| | | | | | | % | Trips | % | Trips |
| WEEKDAY DAILY TRIP GENERATION (1) | | | | | | | | | |
| Mini-Warehouse/Storage | 108,866 | SQ. FT. GFA | 151 | T = 2.5 (X) | 272 | 50% | 136 | 50% | 136 |
| AM PEAK-HOUR TRIP GENERATION (2) | | | | | | | | | |
| Mini-Warehouse/Storage | 108,866 | SQ. FT. GFA | 151 | T = 0.14 (X) | 16 | 55% | 9 | 45% | 7 |
| PM PEAK-HOUR TRIP GENERATION (3) | | | | | | | | | |
| Mini-Warehouse/Storage | 108,866 | SQ. FT. GFA | 151 | T = 0.26 (X) | 28 | 50% | 14 | 50% | 14 |

Source: Institute of Transportation Engineers, **TRIP GENERATION, 9th EDITION**

T= Number of trips; X = area/1,000 sq. ft.

Notes:

- (1) ITE Trip Generation, 9th Edition: Page 221 (Attachment 2).
- (2) ITE Trip Generation, 9th Edition: Page 222 (Attachment 2).
- (3) ITE Trip Generation, 9th Edition: Page 223 (Attachment 2).

If additional information is required, please do not hesitate to call me at 954-776-1616, Ext. 6730.

Respectfully,

KEITH & SCHNARS

Certificate of Authorization #1337

Engineer's Certification: I, Jose Luis Rodriguez, certify that I currently hold an active Professional Engineer's License in the State of Florida and I am competent through educational experience to provide engineering services in the civil and traffic engineering disciplines contained in this report. I further certify that this traffic statement was prepared by me or under my responsible charge as defined in Chapter 61G15-18.001 F.A.C. and that all statements, conclusions and recommendations made herein are true and correct to my knowledge and ability.

Jose Luis Rodriguez, P.E. 45596

Date: January 27, 2017

Professional Engineer, State of Florida License No. 45596

ATTACHMENTS

Cc: Bob Zuccaro, P. E., Keith & Schnars
 John P. Krane, P.E., Keith & Schnars

ATTACHMENT 1

**CUBESMART-OAKLAND PARK TRIP GENERATION REPORT
K&S 18299.00**

SITE PLAN

FOR RECORD USE ONLY, NOT FOR USE OR REUSE

ATTACHMENT 2

**CUBESMART-OAKLAND PARK TRIP GENERATION REPORT
K&S 18299.00**

**ITE TRIP GENERATION, 9th EDITION
LUC 151 – MINIWAREHOUSE
TRIP RATES AND PLOTS**

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TRIP GENERATION MANUAL

9th Edition • Volume 2: Data

Trip Generation Rates, Plots and Equations

- Port and Terminal (Land Uses 000–099)
- Industrial (Land Uses 100–199)
- Residential (Land Uses 200–299)
- Lodging (Land Uses 300–399)
- Recreational (Land Uses 400–499)



Institute of Transportation Engineers

Land Use: 151 Mini-Warehouse

Description

Mini-warehouses are buildings in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as "self-storage" facilities. Each unit is physically separated from other units, and access is usually provided through an overhead door or other common access point.

Additional Data

Truck trips accounted for 2 to 15 percent of the weekday traffic at the sites where data were available.

Vehicle occupancy ranged from 1.2 to 1.9 persons per automobile on an average weekday.

Peak hours of the generator—

The weekday P.M. peak hour was between 12:00 p.m. and 7:00 p.m. The Saturday peak hour was between 10:00 a.m. and 1:00 p.m. The Sunday peak hour was between 1:00 p.m. and 6:00 p.m.

For the purpose of this land use, the independent variable "occupied storage units" is defined as the number of units that have been rented.

The sites were surveyed between 1979 and 2008 in California, Colorado, Massachusetts, New Jersey and Texas.

Source Numbers

113, 212, 403, 551, 568, 642, 708, 724

Mini-Warehouse (151)

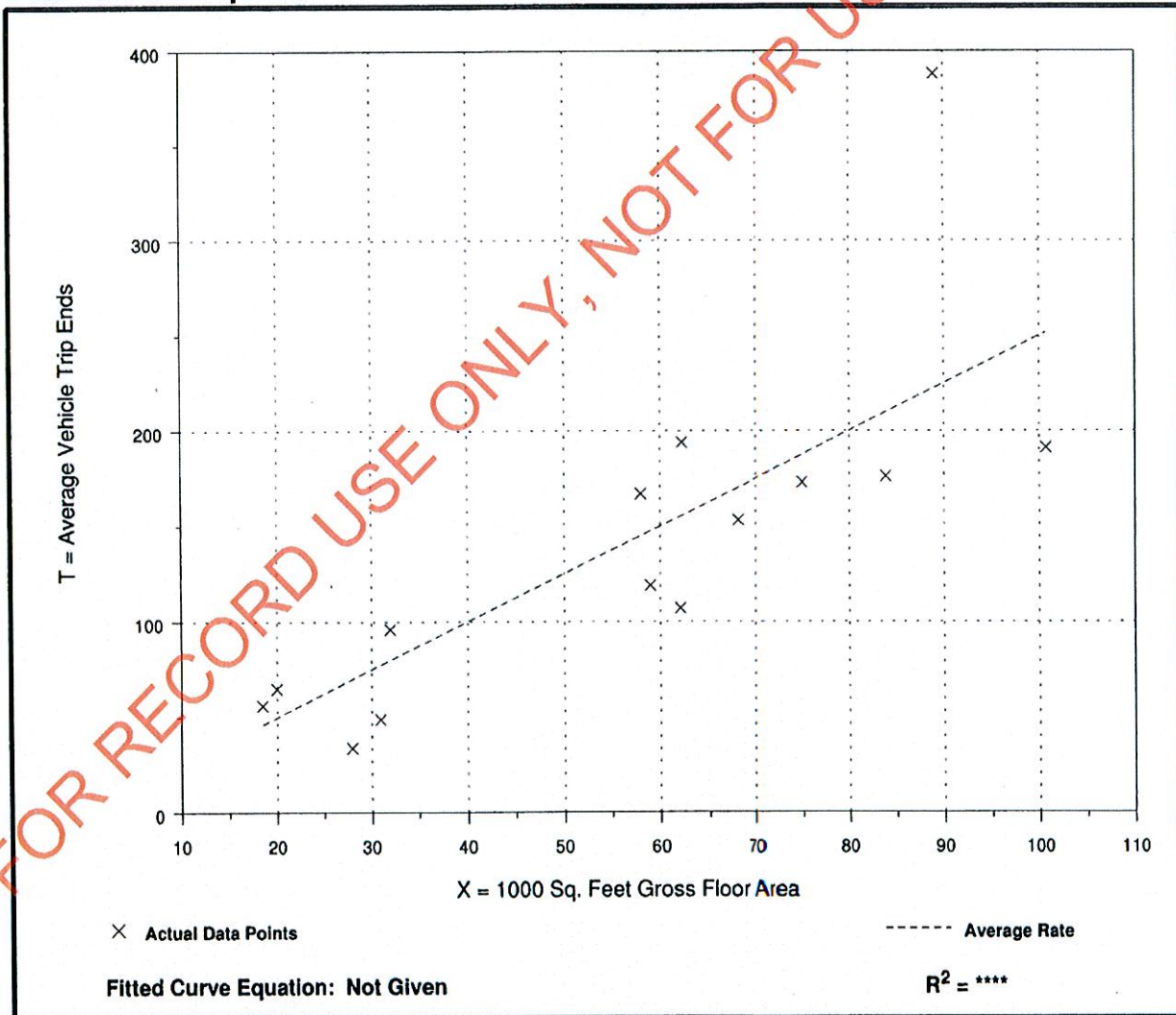
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday

Number of Studies: 14
Average 1000 Sq. Feet GFA: 56
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 2.50 | 1.21 - 4.36 | 1.78 |

Data Plot and Equation



Mini-Warehouse (151)

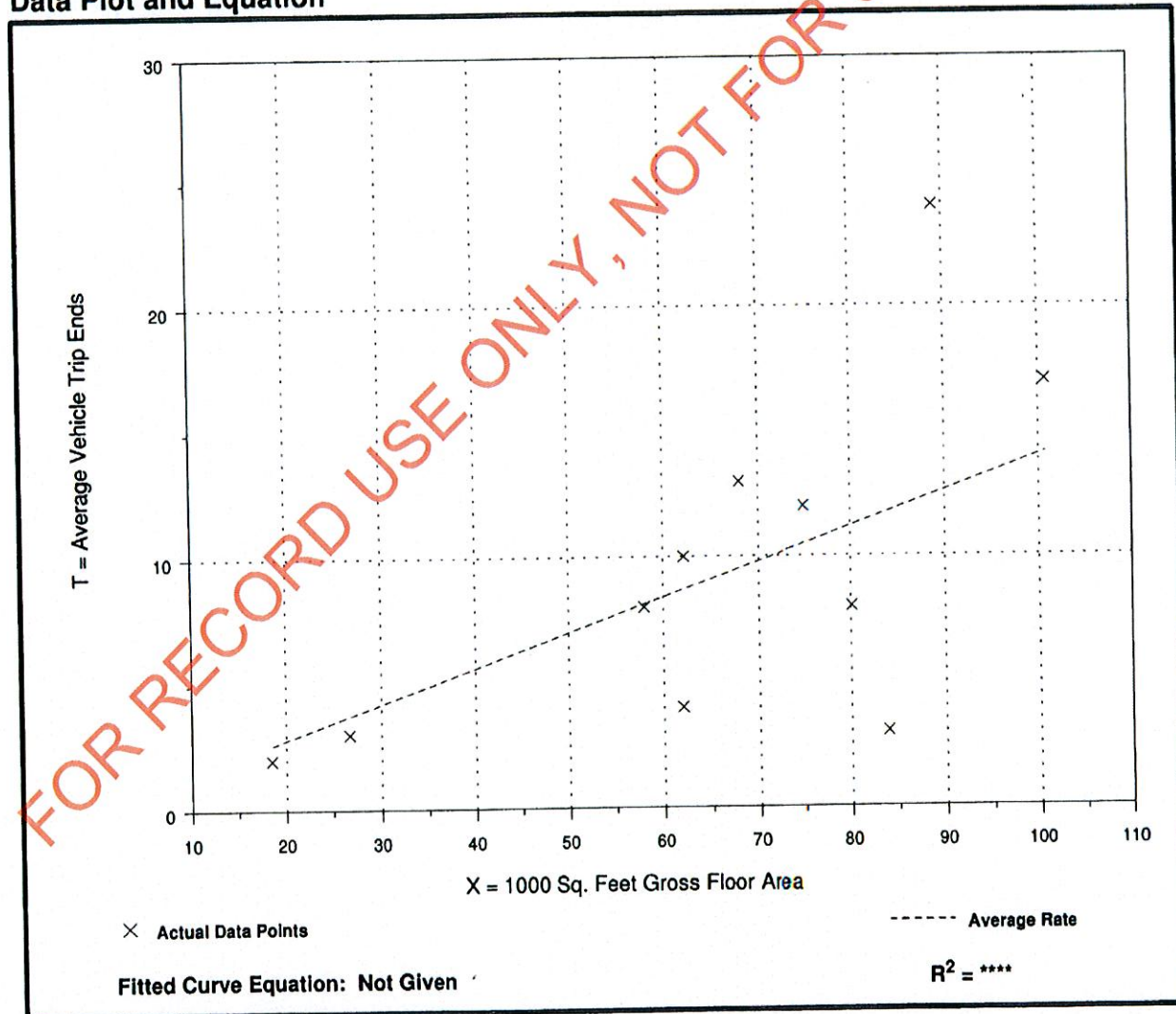
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 11
Average 1000 Sq. Feet GFA: 66
Directional Distribution: 55% entering, 45% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.14 | 0.04 - 0.27 | 0.38 |

Data Plot and Equation



Mini-Warehouse (151)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 15
 Average 1000 Sq. Feet GFA: 57
 Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.26 | 0.07 - 0.64 | 0.52 |

Data Plot and Equation

