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**FRIENDS OF ST. PATRICK'S
TRANSPORTATION IMPACT STUDY
WASHINGTON, D.C.**

Prepared for:
Friends of St. Patrick's

Prepared by:
Wells & Associates, LLC

February 2006

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WASHINGTON, D.C.**

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Section I INTRODUCTION

This report presents the results of a transportation impact study for the Friends of St. Patrick's (FOSP) proposal to redevelop the Brady Estate, which is located on the east side of Foxhall Road, between Hoban Road and Whitehaven Parkway, in the northwest section of Washington, D.C., as shown on Figure I-1.

The Colony Hill residential neighborhood is located immediately adjacent to and south of the subject property. National Park Service property and the Philips Estate, which is planned for redevelopment by others, are located immediately to the north. The German Embassy is located across Foxhall Road, to the west.

Several independent schools are located within the study area, including The Field School, The Lab School, Our Lady of Victory, River School, and the George Washington University Mount Vernon Campus. The St. Patrick's lower school campus (Nursery through grade 6) is located on the south side of Whitehaven Parkway, west of Foxhall Road. Forty (40) St. Patrick's 7th and 8th graders currently attend classes at 4925 MacArthur Boulevard (at Ashby Street). Other nearby independent and public schools located outside of the study area include Rock Creek International School, Georgetown Day School, Key Elementary School, and Mann Elementary School.

FOSP proposes to develop the 17.30-acre site with an independent school, grades 7 through 12, and 28 single-family detached residential dwellings. Middle and upper school campuses are proposed on the north; residential dwellings are proposed on the south, as shown on Figure I-2. The middle school would consist of grades 7 and 8 with an enrollment of 55 to 65 students each, or 120 students. The upper school would consist of grades 9 through 12 with an enrollment of 68 to 90 students each, or 320 students. Faculty and staff are expected to number 100.

One hundred seventy (170) parking spaces would be provided on a single level in a structure beneath the academic buildings. Additional off-peak period curb parking spaces could be provided along the on-site loop circulator road.

All vehicular access to the school would be provided at a new, full-movement, signalized intersection on Foxhall Road. Timing of this new signal would be coordinated with other, existing signals along Foxhall Road. Vehicular access to the residences would be provided at a new driveway on Hoban Road, opposite 45th Street.

For purposes of this traffic analysis, the proposed development was assumed to be completely built and occupied by 2012.

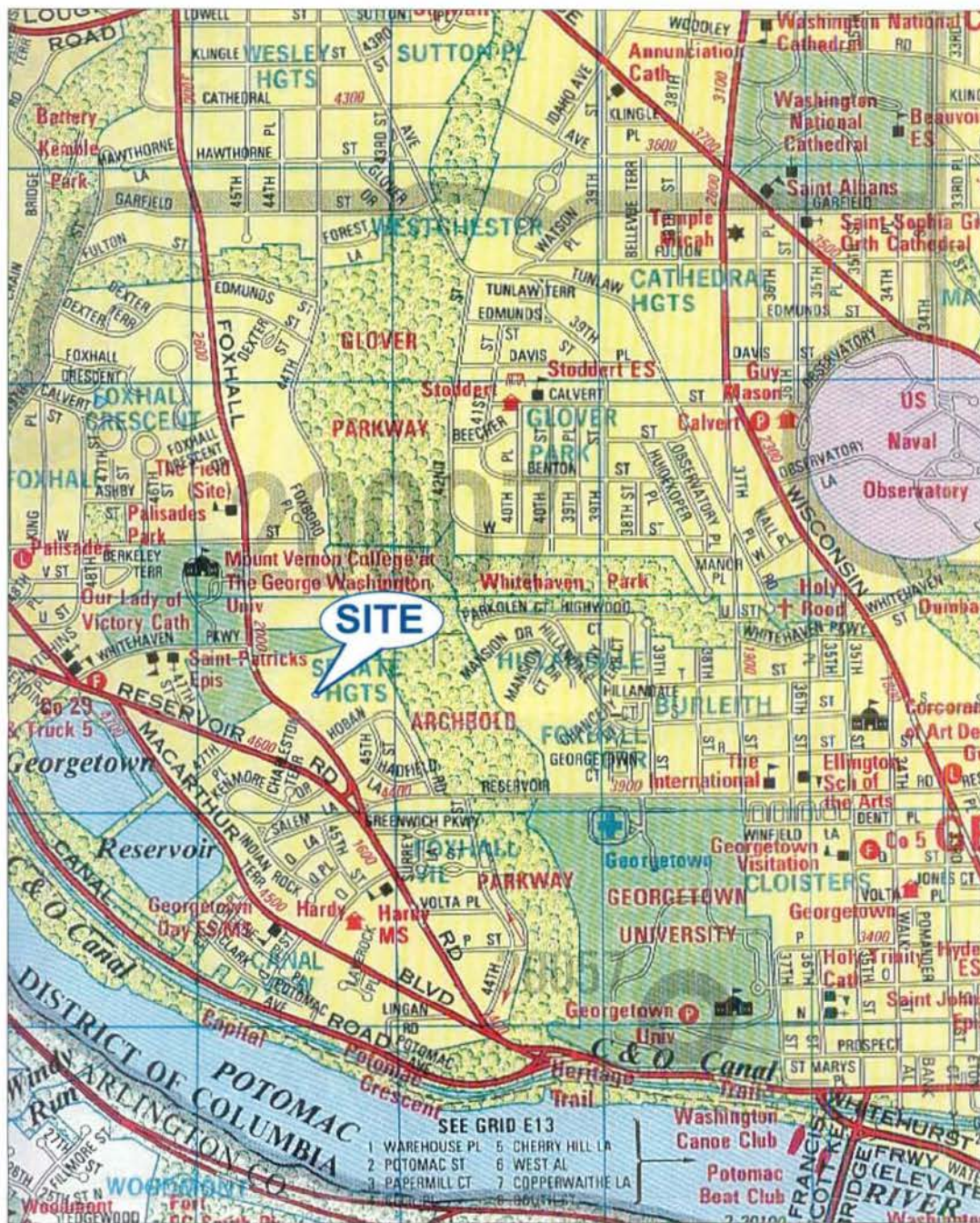


Figure 1-1
Site Location



Figure 1-2
Proposed Site Plan



Tasks undertaken in this study included the following:

1. FOSP's proposed development plans, various traffic studies and plans prepared by the District Department of Transportation (DDOT), and other background data were reviewed.
2. A field reconnaissance of existing roadway and intersection geometrics, traffic controls, traffic signal phasing/timings, and speed limits was conducted.
3. Agreement with DDOT staff regarding the traffic study scope was achieved.
4. Counts of existing traffic at 13 off-site intersections were collected.
5. Analysis of existing levels of service at these intersections was completed.
6. Background future traffic volumes were forecasted for 2012.
7. Background levels of service were calculated at key intersections based on background traffic forecasts, existing traffic controls, and existing intersection geometrics.
8. The number of peak hour vehicle-trips that would be generated by the St. Patrick's Middle and Upper Schools was estimated based on: (1) projected numbers of faculty, staff, and students and (2) the St. Patrick's TDM program.
9. The number of peak hour vehicle-trips that would be generated by the proposed new residences was estimated based on Institute of Transportation Engineers (ITE) trip generation rates, which were corroborated by counts at the nearby Foxhall Crescent neighborhood.
10. Total future traffic volumes were forecasted for 2012.
11. Total future levels of service were calculated at key intersections based on total future traffic forecasts, existing traffic controls, and existing intersection geometrics.

Sources of data for this analysis included traffic counts conducted by Wells & Associates; the Institute of Transportation Engineers (ITE); the Washington Metropolitan Area Transit Authority (WMATA); the District of Columbia; Palisades Traffic Impact Study¹; Barnes Vanze Architects, Inc.; St. Patrick's Episcopal Day School; and FOSP.

¹ Traffic Services Administration, District Department of Transportation, District of Columbia, Palisades Traffic Impact Study, August, 2002.

The conclusions of this study are as follows:

1. **The Brady Estate is located on Foxhall Road, within a connected network of arterial, collector, and local streets.**
2. **All vehicular access to the school would be provided at a new, full-movement, signalized intersection on Foxhall Road. Timing of this new signal would be coordinated with other, existing signals along Foxhall Road. Vehicular access to the residences would be provided at a new driveway on Hoban Road, opposite 45th Street.**
3. **The signalized Foxhall Road/Garfield Street, Foxhall Road/Field School Driveway, Foxhall Road/Whitehaven Parkway, and Reservoir Road/MacArthur Boulevard (East) presently operate at an acceptable overall level of service (LOS) "D" or better during all times of day.**
The signalized Reservoir Road/MacArthur Boulevard (West) intersection operates near capacity at an overall LOS "E" during the AM peak hour and at an acceptable overall LOS "A" during the school and commuter PM peak hours.
The signalized Foxhall Road/Reservoir Road intersection operates near capacity at an overall LOS "E" during the AM peak hour, school PM peak hour, and commuter PM peak hours.
4. **Redevelopment of the Philips Estate and background traffic growth would have a small impact on intersection levels of service.**
5. **The St. Patrick's Six-Point Travel Management Plan (TMP) includes:**
 - 1). **Carpool Initiative,**
 - 2). **Shuttle Bus Service Plan,**
 - 3). **Parking Solution Plan,**
 - 4). **Student Driving Initiative and Controls,**
 - 5). **Walk/Bicycle Initiative, and**
 - 6). **Staggered Arrival and Dismissal Time Plan.**
6. **The St. Patrick's middle and upper schools would generate approximately 262 AM peak hour vehicle-trips, 175 school PM peak hour vehicle-trips, and 189 commuter PM peak hour vehicle-trips, at the ultimate enrollment of 120 middle school and 320 upper school students.**

7. ***The 28 new homes would generate approximately 21 AM peak hour vehicle-trips, 17 school PM peak hour vehicle-trips, and 28 commuter PM peak hour vehicle-trips.***
8. ***The proposed school would increase peak hour traffic on Foxhall Road north of the driveway by five to 14 percent, and would increase peak hour traffic on Foxhall Road south of the driveway by two to four percent.***
9. ***The proposed Project would add fewer than five seconds of additional average vehicle delay for Colony Hill motorists.***
10. ***The proposed new Foxhall Road/St. Patrick's signalized intersection would operate at an overall acceptable LOS "A" or "B" at all times of day. All ingress and egress movements would operate at a LOS "D" or better at all times of the day.***

Section 2

BACKGROUND DATA

Study Scope

This traffic study was conducted in accordance with the scoping agreement between Wells & Associates and DDOT staff. This study includes the following intersections:

1. Foxhall Road/Garfield Street,
2. Foxhall Road/Field School Driveway,
3. Foxhall Road/W Street,
4. Foxhall Road/Whitehaven Parkway,
5. Reservoir Road/MacArthur Boulevard (West),
6. Reservoir Road/Whitehaven Parkway,
7. Reservoir Road/MacArthur Boulevard (East)/Lab School Driveway,
8. Foxhall Road/Reservoir Road,
9. Reservoir Road/Hoban Road,
10. Foxhall Road/45th Street,
11. Foxhall Road/Hoban Road,
12. Foxhall Road/ FOSP School Driveway,
- 12a. Foxhall Road/German Embassy,
- 12b. Foxhall Road/Service Loop, and
13. Foxhall Road/Philips Estate Driveway.

The impacts of the subject project were evaluated at project build out, which is anticipated to occur in 2012.

Level of service (LOS) "D" is considered the minimum acceptable level of service in urban areas such as Washington, D.C. LOS "E" is considered acceptable during peak hours in urbanized areas, such as the subject neighborhood.

Public Road Network

The Brady Estate is located within a connected network of local, collector, and arterial streets. Existing intersection lane use and traffic control at key intersections in the site vicinity are shown on Figure 2-1.

Foxhall Road is a minor arterial street that connects MacArthur Boulevard to the south with Loughboro Road/Nebraska Avenue to the north. Foxhall Road is two (2) lanes wide north of Whitehaven Parkway and four (4) lanes wide south of Whitehaven Parkway, with no parking. A sidewalk exists on the west side of the street; no sidewalk exists on the east side of the street, along the Brady Estate frontage. Traffic signals are located along Foxhall Road at MacArthur Boulevard, Reservoir Road, Whitehaven Parkway, The Field School driveway, Garfield Street, and Loughboro Road/Nebraska Avenue. Foxhall Road has a posted speed limit of 25 miles per hour (mph).

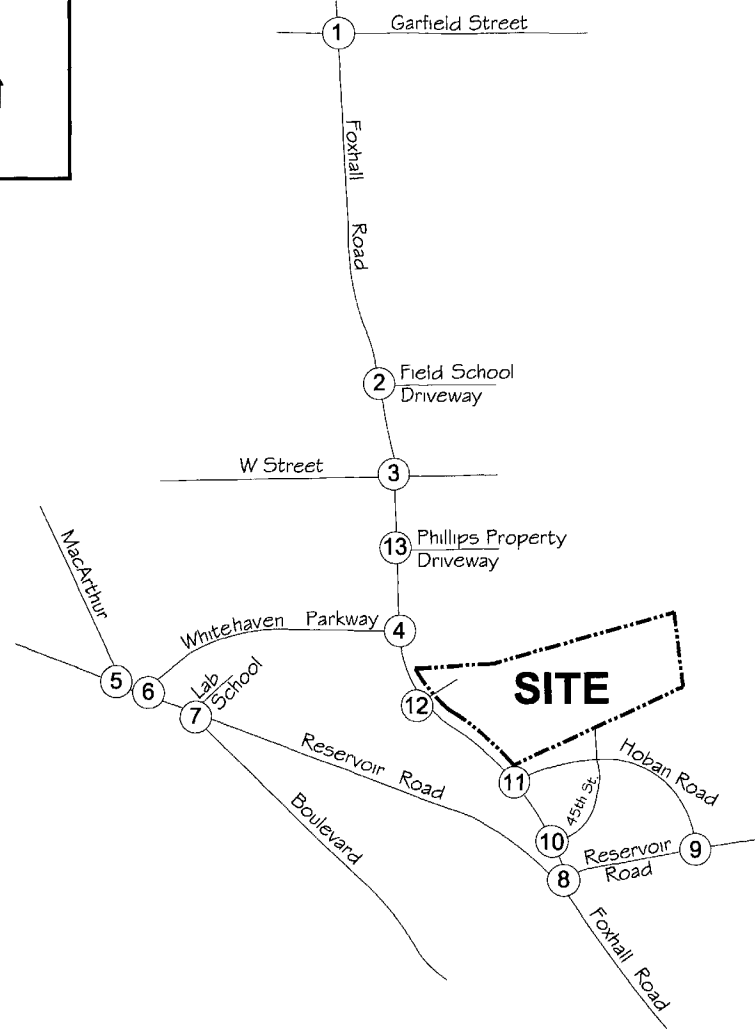
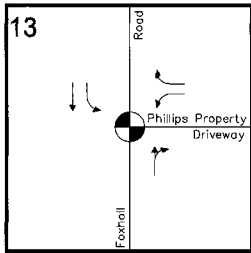
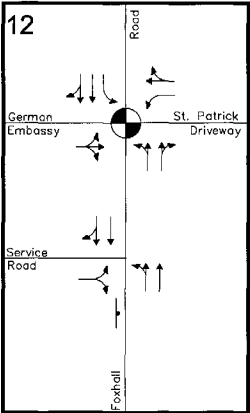
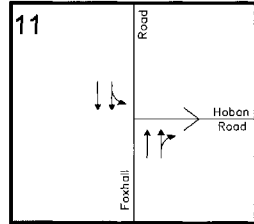
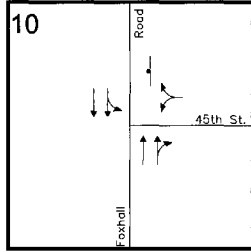
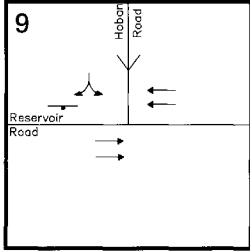
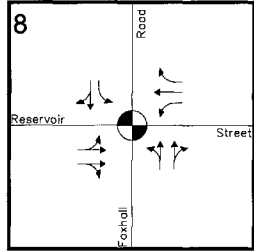
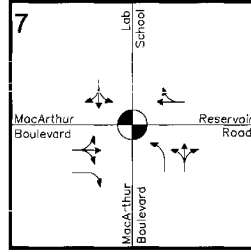
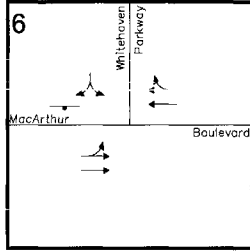
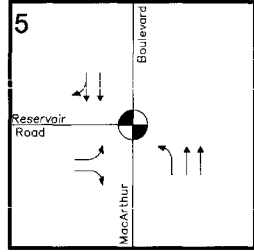
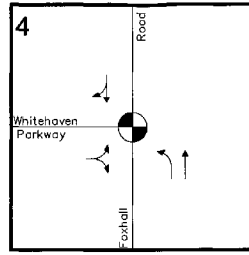
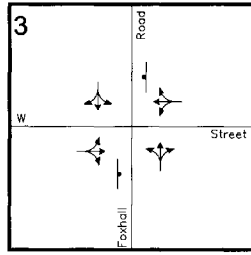
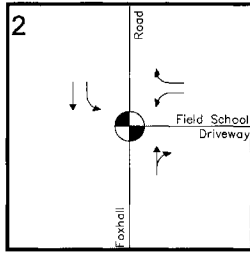
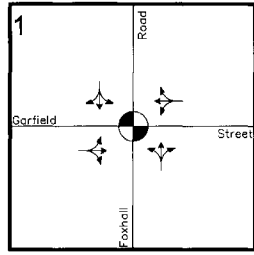
Foxhall Road carried 19,000 vehicles per day (vpd) south of Reservoir Road, 10,300 vpd north of Reservoir Road, 15,300 vpd south of Garfield Street, and 14,300 vpd north of Garfield Street, in 2002, according to DDOT.

Foxhall Road is approximately 45 feet wide along the site frontage. It is striped for four (4) lanes: two (2) northbound lanes and two (2) southbound lanes. The leftmost northbound lane is used as an exclusive left turn lane at Whitehaven Parkway. All northbound through traffic must merge into a single lane north of Whitehaven Parkway. The existing driveway to the Brady Estate is located approximately 160 feet north of Hoban Road.

Foxhall Road recently was widened to provide a separate southbound lane at the Field School driveway. A new, demand-actuated traffic signal recently was installed at the Foxhall Road/Field School driveway intersection.

The following improvements to Foxhall Road were recommended in the Palisades Traffic Impact Study:

- Replace all pavement markings to improve visibility and safety,
- Construct an eastbound left-turn lane on Reservoir Road to allow for an eastbound lane configuration consisting of an exclusive left turn lane, a through lanes, and a shared through/right lane,
- Modify signal phasing and optimize signal timings,
- Convert Salem Lane to one way eastbound to prohibit right turns from southbound Foxhall Road and improve safety,



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PHOTO: TRANSPORTATION AND TRAFFIC CONSULTANTS

Represents One Travel Lane
Signalized Intersection
Stop Sign

Transportation Impact Study
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Washington, D.C.

Figure 2-1
Intersection Lane Use
and Traffic Control

DATE	2/1/2011
BY	WELLS & ASSOCIATES, LLC
FOR	TRANSPORTATION AND TRAFFIC CONSULTANTS
PROJECT	ST. PATRICK'S
LOCATION	WASHINGTON, D.C.
SCALE	1" = 100'



- Construct a sidewalk on the east side of Foxhall Road between Hoban Road and Reservoir Road to improve pedestrian safety,
- Install a “Yield to Pedestrians While Turning” sign for westbound right turns to improve pedestrian safety, and
- Eliminate 200 feet of parking on the north side of Reservoir Road west of Foxhall Road to allow for easier left turns from Kenmore Drive onto Reservoir Road.

The developers of the Philips Estate propose to construct short eastbound and westbound right turn bays on W Street at Foxhall Road.

All vehicular access to Colony Hill is provided by Hoban Road and 45th Street. Hoban Road is posted one-way eastbound (or inbound) at Foxhall Road and one-way southbound (or outbound) at Reservoir Road. (This thwarts westbound-Reservoir-to-northbound-Foxhall-Road cut-through traffic). 45th Street intersects Foxhall Road north of Reservoir Road and south of Hoban Road. Hoban Road, 45th Street, and Hadfield Lane within Colony Hill are classified by DDOT as local streets.

Reservoir Road is an east-west street that connects Canal Road and Wisconsin Avenue. Reservoir Road between MacArthur Boulevard and Wisconsin Avenue is classified by DDOT as a minor arterial street. Traffic signals are located at the MacArthur Boulevard and Foxhall Road intersections. Reservoir Road carried 19,200 vpd east of Foxhall Road, and 4,000 vpd west of MacArthur Boulevard, in 2002, according to DDOT.

Whitehaven Parkway is a local street that provides access to the St. Patrick's lower school (Whitehaven Campus), The George Washington University Mount Vernon Campus, the Lab School of Washington, Our Lady of Victory, and a small number of single-family detached homes.

MacArthur Boulevard is a four-lane, median-divided, north-south, minor arterial street with a posted speed limit of 25 mph. The intersection of MacArthur Boulevard with Reservoir Road is controlled by traffic signal. Whitehaven Parkway is controlled by a stop sign at MacArthur Boulevard. MacArthur Boulevard carried 19,800 vehicles per day (vpd) north of Reservoir Road, and 23,100 vpd south of Reservoir Road, in 2002, according to DDOT.

W Street is an east-west local street that is controlled by stop signs at Foxhall Road. Sight distances for motorists turning off of W Street onto Foxhall Road are restricted by roadside obstacles and the alignment of Foxhall Road. The developers of the Philips Estate propose to construct short eastbound and westbound right turn bays on W Street at Foxhall Road.

Garfield Street is classified as a local street west of Foxhall Road and as a collector street east of Foxhall Road. The Foxhall Road/Garfield Street intersection is controlled by a traffic signal. Garfield Street carried 1,300 vehicles per day between Foxhall Road and New Mexico Avenue in 2002, according to DDOT.

Existing Traffic Counts

Vehicular Traffic Counts. Existing vehicle and pedestrian traffic counts were conducted by Wells & Associates at the following intersections on the following days:

1. Foxhall Road/Garfield Street (Tuesday, November 16, 2004),
2. Foxhall Road/Field School Driveway (Tuesday, November 16, 2004),
3. Foxhall Road/W Street (Tuesday, November 16, 2004),
4. Foxhall Road/Whitehaven Parkway (Tuesday, November 16, 2004),
5. Reservoir Road/MacArthur Boulevard (West), (Tuesday, November 16, 2004),
6. Reservoir Road/Whitehaven Parkway (Tuesday, November 16, 2004),
7. Reservoir Road/MacArthur Boulevard (East)/Lab School Driveway (Tuesday, November 16, 2004),
8. Foxhall Road/Reservoir Road (Tuesday, November 16, 2004),
9. Foxhall Road/45th Street (Wednesday, April 27, 2005 and Thursday, September 29, 2005),
10. Reservoir Road/Hoban Road (Wednesday, April 27, 2005 and Thursday, September 29, 2005),
11. Foxhall Road/Hoban Road (Wednesday, April 27, 2005 and Thursday, September 29, 2005).
- 12a. Foxhall Road/German Embassy (Thursday, September 29, 2005).
- 12b. Foxhall Road/Service Loop (Thursday, September 29, 2005).

Counts were conducted from 7:00 AM to 9:00 AM and from 2:00 PM to 7:00 PM. In some cases, peak hour volumes were balanced to account for differences associated with differing peak hours at the various intersections. The raw counts are included in Appendix A. Baseline peak hour volumes are summarized on Figure 2-2.

These counts reflect:

1. Recent construction of the Field School on the east side of Foxhall Road,
2. Installation of new traffic signals on Foxhall Road at the Field School driveway and Whitehaven Parkway,
3. Implementation of a carpool initiative and traffic management plan at the St. Patrick's lower school (Whitehaven Campus),
4. Shuttle bus service between the St. Patrick's lower school (Whitehaven Campus) and the MacArthur Boulevard Campus,
5. Expansion of the George Washington University Mount Vernon Campus, and
6. Traffic generated by the Lab School, Our Lady of Victory, River School, Rock Creek International School, Georgetown Day School, Key Elementary School, and Mann Elementary School.

Peak Hours. Peak times varied across the many study intersections, as shown on Figure 2-2. Along Foxhall Road, the AM peak hour generally occurred from 7:30 to 8:30 AM, the school PM peak hour occurred from 2:45 to 3:45 PM; and the commuter PM peak hour generally occurred from 5:00 to 6:00 PM.

Foxhall Road Traffic Counts. Figure 2-2 indicates that Foxhall Road, south of Whitehaven Parkway, presently carries 1,622 vehicle-trips during the AM peak hour, 1,162 vehicle-trips during the school PM peak hour, and 1,281 vehicle-trips during the commuter PM peak hour. This traffic is nearly evenly split in the northbound and southbound directions. The north/south splits are 52/48, 52/48, and 55/45 percent during the AM, school PM, and commuter PM peak hours, respectively.

Pedestrian Traffic Counts. Pedestrian traffic counts are presented in Appendix B and summarized on Figure 2-3. Due to the lack of sidewalks along the east side of Foxhall Road, pedestrian volumes along and across Foxhall Road are low.

Colony Hill Traffic Characteristics

Overview. Wells & Associates conducted traffic counts, license plate surveys, and delay studies at the entrances and exits to Colony Hill. Peak hour cut-through traffic volumes and patterns, and the number and directional distribution of vehicle-trips currently generated Colony Hill residents, were determined based on these data. These findings are presented in the following sections.

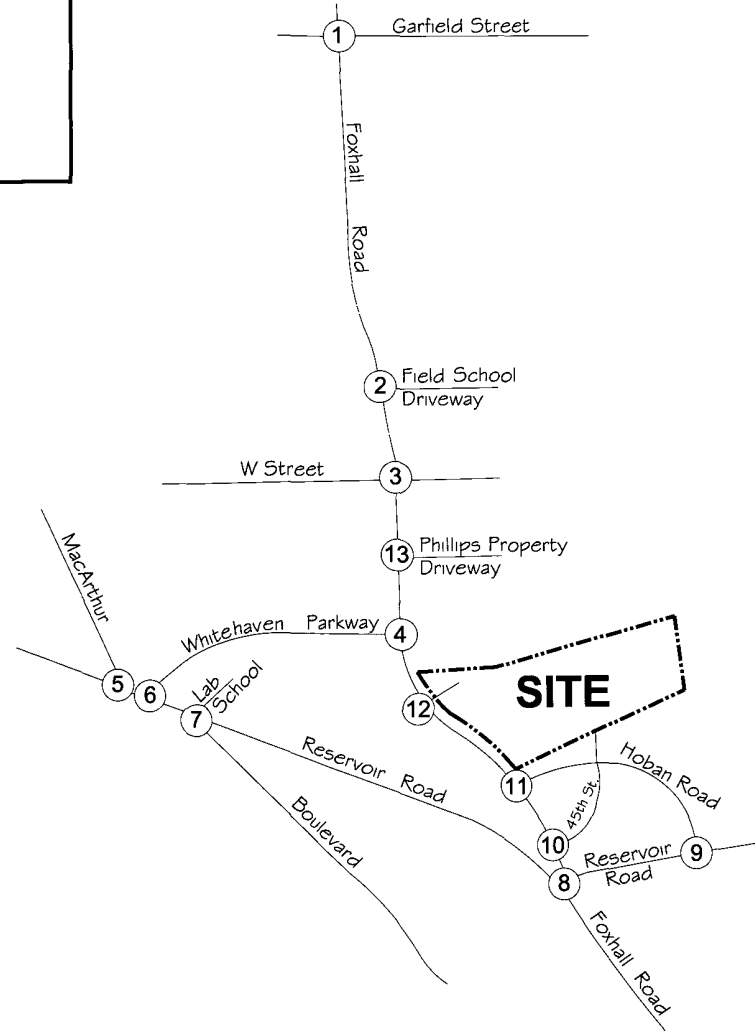
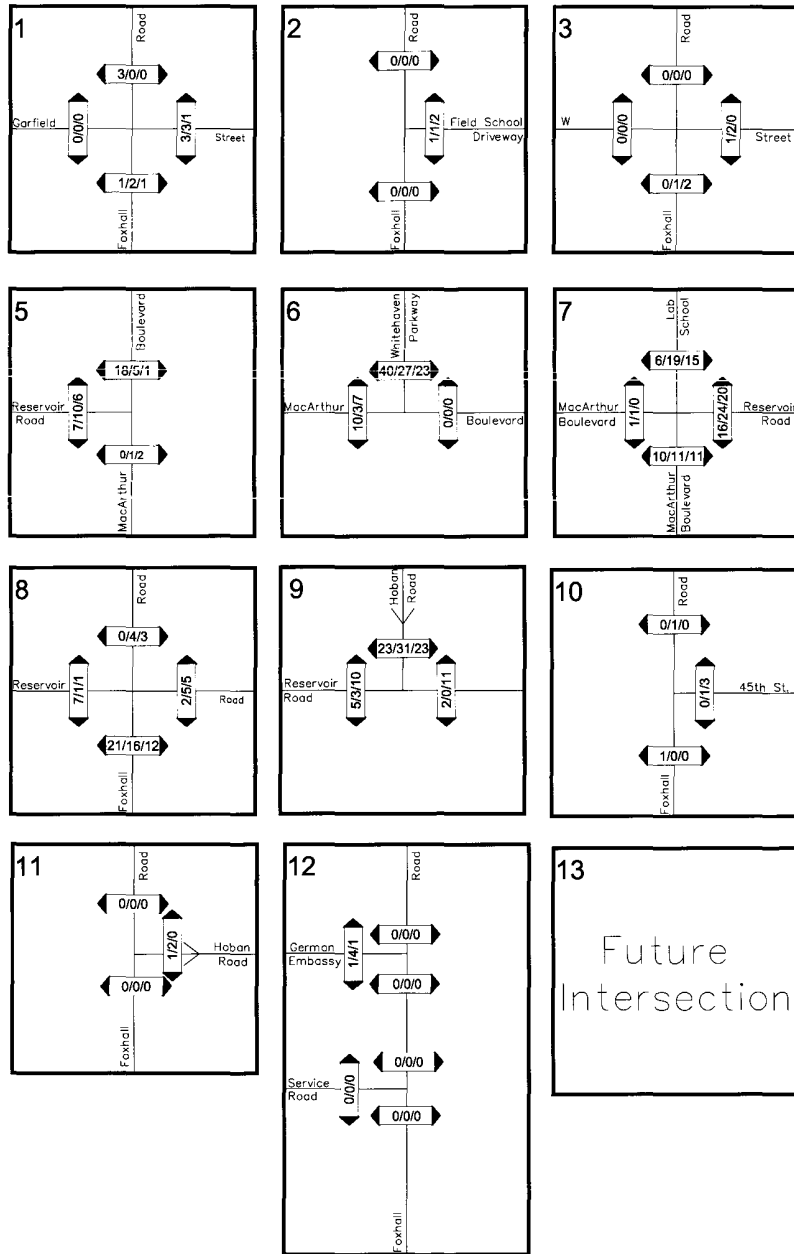
North 	SCALE: schematic	Figure 2-2 Existing Vehicular Traffic Counts
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	DRAWN BY: CA	
	CHECKED BY: JMB	
	PROJECT NO: 2608	

Transportation Impact Study
Friends of Saint Patrick's
 Washington, D.C.

000/000/1100 AM/SCHOOL/PM PEAK HOURS



WELLS & ASSOCIATES, LLC
TRAFFIC, TRANSPORTATION, AND PARKING CONSULTANTS



Traffic Counts. Vehicular traffic turning movement counts were conducted by 15-minute interval on Thursday, September 29, 2005, when public and private area schools were in session, from 7:00 to 10:00 AM, and from 2:00 to 7:00 PM, at the following intersections:

1. Foxhall Road/Hoban Road,
2. Foxhall Road/45th Street, and
3. Reservoir Road/Hoban Road.

The results are presented in Appendix C.

The commuter peak hour on Colony Hill streets occurred at 8:15 to 9:15 AM when 39 vehicles entered and 46 vehicles exited Colony Hill. The commuter PM peak hour occurred at 4:00 to 5:00 PM when 29 vehicles entered and 21 vehicles exited Colony Hill. Twenty-nine (29) vehicles entered and 24 vehicles exited Colony Hill during the school PM peak hour (2:45 to 3:45 PM).

On average, each of the 41 Colony Hill residences generated 1.29 and 0.93 vehicle-trip ends during the commuter AM and PM peak hours, respectively. These rates are 0.54 trips per dwelling *higher* than the ITE AM peak hour rate of 0.75 vehicle-trip ends per single-family detached dwellings, and 0.08 trips *lower* than the ITE PM peak hour rate of 1.01 vehicle-trip ends per dwelling during the PM peak hour.

License Plate Survey. The license plate numbers of all vehicles entering and exiting Colony Hill were recorded across the same times as the vehicular traffic counts. The license plate surveys showed that 16 vehicles (or 32 vehicle-trip ends) entered and exited (or cut through) Colony Hill during the commuter AM peak hour. Seven vehicles (or 14 vehicle-trip ends) cut through during the school PM peak hour, and six vehicles (or 12 vehicle-trip ends) cut through during the commuter PM peak hour.

Cut through traffic turned left from southbound Foxhall Road onto Hoban Road and 45th Street, and then left from Hoban Road onto eastbound Reservoir Road. Nearly equal numbers of vehicles cut through on Hoban Road and 45th Street, as shown on Figure 2-4.

Cut-through traffic accounted for 38 percent of all Colony Hill vehicle-trip ends during the commuter AM peak hour, 26 percent during the school PM peak hour, and 24 percent during the commuter PM peak hour, as shown in Table 2-1.

Table 2-1
Colony Hill
Cut-Through Traffic Analysis

Peak Hour/Type Traffic	In	Out:	Total
<i>AM Peak Hour (8:15 AM to 9:15 AM)</i>			
Total	39	46	85
Cut-Through	16	16	32
Percent Cut-Through	41%	35%	38%
<i>School PM Peak Hour (2:45 PM to 3:45 PM)</i>			
Total	29	24	53
Cut-Through	7	7	14
Percent Cut-Through	24%	29%	26%
<i>Commuter PM Peak Hour (4:00 PM to 5:00 PM)</i>			
Total	29	21	50
Cut-Through	6	6	12
Percent Cut-Through	21%	29%	24%

Delay Studies. Delays encountered by each vehicle exiting Colony Hill by turning left and right from Hoban Road onto Reservoir Road, and from 45th Street onto Foxhall Road, were measured across the same times as the traffic counts and license plate surveys. The highest delays were measured at Hoban Road at Reservoir Road.

On average, motorists waited 35 seconds to turn left, and 26 seconds to turn right, from Hoban Road onto Reservoir Road during the critical commuter AM peak hour, as shown on Table 2-2. Accordingly, left turn traffic operates at an acceptable level of service (LOS) "D", and right turn traffic operates at an acceptable LOS "C" during the critical commuter AM peak hour. These movements operated at an acceptable LOS "A" or "B" during the school and commuter PM peak hours.

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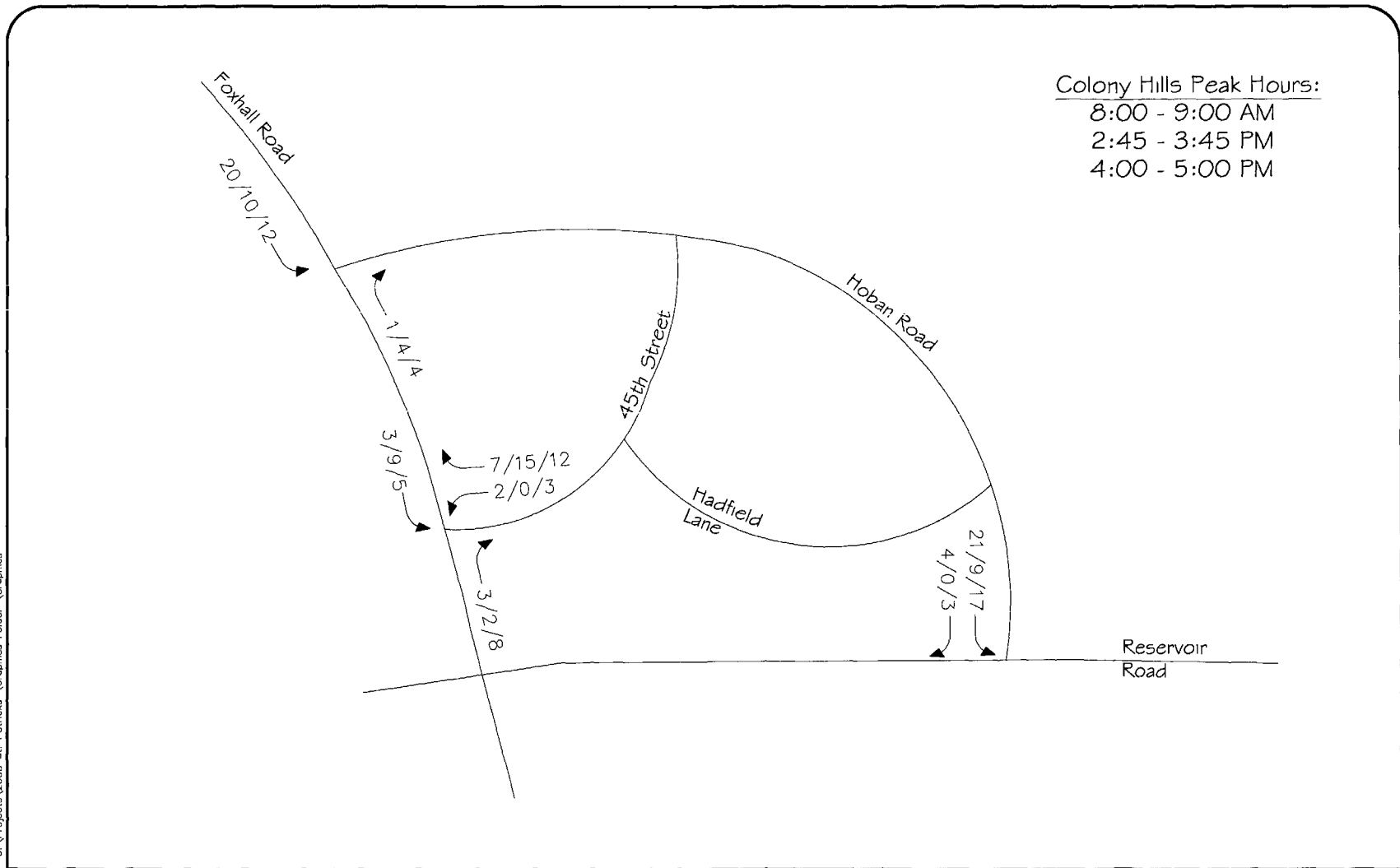


Figure 2-4
Colony Hills Neighborhood Traffic Volumes



Table 2-2
Colony Hills Neighborhood Delays

Intersection	Movement	Delay	AM Peak Hour (8:15 – 9:15 AM)	School PM Peak Hour (2:45 – 3:45 PM)	PM Peak Hour (4:00 – 5:00 PM)
Hoban Road at Reservoir Road	Left Turn	Minimum	A (1 s)	A (3 s)	A (5 s)
		Maximum	F (100 s)	D (36 s)	D (48 s)
		Average	D (35 s)	B (14 s)	B (16 s)
		Median	B (19 s)	B (12 s)	B (10 s)
	Right Turn	Minimum	A (1 s)	A (3 s)	A (1 s)
		Maximum	F (90 s)	B (10 s)	C (20 s)
		Average	C (26 s)	A (6 s)	A (5 s)
		Median	A (6 s)	A (5 s)	A (2 s)
45 th Street at Foxhall Road	Left Turn	Minimum	A (4 s)	n/a	A (9 s)
		Maximum	A (7 s)	n/a	A (9 s)
		Average	A (6 s)	n/a	A (9 s)
		Median	A (6 s)	n/a	A (9 s)
	Right Turn	Minimum	A (2 s)	A (2 s)	A (2 s)
		Maximum	B (10 s)	B (19 s)	B (12 s)
		Average	A (6 s)	A (6 s)	A (7 s)
		Median	A (5 s)	A (4 s)	A (6 s)

The few vehicles turning right and left onto Foxhall Road from 45th Street operated with delays of 19 seconds or less at all times on the survey day. On average, these movements operated at an acceptable LOS “A”.

Directional Distribution. The directional distribution of Colony Hill residential neighborhood (non-cut-through) traffic was determined by Wells & Associates based on the intersection turning movement counts and license plate survey. As shown in Table 2-3, the directional distribution varied significantly by time of day.

Table 2-3
Colony Hill Residential Neighborhood Traffic Distributions

Direction	AM Peak Hour	School PM Peak Hour	Commuter PM Peak Hour
<i>Inbound Traffic</i>			
Southbound Foxhall Road	65%	27%	40%
Northbound Foxhall Road	30%	50%	43%
Eastbound Reservoir Road	0%	5%	0%
Westbound Reservoir Road	5%	18%	17%
Total	100%	100%	100%
<i>Outbound Traffic</i>			
Southbound Foxhall Road	17%	46%	53%
Northbound Foxhall Road	13%	18%	7%
Eastbound Reservoir Road	60%	12%	20%
Westbound Reservoir Road	10%	24%	20%
Total	100%	100%	100%

During the AM peak hour, the majority of outbound residential trips, 60 percent, exited the neighborhood on eastbound Reservoir Road, toward Georgetown. Ten (10) percent exited on westbound Reservoir Road, 17 percent on northbound Foxhall Road, and 13 percent on southbound Foxhall Road. During the commuter PM peak hour, 43 percent of all inbound residential trips entered the neighborhood from northbound Foxhall Road, 40 percent from southbound Foxhall Road, and 17 percent from westbound Reservoir Road.

Traffic Calming. Traffic calming measures could be used to reduce, if not eliminate, cut-through trips, including:

- Peak period left turn prohibition from southbound Foxhall Road onto Hoban Road and 45th Street.
- Speed humps on Hoban Road between Foxhall and Reservoir Roads.
- All-way stop control at the Hoban Road/45th Street intersection.
- Installation of a new traffic signal on Reservoir Road at Hoban Road.
- Construction of a nub on the east side of Hoban Road to prevent traffic from turning the wrong way from Reservoir Road onto Hoban Road.

- Conversion of the one-block section of Hoban Road, between Foxhall Road and 45th Street, from one-way eastbound to two-way operation.

Vehicle Queues

Vehicles queued in the left lane on northbound Foxhall Road at Whitehaven Parkway were measured by Wells & Associates on Thursday, May 9, 2005, during each signal cycle from 7:00 to 9:00 AM and from 2:00 to 7:00 PM. The minimum, maximum, and average queues during the AM peak hour were 1.0, 6.0, and 2.2 vehicles, respectively, or 25, 150, and 55 feet, respectively, based on an average vehicle length of 25 feet (including spacing). The minimum, maximum, and average queues during the PM peak hour were zero, 6.0 and 1.8 vehicles, respectively, or zero, 150, and 45 feet, respectively, based on an average vehicle length 25 feet (including spacing).

Public Transportation Facilities and Services

The nearest Metrobus service operates on Reservoir Road (Lines D3, D6), MacArthur Boulevard (Lines D3, D5, and D6), and Nebraska Avenue (Line M4). No Metrobus service presently operates on Foxhall Road along the site frontage.

The nearest Metrorail stations are the Foggy Bottom-GWU and Dupont Circle stations. The Foggy Bottom-GWU station is located approximately 2.3 miles to the southeast on 23rd Street at Eye Street. The Dupont Circle station is located approximately 2.5 miles to the east on Connecticut Avenue at Q Street. Both of these stations are well beyond convenient walking distance from the subject site.

Bicycle Facilities

DDOT recently published the District of Columbia Bicycle Master Plan². This plan evaluates existing bicycle conditions in the District of Columbia, establishes goals, and recommends various policies and facility improvements to promote bicycle usage.

There are no bike lanes or multi-use trails existing or proposed by DDOT in the study area. The nearest signed bike routes are on MacArthur Boulevard, north of Reservoir Road, and on Reservoir Road, between MacArthur Boulevard and 37th Street.

² District Department of Transportation, District of Columbia Bicycle Master Plan, April, 2005.

Section 3

ANALYSIS OF EXISTING CONDITIONS

Existing Intersection Levels of Service

Existing peak hour levels of service were estimated at the study intersections based on the existing lane usage and traffic control shown on Figure 2-1; the existing vehicular and pedestrian traffic counts shown on Figures 2-2 and 2-3, respectively; and Synchro Traffic Analysis Software (version 6, build 612). The results are presented in Appendix D and summarized in Table 3-1.

Table 3-1 indicates that the signalized Foxhall Road/Garfield Street, Foxhall Road/Field School Driveway, and Foxhall Road/Whitehaven Parkway presently operate at an acceptable overall level of service (LOS) "D" or better during all times of day.

The signalized Reservoir Road/MacArthur Boulevard (West) intersection operates near capacity at an overall LOS "E" during the AM peak hour and at an acceptable overall LOS "A" during the school and commuter PM peak hours. The signalized Reservoir Road/MacArthur Boulevard (East) intersection operates at an acceptable overall level of service (LOS) "D" or better during all times of day.

The signalized Foxhall Road/Reservoir Road intersection operates near capacity at an overall LOS "E" during the AM, school PM and commuter PM peak hours.

It is difficult to turn onto Foxhall Road from either direction on W Street during peak hours due to high traffic volumes on Foxhall Road and limited sight distances. Eastbound and westbound W Street traffic operates near or at capacity at a LOS "E" or "F" during commuter peak hours.

Whitehaven Parkway intersects MacArthur Boulevard between the east and west legs of Reservoir Road. The two (2) Reservoir Road intersections with MacArthur Boulevard are controlled by traffic signals. Whitehaven Parkway is controlled by a stop sign. Southbound traffic on Whitehaven Parkway theoretically operates at capacity at LOS "F" during peak hours; however, field observations indicate that westbound motorists on Whitehaven Parkway rely on the gaps in MacArthur Boulevard traffic created by upstream and downstream traffic signals and driver courtesy to make turns onto MacArthur Boulevard.

Motorists turning into and out of Colony Hill via 45th Street and Hoban Road rely on gaps in Foxhall Road and Reservoir Road traffic created by nearby traffic signals and driver courtesy. It generally is easier to turn into Colony Hill than out of Colony Hill. The Colony Hill intersections presently operate at acceptable LOS "C" or better at all times of day.

Table 3-1
Existing Intersection Levels of Service^{1,2}

TYPE OF CONTROL	INTERSECTION	EXISTING CONDITIONS		
		AM	PM (SCHOOL)	PM
1. Foxhall Road/Garfield Street				
Signal	Eastbound	C(23.3)	C(24.0)	C(24.2)
	Westbound	D(43.5)	C(31.2)	C(30.8)
	Northbound	B(12.7)	A(7.7)	A(8.3)
	Southbound	B(11.9)	A(6.5)	A(6.2)
	Overall	B(16.3)	B(10.5)	B(10.4)
2. Foxhall Road/Field School Driveway				
Signal	Westbound	C(25.5)	D(43.6)	D(45.4)
	Northbound	B(19.0)	A(6.5)	A(7.3)
	Southbound	A(7.0)	A(5.3)	A(4.7)
	Overall	B(13.3)	A(9.2)	A(7.7)
3. Foxhall Road/W Street				
Stop Sign	Eastbound RTL	F[152.6]	D[30.9]	E[48.0]
	Westbound RTL	F[104.7]	D[32.6]	D[34.9]
	Northbound RTL	A[1.4]	A[1.0]	A[1.2]
	Southbound RTL	A[0.2]	A[0.0]	A[0.0]
4. Foxhall Road/Whitehaven Parkway				
Signal	Eastbound	C(22.6)	D(40.7)	D(44.0)
	Northbound	B(14.8)	A(2.0)	A(2.8)
	Southbound	B(10.4)	A(4.3)	A(2.7)
	Overall	B(13.7)	A(7.1)	A(5.4)
5. Reservoir Road/MacArthur Boulevard (west)				
Signal	Eastbound	A(8.0)	A(2.4)	A(1.6)
	Westbound	B(14.5)	A(4.0)	A(3.4)
	Northbound	F(309.2)	D(42.8)	D(44.8)
	Overall	E(76.0)	A(4.4)	A(2.9)
6. Reservoir Road/Whitehaven Parkway				
Stop Sign	Eastbound TL	A[2.4]	A[1.1]	A[0.8]
	Southbound LR	F[964.4]	F[62.4]	F[82.0]
¹ Analysis performed using Synchro/SimTraffic Version 6.0.				
² An asterisk (*) indicates delays greater than 999.9 seconds.				

Table 3-1 (continued)
Existing Intersection Levels of Service^{1,2}

TYPE OF CONTROL	INTERSECTION	EXISTING CONDITIONS		
		AM	PM (SCHOOL)	PM
7. Reservoir Road/Lab School/ MacArthur Boulevard (east)				
Signal	Eastbound	D(53.4)	B(13.2)	B(12.1)
	Westbound	B(13.7)	A(7.0)	B(10.2)
	Northbound	D(49.9)	D(43.9)	D(43.6)
	Southbound	D(41.0)	D(42.0)	D(42.0)
	Overall	D(47.8)	B(19.9)	B(19.9)
8. Foxhall Road/Reservoir Road				
Signal	Eastbound	E(66.5)	D(54.2)	E(56.0)
	Westbound	D(42.6)	D(36.3)	D(36.8)
	Northbound	F(92.8)	C(29.1)	C(29.8)
	Southbound	E(77.0)	F(151.9)	F(164.7)
	Overall	E(75.3)	E(64.2)	E(67.1)
9. Reservoir Road/Hoban Road				
Stop Sign	Southbound LR	C[24.6]	C[18.9]	C[22.2]
10. Foxhall Road/45th Street				
Stop Sign	Westbound LR	C[19.0]	B[11.2]	A[9.6]
	Southbound TL	A[0.2]	A[0.2]	A[0.1]
11. Foxhall Road/Hoban Road				
Stop Sign	Southbound TL	A[0.4]	A[0.1]	A[0.3]
12a. Foxhall Road/German Embassy				
Stop Sign	Eastbound LR	D[29.0]	B[13.8]	C[19.4]
	Northbound LT	A[0.0]	A[0.0]	A[0.0]
12b. Foxhall Road/Service Loop				
Stop Sign	Eastbound LR	A[0.0]	C[17.5]	B[10.1]
	Northbound LT	A[0.0]	A[0.0]	A[0.0]
1 Analysis performed using Synchro/SimTraffic Version 6.0.				
2 An asterisk (*) indicates delays theoretically greater than 999.9 seconds.				

The German Embassy and Service Loop driveways off Foxhall Road are controlled by a stop sign and operate at acceptable levels of service "D" or better at all times of the day.

These findings generally are consistent with the findings reported in the August, 2002 Palisades Traffic Impact Study.

Bicycle Levels of Service

The District of Columbia Bicycle Master Plan indicates that Foxhall Road north of Reservoir Road presently operates at a Bicycle Level of Service (BLOS) "E". This is due to relatively high traffic volumes, narrow pavement widths, and no shoulders. No bicycle level of service is reported for Whitehaven Parkway.

Section 4

ANALYSIS OF FUTURE CONDITIONS WITHOUT REDEVELOPMENT OF THE BRADY ESTATE

Overview

This section presents an analysis of future transportation conditions, without redevelopment of the Brady Estate. The traffic impacts of redeveloping the nearby Philips Estate and background traffic growth over the next five (5) years are evaluated below.

Pipeline Project Trips

The Philips Estate, which is located east of Foxhall Road, south of W Street, and north of the Brady Estate, is planned to be redeveloped with 47 single-family detached homes (that received approval from the BZA in July 2005). Vehicular access to the Philips Estate is proposed at a new driveway on W Street and a new signalized intersection on Foxhall Road.

The number and distribution of vehicle-trips anticipated to be generated by this project were obtained from the traffic impact study prepared by the applicant³. This development is anticipated to generate 35 AM peak hour trips (nine inbound and 26 outbound), and 47 PM peak hour trips (30 inbound and 17 outbound), according to the traffic impact study. It was assumed by Wells & Associates that these homes would generate 29 trips during the school's PM peak hour (16 inbound and 13 outbound).

Approximately 60 percent of all AM peak hour trips and 45 percent of all PM peak hour trips were assumed to approach the site from the north on Foxhall Road, 30 percent of all AM peak hour trips and 40 percent of all PM peak hour trips were assumed to approach from the south on Foxhall Road, and 10 percent of all AM peak hour trips and 15 percent of all PM peak hour trips were assumed to approach from the west on W Street, as stated in applicant's traffic impact study. The Philips Estate trip assignments at the study area intersections are shown on Figure 4-1.

³ Gorove/Slade Associates, Traffic Impact Analysis, Phillips Property, October 7, 2004.

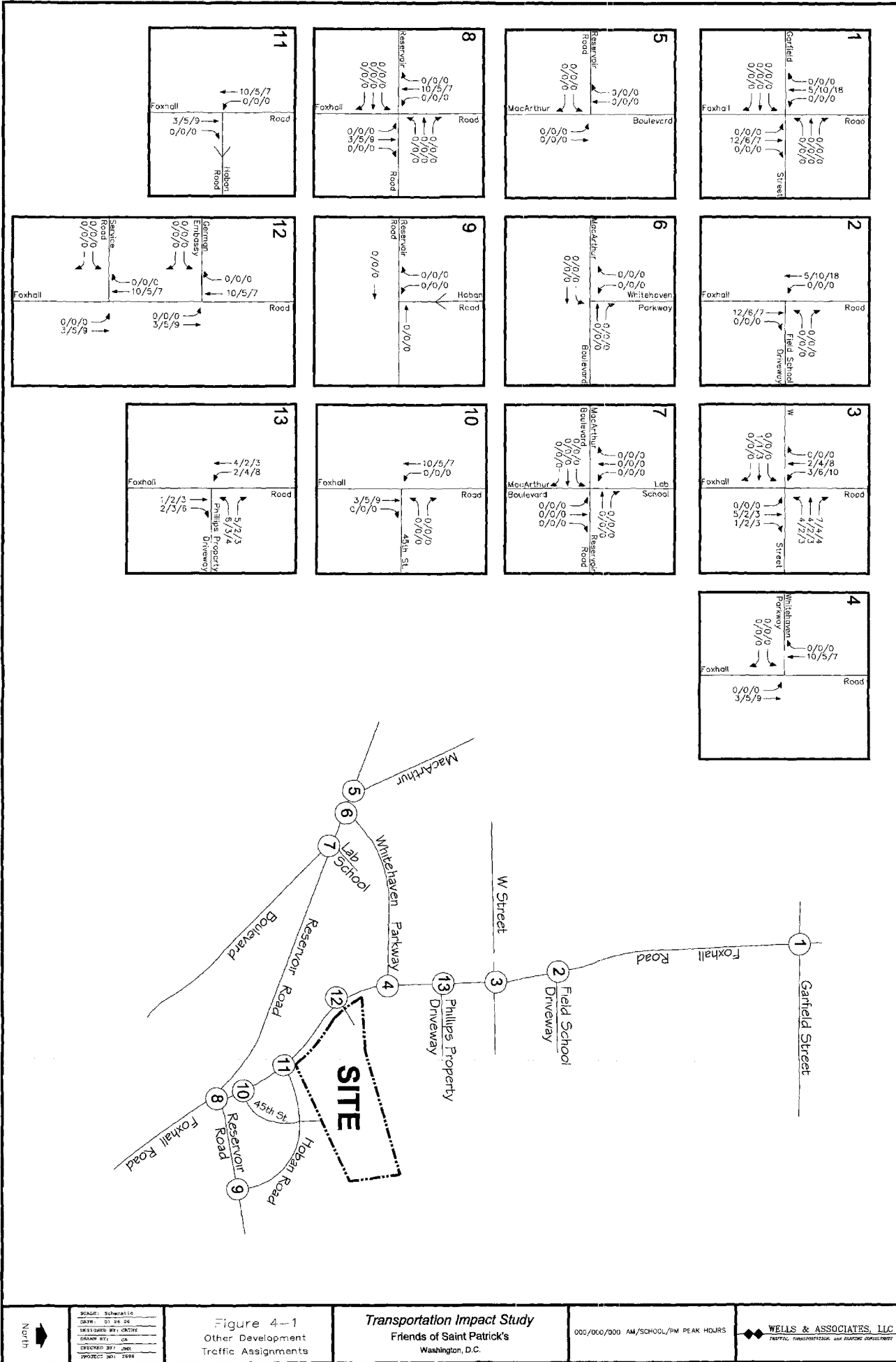


Figure 4-1
Other Development
Traffic Assignments

Transportation Impact Study
Friends of Saint Patrick's
Washington, D.C.

002/000/000 AM/SCHOOL/PM PEAK HOURS

WELLS & ASSOCIATES, LLC
TRAFFIC, ENVIRONMENTAL, AND PLANNING CONSULTANTS

North

DATE: 01/24/01
DRAWN BY: CMC
CHECKED BY: JMC
PROJECT NO: 0000

Background Traffic Growth

Existing traffic volumes are expected to increase in the future as a result of additional new development elsewhere in the city and the region. The District Department of Transportation (DDOT) concluded in the Palisades Traffic Impact Study (TIS), published in August 2002, that the annual background traffic growth rate on Foxhall Road was one-half percent. That rate was derived based on review of historical traffic counts.

Additionally, traffic on Foxhall Road has been stable since 2001. Counts conducted in 2004 are higher in the morning and lower in the afternoon than DDOT's 2001 counts, well within the range of typical daily traffic variations.

Based on this information, a conservative growth rate of one (1) percent per year was utilized. Background traffic growth was, therefore, estimated at eight (8) percent over the eight-year period for project build out (2004 to 2012). This growth rate was applied to all movements at all study intersections.

Background Traffic Forecasts

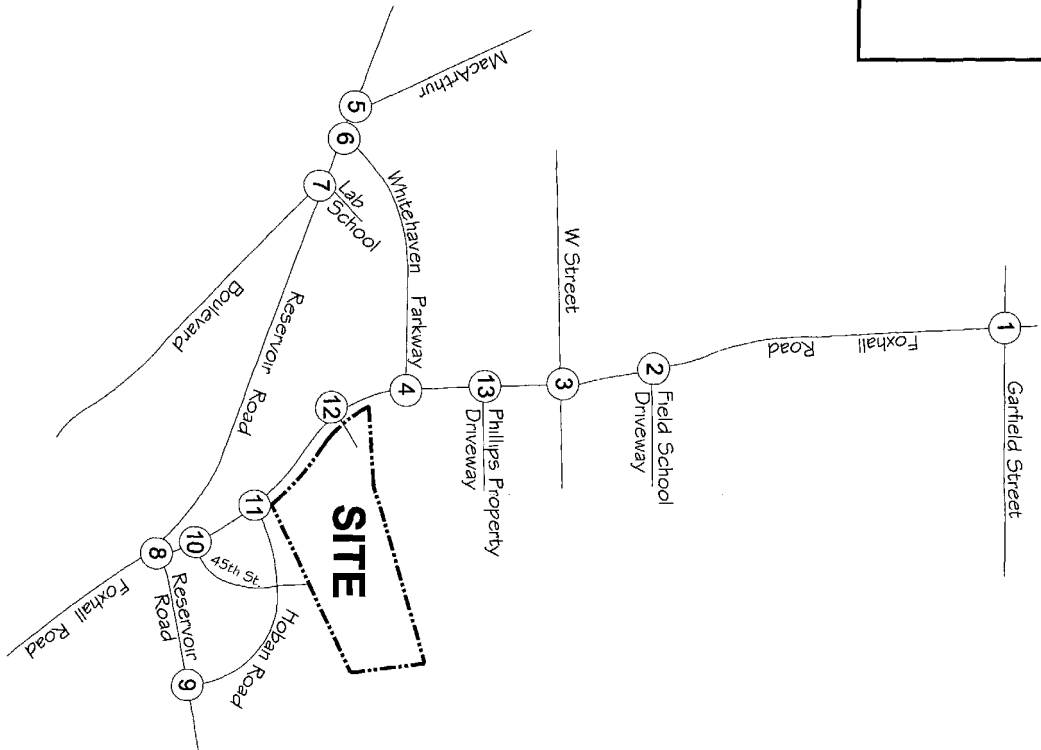
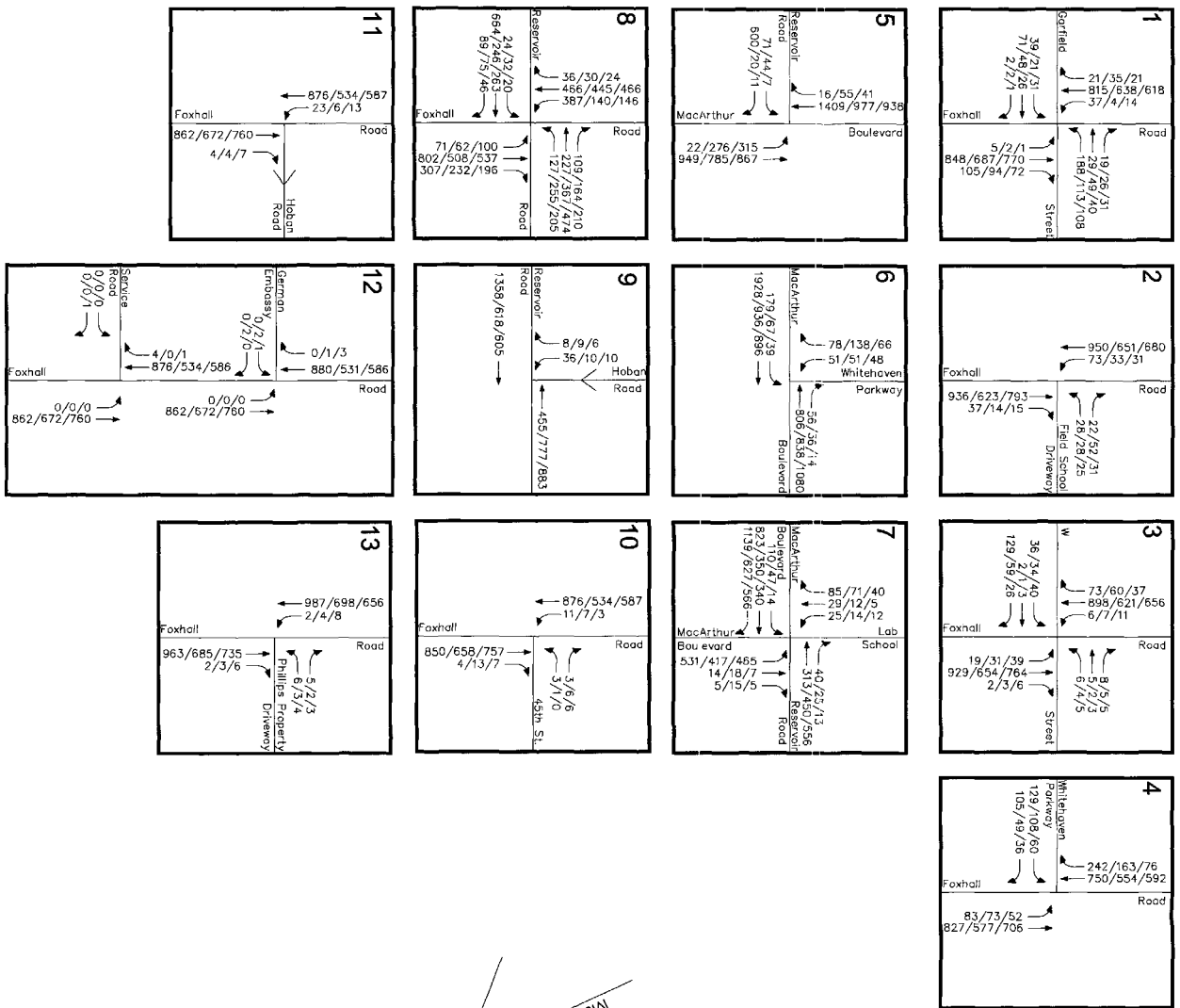
Background peak hour traffic forecasts, without redevelopment of the Brady Estate, were estimated based on existing traffic counts, traffic generated by redevelopment of the Phillips Property, and background traffic growth. The 2012 background traffic forecasts are shown on Figure 4-2.

Background Future Levels of Service

Future peak hour levels of service, without redevelopment of the Brady Estate, were estimated at the study intersections for the year of project build out (2012) based the background traffic forecasts shown on Figure 4-2; Synchro Traffic Analysis Software (version 6, build 612), and the intersection lane usage and traffic control shown on Figure 2-1, with and without the following improvements by others:

1. At the Foxhall Road/Reservoir Road intersection, conversion of the existing eastbound approach to an exclusive left lane, an exclusive through lane, and a shared through/right lane (as recommended in the Palisades Traffic Impact Study).
2. Addition of short eastbound and westbound right-turn bays on W Street at its intersection with Foxhall Road (by developer of the Phillips Estate).
3. Signalization of the Foxhall Road/Phillips Property driveway intersection (by developer of the Phillips Estate).

The results are presented in Appendix E and summarized in Table 4-1.



North

SCALE: 1/4"=100'
DATE: 08/28/04
DESIGNED BY: CAVITY
DRAWN BY: CA
CHECKED BY: JMM
PROJECT NO.: 2408

Figure 4-2
2012 Future Background
Peak Hour Traffic Forecasts

Transportation Impact Study
Friends of Saint Patrick's
Washington, D.C.

000/000/000 AM/SCHOOL/PM PEAK HOURS

WELLS & ASSOCIATES, LLC
TRAFFIC, TRANSPORTATION, AND PLANNING CONSULTANTS

Table 4-1
Future Intersection Levels of Service without Redevelopment of the Brady Estate¹

TYPE OF CONTROL	INTERSECTION	EXISTING CONDITIONS			2012 BACKGROUND CONDITIONS			2012 BACKGROUND CONDITIONS WITH IMPROVEMENTS ²		
		AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM
1. Foxhall Road/Garfield Street										
Signal	Eastbound	C(23.3)	C(24.0)	C(24.2)	C(23.3)	C(23.7)	C(23.9)	C(23.3)	C(23.7)	C(23.9)
	Westbound	D(43.5)	C(31.2)	C(30.8)	D(52.8)	C(32.2)	C(31.3)	D(52.8)	C(32.2)	C(31.3)
	Northbound	B(12.7)	A(7.7)	A(8.3)	B(16.9)	A(8.9)	A(9.7)	B(16.9)	A(8.9)	A(9.7)
	Southbound	B(11.9)	A(6.5)	A(6.2)	B(15.3)	A(7.3)	A(7.0)	B(15.3)	A(7.3)	A(7.0)
	Overall	B(16.3)	B(10.5)	B(10.6)	C(20.5)	B(11.4)	B(11.4)	C(20.5)	B(11.4)	B(11.4)
2. Foxhall Road/Field School Driveway										
Signal	Westbound	C(25.5)	D(43.6)	D(45.4)	C(25.5)	D(43.6)	D(45.4)	C(25.5)	D(44.1)	D(45.8)
	Northbound	B(19.0)	A(6.5)	A(7.3)	C(30.8)	A(7.2)	A(8.1)	C(30.7)	A(7.0)	A(8.0)
	Southbound	A(7.0)	A(5.3)	A(4.7)	A (7.8)	A(5.3)	A(4.7)	A(7.8)	A(5.2)	A(4.7)
	Overall	B(13.3)	A(9.2)	A(7.7)	C (19.2)	A(9.3)	A(8.0)	B(19.2)	A(9.1)	A(7.9)
3. Foxhall Road/W Street										
Stop Sign	Eastbound RTL	F[152.6]	D[30.9]	E[48.0]	F [739.7]	E[39.2]	F [94.2]	F[668.5]	D[29.8]	F [76.2]
	Westbound RTL	F[104.7]	D[32.6]	D[34.9]	F[*] ³	D[31.8]	E [44.6]	F[89.4]	D[29.2]	E [41.7]
	Northbound RTL	A[1.4]	A[1.0]	A[1.2]	B [11.0]	A [1.1]	A[1.5]	B[11.0]	A [1.1]	A[1.5]
	Southbound RTL	A[0.2]	A[0.0]	A[0.0]	A [4.1]	A[0.3]	A[0.5]	A[4.1]	A[0.3]	A[0.5]
4. Foxhall Road/Whitehaven Parkway										
Signal	Eastbound	C(22.6)	D(40.7)	D(44.0)	C(22.9)	D(41.1)	D(44.1)	C(22.9)	D(49.8)	D(50.0)
	Northbound	B(14.8)	A(2.0)	A(2.8)	B(13.8)	A(4.1)	A(5.7)	B(13.5)	A(2.2)	A(2.9)
	Southbound	B(10.4)	A(4.3)	A(2.7)	B(17.3)	A5.8)	A(3.5)	B(17.3)	A(5.5)	A(3.4)
	Overall	B(13.7)	A(7.1)	A(5.4)	B(16.4)	A(8.7)	A(7.1)	B(16.3)	A(8.7)	A(6.1)

¹ Analysis performed using Synchro/SimTraffic Version 6.0.

² Improvements include those recommended in the Palisades Traffic Impact Study and those improvements proposed by developers of the Phillips Property.

³ An asterisk (*) indicates delays theoretically greater than 999.9 seconds.

Table 4-1 (continued)
Future Intersection Levels of Service without Redevelopment of the Brady Estate¹

TYPE OF CONTROL	INTERSECTION	EXISTING CONDITIONS			2012 BACKGROUND CONDITIONS			2012 BACKGROUND CONDITIONS WITH IMPROVEMENTS ²		
		AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM
5. Reservoir Road/MacArthur Boulevard (west)										
Signal	Eastbound	A(8.0)	A(2.4)	A(1.6)	A(8.6)	A(2.5)	A(1.6)	A(8.6)	A(2.5)	A(1.6)
	Westbound	B(14.5)	A(4.0)	A(3.4)	B(14.6)	A(6.3)	A(5.4)	A(8.9)	A(6.3)	A(5.4)
	Northbound	F(309.2)	D(42.8)	D(44.8)	F(380.6)	D(43.0)	D(44.8)	F(380.6)	D(43.0)	D(44.8)
	Overall	E(76.0)	A(4.4)	A(2.9)	F(91.9)	A(5.6)	A(4.0)	F(90.1)	A(5.6)	A(4.0)
6. Reservoir Road/Whitehaven Parkway										
Stop Sign	Eastbound TL	A[2.4]	A[1.1]	A[0.8]	A[2.9]	A[1.2]	A[0.9]	A[2.9]	A[1.2]	A[0.9]
	Southbound LR	F[964.4]	F[62.4]	F[82.0]	F[*]	F[107.7]	F[141.9]	F[*]	F[107.7]	F[141.9]
7. Reservoir Road/Lab School/ MacArthur Boulevard (east)										
Signal	Eastbound	D(53.4)	B(13.2)	B(12.1)	F(99.6)	B(14.3)	B(12.9)	F(109.6)	B(14.3)	B(12.9)
	Westbound	B(13.7)	A(7.0)	B(10.2)	B(14.9)	A(7.9)	B(11.9)	B(14.9)	A(7.9)	B(11.9)
	Northbound	D(49.9)	D(43.9)	D(43.6)	D(52.6)	D(43.1)	D(43.4)	D(52.6)	D(43.1)	D(43.4)
	Southbound	D(41.0)	D(42.0)	D(42.0)	D(41.1)	D(42.1)	D(42.0)	D(41.1)	D(42.1)	D(42.0)
	Overall	D(47.8)	B(19.9)	B(19.9)	F(79.1)	C(20.5)	C(20.6)	F(85.7)	C(20.5)	C(20.6)
8. Foxhall Road/Reservoir Road										
Signal	Eastbound	E(66.5)	D(54.2)	E(56.0)	F(85.8)	E(55.5)	E(63.6)	E(62.2)	D(45.8)	D(49.9)
	Westbound	D(42.6)	D(36.3)	D(36.8)	D(46.8)	D(40.6)	D(40.1)	D(46.7)	D(38.6)	D(39.8)
	Northbound	F(92.8)	C(29.1)	C(29.8)	F(128.4)	C(30.4)	C(31.4)	F(128.4)	C(30.4)	C(31.4)
	Southbound	E(77.0)	F(151.9)	F(164.7)	F(102.7)	F(187.9)	F(200.6)	F(102.7)	F(190.1)	F(203.8)
	Overall	E(75.3)	E(64.2)	E(67.1)	F(100.1)	E(74.9)	E(78.3)	F(94.5)	E(73.5)	E(77.3)
¹ Analysis performed using Synchro/SimTraffic Version 6.0.										
² Improvements include those recommended in the Palisades Traffic Impact Study and those improvements proposed by developers of the Phillips Property.										
³ An asterisk (*) indicates delays theoretically greater than 999.9 seconds.										

Table 4-1 (continued)

Future Intersection Levels of Service without Redevelopment of the Brady Estate¹

TYPE OF CONTROL	INTERSECTION	EXISTING CONDITIONS			2012 BACKGROUND CONDITIONS			2012 BACKGROUND CONDITIONS WITH IMPROVEMENTS ²		
		AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM
9. Reservoir Road/Hoban Road										
Stop Sign	Southbound LR	C[24.6]	C[18.9]	C[22.2]	D[29.1]	C[20.6]	D[25.2]	D[29.2]	C[20.6]	D[25.2]
10. Foxhall Road/45th Street										
Stop Sign	Westbound LR	C[19.0]	B[11.2]	A[9.6]	C[22.2]	B[11.5]	A[9.7]	C[22.2]	B[11.5]	A[9.7]
	Southbound TL	A[0.2]	A[0.2]	A[0.1]	A[0.2]	A[0.1]	A[0.1]	A[0.2]	A[0.1]	A[0.1]
11. Foxhall Road/Hoban Road										
Stop Sign	Southbound TL	A[0.4]	A[0.1]	A[0.3]	A[0.4]	A[0.1]	A[0.3]	A[0.4]	A[0.1]	A[0.3]
12a. Foxhall Road/German Embassy										
Stop Sign	Eastbound LR	D[29.0]	B[13.8]	C[19.4]	A[0.0]	B[14.6]	C[21.3]	A[0.0]	B[14.6]	C[21.3]
	Northbound LT	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]
12b. Foxhall Road/Service Loop										
Stop Sign	Eastbound LR	A[0.0]	C[17.5]	B[10.1]	A[0.0]	A[0.0]	B[10.3]	A[0.0]	A[0.0]	B[10.3]
	Northbound LT	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]
13. Foxhall Road/Phillips Property Driveway										
Signal	Westbound	N/A	N/A	N/A	C(30.2)	C(29.5)	C(29.7)	C(30.2)	C(29.5)	C(29.7)
	Northbound	N/A	N/A	N/A	A(2.9)	A(2.2)	A(2.4)	A(3.0)	A(2.2)	A(2.4)
	Southbound	N/A	N/A	N/A	A(5.0)	A(2.2)	A(2.1)	A(5.0)	A(2.2)	A(2.1)
	Overall	N/A	N/A	N/A	A(4.1)	A(2.3)	A(2.4)	A(4.1)	A(2.3)	A(2.4)

¹ Analysis performed using Synchro/SimTraffic Version 6.0.

² Improvements include those recommended in the Palisades Traffic Impact Study and those improvements proposed by developers of the Phillips Property.

³ An asterisk (*) indicates delays theoretically greater than 999.9 seconds.

Table 4-1 indicates that redevelopment of the Philips Estate and background traffic growth would have some impact on intersection levels of service. The signalized Foxhall Road/Garfield Street, Foxhall Road/Field School Driveway, and Foxhall Road/Whitehaven Parkway intersections would continue to operate at an acceptable overall level of service (LOS) "D" or better during all times of day.

The signalized Foxhall Road/Reservoir Road intersection would operate at an overall LOS "F" during the AM peak hour and at an overall LOS "E" during the school and commuter PM peak hours, even with the improvements recommended in the Palisades Traffic Impact Study.

The signalized Reservoir Road/MacArthur Boulevard (West) intersection would continue to operate at capacity at an overall LOS "F" during the AM peak hour and at an overall LOS "A" during the school and commuter PM peak hours. The signalized Reservoir Road/MacArthur Boulevard (East) intersection would operate at capacity at an overall LOS "F" during the AM peak hour and at an overall LOS "C" during the school and commuter PM peak hours.

Eastbound and westbound W Street traffic would continue to operate near or at capacity at LOS "E" or "F" during peak hours. The Phillips Estate improvement (short eastbound and westbound right turn bays) would improve the eastbound levels of service during the school PM peak hour from LOS "E" to LOS "D."

Southbound traffic on Whitehaven Parkway at its intersection with Reservoir Road would continue to operate at capacity at LOS "F" during peak hours. The Colony Hill intersections, the German Embassy and Service Loop driveways would continue to operate at acceptable levels of service at all times of day.

The new signalized intersection of Foxhall Road and the Phillips Property driveway would operate at overall LOS "A" during each peak hour.

Section 5

ANALYSIS OF FUTURE CONDITIONS WITH REDEVELOPMENT OF THE BRADY ESTATE

Overview

This section presents an analysis of future transportation conditions, with redevelopment of the Brady Estate, as proposed by FOSP. It presents St. Patrick's travel management and traffic management plans, a site trip generation analysis, and evaluation of future intersection levels of service.

Travel Management Plan

Overview. The 1801 Foxhall Six-Point Travel Management Plan (TMP) was created by St. Patrick's Episcopal Day School as a comprehensive and thorough plan that promotes safe and efficient travel, minimizes vehicular traffic added to the public street network, and meets the traffic constraints outlined in the BZA application. The plan consists of the following important elements:

1. Carpool Initiative,
2. Shuttle Bus Service Plan,
3. Parking Solution Plan,
4. Student Driving Initiative and Controls,
5. Walk/Bicycle Initiative, and
6. Staggered Arrival and Dismissal Time Plan.

St. Patrick's is committed to operating a successful, long-term travel plan, employing all of these techniques in a manner that substantially reduces the school's impact on peak-hour traffic flows. St. Patrick's will study the feasibility of coordinating their transportation program with neighboring institutions.

Carpool Initiative. St. Patrick's will create and implement a sustainable carpool program for the Foxhall Campus that is similar to the successful program currently in operation at the Whitehaven Campus. The goal of this program is to reach average vehicle occupancy of 1.75 students per vehicle.

St. Patrick's implemented a carpool initiative at the Whitehaven Campus in fall 2002. That program increased the average vehicle occupancy (AVO) by 43 to 54 percent, from 1.33 to 1.41 students per vehicle during peak hours before the program to a high of 1.91 to 2.05 students per vehicle after the program, based on AVO counts.

Periodic surveys conducted on behalf of the school by Wells & Associates from 2002 through 2005 have demonstrated that the school consistently has exceeded the AVO goal set by the BZA of 1.6 students per vehicle.

St. Patrick's will register students early in the summer before the new school year in order to facilitate the maximum number of participants in the carpool initiative. Incentive programs will be planned and implemented to continuously improve St. Patrick's metrics such as an "express lane" for cars with high AVO's.

Shuttle Bus Service Plan. St. Patrick's will create and implement a highly effective new shuttle service that will operate between the Foxhall Campus and nearby off-site locations (e.g. Metro stations). Under this new program, families will drop off students in the morning at one or more satellite locations. St. Patrick's buses will shuttle the students from these locations to the Foxhall Campus. Conversely, in the afternoon students will be shuttled from St. Patrick's to the satellite locations where they will enter the public transit system or be picked up by their parents/guardians. The School is exploring the feasibility of jointly operating a shuttle bus system between nearby off-campus pick-up and drop-off points with neighboring institutions.

St. Patrick's currently operates shuttle bus service between the Whitehaven Campus and the MacArthur Campus for Grades 7 and 8 students. Parents and guardians in automobiles drop off Grades 7 and 8 students in the morning and pick them up in the afternoon at the Whitehaven Campus. The establishment of the Foxhall Campus will eliminate the need to shuttle between the MacArthur and Whitehaven Campuses (reducing traffic on MacArthur and surrounding streets).

The largest concentrations of current St. Patrick's families are in the 20007 and 20016 zip code areas and in the Bethesda and Chevy Chase, Maryland areas. It is likely that St. Patrick's will continue to have a smaller number of students who live in Arlington and Alexandria, Virginia.

Assuming the geographic distribution of the new students is consistent with the distribution of current students, the School will provide shuttle bus service for students to and from the Tenleytown Station (Red Line) and the Foggy Bottom station (Orange and Blue lines). In addition, other possible pick up areas include student-safe locations along MacArthur Boulevard, Loughboro Road, Massachusetts Avenue, and Nebraska Avenue. These potential shuttle routes and pick-up areas will be reviewed by the ANC and/or DDOT.

St. Patrick's expects to provide seven inbound shuttle runs. The actual number of shuttle buses will be determined by the actual traffic conditions (i.e., how long it takes to make a run); concentration points of families and students; and the availability of safe pick-up locations. The School will provide the number of buses necessary to operate the shuttle program.

Parking Solution Plan. St. Patrick's proposes to construct a 170-space garage beneath the middle and upper school buildings. The Parking Solution Plan exceeds the D.C. Zoning Regulations requirement by 58 spaces, or 53 percent. St. Patrick's will create, implement, and enforce a strict set of guidelines relating to student drivers and where they are permitted to park.

Chapter 21 of the D. C. Zoning Regulations establishes the minimum parking requirements for private schools. For middle schools, the requirement is two (2) spaces for every three (3) faculty and other employees. For upper schools, the requirement is two (2) spaces for every three (3) faculty and other employees plus one (1) space for each 20 classroom seats or one (1) space for each 10 seats in the largest gym, auditorium, or area useable for public assembly, whichever is greater.

A total of 112 parking spaces, therefore, are required for the proposed middle and upper schools. The Parking Solution Plan, which provides 170 spaces, exceeds the D.C. Zoning Regulations requirement by 58 spaces, or 53 percent.

The School will have an additional 47 parking spaces along the internal loop road during non-peak drop-off and pick-up times. This will provide a total of 217 event parking spaces. The proposed parking supply would adequately accommodate projected parking demands and ensure there is no overflow parking in adjacent residential neighborhoods.

Student Driving Plan and Controls. St. Patrick's will devise a student driving plan with controls and metrics designed to provide a safe and viable alternative for qualified and eligible student drivers to its Foxhall Campus. This plan will diminish the overall number of vehicle trips, as these students make one trip in and one trip out during the school day. Students at St. Patrick's will not be permitted to park on nearby public streets even if the student has a valid Zone 3 parking permit.

Students wishing to drive to School may do so only as part of a School-approved carpool.

Students must apply for a parking permit and must park in specifically designated parking spaces. St. Patrick's students will be required to display a School sticker on their vehicles at all times. St. Patrick's will only extend the privilege of driving to, and parking on, campus to select students over the age of 17, based on their academic, disciplinary, and service records. Students violating these regulations are subject to revocation of their driving privileges and, in the case of repeated violations, suspension or expulsion from school.

St. Patrick's will offer a full lunch program on campus. It is the School's expectation that students, faculty, and staff will take lunch on campus. Students will not be permitted to drive off-campus for lunch.

Walk/Bicycle Initiative. Recognizing that walking and biking are the most efficient and environmentally sound modes of travel, St. Patrick's will install a sidewalk on the east side of Foxhall Road to encourage more students to walk or bicycle to school each day. Also, St. Patrick's will require students whose siblings are dropped off at the Whitehaven Campus to walk up to the Foxhall Campus rather than permit their parents to drive over to and through the Foxhall Campus.

These modes reduce traffic congestion, noise, and fossil fuel consumption; promote physical exercise; and reduce the cost and adverse environmental impacts of automobile parking.

A marked crosswalk would connect the existing sidewalk on the south side of Whitehaven Parkway with the proposed sidewalk on the east side of Foxhall Road. An on-site pedestrian network would promote safe and direct pedestrian traffic between the St. Patrick's Lower School Campus (Whitehaven Campus) and the Middle/Upper School (Foxhall Campus) and surrounding neighborhoods.

Staggered Arrival and Dismissal Time Plan. St. Patrick's proposes a comprehensive plan for arrival and dismissal times of students in order to reduce or mitigate traffic volumes on and off the Foxhall Campus. By staggering its arrival and dismissal times, St. Patrick's aims to provide traffic calming measures for the community.

Middle and upper school class start and dismissal times will be separated by at least 20 minutes in order to spread peak-period traffic volumes. This will reduce or mitigate peak 15-minute traffic volumes and queues on and off of the campus. It should be noted that afternoon dismissals, particularly at the high school, will be spread out over longer periods as students remain on campus for athletic and other school-related activities.

In addition, faculty will be required to report before 7:30AM to further reduce the School's impact on peak hour traffic.

Monitoring. St. Patrick's will monitor the TMP for its middle and upper school traffic and parking impacts through periodic faculty, staff, and student transportation surveys; driveway traffic counts; on-site parking occupancy counts; observation of on- and off-site queues; and measurement of transportation impacts of special events. This is a process that St. Patrick's currently follows on the Whitehaven Campus.

In addition, the School will routinely observe the arrival and departure of students walking onto campus to ensure that students are not parking in the neighborhood and walking onto campus. Students violating the parking policies will be subject to revocation of their driving privileges and, in the case of repeated violations, suspension or expulsion from school.

St. Patrick's will periodically meet with neighbors to review School impacts on the surrounding neighborhood (if any) and apprise the community of upcoming events and special occasions, etc.

Compliance. Compliance with the TMP will be made a provision of the enrollment contract between the School and students' families. Compliance with the parking and driving procedures are a requirement for continued enrollment at the School.

Traffic Circulation Plan

Overview. The proposed St. Patrick's middle/upper school circulation plan is presented on Figure 5-1. The plan includes improvements to Foxhall Road along the site frontage, an on-site loop road, and adequate on-site parking, as described below.

Off-Site Traffic. All vehicular access to the school would be provided at a new, full-movement, signalized intersection on Foxhall Road, which would be located approximately 700 feet south of Whitehaven Parkway and 1,300 feet north of Reservoir Road. Timing of this new signal would be coordinated with other, existing signals along Foxhall Road. All vehicular access to the residences would be provided at a new driveway on Hoban Road opposite 45th Street.

The Foxhall Road/St. Patrick's Episcopal Day School Driveway intersection is proposed to be configured as shown on Figure 5-1. One (1) northbound through lane, one (1) northbound shared through/right lane and two (2) southbound through lanes would be maintained on Foxhall Road. A new southbound left turn lane would be constructed on Foxhall Road at the St. Patrick's driveway. Motorists could stop in the left turn lane without impeding the flow of southbound through traffic on Foxhall Road.

It is anticipated that the proposed school signal would be timed similar to the existing Whitehaven Parkway signal. As proposed, the signalized intersection would operate as a demand-actuated, coordinated, three-phase signal with a cycle length of 60 seconds during the AM peak period and 100 seconds during the PM peak hour.

Subject to DDOT approval, loop or video detectors would be installed in the southbound left turn lane on Foxhall Road to allow for a separate left turn phase when a left turning vehicle is present. Additionally, the amount of green time given to the southbound left turn movement would be determined by the detected number of left turning vehicles, up to a pre-determined maximum.

Also subject to DDOT approval, detectors would be installed in both lanes of the school driveway. These would detect the presence or absence of vehicles waiting to turn onto Foxhall Road. If one or more vehicles are present, traffic on Foxhall Road would receive a red indication permitting these vehicles to safely turn onto Foxhall Road. If no vehicle is present, the signal controller would skip the side street signal phase and would not stop Foxhall Road traffic. This demand-actuated feature would minimize disruption of the flow of through traffic in both directions of Foxhall Road.

Figure 5-1
Circulation Plan

Subject to DDOT approval, appropriate school and new traffic signal warning signs and pavement markings would be furnished and installed along Foxhall Road. The 15 mph school zone speed limit would have a calming effect on prevailing speeds on Foxhall Road.

On-Site Traffic. The campus would be served by a two-lane, private, loop road that would operate one-way counter-clockwise. This 1,175-foot-long driveway could accommodate 47 vehicles in a single file, or 94 vehicles in double file, assuming a vehicle length of 25 feet.

A drop-off/pick-up lane would be provided on the west (or right) side of the loop road in front of the middle school campus. Passengers would be dropped off directly onto the sidewalk, like passengers currently are dropped off from the carpool lane onto the sidewalk in front of the St. Patrick's lower school (Whitehaven Campus) on Whitehaven Parkway.

A drop-off/pick-up lane would be provided on the east (or left) side of the loop road in front of the high school. Passengers would be dropped off onto the loop road, like passengers currently are dropped off into the carpool lane in front of Maret School, for example.

A 200- foot long, median-divided driveway would connect Foxhall Road and the on-site loop road. The single inbound lane would be 16 feet wide.

The north leg of the driveway/loop road four-leg intersection would be controlled by a stop sign. Entering traffic could drive directly onto the loop road without stopping, thus avoiding queues at a stop sign that could otherwise potentially spill back onto Foxhall Road.

Site Trip Generation Analysis

Overview. The number of trips that would be generated by the St. Patrick's Middle and Upper School Campus was estimated based on: (1) projected numbers of faculty, staff, and students and (2) the St. Patrick's TDM program. The person- and vehicle-trip generation parameters used to estimate school trips are presented in Table 5-1.

The number of trips that would be generated by the proposed residential dwellings was estimated based on: (1) the proposed number of dwelling units and (2) ITE trip generate rates. These estimates were corroborated by observations at other comparable residential neighborhoods in the site vicinity.

St. Patrick's School. It is estimated that the St. Patrick's middle and upper school campus (Foxhall Campus) would generate approximately 262 AM peak hour vehicle-trips, 175 school PM peak hour vehicle-trips, and 189 commuter PM peak hour vehicle-trips, as shown in Table 5-2.

Table 5-1
Friends of St. Patrick's
Person- and Vehicle-Trip Generation Parameters

Measure		Students		Faculty/Staff (F/S)
		Middle School	High School	
Population (Persons) ¹		120	320	100
Grades		2	4	
Students per Grade		55 – 65	68 - 90	
Mode Split	Auto Driver	0%	20%	90%
	Auto Passenger in Auto Driven by Another Student of F/S	10%	20%	5%
	Auto Passenger in Auto Driven by Parent/Guardian	58%	28%	0%
	Shuttle Bus	30%	30%	3%
	Walk/Bike	2%	2%	2%
	Total	100%	100%	100%
Average Vehicle Occupancy ² (In Autos Driven by Parents/Guardians)		1.75	1.75	
Absenteeism on Average Day		5%	5%	
Percent Students Participating in After-School Programs		20%	80%	
Percent Staff Arriving During AM Peak Hour				5%
Percent Staff Leaving During School PM Peak Hour				70%
Percent Staff Leaving During Commuter PM Peak Hour				30%
¹ Source: Friends of St. Patrick's				
² Based on current peak hour average vehicle occupancy at St. Patrick's Lower School.				

Table 5-2
Friends of St. Patrick's
Vehicle-Trip Generation Analysis
Proposed Middle and High School Campus

Mode	AM Peak Hour			School PM Peak Hour			Commuter PM Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Students Who Drive	63	-	63	-	13	13	-	50	50
Students Who are Driven	90	90	179	41	41	83	48	48	96
Shuttle Buses	7	7	14	5	5	10	5	5	10
Faculty/Staff	5	-	5	-	63	63	-	27	27
Visitors	5	5	10	5	5	10	5	5	10
Total	164	98	262	50	125	175	56	132	189

This is equivalent to 0.60 vehicle-trips per student during the AM peak hour, 0.40 vehicle-trips per student during the school PM peak hour, and 0.43 vehicle-trips per student during the commuter PM peak hour. This is comparable to the rates calculated at the Field School, which are 0.53 vehicle-trips per student during the AM peak hour, 0.43 vehicle-trips per student during the school PM peak hour, and 0.36 vehicle-trips per student during the commuter PM peak hour.

The St. Patrick's middle and upper schools (Foxhall Campus) vehicle-trip generation estimates are conservatively high, for several reasons. First, it is likely that some St. Patrick's families would enroll siblings in both the lower school (Whitehaven Campus) and middle/upper school (Foxhall Campus). For example, eight (or 20 percent) of the 40 middle school students who attend classes at St. Patrick's MacArthur Boulevard Campus have one or more siblings who attend classes at the Whitehaven Parkway campus.

Second, some of the future middle and upper school parents presently use Foxhall Road to commute to and from work. These parents could drop off their children and mates on their way to work and/or pick them up on the return trip home.

Third, these estimates do not deduce the small number of trips currently generated by the 40 students attending classes on St. Patrick's MacArthur Campus.

Actual driveway counts at the St. Patrick's proposed Foxhall Campus driveway would be less than projected in this report when credit is taken for these factors.

Residences. As shown on Table 5-3, the 28 new homes would generate approximately 21 AM peak hour vehicle-trips, 17 school PM peak hour vehicle-trips, and 28 commuter PM peak hour vehicle-trips based on standard ITE trip generation rates.

Table 5-3
Friends of St. Patrick's
Vehicle-Trip Generation Analysis
Proposed Residential Component

Land Use	AM Peak Hour			School PM Peak Hour			Commuter PM Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
28 Single Family Detached Homes	5	16	21	9	8	17	18	10	28
St. Patrick's Middle/High School	164	98	262	50	125	175	56	132	189
Total	169	114	283	59	133	192	74	142	217

As a comparison, counts were conducted by Wells & Associates on Tuesday, November 16, 2004 at the Foxhall Crescent cul-de-sacs off of Foxhall Road and 49th Street, respectively.

The peak hours of the adjacent street at the Foxhall Crescent homes off of Foxhall Road were from 7:30 AM to 8:30 AM and from 4:00 PM and 5:00 PM when the 26 homes generated 20 and 16 trips (or 0.77 and 0.62 trips per home), respectively.

The peak hours of the adjacent street at the Foxhall Crescent homes off of 49th Street were from 7:30 AM to 8:30 AM and from 4:45 PM and 5:45 PM when the 32 homes generated 29 and 24 trips (or 0.91 and 0.75 trips per home), respectively.

These observations are generally consistent with the 0.75 and 1.01 trips per dwelling unit reported by ITE. Traffic count summaries at both Foxhall Crescent locations are included in Appendix F.

Total. Together, the school and homes would generate approximately 283 AM peak hour vehicle-trips, 192 school PM peak hour vehicle-trips, and 217 commuter PM peak hour vehicle-trips, as shown on Table 5-3.

Trip Distribution

The distribution of trips that would be generated by the school was based on the home zip code distribution of existing St. Patrick's families and the most direct and logical travel routes between each zip code and the school driveway. It is estimated that approximately 68 percent of all school traffic would approach/depart the campus from/to the north on Foxhall Road, approximately eight percent would approach/depart the campus from/to the west on MacArthur Boulevard, and approximately 21 percent would approach/depart from/to the south on Foxhall Road. This is similar to the 69/31 north/south inbound traffic distributions and 61/39 outbound traffic distributions observed during the AM and PM school peak hours at the Field School driveway on Foxhall Road.

The distribution of trips that would be generated by the proposed new residences was based on the distribution of traffic entering and exiting the Colony Hill neighborhood as previously described in Table 2-4.

Site Traffic Assignments

The site-generated traffic volumes were assigned to the public road network according to the directional distribution described above. The resulting school traffic assignments are shown on Figure 5-2. The residential traffic assignments are shown on Figure 5-3.

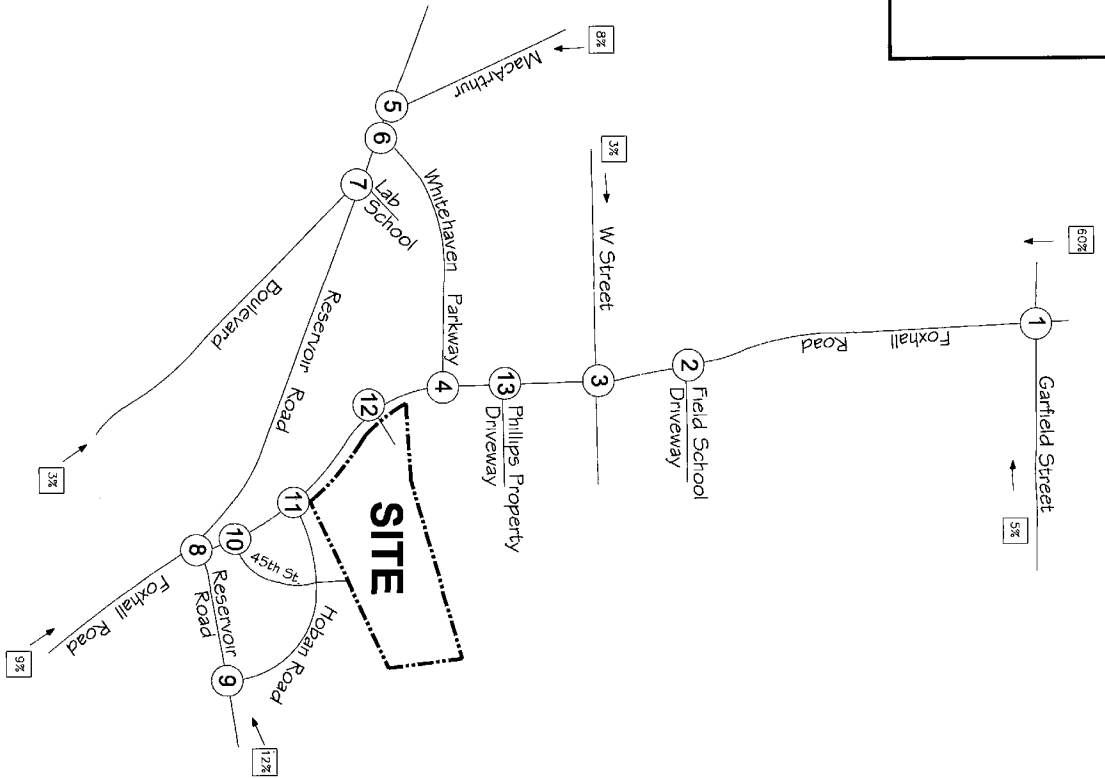
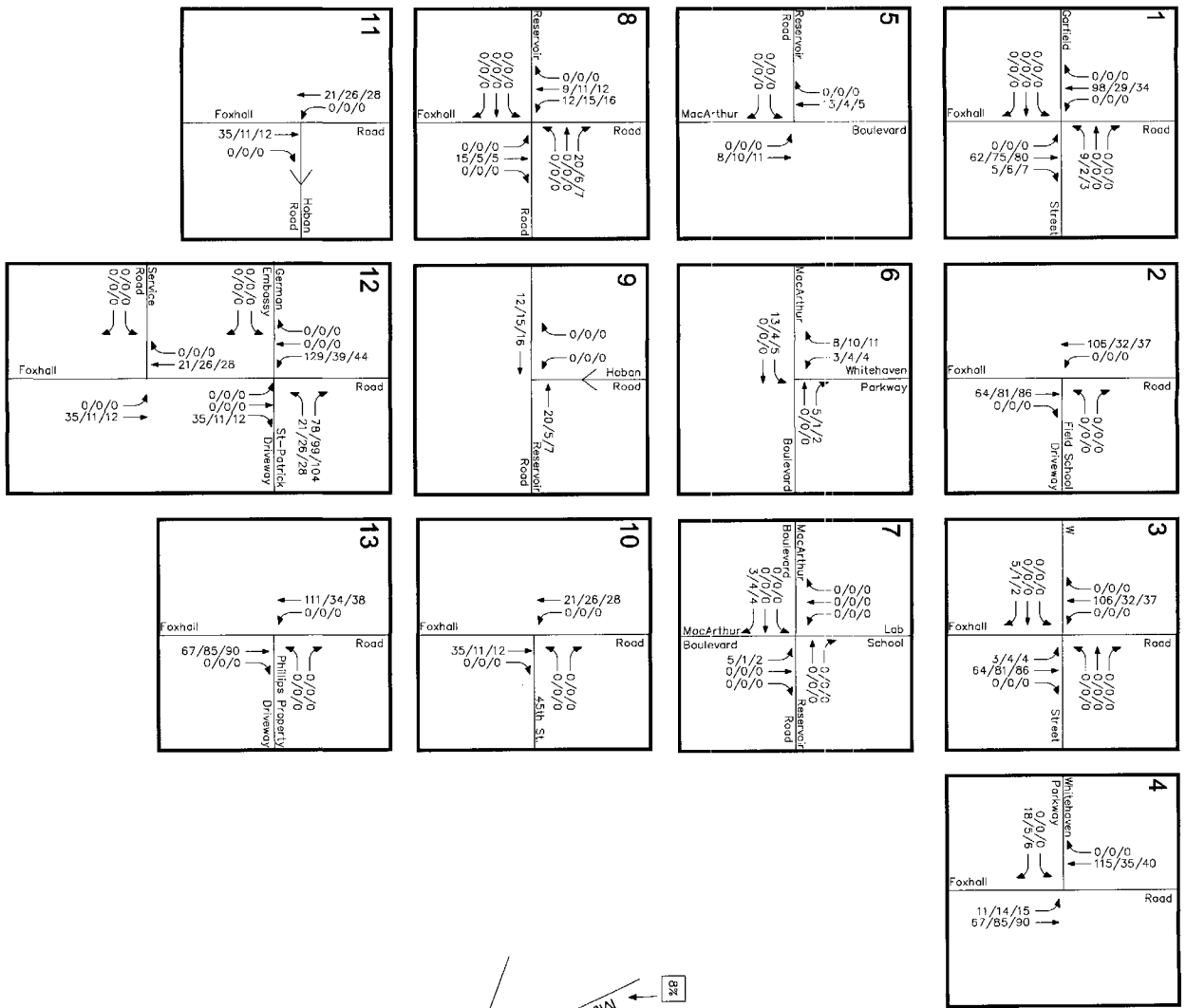
The proposed school would increase peak hour traffic on Foxhall Road north of the driveway by five to 14 percent, and would increase peak hour traffic on Foxhall Road south of the driveway by two to four percent.

Total Future Traffic Forecasts

These site traffic assignments were added to the future background traffic volumes shown on Figure 4-2 to yield the total future traffic forecasts shown on Figure 5-4.

Total Future Levels of Service

Future peak hour levels of service, with redevelopment of the Brady Estate, were estimated at the key intersections in the study area based on the lane usage and traffic controls shown on Figure 2-1; the total future traffic forecasts shown on Figure 5-4; and Synchro Traffic Analysis Software (version 6, build 612). The results are presented in Appendix G and summarized in Table 5-4.



North

SCALE: Schematic
DATE: 01-28-06
DESIGNED BY: JACIE
DRAWN BY: CR
CHECKED BY: JMB
PROJECT NO: 2608

Figure 5-2
School-Generated
Traffic Assignments and
Directional Distribution

Transportation Impact Study
Friends of Saint Patrick's
Washington, D.C.

000/000/000 AM/SCHOOL/PM PEAK HOURS

WELLS & ASSOCIATES, LLC
TRAFFIC, TRANSPORTATION, AND PARKING CONSULTANTS

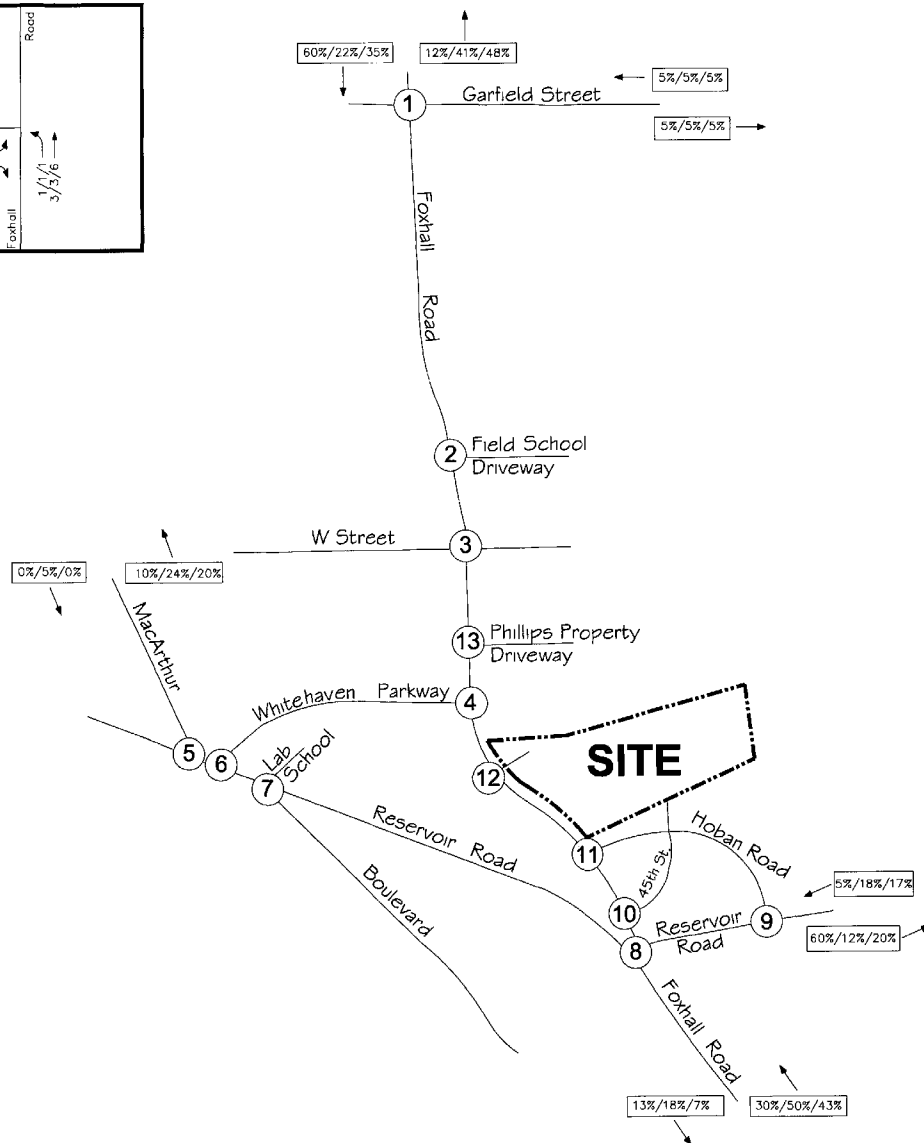
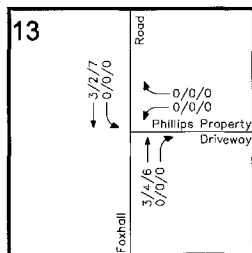
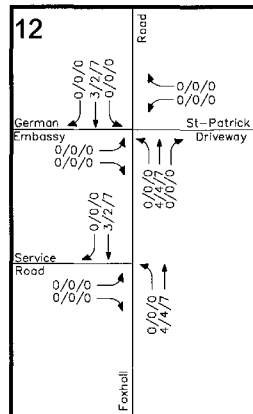
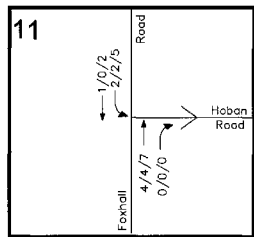
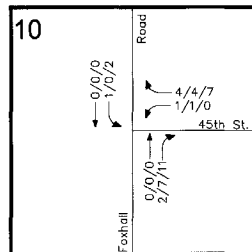
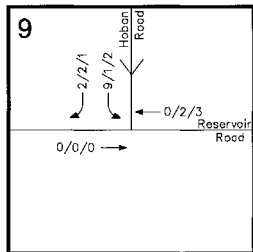
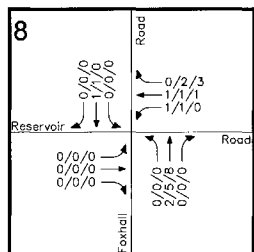
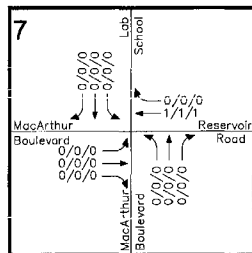
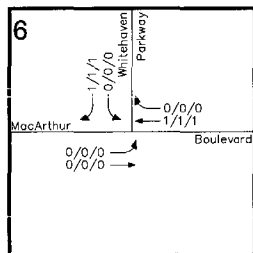
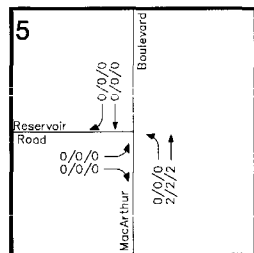
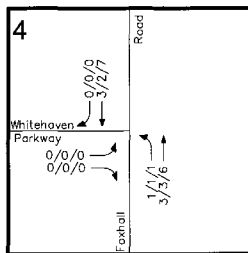
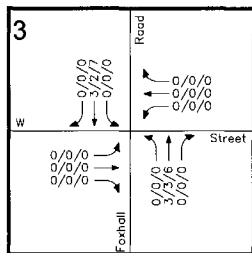
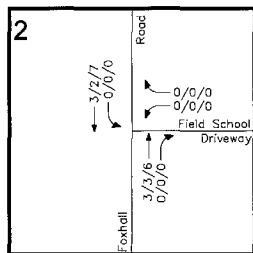
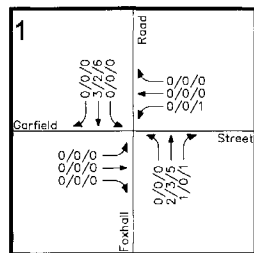


Figure 5--3
Residential-Generated
Traffic Assignments and
Directional Distribution

WELLS & ASSOCIATES, LLC
PRACTICE, MANAGEMENT, AND FINANCIAL CONSULTANTS

0000/000,000 AM/SCHOOL/PM PEAK HOURS

SCALE: SCHWABIC
DATE: 01 26 04
DESIGNED BY: CARY
DRAWN BY: CA
CHECKED BY: JMR



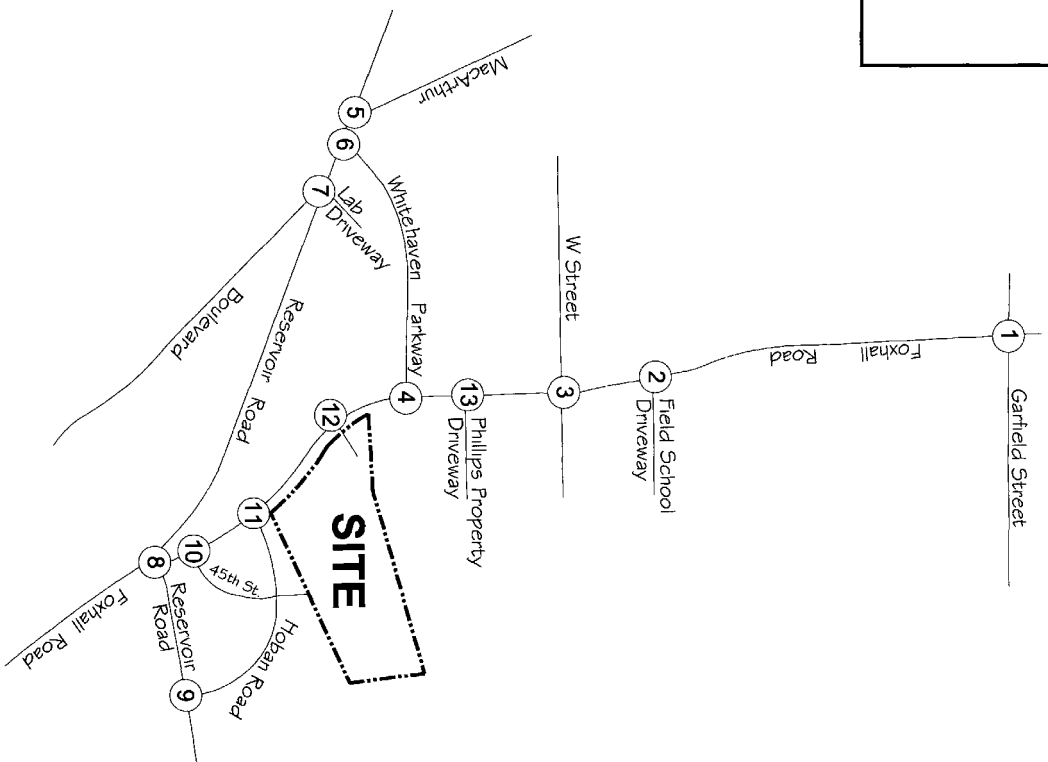
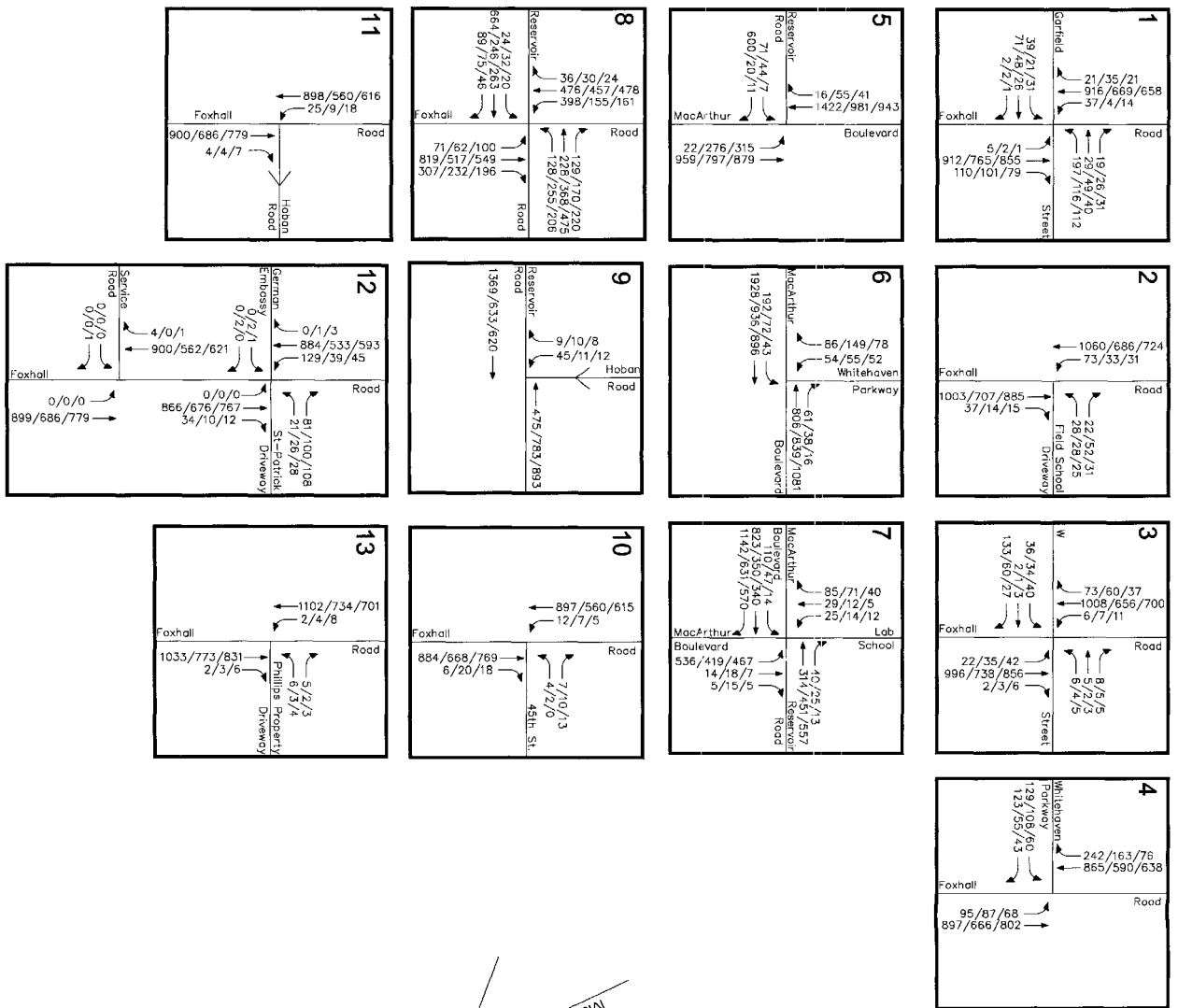


Figure 5-4
2012 Total Future Peak
Hour Traffic Forecasts

Transportation Impact Study
Friends of Saint Patrick's
Washington, D.C.

000/000/000 AM/SCHOOL/PM PEAK HOURS

WELLS & ASSOCIATES, LLC
TRAFFIC, ENVIRONMENTAL, AND PARKING CONSULTANTS

North

SCALE: 1"=40' 0"
DATE: 03/24/08
DESIGNED BY: GARY
DRAWN BY: CA
CHECKED BY: JMR
PROJECT NO: 2459

Table 5-4 indicates that the redevelopment of the Brady Estate would have some impact on intersection levels of service. The signalized Foxhall Road/Garfield Street, Foxhall Road/Field School Driveway, and Foxhall Road/Whitehaven Parkway intersections would continue to operate at an acceptable overall level of service (LOS) "C" or better during all times of day.

The signalized Foxhall Road/Reservoir Road intersection would continue to operate at capacity at an overall LOS "F" during the AM and near capacity at an overall LOS "E" during the school PM peak hour. During the PM commuter peak, this intersection would operate at an overall LOS "F."

The signalized Reservoir Road/MacArthur Boulevard (West) intersection would continue to operate at capacity at an overall LOS "F" during the AM peak hour and at an overall LOS "A" during the school and commuter PM peak hours. The signalized Reservoir Road/MacArthur Boulevard (East) intersection would continue to operate at capacity at an overall LOS "F" during the AM peak hour and at an overall LOS "C" during the school and commuter PM peak hours.

Eastbound and westbound W Street traffic at its intersection with Foxhall Road would continue to operate near or at capacity at LOS "E" or "F" during peak hours. The northbound approach on Foxhall Road would operate at LOS "E."

Southbound traffic on Whitehaven Parkway would continue to operate at capacity at LOS "F" during peak hours. The Colony Hill intersections and the Service Loop driveway would continue to operate at acceptable levels of service during all times of day.

The proposed Foxhall Road/German Embassy/St. Patrick's signalized intersection is forecasted to operate at an overall LOS "C" during the AM peak hour and at LOS "A" during the school and commuter PM peak hours. All approaches at this intersection would operate at acceptable LOS "D" or better during each peak hour.

Vehicle Queues

Vehicle queues on Foxhall Road in the southbound left turn lane at the St. Patrick's school driveway, and in the northbound left turn lane at Whitehaven Parkway, were estimated based on projected traffic volumes with the proposed re-development of the Brady Estate, the proposed lane configurations, signal timings, and the Synchro analysis methodology.

The 95th percentile left turn queue for the southbound Foxhall Road left turn lane at the school driveway is estimated at 50 feet (or approximately two vehicles) during the AM peak hour, 59 feet (or approximately 2.4 vehicles) during the school PM peak hour, and 68 feet (or approximately 2.7 vehicles) during the commuter PM peak hour.

The 95th percentile left turn queue for the northbound Foxhall Road left turn lane at Whitehaven Parkway is estimated at 57 feet (or approximately 2.3 vehicles) during the AM peak hour, 14 feet (or less than one vehicle) during the school PM peak hour, and 21 feet (or approximately one vehicles) during the commuter PM peak hour.

Adequate left turn lane storage will be provided to adequately accommodate these projected queues.

The results of the queue analysis are presented in Appendix H.

Table 5-4
Future Intersection Levels of Service with Redevelopment of the Brady Estate¹

TYPE OF CONTROL	INTERSECTION	2012 BACKGROUND CONDITIONS			2012 BACKGROUND CONDITIONS WITH IMPROVEMENTS ²			2012 TOTAL FUTURE		
		AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM
1. Foxhall Road/Garfield Street										
Signal	Eastbound	C(23.3)	C(23.7)	C(23.9)	C(23.3)	C(23.7)	C(23.9)	C(23.1)	C(23.6)	C(23.8)
	Westbound	D(52.8)	C(32.2)	C(31.3)	D(52.8)	C(32.2)	C(31.3)	E(56.2)	C(32.9)	C(31.9)
	Northbound	B(16.9)	A(8.9)	A(9.7)	B(16.9)	A(8.9)	A(9.7)	C(23.2)	B(10.7)	B(12.3)
	Southbound	B(15.3)	A(7.3)	A(7.0)	B(15.3)	A(7.3)	A(7.0)	C(23.9)	A(7.7)	A(7.6)
	Overall	C(20.5)	B(11.4)	B(11.4)	C(20.5)	B(11.4)	B(11.4)	C(26.9)	B(12.3)	B(12.8)
2. Foxhall Road/Field School Driveway										
Signal	Westbound	C(25.5)	D(43.6)	D(45.4)	C(25.5)	D(44.1)	D(45.8)	C(25.4)	D(43.4)	D(43.9)
	Northbound	C(30.8)	A(7.2)	A(8.1)	C(30.7)	A(7.0)	A(8.0)	D(47.7)	A(9.5)	A(8.4)
	Southbound	A (7.8)	A(5.3)	A(4.7)	A(7.8)	A(5.2)	A(4.7)	A(10.0)	A(5.6)	A(5.3)
	Overall	C (19.2)	A(9.3)	A(8.0)	B(19.2)	A(9.1)	A(7.9)	C(27.9)	B(10.4)	A(8.3)
3. Foxhall Road/W Street										
Stop Sign	Eastbound RTL	F [739.7]	E[39.2]	F [94.2]	F[668.5]	D[29.8]	F [76.2]	F[*]	E[40.1]	F[112.3]
	Westbound RTL	F[*] ³	D[31.8]	E [44.6]	F[89.4]	D[29.2]	E [41.7]	F[183.8]	E[36.7]	E[48.8]
	Northbound RTL	B [11.0]	A [1.1]	A[1.5]	B[11.0]	A [1.1]	A[1.5]	E[33.7]	A[1.4]	A[1.8]
	Southbound RTL	A [4.1]	A[0.3]	A[0.5]	A[4.1]	A[0.3]	A[0.5]	A[9.5]	A[0.3]	A[0.5]
Signal	Eastbound	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Northbound	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Southbound	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Overall	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
¹ Analysis performed using Synchro/SimTraffic Version 6.0.										
² Improvements include those recommended in the Palisades Traffic Impact Study and those improvements proposed by developers of the Phillips Property.										
³ An asterisk (*) indicates delays theoretically greater than 999.9 seconds.										

Table 5-4
Future Intersection Levels of Service with Redevelopment of the Brady Estate¹

TYPE OF CONTROL	INTERSECTION	2012 BACKGROUND CONDITIONS			2012 BACKGROUND CONDITIONS WITH IMPROVEMENTS ²			2012 TOTAL FUTURE		
		AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM
4. Foxhall Road/Whitehaven Parkway										
Signal	Eastbound	C(22.9)	D(41.1)	D(44.1)	C(22.9)	D(49.8)	D(50.0)	C(23.3)	D(41.0)	D(43.9)
	Northbound	B(13.8)	A(4.1)	A(5.7)	B(13.5)	A(2.2)	A(2.9)	C(21.3)	A(2.6)	A(4.8)
	Southbound	B(17.3)	A5.8)	A(3.5)	B(17.3)	A(5.5)	A(3.4)	D(35.3)	A(6.2)	A(3.7)
	Overall	B(16.4)	A(8.7)	A(7.1)	B(16.3)	A(8.7)	A(6.1)	C(28.1)	A(8.0)	A(6.7)
5. Reservoir Road/MacArthur Boulevard (west)										
Signal	Eastbound	A(8.6)	A(2.5)	A(1.6)	A(8.6)	A(2.5)	A(1.6)	A(8.7)	A(2.5)	A(1.7)
	Westbound	B(14.6)	A(6.3)	A(5.4)	A(8.9)	A(6.3)	A(5.4)	B(14.7)	A(6.5)	A(5.7)
	Northbound	F(380.6)	D(43.0)	D(44.8)	F(380.6)	D(43.0)	D(44.8)	F(381.6)	D(43.0)	D(44.8)
	Overall	F(91.9)	A(5.6)	A(4.0)	F(90.1)	A(5.6)	A(4.0)	F(91.6)	A(5.7)	A(4.2)
6. Reservoir Road/Whitehaven Parkway										
Stop Sign	Eastbound TL	A[2.9]	A[1.2]	A[0.9]	A[2.9]	A[1.2]	A[0.9]	A[3.2]	A[1.3]	A[0.9]
	Southbound LR	F[*]	F[107.7]	F[141.9]	F[*]	F[107.7]	F[141.9]	F[*]	F[138.8]	F[177.6]
7. Reservoir Road/Lab School/ MacArthur Boulevard (east)										
Signal	Eastbound	F(99.6)	B(14.3)	B(12.9)	F(109.6)	B(14.3)	B(12.9)	F(100.8)	B(14.4)	B(13.0)
	Westbound	B(14.9)	A(7.9)	B(11.9)	B(14.9)	A(7.9)	B(11.9)	B(14.9)	A(7.9)	B(11.9)
	Northbound	D(52.6)	D(43.1)	D(43.4)	D(52.6)	D(43.1)	D(43.4)	D(53.2)	D(43.2)	D(43.6)
	Southbound	D(41.1)	D(42.1)	D(42.0)	D(41.1)	D(42.1)	D(42.0)	D(41.1)	D(42.1)	D(42.0)
	Overall	F(79.1)	C(20.5)	C(20.6)	F(85.7)	C(20.5)	C(20.6)	E(80.0)	C(20.5)	C(20.7)
¹ Analysis performed using Synchro/SimTraffic Version 6.0.										
² Improvements include those recommended in the Palisades Traffic Impact Study and those improvements proposed by developers of the Phillips Property.										
³ An asterisk (*) indicates delays theoretically greater than 999.9 seconds.										

Table 5-4
Future Intersection Levels of Service with Redevelopment of the Brady Estate¹

TYPE OF CONTROL	INTERSECTION	2012 BACKGROUND CONDITIONS			2012 BACKGROUND CONDITIONS WITH IMPROVEMENTS ²			2012 TOTAL FUTURE		
		AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM
8. Foxhall Road/Reservoir Road										
Signal	Eastbound	F(85.8)	E(55.5)	E(63.6)	E(62.2)	D(45.8)	D(49.9)	E(62.2)	D(45.8)	D(49.9)
	Westbound	D(46.8)	D(40.6)	D(40.1)	D(46.7)	D(38.6)	D(39.8)	D(46.5)	D(38.5)	D(39.8)
	Northbound	F(128.4)	C(30.4)	C(31.4)	F(128.4)	C(30.4)	C(31.4)	F(135.1)	C(30.6)	C(31.7)
	Southbound	F(102.7)	F(187.9)	F(200.6)	F(102.7)	F(190.1)	F(203.8)	F(125.1)	F(198.0)	F(212.9)
	Overall	F(100.1)	E(74.9)	E(78.3)	F(94.5)	E(73.5)	E(77.3)	F(102.8)	E(76.5)	F(80.4)
9. Reservoir Road/Hoban Road										
Stop Sign	Southbound LR	D[29.1]	C[20.6]	D[25.2]	D[29.2]	C[20.6]	D[25.2]	D[33.4]	C[21.0]	D[25.7]
10. Foxhall Road/45th Street										
Stop Sign	Westbound LR	C[22.2]	B[11.5]	A[9.7]	C[22.2]	B[11.5]	A[9.7]	C[20.4]	B[11.6]	A[9.8]
	Southbound TL	A[0.2]	A[0.1]	A[0.1]	A[0.2]	A[0.1]	A[0.1]	A[0.2]	A[0.1]	A[0.1]
11. Foxhall Road/Hoban Road										
Stop Sign	Southbound TL	A[0.4]	A[0.1]	A[0.3]	A[0.4]	A[0.1]	A[0.3]	A[0.4]	A[0.2]	A[0.4]
¹ Analysis performed using Synchro/SimTraffic Version 6.0. ² Improvements include those recommended in the Palisades Traffic Impact Study and those improvements proposed by developers of the Phillips Property. ³ An asterisk (*) indicates delays theoretically greater than 999.9 seconds.										

Table 5-4
Future Intersection Levels of Service with Redevelopment of the Brady Estate¹

TYPE OF CONTROL	INTERSECTION	2012 BACKGROUND CONDITIONS			2012 BACKGROUND CONDITIONS WITH IMPROVEMENTS ²			2012 TOTAL FUTURE		
		AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM	AM	PM (SCHOOL)	PM
I 2a. Foxhall Road/German Embassy/Friends of St-Patrick Site Access										
Stop Sign	Eastbound LR	A[0.0]	B[14.6]	C[21.3]	A[0.0]	B[14.6]	C[21.3]	N/A	N/A	N/A
	Northbound LT	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	N/A	N/A	N/A
Signal	Eastbound	N/A	N/A	N/A	N/A	N/A	N/A	A(0.0)	D(41.3)	D(41.8)
	Westbound	N/A	N/A	N/A	N/A	N/A	N/A	C(24.1)	D(42.3)	D(42.6)
	Northbound	N/A	N/A	N/A	N/A	N/A	N/A	D(40.8)	A(2.9)	A(5.1)
	Southbound	N/A	N/A	N/A	N/A	N/A	N/A	A(5.8)	A(5.2)	A(5.4)
	Overall	N/A	N/A	N/A	N/A	N/A	N/A	C(22.3)	A(9.1)	A(8.7)
I 2b. Foxhall Road/Service Loop										
Stop Sign	Eastbound LR	A[0.0]	A[0.0]	B[10.3]	A[0.0]	A[0.0]	B[10.3]	A[0.0]	A[0.0]	B[10.2]
	Northbound LT	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]
I 3. Foxhall Road/Phillips Property Driveway										
Signal	Westbound	C(30.2)	C(29.5)	C(29.7)	C(30.2)	C(29.5)	C(29.7)	C(30.2)	D(50.7)	D(50.8)
	Northbound	A(2.9)	A(2.2)	A(2.4)	A(3.0)	A(2.2)	A(2.4)	A(3.7)	A(1.7)	A(2.8)
	Southbound	A(5.0)	A(2.2)	A(2.1)	A(5.0)	A(2.2)	A(2.1)	A(6.3)	A(1.5)	A(1.5)
	Overall	A(4.1)	A(2.3)	A(2.4)	A(4.1)	A(2.3)	A(2.4)	A(5.1)	A(1.8)	A(2.4)
¹ Analysis performed using Synchro/SimTraffic Version 6.0.										
² Improvements include those recommended in the Palisades Traffic Impact Study and those improvements proposed by developers of the Phillips Property.										
³ An asterisk (*) indicates delays theoretically greater than 999.9 seconds.										

Sight Distances

The proposed new school driveway was located to provide safe sight distances in both directions along Foxhall Road. Sight distances were evaluated in accordance with American Association of State Highway and Transportation Officials (AASHTO) and DDOT policies. The posted speed limit on Foxhall Road is 25 mph. The design speed is five (5) mph greater than the posted speed limit for an existing roadway, and 10 mph greater than the posted speed limit for reconstructed roadways, according to the DDOT Design and Engineering Manual. Accordingly, the location of the proposed new school driveway was determined based on a design speed of 35 mph.

Table 5-5 summarizes the AASHTO policies and actual sight distances, as measured in the field by the project civil engineers, Macris, Hendricks and Glascock, P.A, at the proposed driveway location.

Table 5-5
Sight Distance Summary

Movement	AASHTO Policy (Feet)	Actual Distance (Feet)	Adequate?
Left turn from Site Access	390	450	Yes
Left Turn into Site Access	350	450	Yes
Right Turn from Site Access	375	400	Yes
Stopping Sight Distance	250	400	Yes

The proposed school driveway will exceed the AASHTO policies in each instance.

Section 6

CONCLUSIONS

The conclusions of this study are as follows:

- 1. The Brady Estate is located on Foxhall Road, within a connected network of arterial, collector, and local streets.**
- 2. All vehicular access to the school would be provided at a new, full-movement, signalized intersection on Foxhall Road. Timing of this new signal would be coordinated with other, existing signals along Foxhall Road. Vehicular access to the residences would be provided at a new driveway on Hoban Road, opposite 45th Street.**
- 3. The signalized Foxhall Road/Garfield Street, Foxhall Road/Field School Driveway, Foxhall Road/Whitehaven Parkway, and Reservoir Road/MacArthur Boulevard (East) presently operate at an acceptable overall level of service (LOS) "D" or better during all times of day.**

The signalized Reservoir Road/MacArthur Boulevard (West) intersection operates near capacity at an overall LOS "E" during the AM peak hour and at an acceptable overall LOS "A" during the school and commuter PM peak hours.

The signalized Foxhall Road/Reservoir Road intersection operates near capacity at an overall LOS "E" during the AM peak hour, school PM peak hour, and commuter PM peak hours.
- 4. Redevelopment of the Philips Estate and background traffic growth would have a small impact on intersection levels of service.**
- 5. The St. Patrick's Six-Point Travel Management Plan (TMP) includes:**
 - 1). Carpool Initiative,**
 - 2). Shuttle Bus Service Plan,**
 - 3). Parking Solution Plan,**
 - 4). Student Driving Initiative and Controls,**
 - 5). Walk/Bicycle Initiative, and**
 - 6). Staggered Arrival and Dismissal Time Plan.**

6. ***The St. Patrick's middle and upper schools would generate approximately 262 AM peak hour vehicle-trips, 175 school PM peak hour vehicle-trips, and 189 commuter PM peak hour vehicle-trips, at the ultimate enrollment of 120 middle school and 320 upper school students.***
7. ***The 28 new homes would generate approximately 21 AM peak hour vehicle-trips, 17 school PM peak hour vehicle-trips, and 28 commuter PM peak hour vehicle-trips.***
8. ***The proposed school would increase peak hour traffic on Foxhall Road north of the driveway by five to 14 percent, and would increase peak hour traffic on Foxhall Road south of the driveway by two to four percent.***
9. ***The proposed Project would add fewer than five seconds of additional average vehicle delay for Colony Hill motorists.***
10. ***The proposed new Foxhall Road/St. Patrick's signalized intersection would operate at an overall acceptable LOS "A" or "B" at all times of day. All ingress and egress movements would operate at a LOS "D" or better at all times of the day.***

1

THE 1801 FOXHALL SIX-POINT TRAVEL MANAGEMENT PLAN

The 1801 Foxhall Six-Point Travel Management Plan was created by St. Patrick's Episcopal Day School ("St. Patrick's" or "School") as a comprehensive and thorough Traffic Management Plan that promotes safe and efficient travel, minimizes vehicular traffic added to the public street network, and meets the traffic constraints outlined in the BZA application. The 1801 Foxhall Six-Point Travel Management Plan consists of the following important elements:

1. Carpool Initiative,
2. Shuttle Bus Service Plan,
3. Parking Solution Plan,
4. Student Driving Initiative and Controls,
5. Walk/Bicycle Initiative, and
6. Staggered Arrival and Dismissal Time Plan.

St. Patrick's is committed to operating a successful, long-term travel plan, employing all of these techniques in a manner that substantially reduces the school's impact on peak-hour traffic flows. St. Patrick's will study the feasibility of coordinating their transportation program with neighboring institutions.

POINT ONE: CARPOOL INITIATIVE

St. Patrick's will create and implement a sustainable carpool program for the Foxhall Campus that is similar to the successful program currently in operation at the Whitehaven Campus. The goal of this program is to reach average vehicle occupancy of 1.75.

Background and Details:

- St. Patrick's implemented a carpool initiative at the Whitehaven Campus in fall 2002. That program increased the average vehicle occupancy (AVO) by 43% to 54%, from 1.33 to 1.41 students per vehicle during peak hours before the program to a high of 1.91 to 2.05 students per vehicle after the program, based on AVO counts.
- Periodic surveys conducted on behalf of the school by Wells & Associates from 2002 through 2005 have demonstrated that the school consistently has exceeded the AVO goal set by the BZA of 1.6 students per vehicle.
- St. Patrick's will register students early in the summer before the new school year in order to facilitate the maximum number of participants in the carpool initiative. Incentive programs will be planned and implemented to continuously improve St. Patrick's metrics such as an "express lane" for cars with high AVOs.

this is a difficult school history!

POINT TWO: SHUTTLE BUS SERVICE PLAN

St. Patrick's will create and implement a highly effective new shuttle service that will operate between the Foxhall Campus and nearby off-site locations (e.g. Metro stations). Under this new program, families will drop off students in the morning at one or more satellite locations. St. Patrick's buses will shuttle the students from these locations to the Foxhall Campus. Conversely, in the afternoon students will be shuttled from St. Patrick's to the satellite locations where they will enter the public transit system or be picked up by their parents/guardians. The School is exploring the feasibility of jointly operating a shuttle bus system between nearby off-campus pick-up and drop-off points with neighboring institutions.

Background and Details:

- St. Patrick's currently operates shuttle bus service between the Whitehaven Campus and the MacArthur Campus for Grades 7 and 8 students. Parents and guardians in automobiles drop off Grades 7 and 8 students in the morning and pick them up in the afternoon at the Whitehaven Campus. The establishment of the Foxhall Campus will eliminate the need to shuttle between the MacArthur and Whitehaven Campuses (reducing traffic on MacArthur and surrounding streets). *switching it!*
- The largest concentrations of current St. Patrick's families are in the 20007 and 20016 zip code areas and in the Bethesda and Chevy Chase, MD areas. It is likely that St. Patrick's will continue to have a smaller number of students who live in Arlington and Alexandria, VA. *SO?*
- Assuming the geographic distribution of the new students is consistent with the distribution of current students, the School will provide shuttle bus service for students to and from the Tenleytown Station (Red Line) and the Foggy Bottom station (Orange and Blue lines). In addition, other possible pick up areas include student-safe locations along MacArthur Boulevard, Loughboro Road, Massachusetts Avenue, and Nebraska Avenue.
- St. Patrick's expects to provide seven inbound shuttle runs. The actual number of shuttle buses will be determined by the actual traffic conditions (i.e., how long it takes to make a run); concentration points of families and students, and the availability of safe pick-up locations. The School will provide the number of buses necessary to operate the shuttle program.

POINT THREE: PARKING SOLUTION PLAN

St. Patrick's proposes to construct a 170-space garage beneath the middle and upper school buildings. The Parking Solution Plan exceeds the D.C. Zoning Regulations requirement by 58 spaces, or 53 percent. St. Patrick's will create, implement, and enforce a strict set of guidelines relating to student drivers and where they are permitted to park (see Point Four below).

Background and Details:

- Chapter 21 of the D. C. Zoning Regulations establishes the minimum parking requirements for private schools. For middle schools, the requirement is two (2) spaces for every three (3) faculty and other employees. For upper schools, the requirement is two (2) spaces for every three (3) faculty and other employees plus one (1) space for each 20 classroom seats or one (1) space for each 10 seats in the largest gym, auditorium, or area useable for public assembly, whichever is greater.
- A total of 112 parking spaces, therefore, are required for the proposed middle and upper schools. Again, the Parking Solution Plan, which provides 170 spaces, exceeds the D.C. Zoning Regulations requirement by 58 spaces, or 53 percent.
- In addition, the School will have an additional 47 parking spaces along the internal loop road during non peak drop-off and pick-up times. This will provide a total of 217 event parking spaces. The proposed parking supply would adequately accommodate projected parking demands and ensure there is no overflow parking in adjacent residential neighborhoods.

POINT FOUR: STUDENT DRIVING PLAN AND CONTROLS

St. Patrick's will devise a student driving plan with controls and metrics designed to provide a safe and viable alternative for qualified and eligible student drivers to its Foxhall Campus. This plan will diminish the overall number of vehicle trips, as these students make one trip in and one trip out during the school day. As noted above, students at St. Patrick's will not be permitted to park on nearby public streets even if the student has a valid Zone 3 parking permit.

Background and Details:

- Students wishing to drive to School may do so only as part of a School-approved carpool..
- Students must apply for a parking permit and must park in specifically designated parking spaces. St. Patrick's students will be required to display a School sticker on their vehicles at all times. St. Patrick's will only extend the privilege of driving to, and parking on, campus to select students over the age of 17, based on their academic, disciplinary, and service records. Students violating these regulations are subject to revocation of their driving privileges and, in the case of repeated violations, suspension or expulsion from school.
- St. Patrick's will offer a full lunch program on campus. It is the School's expectation that students, faculty, and staff will take lunch on campus. Students will not be permitted to drive off-campus for lunch.

POINT FIVE: WALK/BICYCLE INITIATIVE

Recognizing that walking and biking are the most efficient and environmentally sound modes of travel, St. Patrick's will install a sidewalk on the east side of Foxhall Road to encourage more students to walk or bicycle to school each day. Also, St. Patrick's will require students whose siblings are dropped off at the Whitehaven Campus to walk up to the Foxhall Campus. rather than permit their parents to drive over to and through the Foxhall Campus.

why should they be punished just b/c they have siblings?

Background and Details:

- These modes reduce traffic congestion, noise, and fossil fuel consumption; promote physical exercise; and reduce the cost and adverse environmental impacts of automobile parking.
- A marked crosswalk would connect the existing sidewalk on the south side of Whitehaven Parkway with the proposed sidewalk on the east side of Foxhall Road. An on-site pedestrian network would promote safe and direct pedestrian traffic between the St. Patrick's Lower School Campus (Whitehaven Campus) and the Middle/Upper School (Foxhall Campus) and surrounding neighborhoods.

POINT SIX: STAGGERED ARRIVAL AND DISMISSAL TIME PLAN

St. Patrick's proposes a comprehensive plan for arrival and dismissal times of students in order to reduce or mitigate traffic volumes on and off the Foxhall Campus. By staggering its arrival and dismissal times, St. Patrick's aims to provide traffic calming measures for the community.

Background and Details

- Middle and upper school class start and dismissal times will be separated by at least 20 minutes in order to spread peak-period traffic volumes. This will reduce or mitigate peak 15-minute traffic volumes and queues on and off of the campus. It should be noted that afternoon dismissals, particularly at the high school, will be spread out over longer periods as students remain on campus for athletic and other school-related activities.
- In addition, faculty will be required to report before 7:30AM to further reduce the School's impact on peak hour traffic.

CONCLUSION

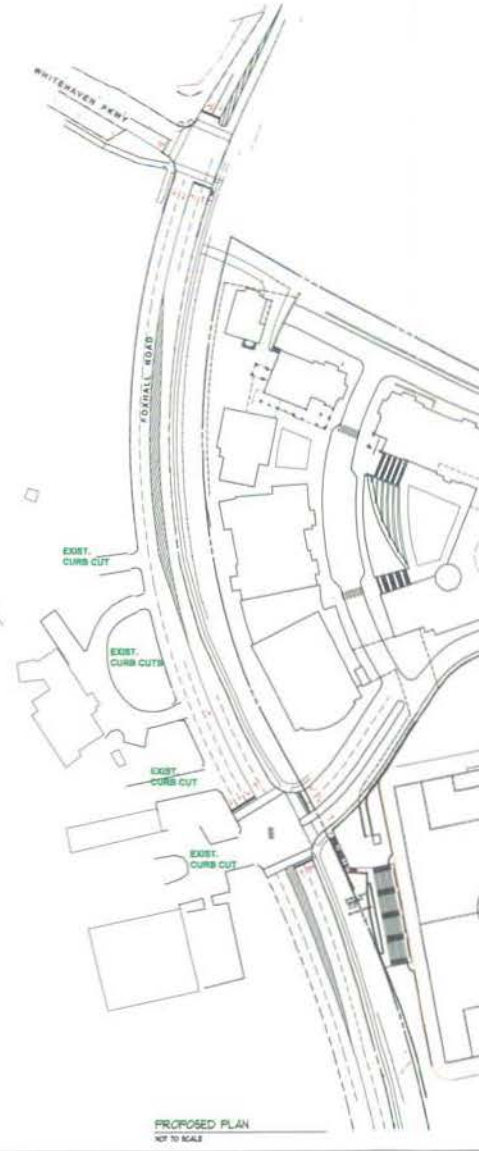
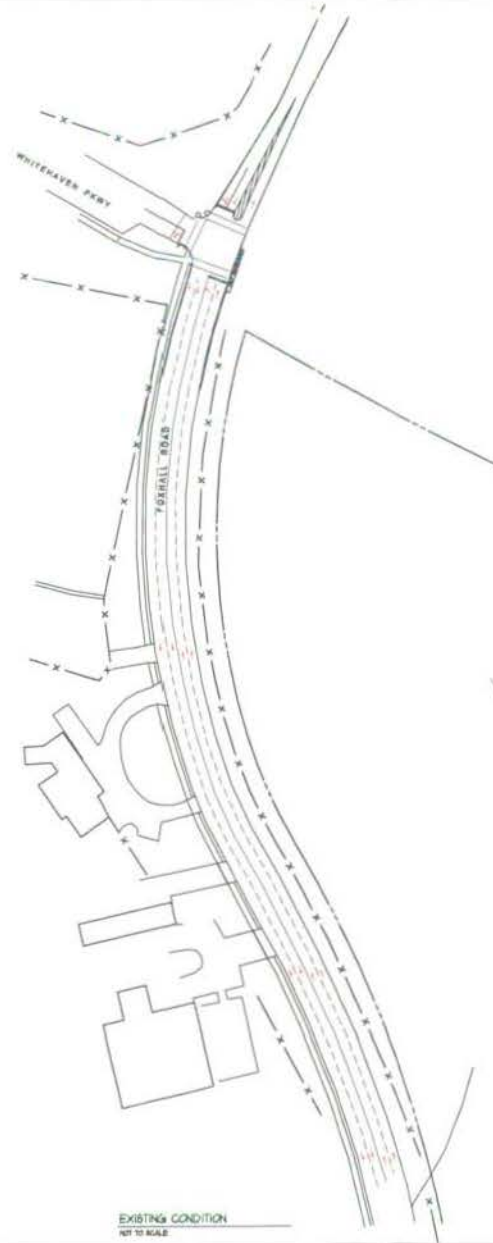
St. Patrick's will monitor the *1801 Foxhall Six-Point Travel Management Plan* for its middle and upper school traffic and parking impacts through periodic faculty, staff, and student transportation surveys; driveway traffic counts; on-site parking occupancy counts; observation of on- and off-site queues; and measurement of transportation impacts of special events. This is a process that St. Patrick's currently follows on the Whitehaven Campus.

In addition, the School will routinely observe the arrival and departure of students walking onto campus to ensure that students are not parking in the neighborhood and walking onto campus. Students violating the parking policies will be subject to revocation of their driving privileges and, in the case of repeated violations, suspension or expulsion from school.

St. Patrick's will periodically meet with neighbors to review School impacts on the surrounding neighborhood (if any) and apprise the community of upcoming events and special occasions, etc.

Compliance with the *1801 Foxhall Six-Point Travel Management Plan* will be made a provision of the enrollment contract between the School and students' families.
Compliance with the parking and driving procedures is a requirement for continued enrollment at the School.

J



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ISSUED: 05/23/2011

DATE OF APPROVAL

DATE

K

St. Patrick's Episcopal Day School Foxhall Campus Operations Plan

I. Parking

- A. The St. Patrick's Episcopal Day School ("**School**") will require all students, employees, and visitors to park on campus, even if they have a valid Ward 3 parking sticker. This includes anyone attending an event held at the school.
- B. The School may use its parking spaces on the Whitehaven Campus, if necessary, to provide event parking.
- C. The School shall establish a parking sticker program. Students who qualify will be required to register their vehicles, and a parking sticker will be issued. No student can drive to school without a permit. Parking stickers may not be issued to students under 17 years of age.
- D. Students violating these requirements are subject to the revocation of their driving privileges, and, in the case of repeated violations, suspension or expulsion from school.
- E. Students and/or parents failing to abide by the parking requirements may be denied reenrollment to the school.

II. Field Use

- A. ~~Games will not be permitted to start on the athletic field after 6PM.~~ No athletic events will be held on Sundays unless required by the athletic league for a particular sport, or unless on an emergency basis. ✓ so these will be Sunday use!
- B. The School will not install lights on the field for nighttime athletic use. ✓
- C. The School will ensure that safety lights on the field are shielded and shine directly on the Property.
- D. When the field and grounds are not being used by the School, the School will permit neighbors to use the field and to walk the grounds during reasonable hours and subject to reasonable rules and regulations.
- E. Neighbors' use is for unorganized, casual activities. ?

F. The School will not rent the athletic field to outside groups. ✓

III. Other Issues

A. Evening events

1. The School will limit outdoor evening events (non-athletic) beginning after 7PM to four per year. For indoor events beginning after 7PM, all parking will be on the Foxhall Campus (or, when additional parking is needed, on the Whitehaven Campus). The School will enforce against external parking. *here?*

B. Meetings

1. The School will organize regular meetings, post construction, not less than semi-annually to maintain open communications with the community. The School and residents agree that there may be times when more frequent meetings are necessary, and they will work together to schedule these meetings as appropriate.

C. Outside use of buildings

1. Use of School facilities by outside parties will be limited to those related to St. Patrick's Episcopal Church. The Church will inform its neighbors in advance of these activities.

D. Deliveries

1. Where possible, deliveries to the School will be scheduled outside of peak traffic hours (as defined in the Transportation Impact Study and the 1801 Foxhall Six-Point Travel Management Plan). ✓