

**Exterior Building Color & Material Samples (Photo)**

**Color Drawdowns**

**Drainage Reports**

**TIMA**

**Abbreviated Water & Sewer Need Report**

**Archaeological Resources**

**Airport Vicinity Development Checklist**

**Parking Study**

**Parking Master Plan**

**Water Study**

**Wastewater Study**

**Stormwater Waiver Application**



**FILE COPY**

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**To:** Dave Gilbert  
DPMG Hayden LLLP

**Date:** December 12, 2016

**From:** Jamie Blakeman, PE, PTOE

**Job Number:** 16.0944.001

**RE:** NWC of Hayden Road and Raintree Drive  
Transportation Impact and Mitigation Analysis



**EXPIRES 6-30-19**

**INTRODUCTION**

J2 Engineering and Environmental Design (J2) has prepared a Category I Transportation Impact and Mitigation Analysis (TI&MA) for the existing development located on the northwest corner (NWC) of Hayden Road and Raintree Drive in Scottsdale, Arizona. See **Figure 1**.

The objective of this Traffic Impact and Mitigation Analysis is to perform a trip generation comparison between the existing zoning (I-1) and the proposed zoning (C-4).

**EXISTING CONDITIONS**

Currently, the site contains a 21,646 square foot building; according to the Maricopa County Assessor's Website. See **Attachment A** for parcel information.

The parcel is bordered by Hayden Road to the east and Raintree Drive to the south.



**Figure 1 - Vicinity Map**





**STUDY ROADWAY SEGMENTS**

**Hayden Road** is a north-south roadway, classified as a suburban major arterial on the 2008 City of Scottsdale Classification Map. Within the study area two (2) through lanes are provided for each direction of travel, along with exclusive left turn lanes and a raised median. There is a posted speed limit of 45 mph. According to the City of Scottsdale 2014 Average Daily Traffic (ADT) Volume map, the Hayden Road ADT is 24,800 vehicles per day between Redfield Road and Raintree Drive and is 22,700 vehicles per day between Raintree Drive and Northsight Boulevard.



Figure 2 - Site Map

**Raintree Drive** is an east-west roadway, classified as a suburban major arterial, between State Route Loop 101 and Hayden Road, on the 2008 City of Scottsdale Classification Map. To the east of Hayden Road, two (2) through lanes are provided for each direction of travel with a two-way left turn lane. To the west of Hayden Road, one (1) lane is provided for each direction of travel with a two-way left turn lane. There is a posted speed limit of 35 mph. According to the City of Scottsdale 2014 Average Daily Traffic Volume map, the Raintree Drive ADT is 17,000 vehicles per day between Hayden Road and Northsight Boulevard.

**78<sup>th</sup> Way** is a north-south roadway, within the study area, that provides one (1) lane for each direction of travel, with a posted speed limit of 25 mph.

**FUTURE SURROUNDING ROADWAY NETWORK**

Currently, Raintree Drive terminates approximately 425 feet west of Hayden Road, where it forms a T-intersection with 78<sup>th</sup> Way. Future planned roadway improvements in the surrounding area include extending Raintree Drive southwest intersecting with Redfield Road approximately one half mile to the south near the 76<sup>th</sup> Street alignment.

In addition, Hayden Road and Raintree Drive currently operates as a signalized intersection. However, future improvements include the construction of a roundabout at this intersection.

See **Attachment B** for 60% plans.





**TRIP GENERATION (CURRENT I-1 ZONING)**

The existing building is currently zoned for I-1 land uses and is currently occupied by Terri's Consign & Design Furnishings and Pelleco Home Design.

The existing trip generation was calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation, 9th Edition*. The ITE rates and equations are based on studies that measured the trip generation characteristics for various types of land uses and are expressed in terms of trips per unit of land use type. This publication is considered to be the standard for the transportation engineering profession.

ITE Trip Generation Furniture Store Land Use (LU 890) is the closest land use category for the existing businesses. The existing 21,646 square foot building was used to calculate the existing trip generation. See **Table 1**. See **Attachment C f** for the detail trip generation calculations.

**Table 1 - Trip Generation for Existing I-1 Zoning**

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Furniture Store	890	21.646	1,000 Sq Ft GFA	110	4	3	1	10	5	5
<b>TOTAL</b>				<b>110</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>10</b>	<b>5</b>	<b>5</b>

**TRIP GENERATION (PROPOSED C-4 ZONING)**

This parcel is being proposed for rezoning from the I-1 (Industrial Park) to C-4 (General Commercial). The property is surrounded by I-1 zoning on the north, south, and west, with C-3 to the east (across Hayden Road). These properties include a mix of light industrial, commercial service/retail uses, and automobile sales. Various land uses are permitted under C-4 zoning, some of which include big box retail, light manufacturing, and automobile sales. For the proposed C-4 zoning, the development was assumed to be a 21,646 square foot automobile sales building.

Automobile sales dealerships are typically located along major arterial streets characterized by abundant commercial development. Automobile services, part sales and substantial used car sales may also be available. See **Table 2** and **Attachment C** for the detailed trip generation calculations.

**Table 2 - Trip Generation for Proposed C-4 Zoning (Automobile Sales)**

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Automobile Sales	841	21.646	1,000 Sq Ft GFA	699	42	31	11	65	26	39
<b>TOTAL</b>				<b>699</b>	<b>42</b>	<b>31</b>	<b>11</b>	<b>65</b>	<b>26</b>	<b>39</b>





**TRIP GENERATION COMPARISON**

A trip generation comparison between trips generated by existing land use with I-1 zoning (21,646 square foot furniture store) versus potential C-4 land uses are shown below.

**Table 3** compares the existing land use with a 21,646 square foot automobile sales building.

**Table 3 - Trip Generation Comparison (Existing vs. Automobile Sales)**

Land Use	ITE Code	Weekday	AM Peak Hour			PM Peak Hour		
		Total	Total	In	Out	Total	In	Out
Furniture Store	890	110	4	3	1	10	5	5
Automobile Sales	841	699	42	31	11	65	26	39
TOTAL		589	38	28	10	55	21	34

**SUMMARY**

Trip generation calculations for potential land use with the proposed C-4 zoning were compared with the existing land use, which is I-1 zoning.

*Automobile Sales*

The proposed C-4 zoning was assumed to be a 21,646 square foot automobile sales building is anticipated to generate 589 more weekday, 38 more AM peak hour, and 55 more PM peak hour trips than the existing land use.

With an ADT of 24,800 vehicles per day between Redfield Road and Raintree Drive and 22,700 vehicles per day between Raintree Drive and Northsight Boulevard along Hayden Road, and 17,000 vehicles per day between Hayden Road and Northsight Boulevard along Raintree Drive, **the anticipated weekday daily traffic volumes of 699 vehicles per day for the proposed C-4 zoning (assumed and calculated as automobile sales) will have minimal impacts to the traffic operation along the adjacent roadway network.**





## **Attachment A – Parcel Information**

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## 215-55-025 Commercial Parcel

This is a commercial parcel located at 15000 N HAYDEN RD SCOTTSDALE 85260. and the current owner is DPMG HAYDEN LLLP. It is located in the Scottsdale Industrial Airpark No 7 Lot 1-16 Tr A subdivision and MCR 23427. Its current year full cash value is \$2,205,800.

### Property Information

#### 15000 N HAYDEN RD SCOTTSDALE 85260

MCR #	<u>23427</u>
Description:	SCOTTSDALE INDUSTRIAL AIRPARK NO 7 MCR 234-27
Lat/Long	<u>33.62033849   -111.90753558</u>
Lot Size	67,333 sq ft.
Zoning	I-1
Lot #	3
High School District	PARADISE VALLEY UNIFIED #69
Elementary School District	PARADISE VALLEY UNIFIED SCHOOL DISTRICT
Local Jurisdiction	SCOTTSDALE
S/T/R	12 3N 4E
Market Area/Neighborhood	05/013
Subdivision (18 Parcels)	<u>SCOTTSDALE INDUSTRIAL AIRPARK NO 7 LOT 1-16 TR A</u>

### Owner Information

#### DPMG HAYDEN LLLP

Mailing Address	PO BOX 14055 , PALM DESERT, CA 92255
Deed Number	<u>140678689</u>
Last Deed Date	10/14/2014
Sale Date	n/a
Sale Price	n/a

## Valuation Information

We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our [data sales](#).

Tax Year	2017	2016	2015	2014	2013
Full Cash Value	\$2,205,800	\$2,012,500	\$1,758,700	\$1,515,800	\$1,712,900
Limited Property Value	\$1,754,729	\$1,671,170	\$1,591,590	\$1,515,800	\$1,712,900
Legal Class	1	1	1	1	1
Description	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P
Assessment Ratio	18%	18%	18.5%	19%	19.5%
Assessed FCV	n/a	n/a	n/a	\$288,002	\$334,016
Assessed LPV	\$315,851	\$300,811	\$294,444	\$288,002	\$334,016
Property Use Code	3740	3740	3740	3740	3740
PU Description	Warehouse	Warehouse	Warehouse	Warehouse	Warehouse
Tax Area Code	691400	691400	691400	691400	691400
Valuation Source	Notice	Notice	Notice	SBOE	Notice

## Additional Property Information

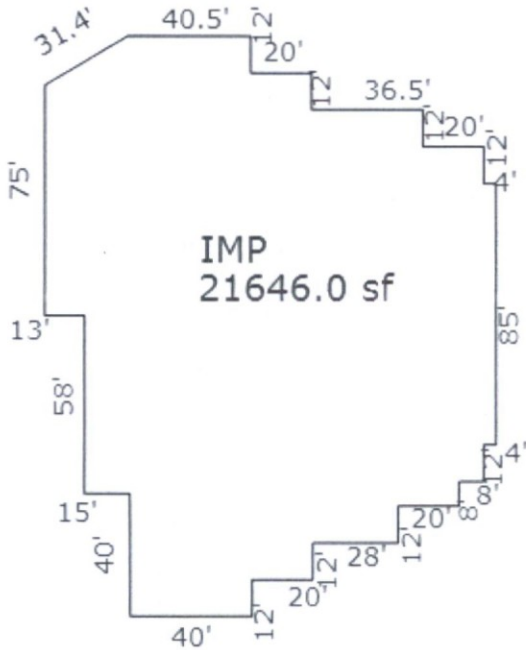
Additional commercial property data.

Description	Imp #	Model	Rank	CCI	Age	Sq Ft.
Warehouse Showroom Stores	000101	534	2	C	22	21,646
Commercial Yard Improvements	000201	353	2	D	22	1



### Building Sketches

Sketches that illustrate the external dimensions of a property.



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### Similar Parcels

Parcels that are similar to this one (known as the reference parcel) are displayed below.

**APN Address Sale Info FCV Size Livable Sq Ft Year Built Pool Foreclosed**

No similar parcels found.

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### Search the Maricopa County Assessor's Office

Enter an owner name, address, parcel number (APN), business personal property account number, or any other information to begin searching our data.



**Attachment B – Raintree Drive Extension  
60% Plans**

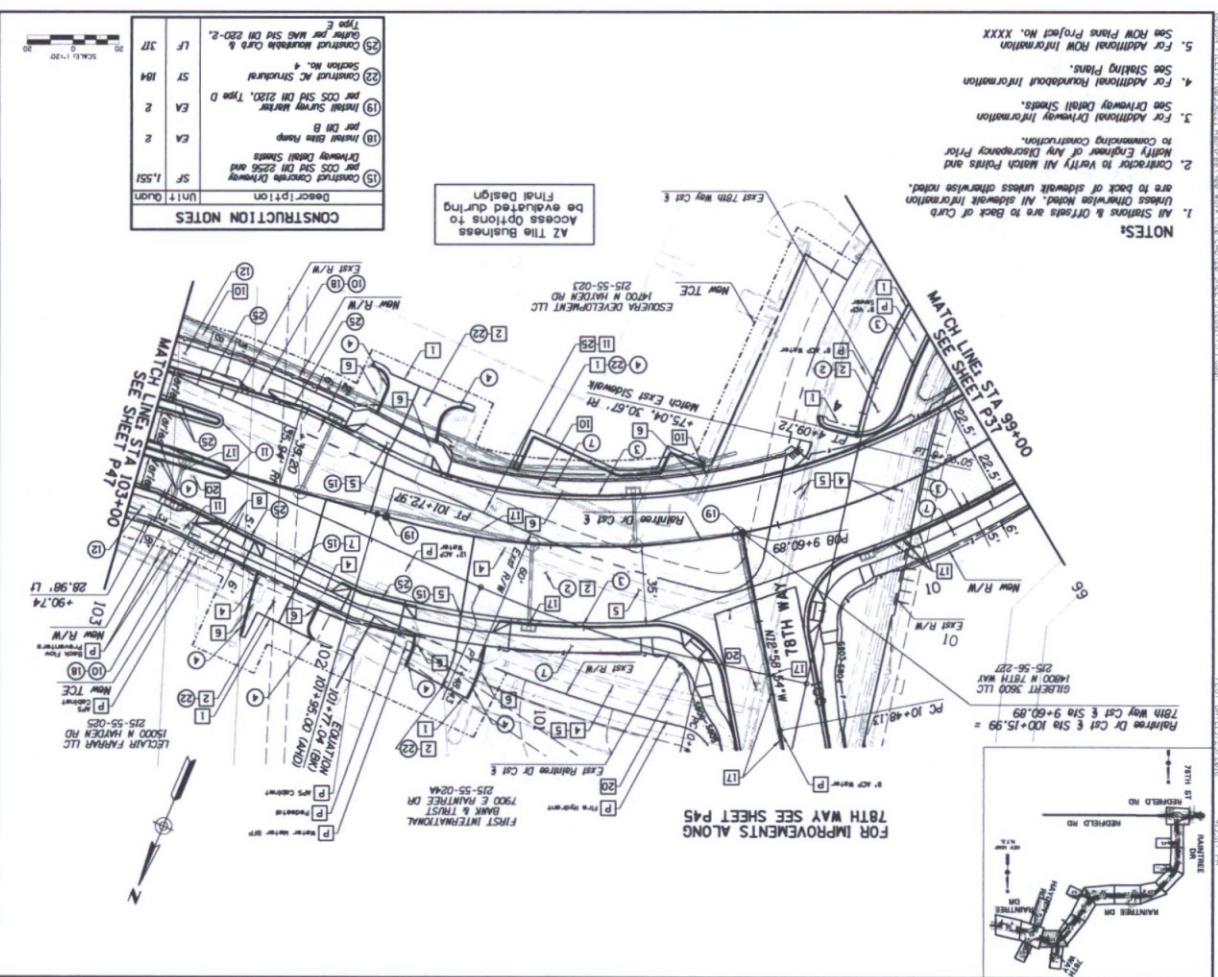
**REMOVAL & RELOCATION NOTES**

1	Remove Existing Pavement/Shoulder as Applicable	SF	1,783
2	Remove Existing Curb & Gutter	SF	674
3	Remove Existing Sidewalk	SF	3,658
4	Remove Existing Single Curb	LF	250
5	Remove Existing Valley Gutter	SF	282
6	Remove Existing Box/Precast Box	WP	1
7	Remove Existing Wall	LF	212
8	Remove Existing Water Meter	EA	2
9	Remove Existing	EA	x
10	Remove Existing	EA	3
11	Remove Existing	EA	1

**CONSTRUCTION NOTES**

1	Remove Existing	EA	2,180
2	Remove Existing	EA	236
3	Remove Existing	SF	2,532
4	Remove Existing	EA	2
5	Remove Existing	SF	411

**PLAN SHEET**  
 STA 99+00 TO STA 103+00  
 HAYTINE DRIVE  
 SCOTTSDALE DRIVE EXTENSION ROAD  
 PUBLIC WORKS  
 60%  
 AECOM

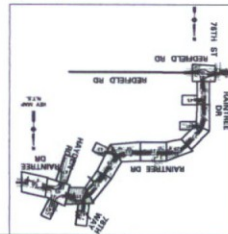


**CONSTRUCTION NOTES**

15	Construct Concrete Driveway	SF	1,551
16	Install Concrete Driveway	EA	2
17	Install Concrete Driveway	EA	2
18	Install Concrete Driveway	EA	2
19	Install Concrete Driveway	EA	2
20	Install Concrete Driveway	EA	2
21	Install Concrete Driveway	EA	2
22	Install Concrete Driveway	EA	2
23	Install Concrete Driveway	EA	2
24	Install Concrete Driveway	EA	2
25	Install Concrete Driveway	EA	2

At The Business  
 Access Options to  
 Be evaluated during  
 Final Design

- NOTES:**
1. All Stations & Offsets are to Back of Curb Unless Otherwise Noted. All Sidewalk Information are to Back of Sidewalk Unless Otherwise Noted.
  2. Contractor to Verify All Match Points and Utility Engineers of Any Discrepancy Prior to Commencing Construction.
  3. See Additional Driveway Information to Commanding Construction.
  4. See Additional Roundabout Information to Commanding Construction.
  5. See Staking Plans.
  6. See Additional Roundabout Information to Commanding Construction.
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  100. See Staking Plans.









## **Attachment C - Trip Generation Calculations**

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**Trip Generation Calculations**

**Existing I-1 Zoning**

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour		
				Avg Rate	% In	% Out	Avg Rate	% In	% Out	Avg Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out
Furniture Store	890	21.646	1,000 Sq Ft GFA	5.06	50%	50%	0.17	69%	31%	0.45	48%	52%	110	55	55	4	3	1	10	5	5
<b>TOTAL</b>													<b>110</b>	<b>55</b>	<b>55</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>10</b>	<b>5</b>	<b>5</b>

**Proposed C-3 Zoning**

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour		
				Fitted Curve	% In	% Out	Fitted Curve	% In	% Out	Fitted Curve	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out
Specialty Retail Center*	826	21.646	1,000 Sq Ft GFA	$T=42.78(X)+37.66$	50%	50%	$\ln(T)=0.61\ln(X)+2.24$	62%	38%	$T=2.40(X)+21.48$	44%	56%	964	482	482	61	38	23	73	32	41
<b>TOTAL</b>													<b>964</b>	<b>482</b>	<b>482</b>	<b>61</b>	<b>38</b>	<b>23</b>	<b>73</b>	<b>32</b>	<b>41</b>

\*A.M. Peak Hour for Shopping Center Used for AM Calculations