

LSC TRANSPORTATION CONSULTANTS, INC.

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# Brookmoor Estates Subdivision Transportation Memorandum (LSC #174650) December 11, 2017

## **Traffic Engineer's Statement**

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.

Jeffrey C. Hodsdon, P.E., #3168

Date

#### **Developer's Statement**

I, the Developer, have read and will comply with all commitments made on my behalf within this report.



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December 11, 2017

Mr. Kevin Watts
President
Brookmoor Homeowners Association
c/o Murray Weiner
Mulliken Weiner Berg & Jolivet, P.C.
102 South Tejon Street, Suite 900
Colorado Springs, CO 80903

RE: Brookmoor Estates Subdivision El Paso County, Colorado

Transportation Memorandum

LSC #174650

Dear Mr. Watts:

In response to your request, LSC Transportation Consultants, Inc. has prepared this transportation memorandum for Brookmoor Estates. The Brookmoor Estates subdivision is located generally north of Highway 105 and east of Woodmoor Drive in El Paso County, Colorado.

The purpose of this memo is assist you with your request (to El Paso County) to convert the existing emergency-only east access to the Brookmoor Estates subdivision to an RFID-controlled, resident-only access (emergency vehicles would still have access as well).

This memo presents estimates of the total subdivision vehicle trip generation at buildout and the average daily traffic volume at the east gate if converted to an RFID-controlled, resident-only access.

#### LAND USE AND ACCESS

The Brookmoor Estates subdivision is a gated community with 59 lots for single-family homes. Homes have been built on all but two of the lots. Currently, the community has one full-use access. Moveen Heights at Lake Woodmoor is an existing gated access on the west end of Lake Woodmoor Drive about one-quarter mile northeast of Woodmoor Drive. There is an additional gated, emergency-vehicle-only access on the east side of the subdivision at the terminus of Symphony Heights (a private street). South Park Drive, a public street, extends east from the gate across Knollwood Drive and then terminates near the east end of Lake Woodmoor Drive.

The Brookmoor HOA is proposing that the emergency-only gate between Symphony Heights and South Park Drive be converted to a resident-only gate. Gate access would be controlled by an RFID and transponder system and would not be used by guests, service vehicles, or any other non-resident vehicles except for emergency vehicles as there is no available property for the installation of a keypad entry or guarded gatehouse. Two transponders would be issued per household (118 transponders) plus there would be a transponder available for emergency services.

### TRIP GENERATION

Estimates of the vehicle-trips generated by the subdivision have been estimated using trip generation rates from *Trip Generation*, 9th Edition, 2012 by the Institute of Transportation Engineers (ITE). Table 1 shows the average weekday and peak-hour trip generation estimates. Trip generation represents the total combined number of vehicle trips entering and exiting at both gates.

At buildout, the Brookmoor Estates subdivision is projected to generate about 562 vehicle-trips on the average weekday, with about half entering and half exiting the site. During the morning peak hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 11 vehicles would enter and 33 vehicles would exit the site. During the afternoon peak hour, which generally occurs for one hour between 4:15 and 6:15 p.m., about 37 vehicles would enter and 22 vehicles would exit the site.

#### **AVERAGE DAILY TRAFFIC ESTIMATE**

Table 1 shows the number of trips estimated to use each of the gates if the east gate is converted from an emergency-only access to an RFID-controlled, resident-only gate. As shown on Table 1, it is estimated that about 56 vehicles per day would use the east gate for travel to and from the site via South Park Drive. LSC estimates 506 daily vehicle trips (the balance of the total trips generated by the Brookmoor Estates subdivision at buildout) would continue to use the existing gate on Lake Woodmoor Drive. These estimates are based on a 90 percent/10 percent (west gate/east gate) split, which accounts for residentonly (with transponder) use of the east gate.

Please contact me if you have any questions regarding this memorandum.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

Jeffrey C. Hodsdon, P.E., PTOE rincipal

JCH:KDF:bjwb

Enclosures: Table 1

what is the EX/ proposed traffic counts at the intersection of South Park Drive and Knollwood if gate is opened?

Table 1

Trip Generation and Gate Average Daily Traffic Estimate

Brookmoor Estates

Land	Land Use	Trip Generation	Trip Generation Rates (1)						Total Trips Generated				
			Average Weekday	Morning Peak Hour		Afternoon Peak Hour		Average Weekday	Morning Peak Hour		Afternoon Peak Hour		
Use													
Code	Description	Units	Traffic	ln	Out	ln	Out	Traffic	ln	Out	ln	Out	
210	Single-Family Detached Housing	59 DU <sup>(2)</sup>	9.52	0.19	0.56	0.63	0.37	562	11	33	37	22	
	Trips Estimated to Us	e the Existing La	ake Woodmoo	or Dr. Ga	te (90 Pe	rcent of t	he Total) <sub>&lt;</sub>	506	10	30	33	20	
	Trips Estimated to	Use the Propos	sed South Par	rk Dr. Ga	te (10 Pe	rcent of t	he Total)	56	1	3	4	2	

#### Notes:

(1) Source: "Trip Generation, 9th Edition, 2012" by the Institute of Transportation Engineers (ITE)

(2) DU = dwelling units

Source: LSC Transportation Consultants, Inc.

This seems low based on the actual time it currently takes to turn left from Lake Woodmoor onto Woodmoor Drive towards 105. Has there been a recent study that identified what the level of serve is at the intersection of Lake Woodmoor and Woodmoor Drive?