

County of Loudoun
Office of Transportation Services

MEMORANDUM

DATE: February 17, 2009
TO: Sophia Fisher, Project Manager, Department of Planning
FROM: Art Smith, Senior Coordinator 
SUBJECT: ZMAP 2008-0023, Cedar Green Church
First Referral

BACKGROUND

This application proposes to rezone two residential lots from the R-4 District to the PD-IP District. Each lot currently contains a single residential unit. One of the homes on existing Lot 24 would be demolished, and the two lots would then be consolidated. A new church would be constructed on the consolidated lot. The other existing home would be retained for rectory uses.

The consolidated lot would have an area of approximately 2.86 acres. The lot is located on the west side of Cedar Green Road, Route 775 south and east of Shaw Road, Route 636. Please see Attachment 1, Regional Site Map. The application's traffic study states that the church will be used primarily for Sunday services and will not have weekday uses, such as daycare, pre-school or school. The church is proposed to have 9,600 square feet of floor area with 420 seats in its sanctuary.

EXISTING, PLANNED AND PROGRAMMED ROADS

Cedar Green Road along the project's site currently has a 37 foot wide cross section. It has a painted center line which allows operation of a single travel lane in each direction. There is also a single parking lane on the east side of the road, which also has a sidewalk. There are no Cedar Green Road improvements projects currently in the Secondary Road Program and no further improvements are planned to the road in the current or proposed Countywide Transportation Plan (CTP).

Please note the recommendations of the Belfort Park Task Force have been forwarded to the Planning Commission by the Board of Supervisors. These recommendations do not include any major changes to Cedar Green Road along the site's frontage.

EXISTING AND FORECASTED TRAFFIC VOLUMES AND SERVICE LEVELS

Since this project will have little impact on weekday peak hours (7 trips in the AM peak hour and 6 trips in the PM peak hour), the applicant's traffic study focuses on Sunday peak hour trip generation. Traffic conditions were evaluated at the intersection of Cedar Green Road / Shaw Road and also at the church's entrance. A total of 268 two-way trips are forecast (for a single service) in forecast year 2010. The following information is attached to this referral.

Attachment 2: Existing Peak Hour Traffic Volumes (Sunday)

Attachment 3: Trip Distribution and Generated Traffic Volumes

Attachment 4: Total Future Peak Hour Traffic Volumes (Sunday)

Attachment 5: Forecasted Levels of Service (LOS)

Peak note that Sunday LOS is forecasted to be in the LOS A/B range

QUESTIONS / COMMENTS

1. How many on-site parking spaces will be provided for the church? Any overflow parking will most likely use existing on-street spaces across the street and impact local residents.
2. Curb and gutter frontage improvements should be provided along with a sidewalk to match improvements on the other side of the street (Old Sterling Gable, Section 2).
3. The applicant should provide a commercial entrance meeting VDOT standards.

CONCLUSION

Provided the applicant provides appropriate responses to the above comments, OTS would have no objection to the approval of this application.

cc: Andy Beacher, Assistant Director/Highway Division Chief



MEMORANDUM

To: George Phillips
Loudoun County Office of Transportation Services

From: Edward Y. Papazian, P.E. *EYP*
Kaitlyn J. Weatherton, EIT *KJW*
Kimley-Horn and Associates, Inc.

Date: November 14, 2008

Subject: Cedar Green Road Rezoning, Sterling, VA
Traffic Analysis

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Suite 400
13221 Woodland Park Rd
Herndon, Virginia
20171

Introduction

This memorandum serves as a traffic analysis for the proposed rezoning of 2.86 acres along Cedar Green Road near Shaw Road in Sterling, Virginia. The property is currently zoned R-4 and is proposed to be rezoned to the I-zone. The proposed development on the property is to be a church with 9,600 square feet of floor area and with a sanctuary containing 420 seats.

The following sections of this memorandum demonstrate that the proposed rezoning for the proposed church will result in fewer weekday peak hour trips than the existing zoning. The proposed activity levels at the church will have no adverse impact on the area roadways. Also, the vehicle access drive will operate in a safe and efficient manner.

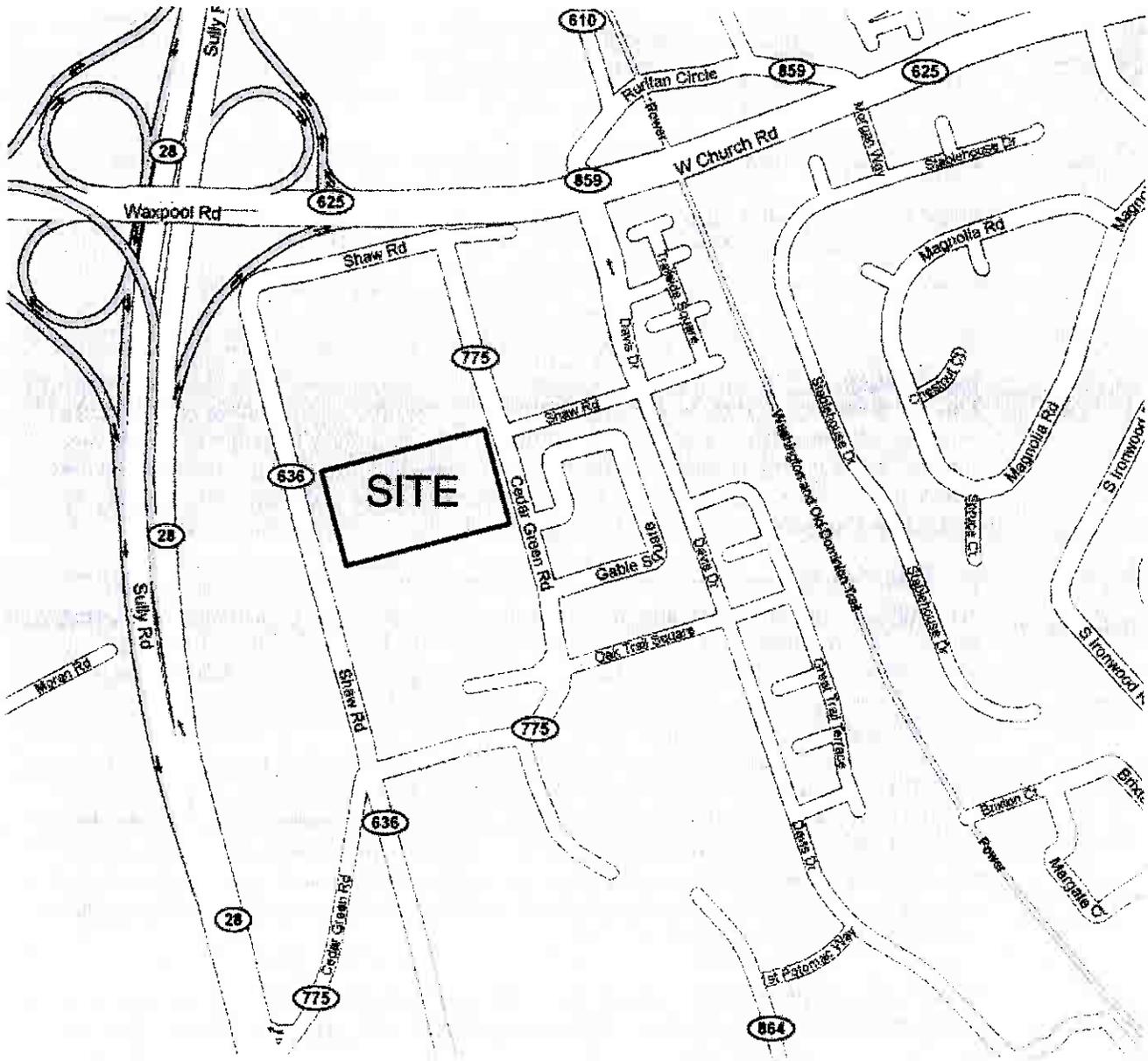
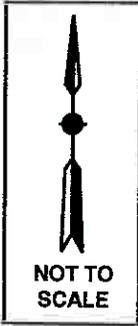
Site Location and Area Setting

The property is located along the west side of Cedar Green Road just south of Shaw Road in Sterling (see Figure 1). The property consists of two parcels each containing 1.43 acres. The property is in the R-4 zone. It is proposed to be rezoned to the I-zone. The proposed development in the I-zone consists of a church with 9,600 square feet of floor area and a sanctuary containing 420 seats. The church will be used primarily for Sunday services. There will be no weekday activities, such as schools, pre-school, or daycare that will result in commuter peak hour traffic.

Cedar Green Road along the property has a 37 foot wide cross section. It has a painted center line that permits a single travel lane in each direction. There is a parking lane on the east side of the road that is 9 feet wide. The northbound travel lane is 17 feet wide while the southbound lane of Cedar Green Road is 11 feet wide.

The horizontal alignment of Cedar Green Road is straight. There is little change in the vertical alignment. There are no obstructions along Cedar Green Road in the area of the proposed driveway. As a result, there are no safety hazards in the area of the property.

ATTACHMENT 1



Kimley-Horn
and Associates, Inc.

KHA Project # 110219000

Regional Site Map

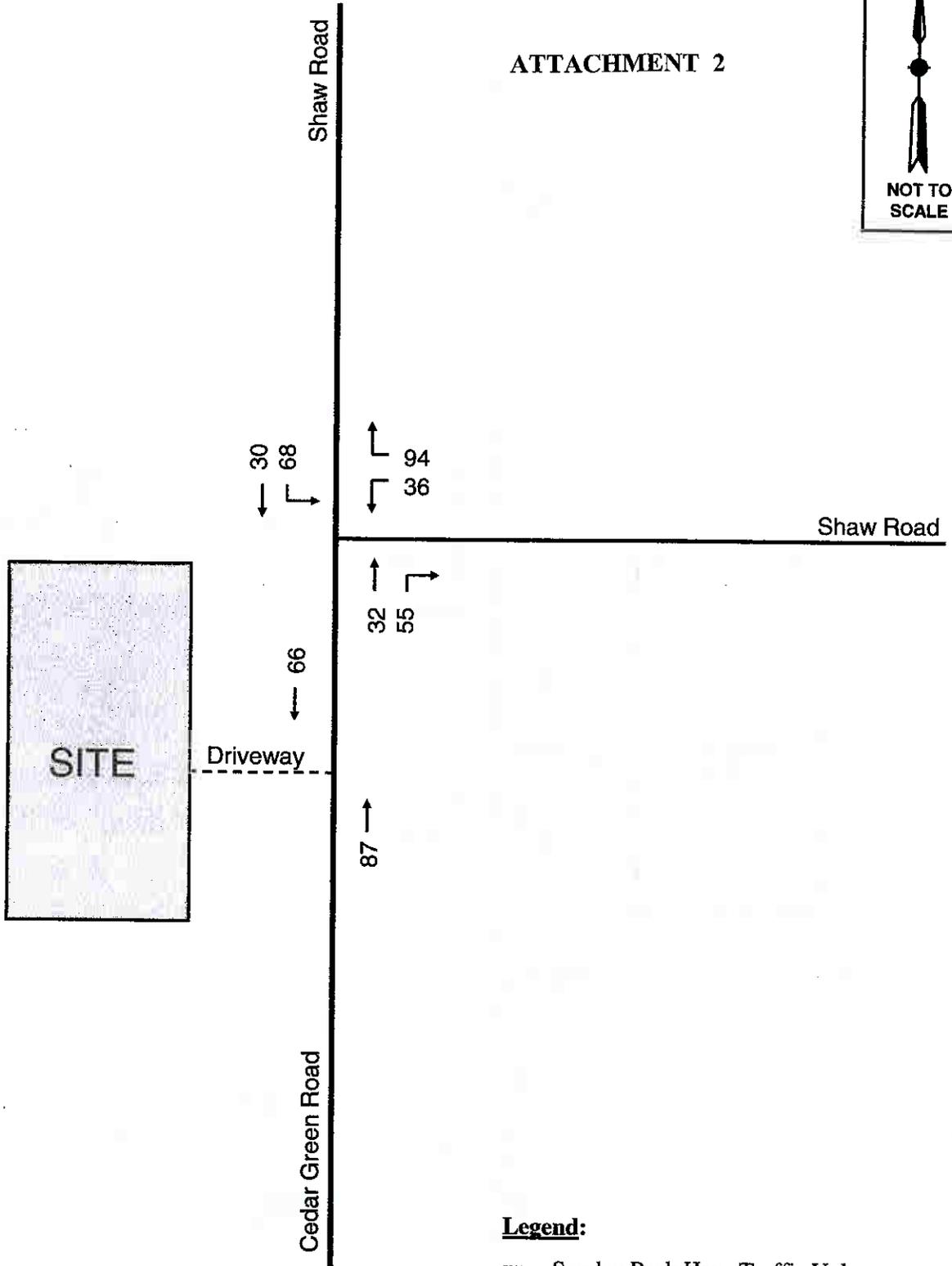
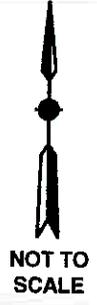
Cedar Green Road Rezoning
Sterling, VA

Figure

1

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ATTACHMENT 2



Legend:

xx - Sunday Peak Hour Traffic Volumes



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**Existing Sunday Peak Hour
Traffic Volumes**

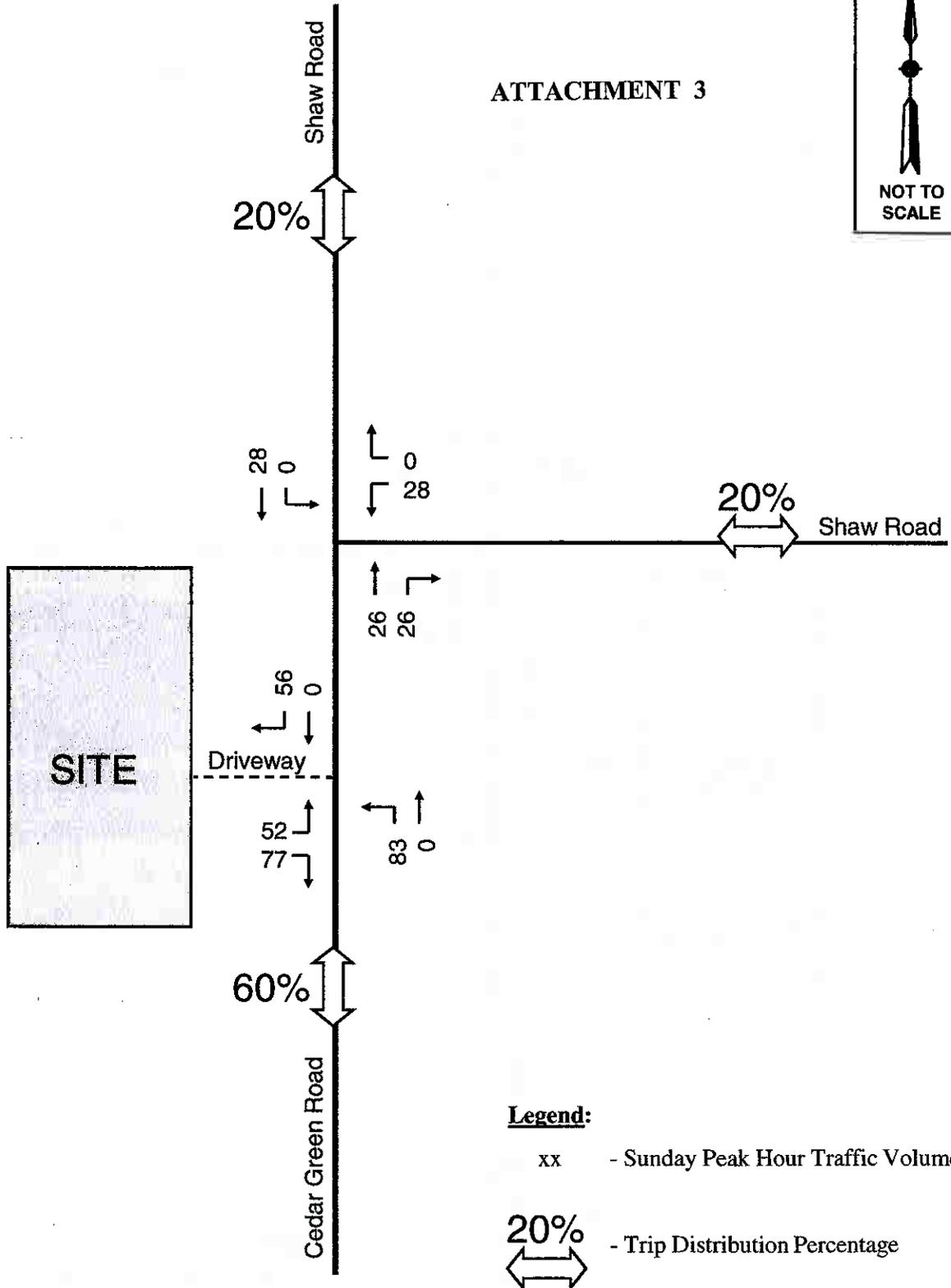
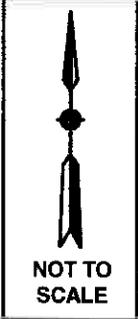
Cedar Green Road Rezoning
Sterling, VA

Figure

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ATTACHMENT 3



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**Trip Distribution and Site
Generated Traffic Volumes**

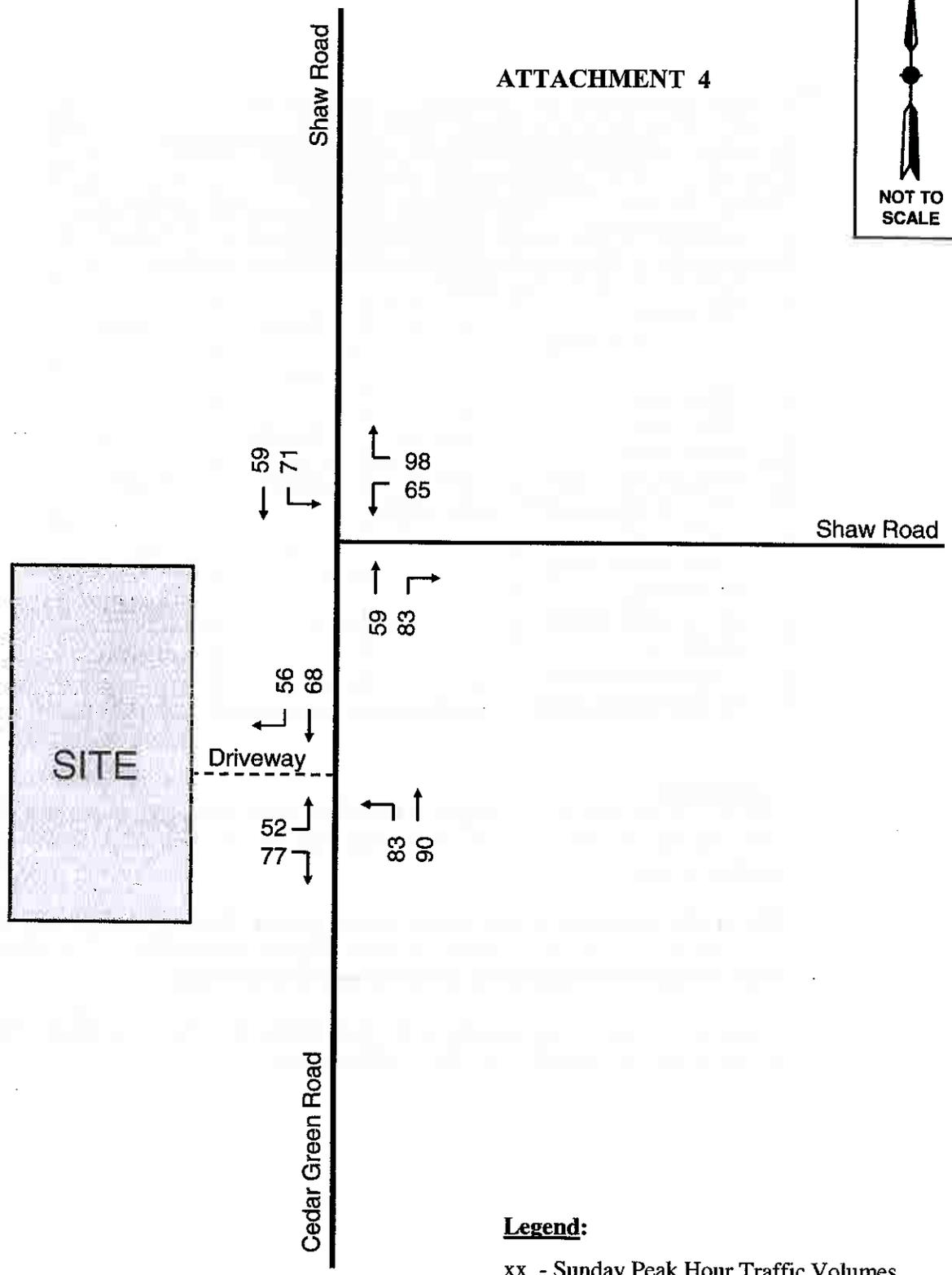
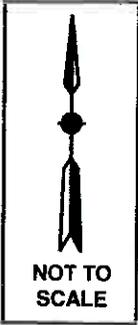
Cedar Green Road Rezoning
Sterling, VA

Figure

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ATTACHMENT 4



Legend:

xx - Sunday Peak Hour Traffic Volumes



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Total Future Sunday Peak Hour Traffic Volumes

Cedar Green Road Rezoning
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Figure

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Table 3 Level of Service Summary at Study Intersections (LOS/sec of delay per vehicle)			
Intersection	Existing 2008	Background 2010	Total Future 2010
<i>Cedar Green Road and Shaw Road</i>			
Northbound (Cedar Green Road)	A (0.0)	A (0.0)	A (0.0)
Southbound (Shaw Road)	A (5.3)	A (5.4)	A (4.4)
Westbound (Shaw Road)	A (9.8)	A (9.8)	B (10.9)
Overall Intersection	A (5.7)	A (5.7)	A (5.4)
<i>Cedar Green Road and Church Driveway</i>			
Northbound (Cedar Green Road)	-	-	A (3.9)
Southbound (Cedar Green Road)	-	-	A (0.0)
Eastbound (Church Driveway)	-	-	B (10.8)
Overall Intersection	-	-	A (4.9)

Conclusions

Based on these analyses, it is concluded that the proposed rezoning to permit a church on the property will result in fewer peak hour trips than the permitted density under the existing zoning.

The traffic generated by the church at the time of Sunday services can be easily accommodated on the surrounding roadways. The levels of traffic service will be A and B on Sunday at the site driveway and at the nearby intersection.

There are no road safety hazards in the area of the property. As a result, the vehicle access system will operate in a safe and efficient manner.