



**To:** Billy Cundiff  
Greystar

**From:** Shelly Sorensen, PE, PTOE

**Job Number:** 20,5124.001

**RE:** Greystar Active Independent Living  
Traffic Statement

**Date:** October 9, 2020



## INTRODUCTION

Lōkahi, LLC (Lōkahi) has prepared a Traffic Statement for the proposed Greystar Active Independent Living development, located along 90<sup>th</sup> Street, approximately one-quarter mile north of Raintree Drive, in Scottsdale, Arizona. See **Figure 1** for the vicinity map.

The proposed site will be comprised of 155 senior independent living residential units. See **Attachment A** and **Figure 2** for the site plan.

The objective of this Traffic Statement is to analyze the proposed development’s traffic related impacts to the adjacent roadway network.



**Figure 1 - Vicinity Map**

4657 e. cotton gin loop, suite 102  
phoenix, az 85040  
480.536.7150  
www.lokahigroup.com



16-ZN-2020  
10/20/20



## EXISTING CONDITIONS

The approximate 5-acre site is a currently undeveloped infill parcel surrounded by parcels developed as office and self-storage and is comprised of one (1) parcel. The site is currently zoned as Single-Family Residential District (R1-35). This zoning is intended to accommodate low-density single-family residential development. See **Attachment B** for Maricopa County Assessor's parcel information.

The proposed development is bordered by 90<sup>th</sup> Street to the east. East of 90<sup>th</sup> Street is single family residences. Office development borders the proposed development to the north and south. Immediately west of the proposed development, adjacent to the Arizona State Route 101 (Sr 101), is land currently zoned for a self-storage development.

**90<sup>th</sup> Street** is a north-south roadway that provides two (2) through lanes in each direction of travel, with a center two-way left turn lane. The City of Scottsdale classifies 90<sup>th</sup> Street as a major collector, according to the *City of Scottsdale Transportation Master Plan*, dated July 5, 2016. There is a posted speed limit of 35 miles per hour (mph).

**Raintree Drive** is an east-west roadway that provides two (2) through lanes for each direction of travel, with a raised landscaped median. The City of Scottsdale classifies Raintree Drive as a minor arterial, according to the *City of Scottsdale Transportation Master Plan*, dated July 5, 2016. The City of Scottsdale's *2018 Average Daily Segment Traffic (ADT) Volumes* map reports an ADT of 30,900 vehicles per day (vpd) along Raintree Drive, between Arizona State Route 101 (SR 101) and 90<sup>th</sup> Street, and an ADT of 23,400 vpd between 90<sup>th</sup> Street and Thompson Peak Parkway. There is a posted speed limit of 40 mph.

## COLLISION HISTORY

The City of Scottsdale's *2018 Traffic Volume and Collision Rate Data* report provides collision rate and traffic volume information on major roadway segments and at major intersections within the City. Segment collisions are collisions that occur on a major street more than 100 feet from the segment's termini intersections, including those that occur at minor intersections within the segment. Intersection collisions are collisions that occur at or within 100 feet of the intersection.

The collision rate and city-wide ranking for study roadway segments and intersections are shown in **Table 1** and **Table 2**, respectively.





**Table 1 – Collision Rates - Study Roadway Segment**

Segment	From	To	Collision Rate	Rank
Raintree Drive	SR 101 FWY	90th Street/Redfield Road	1.16	154
Raintree Drive	90th Street/Redfield Road	92nd Street	0.24	277
2018 City of Scottsdale Average Segment Collision Rate			1.53	

**Table 2 – Collision Rates - Study Intersections**

Intersection	Collision Rate	Rank
90th Street/Redfield Road & Raintree Drive	0.57	93
2018 City of Scottsdale Average Intersection Collision Rate	0.58	

## DATA COLLECTION

A local data collection firm, Field Data Services of Arizona, Inc., was utilized to collect traffic counts. On Tuesday, August 25, 2020, typical weekday bi-directional tube counts for 24-hours in 15-minute intervals were counted along 90<sup>th</sup> Street, approximately 900 feet north of Raintree Drive. The counts indicate that during the 24-hour period, there were 1,655 and 1,887 vehicles traveling in the northbound and southbound directions or travel, respectively. This represents a total of 3,542 vehicles per day along 90<sup>th</sup> street, north of Raintree Drive. See **Attachment C** for detailed traffic count data.

At the time of the report traffic patterns were not considered typical, due to the Covid-19 pandemic and the school and business closures associated with it. Therefore, the traffic counts collected on Tuesday, August 25, 2020, were adjusted, with the guidance from the City Scottsdale, to account for a reduction of 40% from the typical traffic patterns.

Applying this factor results in 2,759 and 3,145 vehicles traveling in the northbound and southbound directions or travel, respectively. This represents an estimated total of 5,904 vehicles per day along 90<sup>th</sup> street, north of Raintree Drive.





## PROPOSED DEVELOPMENT

The proposed development will consist of 155 senior independent living residential units. Additionally, the following on-site amenities will be provided to residents: van/transportation services, common dining area, and a wellness/medical area.

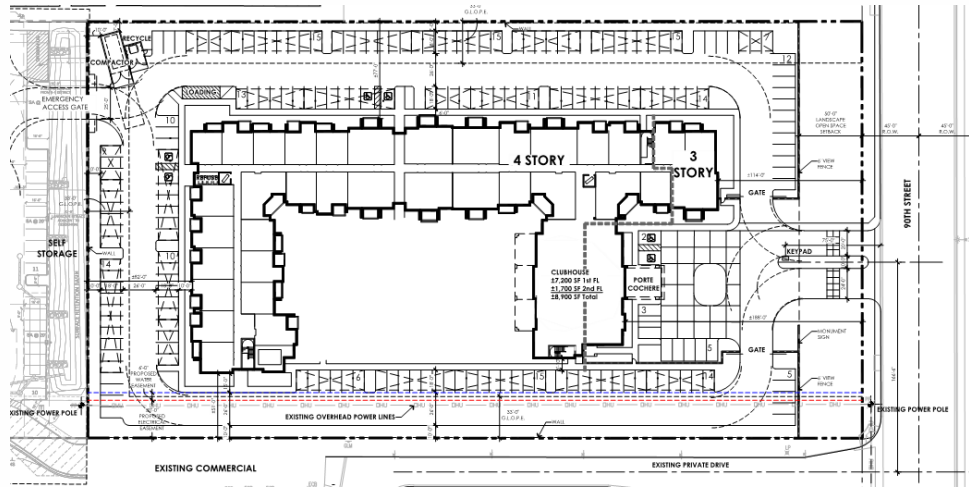


Figure 2 – Site Plan

The primary access is located along 90<sup>th</sup> Street, approximately one-quarter mile north of Raintree Drive. This driveway will be a full access point, allowing all movements into and out of the site.

Additionally, an emergency gated access point will be located on the northwest corner of the development, that will connect to a future commercial development adjacent to the proposed site.

## TRIP GENERATION

The trip generation for the proposed Greystar Active Independent Living was calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation, 10<sup>th</sup> Edition*. The ITE trip generation rates and fitted curve equations are based on studies that measure trip generation characteristics for various types of land uses. The rates are expressed in terms of trips per unit of land use type. This publication is the standard for the transportation engineering profession.

### Proposed Development

The trip generation for the proposed 155 senior independent living residential unit Greystar Active Independent Living development was calculated utilizing ITE Land Use 252 – Senior Adult Housing – Attached. Trip generation calculations are shown in **Table 3**. See **Attachment D** for detailed trip generation calculations.





**Table 3 – Trip Generation (Proposed Development)**

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Senior Adult Housing - Attached	252	155	Dwelling Units	598	31	11	20	39	21	18

The proposed development is anticipated to generate 598 weekday daily trips, with 31 trips occurring during the AM peak hour and 39 trips during the PM peak hour.

**Existing Zoning**

According to Maricopa County Assessor, the existing parcel is zoned for Single-family Residential (R1-35) land uses. The City of Scottsdale Code of Ordinances for R1-35 single-family residential requires each lot to be a minimum of 35,000 SF. According to Maricopa County Assessor, this parcel is 202,946 SF (4.66 acres). This results in the possible build-out of five (5) single family residential dwelling units.

Utilizing ITE Land Use 210 – Single-Family Detached Housing, the trip generation for the build-out under existing zoning was calculated as shown in **Table 4** below.

**Table 4 – Trip Generation (Existing Zoning)**

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Single-Family Detached Housing	210	5	Dwelling Units	66	8	2	6	6	4	2

**Potential Development**

Bordering the site to the north, south, and west, are parcels zoned for Central Business (C-2) and Industrial Park (I-1) land uses. C-2 zoning is intended to permit uses for recurring shopping and service needs for multiple neighborhoods. I-1 zoning is intended to provide light manufacturing, light industrial, office and supportive uses to sustain and enhance major employment opportunities. These parcels are primarily occupied by general and medical office land uses. In addition, C-2 and I-1 zoning allow for developments at a maximum floor-to-area (FAR) of 0.80.

Located adjacent to the site to the south is parcel 217-15-943 and parcel 217-15-944. These parcels are occupied by two (2) office buildings and a parking garage that comprise a portion of the Raintree Corporate Center. Based upon data obtained from the Maricopa County Assessor, below is a breakdown of each parcel:





**Table 5 – Parcel 217-15-943 and Parcel 217-15-944 Site Data**

Parcel	Lot Size (SF)	Office Size (SF)	FAR
217-15-943	294,313	172,905	0.59
217-15-944	210,736	182,585	0.87
<b>Total</b>	<b>505,049</b>	<b>355,490</b>	<b>0.70</b>

Based upon the site data in shown in **Table 5**, the two (2) office buildings of the Raintree Corporate Center, occupying parcel 217-15-943 and parcel 217-15-944, represents a FAR of 0.7.

According to Maricopa County Assessor, the proposed Greystar Active Independent Living development is proposed to occupy a parcel totaling 202,946 SF (4.66 acres). Applying the FAR of 0.8 to the parcel allows for 162,350 SF of developable area. However, conservatively assuming a FAR of 0.7, as observed at the adjacent office development, results in a total of 142,060 SF of developable area. As previously mentioned, the adjacent parcels are generally occupied by general and medical office land uses. Therefore, the trips generation by an 142,060 SF general office development were calculated.

Utilizing ITE Land Use 710 – General Office, the trip generation for the potential development was calculated as shown in **Table 6** below.

**Table 6 – Trip Generation (Potential Development)**

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
General Office	710	142.060	1000 SF GFA	1,384	165	142	23	163	26	137



## TRIP GENERATION COMPARISON

### Proposed Development versus Existing Zoning

A trip generation comparison between the proposed Greystar Active Independent Living development and the potential build-out of five (5) single family residential dwelling units.

**Table 7 – Trip Generation Comparison**

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Senior Adult Housing - Attached	252	155	Dwelling Units	598	31	11	20	39	21	18
<b>Proposed - Total</b>				<b>598</b>	<b>31</b>	<b>11</b>	<b>20</b>	<b>39</b>	<b>21</b>	<b>18</b>
Single-Family Detached Housing	210	5	Dwelling Units	66	8	2	6	6	4	2
<b>Existing Zoning Total</b>				<b>66</b>	<b>8</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>2</b>
<b>Difference</b>				<b>532</b>	<b>23</b>	<b>9</b>	<b>14</b>	<b>33</b>	<b>17</b>	<b>16</b>
<b>% Difference</b>				<b>806%</b>	<b>288%</b>	<b>450%</b>	<b>233%</b>	<b>550%</b>	<b>425%</b>	<b>800%</b>

The build-out of Greystar Active Independent Living development is anticipated to generate 532 (806%) more weekday trips, with 23 (288%) more trips during the AM peak hour, and 33 (550%) more trips during the PM peak hour than the build-out of five (5) single family residential dwelling units under the existing zoning.

### Proposed Development versus Potential Development

A trip generation comparison between the proposed Greystar Active Independent Living development and the potential build-out of an 142,060 SF general office building.

**Table 8 – Trip Generation Comparison**

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Senior Adult Housing - Attached	252	155	Dwelling Units	598	31	11	20	39	21	18
<b>Proposed - Total</b>				<b>598</b>	<b>31</b>	<b>11</b>	<b>20</b>	<b>39</b>	<b>21</b>	<b>18</b>
General Office	710	142,060	1000 SF GFA	1,384	165	142	23	163	26	137
<b>Office Total</b>				<b>1,384</b>	<b>165</b>	<b>142</b>	<b>23</b>	<b>163</b>	<b>26</b>	<b>137</b>
<b>Difference</b>				<b>-786</b>	<b>-134</b>	<b>-131</b>	<b>-3</b>	<b>-124</b>	<b>-5</b>	<b>-119</b>
<b>% Difference</b>				<b>-57%</b>	<b>-81%</b>	<b>-92%</b>	<b>-13%</b>	<b>-76%</b>	<b>-19%</b>	<b>-87%</b>

The build-out of Greystar Active Independent Living development is anticipated to generate 786 (57%) fewer weekday trips, with 134 (81%) fewer trips during the AM peak hour, and 124 (76%) fewer trips during the PM peak hour than the build-out of an 142,060 SF general office development.





## TRIP DISTRIBUTION AND ASSIGNMENT

The trip distribution procedure determines the general pattern of travel for vehicles entering and leaving the proposed development. The trip distribution and trip assignment for the proposed Greystar Active Independent Living development is generally based on the distribution of existing traffic along the surrounding roadway network, permitted movements at the proposed site driveways, and probable routes. The trip distribution is shown in **Attachment E**.

The trip assignment was generally based on proximity of the site driveway to the major roadway network routes, permitted turn movements, as well as ease and probability of use. The site generated traffic volumes are also shown in **Attachment E**.





## SUMMARY

The proposed Greystar Active Independent Living site is located along 90<sup>th</sup> Street, approximately one-quarter mile north of Raintree Drive, and is comprised of a total of 155 senior independent living residential units.

The primary access point to the proposed Greystar Active Independent Living development is located along 90<sup>th</sup> Street, approximately one-quarter mile north of Raintree Drive. This is anticipated to be a full-access driveway, allowing all movements into and out of the site.

### Trip Generation

At full build-out, the proposed Greystar Active Independent Living development is anticipated to generate 598 weekday daily trips, with 31 trips occurring during the AM peak hour and 39 trips during the PM peak hour.

### Trip Generation Comparison

The build-out of Greystar Active Independent Living development is anticipated to generate 532 (806%) more weekday trips, with 23 (288%) more trips during the AM peak hour, and 33 (550%) more trips during the PM peak hour than the build-out of five (5) single family residential dwelling units under the existing zoning.

The buildout of Greystar Active Independent Living development is anticipated to generate 786 (57%) fewer weekday trips, with 134 (81%) fewer trips during the AM peak hour, and 124 (76%) fewer trips during the PM peak hour than the build-out of an 142,060 SF general office development.

The recorded daily traffic counts indicate 3,452 vehicles per day along 90<sup>th</sup> Street. However, these counts were collected turned a period in which typical patterns were not occurring. Therefore, with the guidance of the City of Scottsdale, the counts were adjusted to account for an approximate 40% reduction from typical traffic patterns. Applying this factor results in 5,904 vehicle per day along 90<sup>th</sup> Street, north of Raintree Drive. Therefore, the 598 vehicles per day generated from the proposed development would represent an approximate increase of 10% in average weekday traffic along 90<sup>th</sup> Street, north of Raintree Drive.

**In conclusion, the traffic generated by the proposed Greystar Active Independent Living development is anticipated to result in minimal traffic impacts to the existing roadway network and the surrounding area.**

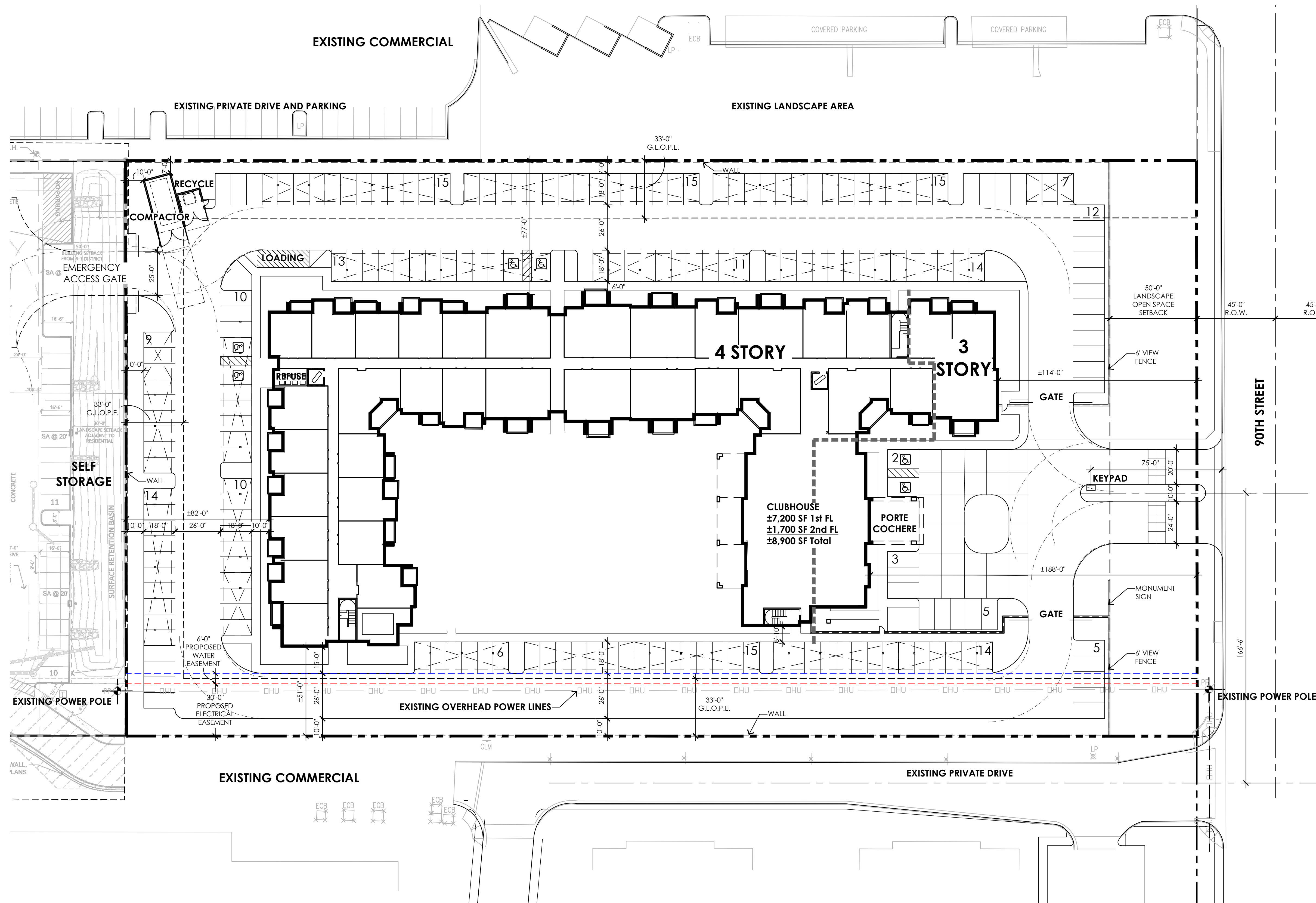




# ATTACHMENT A – PROPOSED SITE PLAN



A



**REZONING SITE DATA**

**PROJECT DESCRIPTION:**  
 NEW 155-UNIT RESIDENTIAL HEALTHCARE FACILITY WITH THREE (3) AND (4) STORY COMPONENTS, PARKING AND COMMON AREA. TOTAL PROPOSED BUILDING AREA: ±180,000 GSF (IBC)

**SITE AREA**  
 GROSS: ±217,800 SF (±5.0000 AC)  
 NET: ±202,950 SF (±4.6591 AC)

**ZONING**  
 EXISTING: R1-35  
 PROPOSED: C-O

**DENSITY**  
 MAXIMUM: 40 DU/GROSS AC. (200DU)  
 PROPOSED: ±31.0 DU/AC. (155 DU)

**OPEN SPACE**  
 MINIMUM REQUIRED: 0.24 x NET LOT AREA (±48,708 SF)  
 PROPOSED: ±0.38 x NET LOT AREA (±77,033 SF)

**FLOOR AREA RATIO**  
 MAXIMUM: 0.80 (±162,360 GSF)  
 PROPOSED: 0.80 (±163,138 GSF)  
 \*PER CITY OF SCOTTSDALE GROSS BLDG. AREA DEFINITION

**BUILDING HEIGHT**  
 MAX HEIGHT ALLOWED: (EXCLUDING ROOFTOP APPURTENANCES) 48'  
 PROPOSED: 3 STORIES AND 4 STORIES (48' MAX.)

**UNIT COUNT**  
 155 D.U.

**PARKING REQUIRED**  
 155 DU x 1.25 P.S. / DU 194 P.S.

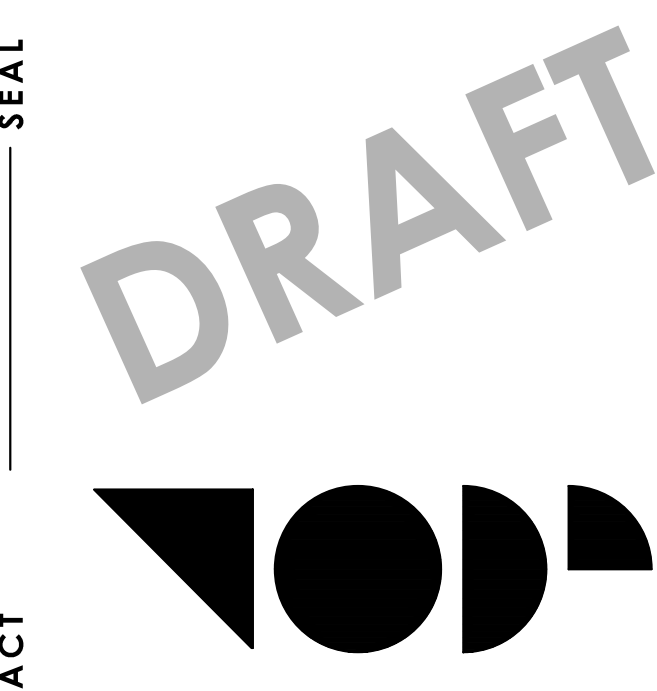
**TOTAL PARKING PROVIDED**  
 UNCOVERED 44 P.S.  
 CARPORT 151 P.S.  
 TOTAL 195 P.S. (1.29 P.S./D.U.)

**REQUIRED BICYCLE PARKING**  
 REQUIRED BIKE PARKING: 0.1 SPACES FOR EACH P.S. PROVIDED  
 MAXIMUM OF 100 SPACES  
 PROVIDED BIKE PARKING: 20 SPACES

NOTE:  
 G.L.O.P.E. (GOVERNMENT LAND OFFICE PATENT EASEMENT)

PROJECT NO. 20-2006-01  
**GREYSTAR**  
**ACTIVE**  
**INDEPENDENT**  
**LIVING**  
 SCOTTSDALE, ARIZONA

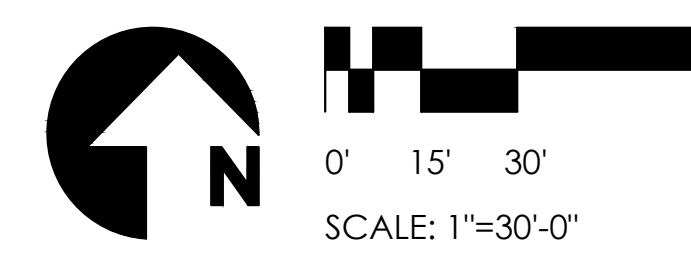
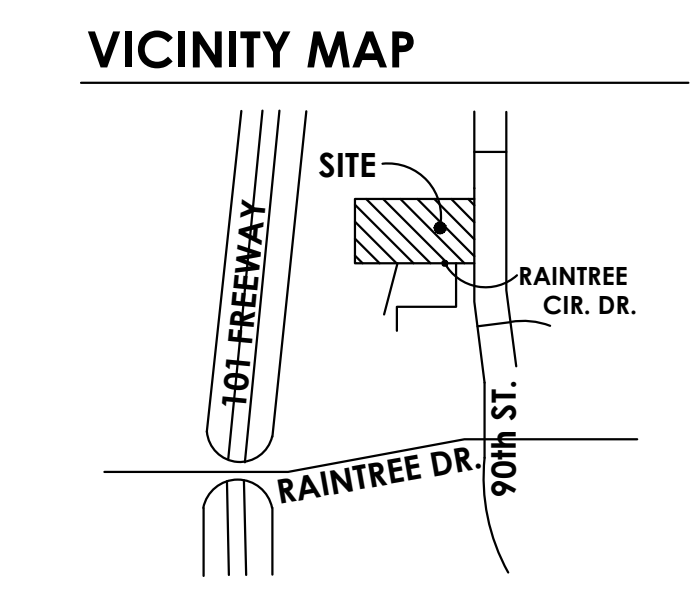
**GREYSTAR**  
 3200 E. CAMELBACK RD., SUITE 225  
 PHOENIX, ARIZONA 85018



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DATE 09/15/20  
 Proj Mgr.  
 Dwn By:



REZONING  
 SUBMITTAL (DRAFT)

SITE PLAN  
**04**



## ATTACHMENT B – MARICOPA COUNTY ASSESSOR



B

## 217-15-033 Land Parcel

This is a land parcel and the current owner is SFI RAINTREE SCOTTSDALE LLC. Its current year full cash value is \$2,965,500.

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### Property Information

MCR #  
Description: LOT 7 OR N2 NE4 SW4 NW4 EX E 45F TH/OF  
Lat/Long  
Lot Size 202,946 sq ft.  
Zoning R1-35  
Lot #  
High School District SCOTTSDALE UNIFIED #48  
Elementary School District SCOTTSDALE UNIFIED SCHOOL DISTRICT  
Local Jurisdiction SCOTTSDALE  
S/T/R 7 3N 5E  
Market Area/Neighborhood 05/013  
Subdivision (0 Parcels)

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### Owner Information

#### [SFI RAINTREE SCOTTSDALE LLC](#)

Mailing Address 180 GLASTONBURY BLVD STE 201, HARTFORD, CT 06033  
In Care Of ISTAR FINANCIAL INC - DAWN ZUKOWSKI  
Deed Number [111003433](#)  
Last Deed Date 12/06/2011  
Sale Date n/a  
Sale Price n/a

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## 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](#).

**The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program. [CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL](#)**

Tax Year	2021	2020	2019	2018	2017
Full Cash Value	\$2,965,500	\$2,793,000	\$2,660,000	\$2,809,700	\$2,809,700
Limited Property Value	\$2,395,901	\$2,281,810	\$2,173,152	\$2,069,669	\$1,971,113
Legal Class	2.R	2.R	2.R	2.R	2.R
Description	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P
Assessment Ratio	15%	15%	15%	15%	15%
Assessed LPV	\$359,385	\$342,272	\$325,973	\$310,450	\$295,667
Property Use Code	0032	0032	0032	0032	0032
PU Description	Vacant Industrial Land	Vacant Industrial Land	Vacant Industrial Land	Vacant Industrial Land	Vacant Industrial Land
Tax Area Code	481400	481400	481400	481400	481400
Valuation Source	Notice	Notice	Notice	Notice	Notice



## ATTACHMENT C – TRAFFIC COUNTS



C

**Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745**

Volumes for: Tuesday, August 25, 2020

City: Scottsdale

Project #: 20-1329-001

Location: 90th St. north of Raintree

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB		
00:00	2	2			12:00	33	26				
00:15	0	1			12:15	38	28				
00:30	1	0			12:30	23	27				
00:45	1	4	1	4	8	12:45	44	138	32	113	251
01:00	1	2			13:00	29	25				
01:15	0	0			13:15	25	24				
01:30	2	0			13:30	34	43				
01:45	1	4	1	3	7	13:45	23	111	37	129	240
02:00	1	3			14:00	22	33				
02:15	3	0			14:15	26	41				
02:30	4	3			14:30	30	45				
02:45	0	8	1	7	15	14:45	34	112	50	169	281
03:00	2	0			15:00	30	54				
03:15	0	0			15:15	29	41				
03:30	0	1			15:30	34	43				
03:45	0	2	1	2	4	15:45	26	119	39	177	296
04:00	1	0			16:00	28	33				
04:15	2	2			16:15	33	30				
04:30	4	3			16:30	28	58				
04:45	2	9	3	8	17	16:45	35	124	52	173	297
05:00	1	3			17:00	37	36				
05:15	0	7			17:15	38	41				
05:30	6	4			17:30	37	29				
05:45	5	12	2	16	28	17:45	41	153	28	134	287
06:00	11	11			18:00	30	32				
06:15	10	12			18:15	18	26				
06:30	10	11			18:30	22	38				
06:45	18	49	17	51	100	18:45	20	90	29	125	215
07:00	20	18			19:00	13	20				
07:15	16	11			19:15	30	22				
07:30	33	31			19:30	17	14				
07:45	22	91	18	78	169	19:45	13	73	23	79	152
08:00	28	36			20:00	18	13				
08:15	25	39			20:15	20	9				
08:30	26	35			20:30	11	15				
08:45	24	103	54	164	267	20:45	9	58	11	48	106
09:00	19	41			21:00	6	10				
09:15	22	42			21:15	4	6				
09:30	23	22			21:30	5	4				
09:45	28	92	20	125	217	21:45	8	23	11	31	54
10:00	25	21			22:00	7	5				
10:15	29	19			22:15	2	7				
10:30	25	28			22:30	6	4				
10:45	18	97	24	92	189	22:45	7	22	2	18	40
11:00	48	29			23:00	2	2				
11:15	32	33			23:15	2	4				
11:30	32	30			23:30	1	1				
11:45	44	156	41	133	289	23:45	0	5	1	8	13

**Total Vol.** 627 683 **1310** 1028 1204 **2232**

GPS Coordinates: 33.621162, -111.886952

**Daily Totals**

NB	SB	EB	WB	Combined
1655	1887			<b>3542</b>

**AM**

**PM**

Split %	47.9%	52.1%	<b>37.0%</b>	46.1%	53.9%	<b>63.0%</b>
<b>Peak Hour</b>	11:00	08:30	<b>11:00</b>	17:00	14:15	<b>16:30</b>
<b>Volume</b>	156	172	<b>289</b>	153	190	<b>325</b>
<b>P.H.F.</b>	0.81	0.80	<b>0.85</b>	0.93	0.88	<b>0.93</b>



## ATTACHMENT D – TRIP GENERATION



D



210 Single-Family Detached Housing																						
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Single-Family Detached Housing	210	5	Dwelling Units	9.44	50%	50%	0.74	25%	75%	0.99	63%	37%	47	24	23	4	1	3	5	3	2	Average
Single-Family Detached Housing	210	5	Dwelling Units	4.81	50%	50%	0.33	25%	75%	0.44	63%	37%	24	12	12	2	1	1	2	1	1	Minimum
Single-Family Detached Housing	210	5	Dwelling Units	19.39	50%	50%	2.27	25%	75%	2.98	63%	37%	97	49	48	11	3	8	15	9	6	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Single-Family Detached Housing	210	5	Dwelling Units	$\ln(T)=0.92\ln(X)+2.71$	50%	50%	$T=0.71(X)+4.80$	25%	75%	$\ln(T)=0.96\ln(X)+0.20$	63%	37%	66	33	33	8	2	6	6	4	2	Equation
Single-Family Detached Housing	Standard Deviation			2.10			0.27			0.31												
	Number of Studies			159			173			190												
	Average Size			264			219			242												
	R <sup>2</sup>			0.95			0.89			0.92												



0.7 FAR

710 General Office																						
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
General Office	710	142.06	1000 SF GFA	9.74	50%	50%	1.16	86%	14%	1.15	16%	84%	1,384	692	692	165	142	23	163	26	137	Average
General Office	710	142.06	1000 SF GFA	2.71	50%	50%	0.37	86%	14%	0.47	16%	84%	385	193	192	53	46	7	67	11	56	Minimum
General Office	710	142.06	1000 SF GFA	27.56	50%	50%	4.23	86%	14%	3.23	16%	84%	3,915	1,958	1,957	601	517	84	459	73	386	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
General Office	710	142.06	1000 SF GFA	$\ln(T)=0.97\ln(X)+2.50$	50%	50%	$T=0.94(X)+26.49$	86%	14%	$\ln(T)=0.95\ln(X)+0.36$	16%	84%	1,492	746	746	160	138	22	159	25	134	Equation
General Office	Standard Deviation			5.15			0.47			0.42			N/A									
	Number of Studies			66			35			32			N/A									
	Average Size			171			117			114			N/A									
	R <sup>2</sup>			0.83			0.47			0.88			N/A									



Residential Healthcare Facility

Trip Generation Calculations

Completed: CT 9/24/2020  
 Checked: TC 9/25/2020

Senior Adult Housing - Attached																						
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Senior Adult Housing - Attached	252	155	Dwelling Units	3.70	50%	50%	0.20	35%	65%	0.26	55%	45%	574	287	287	31	11	20	40	22	18	
Senior Adult Housing - Attached	252	155	Dwelling Units	2.59	50%	50%	0.06	35%	65%	0.08	55%	45%	401	201	200	9	3	6	12	7	5	
Senior Adult Housing - Attached	252	155	Dwelling Units	4.79	50%	50%	0.27	35%	65%	0.43	55%	45%	742	371	371	42	15	27	67	37	30	
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Senior Adult Housing - Attached	252	155	Dwelling Units	$T=4.02(X)-25.37$	50%	50%	$T=0.20(X)-0.18$	35%	65%	$T=0.24(X)+2.26$	55%	45%	598	299	299	31	11	20	39	21	18	

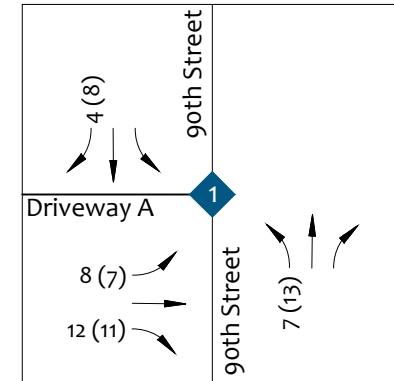
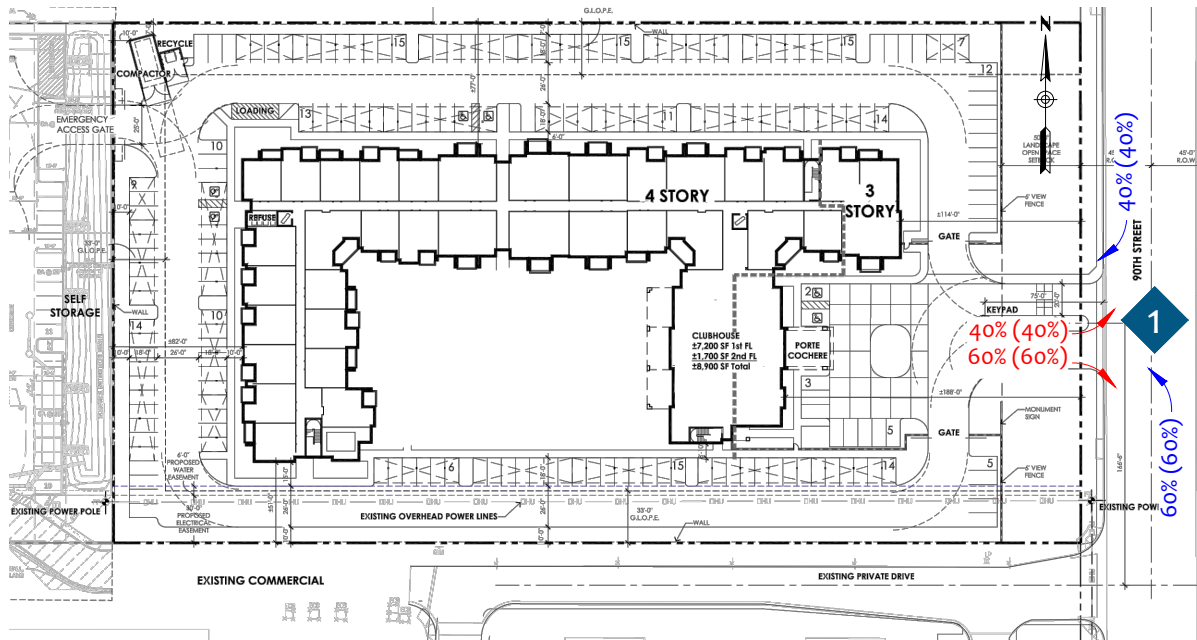
Senior Adult Housing - Attached	Standard Deviation	0.53		0.05		0.08	
	Number of Studies	6		11		11	
	Average Size	81		148		148	
	R <sup>2</sup>	0.99		0.98		0.96	




# ATTACHMENT E – SITE DISTRIBUTION AND SITE VOLUMES



E



### Legend

- AM(PM) Peak Hour Traffic Volumes
- AM(PM) Inbound Trip Distribution Percentages
- AM(PM) Outbound Trip Distribution Percentages
-  Intersection