Holland+Knight

Tel 202 955 3000
Fax 202 955 5564

Holland & Knight LLP
2099 Pennsylvania Avenue, N.W., Suite 100
Washington, D.C. 20006
www.hklaw.com

Mary Carolyn Brown
202 862 5990
carolyn.brown@hklaw.com

May 31, 2005

VIA HAND DELIVERY

Board of Zoning Adjustment
for the District of Columbia
441 4th Street, N.W., Suite 210S
Washington, D.C. 20001

RECEIVED
D.C. OFFICE OF ZONING
2005 MAY 31 PM 2:39

17320

Re: BZA Application No. ~~17330~~
St. Albans School, Washington, D.C.

Dear Members of the Board:

On behalf of St. Albans School, we are submitting herewith an original and twenty copies of its statement in support of the above-referenced application. We look forward to presenting our case to the Board of Zoning Adjustment at the June 14, 2005, hearing.

Very truly yours,

Carolyn Brown

Mary Carolyn Brown

Attachments

cc: Advisory Neighborhood Commission 3C (w/attach. via mail)
Maxine Brown-Roberts, D.C. Office of Planning (w/attach.; via hand)

2950257_v1

BZA
Case No. 17320
Exhibit No. 25

Board of Zoning Adjustment
District of Columbia
CASE NO. 17320
EXHIBIT NO. 25A1

BEFORE THE DISTRICT OF COLUMBIA
BOARD OF ZONING ADJUSTMENT

RECEIVED
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2005 MAY 31 PM 2:41

APPLICATION OF:	)	
	)	
THE PROTESTANT EPISCOPAL CATHEDRAL FOUNDATION, ON BEHALF OF ST. ALBANS SCHOOL, FOR SPECIAL EXCEPTION RELIEF UNDER SECTION 206, FOR ADDITIONS TO AN EXISTING PRIVATE SCHOOL AT 3101 WISCONSIN AVE., N.W. (SQUARE 1994, LOT 25)	)	**BZA CASE NO. 17320**
	)	**ANC 3C**
	)	**Hearing Date: June 14, 2005**

STATEMENT OF THE APPLICANT

I. INTRODUCTION

The Protestant Episcopal Cathedral Foundation ("PECF"), on behalf of St. Albans School, submits this statement in support of the application to the Board of Zoning Adjustment for a special exception under section 206 of the Zoning Regulations to allow the construction of additions and alterations to a private school located at 3101 Wisconsin Avenue, N.W., Washington, D.C. (Square 1994, Lot 25). The proposed changes consist of an addition to connect the existing St. Albans School buildings, alterations and reconfiguration of the existing athletic fields, and an underground performing arts center. No increase in student enrollment is proposed. St. Albans School is located on the grounds of the Washington National Cathedral in the R-1-B District.

II.
JURISDICTION OF THE BOARD

The Board of Zoning Adjustment ("Board" or "BZA") has jurisdiction to grant special exception relief pursuant to D.C. Code § 6-641.07 (2001 ed.) and section 3104 of the Zoning Regulations (11 DCMR).

III.
BACKGROUND

A. Description of the Subject Property

St. Albans School is located on a portion of Lot 25 in Square 1994 on the grounds of the Washington National Cathedral Close in the R-1-B District. A copy of the Zoning Map is attached as Exhibit A. Consisting of approximately 56 acres, Lot 25 consumes all but a small portion Square 1994, which is bordered by Wisconsin Avenue, Massachusetts Avenue, Woodley Road, 34th Street, and Garfield Street in northwest Washington. Plats of the property are attached as Exhibit B. The Cathedral Close occupies Mount St. Alban, the high ground of Washington, which offers views of Capitol Hill and the Washington Monument. The Cathedral Close is an individual landmark listed in the D.C. Inventory of Historic Places and on the National Register of Historic Places.

The topography of the Close drops precipitously by approximately 70 feet from the high ground of the Cathedral to the lower level of the St. Albans academic buildings along Garfield Street to the south. At the lower southeast corner of the campus at 34th and Garfield Street, which is the location of the athletic fields, there is a grade change of approximately 85 feet. (See illustrations of grade changes in the Architectural Drawings submitted separately). The school buildings are separated from the athletic fields by the

Olmsted Woods, one of the major landscape elements of the Cathedral Close, which was designed by the preeminent American landscape architect, Frederick Law Olmsted, Jr.

St. Albans School shares the Cathedral Close with the National Cathedral School for Girls, which is located north of the Cathedral, and Beauvoir Elementary School, which is located to the east of the Cathedral and just north of St. Albans athletic fields.

B. Description of the Surrounding Area

The area surrounding St. Albans is characterized by residential uses. Apartment buildings are located cross Wisconsin Avenue from the school, while single family detached dwellings are found along Garfield Street to the south and 34th Street to the east. St. Sophia's Greek Orthodox Church is also located across from St. Albans along Garfield Street.

C. History of St. Albans School

St. Albans is a college preparatory school for boys, chartered by the Protestant Episcopal Cathedral Foundation of the District of Columbia, in Washington, D.C. Dedicated to fostering the spiritual, intellectual, and physical development of its students, the school is divided into a Lower School consisting of Forms C, B, A, I and II (grades 4-8), and an Upper School, consisting of Forms III through VI (grades 9-12), each administered by a division head.

St. Albans School opened as the National Cathedral School for Boys and Choir School on October 7, 1909. (The name was shortened to "St. Albans School " in 1914.) Funds allowing construction of the School were provided by a bequest from Harriet Lane Johnston, whose endowment was to ensure scholarships for boys singing in the Cathedral choir. The earliest of the campus buildings, Lane-Johnston, is named in her honor. Since

the School's founding, construction of the National Cathedral has been completed; the Lane-Johnston Building has been expanded and renovated to serve the needs of the Upper School; and the Lower School moved from a Victorian house across Wisconsin Avenue to its present location in 1929. The school presently consists of multiple buildings and facilities: Lane-Johnston Building, the True-Lucas Building, Little Sanctuary, the Steuart Building, the New Wing, the Activities Building, the Lawrence Pool, and the Martin Gymnasium. With an original enrollment of 54 choir boy students in the first class of 1909, St. Albans has expanded to serve approximately 568 students today.

D. School Governance

St. Albans is controlled by a Governing Board whose members include alumni, present and past parents, faculty, and representatives of the community. Two members of the Board are also members of the Board of Trustees for the Protestant Episcopal Cathedral Foundation ("PECF"). The St. Albans Governing Board has general authority over the operation of the School, but it delegates to the headmaster and other administrative personnel responsibility for curriculum, faculty, student discipline, and various administrative functions. PECF is comprised of four institutions: Washington National Cathedral, National Cathedral School for Girls, St. Albans School, and Beauvoir Elementary School

E. Zoning History

St. Albans School was established prior to the enactment of the Zoning Regulations in the District of Columbia. The school first appeared before the Board in 1971 for approval to erect a two-story addition to the existing school, now known as the

New Wing, to house a library, classrooms and offices. *See* BZA Order No. 8867 (October 1, 1971).

Five years later, St. Albans received special exception approval to renovate the existing Activities Building, construct a new wing to the existing gymnasium and a new academic building to replace five classrooms lost in the remodeling of the Activities Building. There was no increase in student enrollment, faculty or staff. Maximum attendance for any school event was limited to 1300 and the school was required to provide a minimum of 130 parking spaces. *See* BZA Order No. 12174 (November 5, 1976).

By summary order in 1994, the Board approved a special exception to construct another addition to the school. *See* BZA Order No. 15987 (October 28, 1994).

The current proposal likewise seeks special exception approval for a new addition, construction of an underground performing arts center and renovation of the athletic fields. St. Albans does not propose to increase its student enrollment. Copies of the BZA Orders are attached as Exhibit C.

VI.
PROJECT DESCRIPTION

A. Overview

St. Albans facilities are outdated and over-utilized. The school is ten classrooms short of the demands of its academic curriculum. It needs to accommodate technological advances in education and learning tools and to provide the necessary service structures for the school's athletic and performing arts programs.

Currently, St. Albans only has one, non-regulation athletic field, which is inadequate for the level of competition and interscholastic play of its teams. The School

has one of the most competitive programs in the region, yet it can only host one game or practice at a time for any given sporting event.

During the last five years, the school's performing arts program, in conjunction with that of the National Cathedral School for Girls, has flourished. Unfortunately, patrons are turned away because there is no adequate venue for performances. St. Albans has fostered and nourished performing and visual arts since its founding as the National Cathedral's choir school. In the great tradition of cathedral schools, St. Albans has a rare opportunity to teach, promote and sustain the performing and visual arts in a secular world. To that end, St. Albans proposes to construct a new performing arts center on its campus.

The proposed building campaign for St. Albans is a ten-year, multi-phase development consisting of the following:

1. Renovating the Upper School and extending the existing New Wing to include additional classrooms and offices and social spaces that give faculty and students more room in which to teach and to learn.

2. Modifying existing Satterlee-Henderson Field into three tiered fields, including a regulation track, two full-sized fields, a practice area and eight tennis courts.

3. Building a new underground performing arts center that will house a new theater, classrooms, practice rooms, and storage.

The reconfiguration of the athletic fields and construction of the New Wing Extension will commence in 2006, with completion scheduled for Fall 2007. The Performing Arts Center will be built in a later phase within the ten-year timeframe.

B. New Wing Extension

St. Albans proposes to construct a New Wing Extension as an addition to the school's existing New Wing Building. The New Wing Extension will provide vital connections between the separate buildings of the campus that will unify the Upper School buildings. The addition will extend the structure of the New Wing at its current height and width by connecting the New Wing with the Steuart Building and the Lawrence Pool. The interior circulation consists of a series of stairs and an elevator connecting the various levels for the existing buildings. The elevator provides connection on all floor levels and dramatically improves accessibility to every building on campus.

The New Wing Extension will bridge and suppress the current service road, thereby eliminating the more unsightly aspects of the building's service functions. All truck delivery and loading will take place underground, directly below their current operations. The existing loading dock will be converted into a terrace or green space for circulation and passive social activities.

Consisting of approximately 18,000 square feet of space, the addition will consist of six new standard classrooms, five new faculty offices, student social space, administrative offices, and a student bookstore. The extension will also house part of the program for the Teaching & Learning Initiative of St. Albans Long Range Plan.

The New Wing Extension will help to resolve the current spatial inadequacies for the current faculty and student body. St. Albans has no plans to increase its enrollment.

C. Reconfiguration of the Athletic Fields

The St. Albans Athletic Fields project consists of a reconfiguration of the existing Satterlee-Henderson Field on the southeast corner of the Close into three separate tiers. The upper level will contain a regulation competition/practice field for football, soccer, and lacrosse. The field will be surrounded by a regulation six-lane track. There will be seating for approximately 600 people on the north face of the new field, built into the hillside sloping upward to the Beauvoir School. The lower tier playing field, located approximately eighteen feet below the upper tier, will consist of a regulation baseball field, which can also be converted into two practice fields, and an additional half-field for practice. The third tier at the corner of the intersection of 34th and Garfield streets will contain eight tennis courts and support space building into a hillside. Along the north face of the baseball field and separating the two levels will be a sixteen-foot high stone arcade with Roman arches, which will serve as a retaining wall for the upper field and a pedestrian pathway for the length of the fields. The entire project will maintain or improve most of the grades around the perimeter as well as significantly improve the landscaping with generously planted edges.

The reconfigured athletic facility will include practice and game venues for St. Albans interscholastic teams in baseball, cross country, football, lacrosse, soccer, tennis and track and field. However, the number of games played by these teams will remain unchanged from the current schedule, as St. Albans is now at the limit allowed by the Intercollegiate Athletic Conference (IAC) rules.

St. Albans has a total of twenty-eight teams in the seven sports, and virtually all of the approximately 480 boys who make up grades six through twelve play on one or

more of the teams. The fields will be used primarily during the fall and spring athletic seasons, which run from September 1 to November 15, and from March 1 to May 15, respectively. One or two interscholastic games will be played on the fields virtually every day with multiple games normally being played "back to back" rather than simultaneously. The reconfiguration will allow the school for the first time to have teams practice on regulation-sized fields while contests are occurring. In the Fall, there will be two full-sized practice fields completely separate from the game field. In the Spring, the baseball and lacrosse teams will have completely separate venues. In addition, for the first time, the track and cross country teams will have an all-weather regulation running track on which they can compete. Additionally, with specific fields designated for certain sports, the fields will have a chance to "rest" and be maintained, unlike the current condition where one field is in constant use with little opportunity for maintenance and regeneration. The St. Albans and NCS tennis teams and community tennis club will have eight courts on which to conduct their practices and matches.

D. The Performing Arts Center

St. Albans proposes to construct a Performing Arts Center ("PAC") consisting of a new auditorium and support space for the coordinate St. Albans and National Cathedral School Performing Arts Program.[1] The PAC will mainly serve existing programs, but will also be a venue for some of the Cathedral's programs. The new facility will be located directly underneath Senior Circle, the circular drive at the front of the school, and thus there will be no visible change of grade at this upper campus level. As the ground slopes downward from Senior Circle to the Ellison Library, a façade of the theater will be exposed, creating an opportunity to provide natural light into the facility. A PAC terrace

[1] The term "coordinate" is used to mean "co-educational", *i.e.*, programs for both boys and girls

at the bottom of this slope and adjacent to the Ellison Library will provide access to the facility and outdoor lobby and gallery space. The PAC will also be accessed from a grand stairway and an elevator located directly inside the New Wing.

The PAC will contain 39,000 square feet of space, with 650 seats in the auditorium. Characteristic of a baroque-style opera house with two balcony levels, it will provide an appropriate performance venue for both speech and music for the range of boys at the School. The lowest level of the facility will consist of a proscenium stage, orchestra pit, and seating for 350 people. Adjacent to the stage will be a set construction shop with a mezzanine level. The upper two balcony levels consist of additional support space, including seven small music practice rooms, a large music practice room, a theater classroom, and six faculty offices. A main staircase at the back of the auditorium will provide circulation, and underground connections will link the facility to the existing Trapier Theater and New Wing.

The PAC will also have an above-grade component located directly behind the Library, know as the Library Addition, which could be phased in earlier than the underground portion. The segment of the PAC will contain three large classrooms: a two-dimensional art studio and two music ensemble rooms. Large lightwells on the top and an exposed edge on the north side will provide natural light to the addition.

The parking needs of the PAC will be serviced by the new parking garage planned by the PECF and expected to be completed by Fall 2006.

V.
COMPLIANCE WITH THE ZONING REGULATIONS

A. Standard of Review

A special exception use is presumed to be compatible with other uses permitted in that particular zoning classification provided that the specific regulatory requirements are met. In reviewing applications for a special exception, the Board's discretion is limited to determining whether the proposed exception satisfies the requirements set forth in the appropriate section. If the Applicant meets its burden, the Board must ordinarily grant the application. *First Baptist Church of Washington v. District of Columbia Board of Zoning Adjustment*, 432 A.2d 695 (1981); *Stewart v. District of Columbia Board of Zoning Adjustment*, 305 A.2d 516, 518 (1973). As set forth below, St. Albans complies with the standards for special exception relief.

B. Special Exception Standard for Private Schools Under Section 206

Section 206 of the Zoning Regulations permits the use of a private school and residences for teachers and staff in the R-1 District if approved by the Board as a special exception provided certain conditions are met. First, the school must be located so that it is not likely to become objectionable to adjoining and nearby property because of noise, traffic, number of students, or otherwise objectionable conditions. 11 DCMR § 206.2 (2005). Second, the private school provide ample parking space, but not less than that required in Chapter 21 of the Zoning Regulations, to accommodate the students, teachers and visitors likely to come to the site by automobile. 11 DCMR § 206.3. As set forth in greater detail below, the proposed additions and alterations to St. Albans School will not increase the number of students and results in only a minimal increase in the number of faculty. Further, the proposed expansion will not result in objectionable conditions.

Parking will be provided in accordance with requirements of the Zoning Regulations and will be sufficient to accommodate the proposed demand. Finally, the special exception will be in harmony with the general purpose and intent of the Zoning Regulations and Zoning Maps and will not tend to affect adversely the use of neighboring property.

C. No Increase in Noise Levels

The proposed changes to the St. Albans campus will not have any perceptible increase in noise levels on adjacent or adjoining properties. Of the three planned building programs, only the reconfiguration of the athletic fields has the potential to increase noise. The New Wing Extension is not expected to generate any increase in sound levels because there is no concomitant increase in student numbers. It may, in fact, buffer noise from the previously exposed service road and loading facilities for the school, which will now be underground. Similarly, the Performing Arts Center will be constructed underground using some of the highest acoustical standards necessary for performing arts, so that noise from this facility is expected to be imperceptible. Because the athletic field reconfiguration will relocate the multi-purpose field and seating area from the south side of the project site to the north side, St. Albans commissioned Arup Acoustics to determine the potential level of disturbance to the neighboring residences on Garfield Street and 34th Street. Arup Acoustics is an international design consultant group specializing in assessments of noise and acoustic levels for performing arts, recording, broadcast, sports, leisure, transportation and the environment.

Arup Acoustics concluded that noise levels resulting from the new seating areas of the athletic field renovations will actually decrease game time noise level at the residences along Garfield Street and increase slightly for some residents on 34th Street,

but that the overall increase in the ambient noise level would not be perceivable when compared to current game-time noise levels. The study was conducted during the Fall 2004 homecoming football game, which generates the greatest attendance and enthusiasm levels of all sporting events at St. Albans. It includes noise from spectators in the seats, the band playing, the announcer calling the game, whistles from the referees, and other football game related noise. The study compared this "worst case scenario" noise with the typical ambient noise level at the residences along Garfield and 34th streets, of which automobile traffic is a key factor.

The study found that along Garfield Street, the current ambient noise levels (65 dB(A)) are slightly increased (66 dB(A)) during a football game. As a result of the new seating area however, the sound levels from the crowd alone would decrease by more than 10 dB at the Garfield Street residences. With a crowd of 1,100 spectators, the overall crowd noise along Garfield Street is expected to be 55 dB, which is below the current ambient, non-game noise levels.

Along 34th Street, the current ambient, non-game noise level is 68 dB(A). The proposed location of the new athletic seating area is expected to generate noise from the crowd at a level of 63 dB(A), which is below the current ambient noise level. When the game and traffic noise are measured together along 34th Street, a game-time ambient level of 69 dB(A) is expected. This represents an increase of 1 dB over the current game-time level, which is less than the minimal perceptible level change for humans of 3 dB.

Thus, the proposed athletic field renovations will not create any objectionable conditions with respect to noise. A copy of the Arup Acoustics noise study is attached as Exhibit D.

D. No Objectionable Traffic or Parking Conditions

The proposed changes to the St. Albans campus will not have any significant impacts on traffic or parking conditions on the public streets adjacent to the Cathedral Close and in the nearby neighborhoods. St. Albans presently provides 154 off-street parking spaces to accommodate the current size of the school and the current population of students, faculty and staff. This number is derived from the zoning requirement of two parking spaces for every three faculty and staff members, plus one parking space for every ten seats in the largest assembly space. Currently, there are 133 faculty and staff members, which generates a requirement for 89 spaces (133 x 2/3 = 89). The largest assembly space provides 650 seats, thereby generating a requirement for an additional 65 seats (650 x 1/10 = 65).

While student enrollment will not change under the present proposal, St. Albans may increase the number of faculty and staff employment by nine persons, which would increase by six the number of required parking spaces, for a total requirement of 160 spaces. St. Albans proposes to provide 163 spaces on the Cathedral Close in satisfaction of this requirement.

Currently, there is a parking demand for 826 vehicles on the Cathedral Close for all uses on a typical peak day; however, the Close can only accommodate 532 automobiles at the present time, resulting in spillover parking onto nearby streets. To alleviate this condition, the PECF is constructing an underground parking garage on the Close for tour buses and automobiles. Upon completion, which is expected in Fall of 2006, the number of parking spaces on the Close will increase by 300 spaces, and thus will exceed demand by 6 spaces. Thus, demand for all parking on the Close, including

that of St. Albans, can be accommodated on the Close. St. Albans will also implement a student parking policy to designate specific parking locations on the Close for student use.

St. Albans commissioned Gorove/Slade Associates, Inc., a transportation, traffic and parking consultant, to evaluate the effect of the New Wing Extension, the renovated athletic fields and the new PAC on traffic and parking conditions, in light of the new parking garage. The traffic report, which is attached hereto as Exhibit E, concludes that the proposed modifications to St. Albans School will not have any significant impacts on the existing parking and traffic conditions. It states that the new parking garage will ensure that all St. Albans faculty, staff, students and visitors will be accommodated on the Close in designated parking spaces. Further, the modifications and addition to the academic buildings and the associated increase in faculty and staff employment will have no impact on parking because additional parking will be provided on the Close. Also, the small number of additional staff will have an insignificant impact on neighborhood traffic conditions.

The traffic report also concludes that the increase in the capacity of the performing arts facility will generate significant additional traffic arriving on the Close. It is anticipated that 150 new trips will be generated a few times a year on Friday evenings prior to a performance. Because these vehicles will use the North Road entrance of the parking garage, which will be a signalized intersection at Wisconsin Avenue, traffic operations at that signalized intersection will be in the desirable range based on standards set by the traffic engineering profession and the District's Department of Transportation. Further, this signal will be integrated with the signal system along

Wisconsin Avenue, thus ensuring that signals are coordinated by a master computer for smooth-flowing traffic. Thus, the proposed modifications to the St. Albans campus will not create any objectionable conditions due to parking or traffic.

E. No Objectionable Design Issues

St. Albans has been in constant communication with the community for the past 18 months to elicit their comments and address their concerns regarding the proposed alterations and additions to the school buildings. In addition to noise, parking and traffic, the community was also concerned about the effect of the proposed construction on the character of the National Cathedral, the Olmsted Woods and the Close in general. The architects for the project, Skidmore Owings & Merrill ("SOM") of New York, carefully designed the various components to restore the vision of Frederick Law Olmsted, Jr. for the Cathedral grounds and preserve the sightlines to the Cathedral.

At its May 16, 2005, meeting, Advisory Neighborhood Commission ("ANC") 3C voted to support with conditions the proposed design for the new construction and landscaping. The ANC requested that the Applicant use the least amount of chain link fencing, soften the hard edges of the athletic fields so that it does not compete with the Cathedral, and increase the amount of landscaping and trees at the north end of the fields along the Beauvoir School grounds and along Pilgrim Road. A copy of the ANC resolution is attached as Exhibit F. St. Albans and SOM have addressed these issues, which are reflected in the revised architectural drawings submitted separately herewith. A discussion of the meetings with the community is described in Section VI below.

St. Albans and SOM also met on several occasions with the staff of the District's Historic Preservation Office to ensure that the proposed changes are compatible with

historic landmark. The staff has recommended some minor design changes, which the architects are currently addressing. St. Albans will present its proposal to the Historic Preservation Review Board ("HPRB") at its June 23, 2005, meeting, and requests flexibility from the BZA to respond to those issues.

F. No Objectionable Hydrological Conditions

During its meetings with the community, St. Albans was informed of concerns that the proposed construction could negatively affect the existing ground water flow. Accordingly, St. Albans commissioned Ove Arup & Partners Ltd. to assess the proposed St. Albans expansion on the existing hydrological environment, incorporating the results of ground water monitoring around the Close since 1999 and previous studies carried out for the area of Olmsted Woods. The study, which was completed in January 2005, concludes that no part of the permanent below ground structures will extend below the highest recorded ground levels, and that the proposed structures will not affect the existing hydrological environment. A copy of the hydrology study is attached as Exhibit G.

VI.
COMMUNITY RELATIONS

St. Albans began direct involvement with the community early in the development of plans for the school, recognizing that any change to the campus had the potential to affect the neighborhood and its residents. Early in the process, St. Albans presented its set of principles to guide the school in communicating with the neighbors as plans developed and the project proceeded through the regulatory approval process. The principles are:

1. As one of the oldest neighbors in this community, St. Albans recognizes and respects how much all neighbors value their location and the surroundings we enjoy.

2. St. Albans will share relevant study results, research data, concept designs, plans, and proposals with the community to ensure transparency and openness.

3. St. Albans will invite community comment at each stage as it begins to develop and consider proposals to meet the needs of the school.

4. St. Albans will consult its neighbors by providing opportunities for comment before making decisions, considering alternatives, or preparing designs of new or upgraded facilities.

5. Following the planning and approval process, and before starting any renovation or construction, St. Albans will work with its neighbors on the Cathedral Close and with the wider community to develop routes, schedules, and parking arrangements to minimize noise, traffic, or other disturbance during construction.

St. Albans has been meeting with neighbors on a monthly basis, often in conjunction with the PEFC, to elicit community comment. A list of those meetings is attached as part of Exhibit H. As part of its outreach program, St. Albans created a newsletter, *News for Neighbors,* that was mailed to the community, along with a letter from the school's headmaster. St. Albans has also established a website that can be readily accessed by adjacent property owners and neighbors to review a description of the improvements, renderings of the proposals, "Frequently Asked Questions" with answers, a schedule of community meetings and other general information on the project. *See* "Community Relations" at www.staweb.sta.cathedral.org. A copy of the "Frequently Asked Questions" is attached as part of Exhibit H

ANC 3C is expected to hold a special meeting on June 6, 2005, at which time it will formally vote on the St. Albans special exception application. The community has

provided valuable insight and thoughtful comment on the proposed plans, resulting in a better project. St. Albans will continue to work with the community through the final review processes and during construction.

VII.
WITNESSES

St. Albans intends to call the following witnesses in support of its special exception application:

- Representative of St. Albans School Building and Grounds Committee
- Vance Wilson, Headmaster, St. Albans School
- Roger Duffy, AIA, Skidmore, Owings & Merrill LLP, Architect
- Richard Arentz, Arentz Landscape Architects LLC
- Skip Burke, Landscape Architect
- Louis Slade, Gorove/Slade Associates, Inc., Transportation Consultants
- Steven E. Sher, Director, Zoning & Land Use Services, Holland & Knight LLP

Other representatives from these organizations may also appear on behalf of the applicant.

VIII.
EXHIBITS

In addition to the architectural drawings, which are submitted simultaneously herewith as a separate booklet, the following exhibits are attached in support of this application:

Exhibit A	Zoning Map for the Subject Property
Exhibit B	Real Estate Plats (Baist and Sanborn) Depicting the Subject Property
Exhibit C	Copies of BZA Orders Pertaining to St. Albans School

Exhibit D	Noise Study Prepared by Arup Acoustics
Exhibit E	Traffic Analysis Prepared by Gorove/Slade Associates, Inc.
Exhibit F	ANC 3C Resolution to HPRB on Proposed Design of Project
Exhibit G	Hydrology Report
Exhibit H	List of Community Meetings and "Frequently Asked Questions"
Exhibit I	Outlines of Witness Testimony

IX.
CONCLUSION

For the reasons stated above, the requested relief meets the applicable standards for special exception approval under the Zoning Regulations. Accordingly, St. Albans School respectfully requests that the Board grant the application.

Respectfully submitted,

HOLLAND & KNIGHT LLP

By 

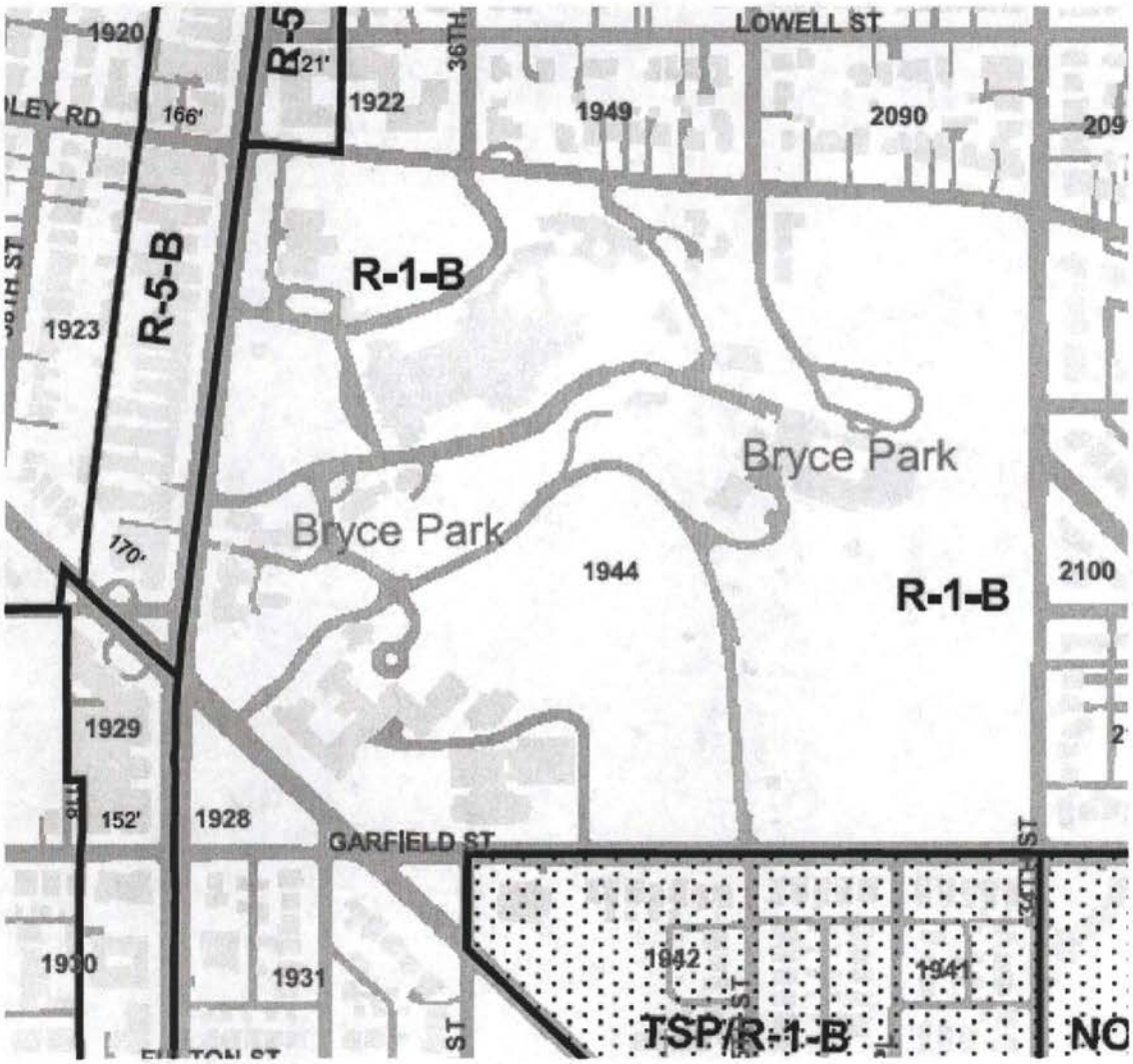
Whayne S. Quin
Mary Carolyn Brown
2099 Pennsylvania Avenue, NW,
Suite 100
Washington, D.C. 20006
(202) 955-3000

May 31, 2005

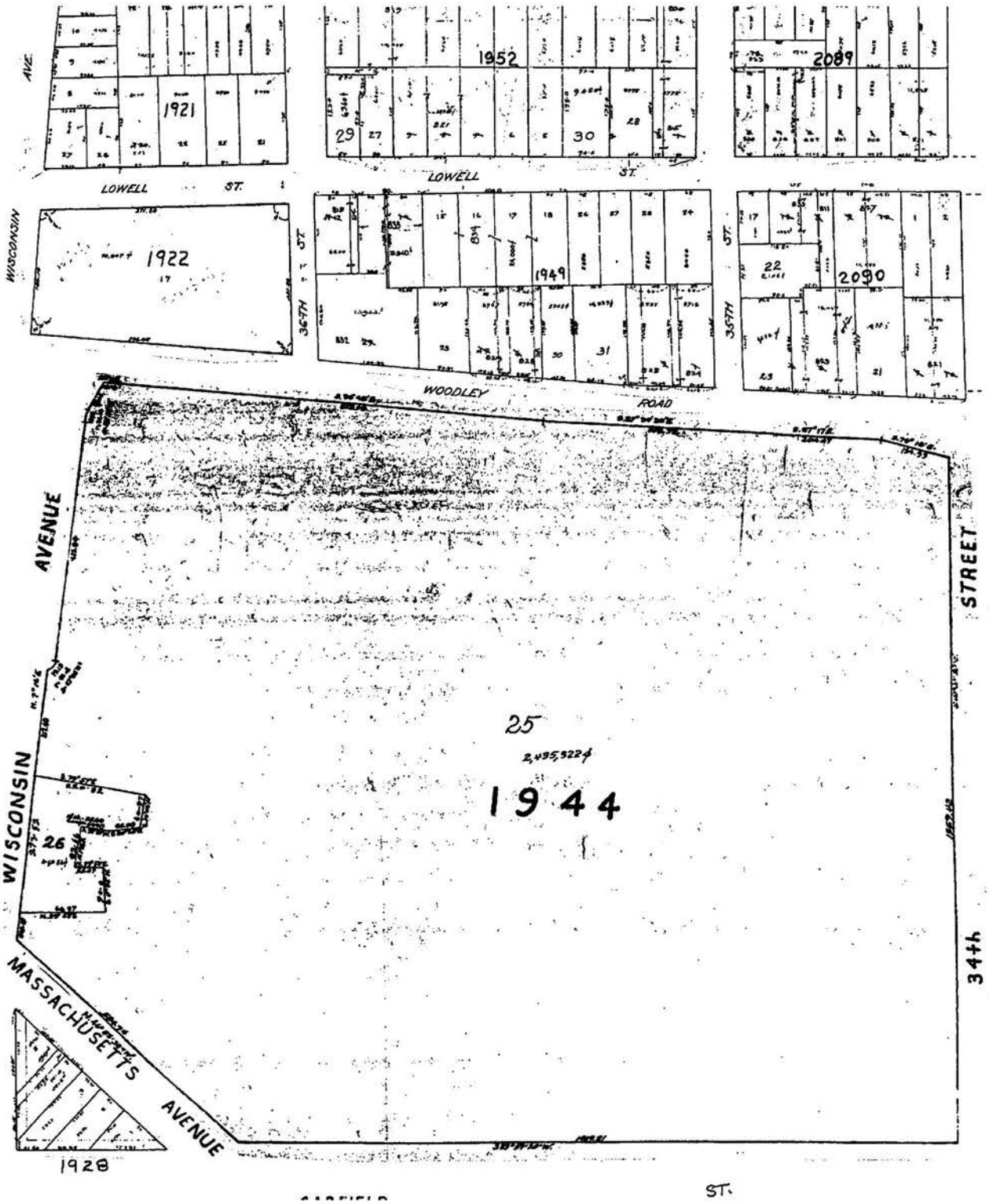
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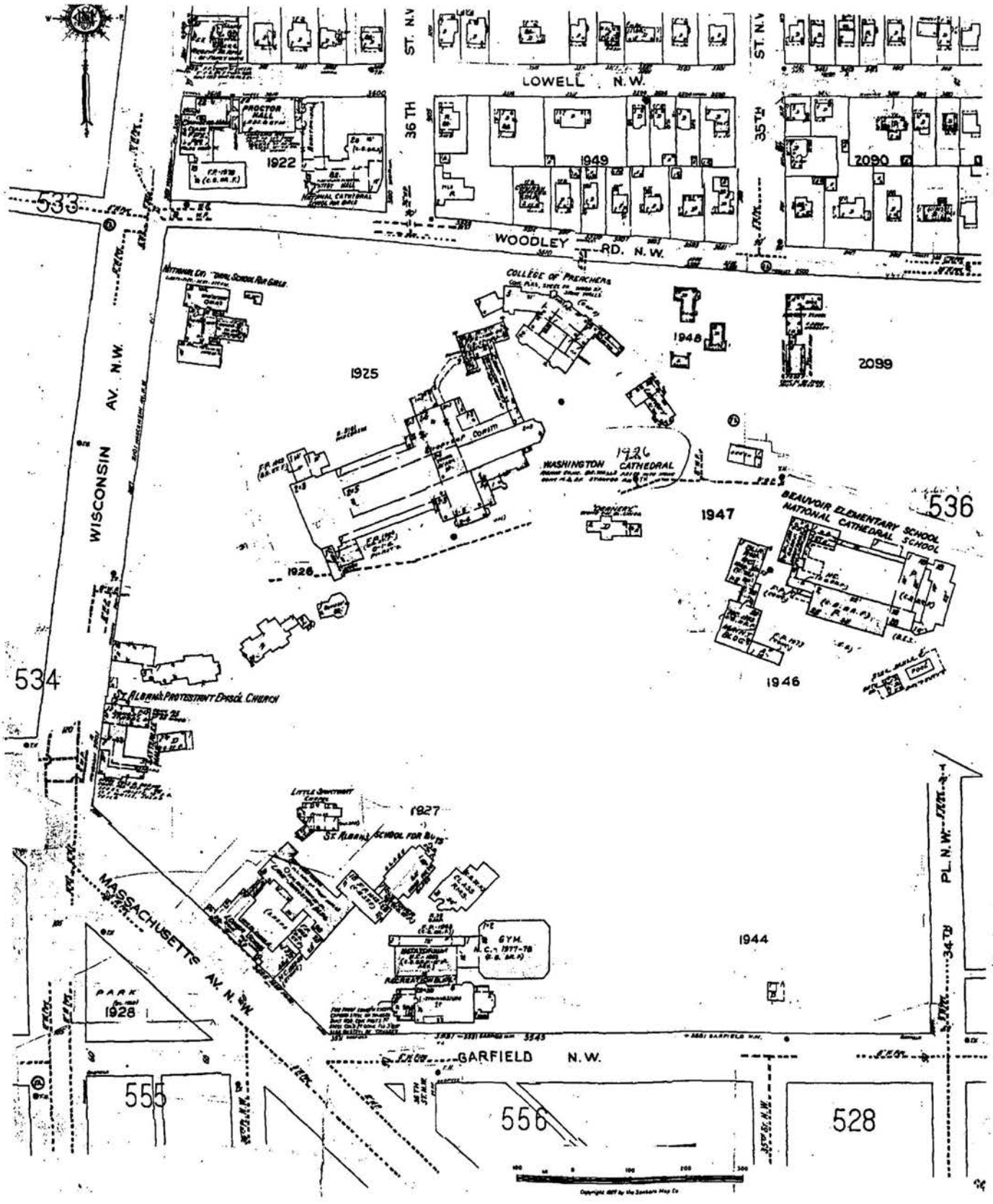
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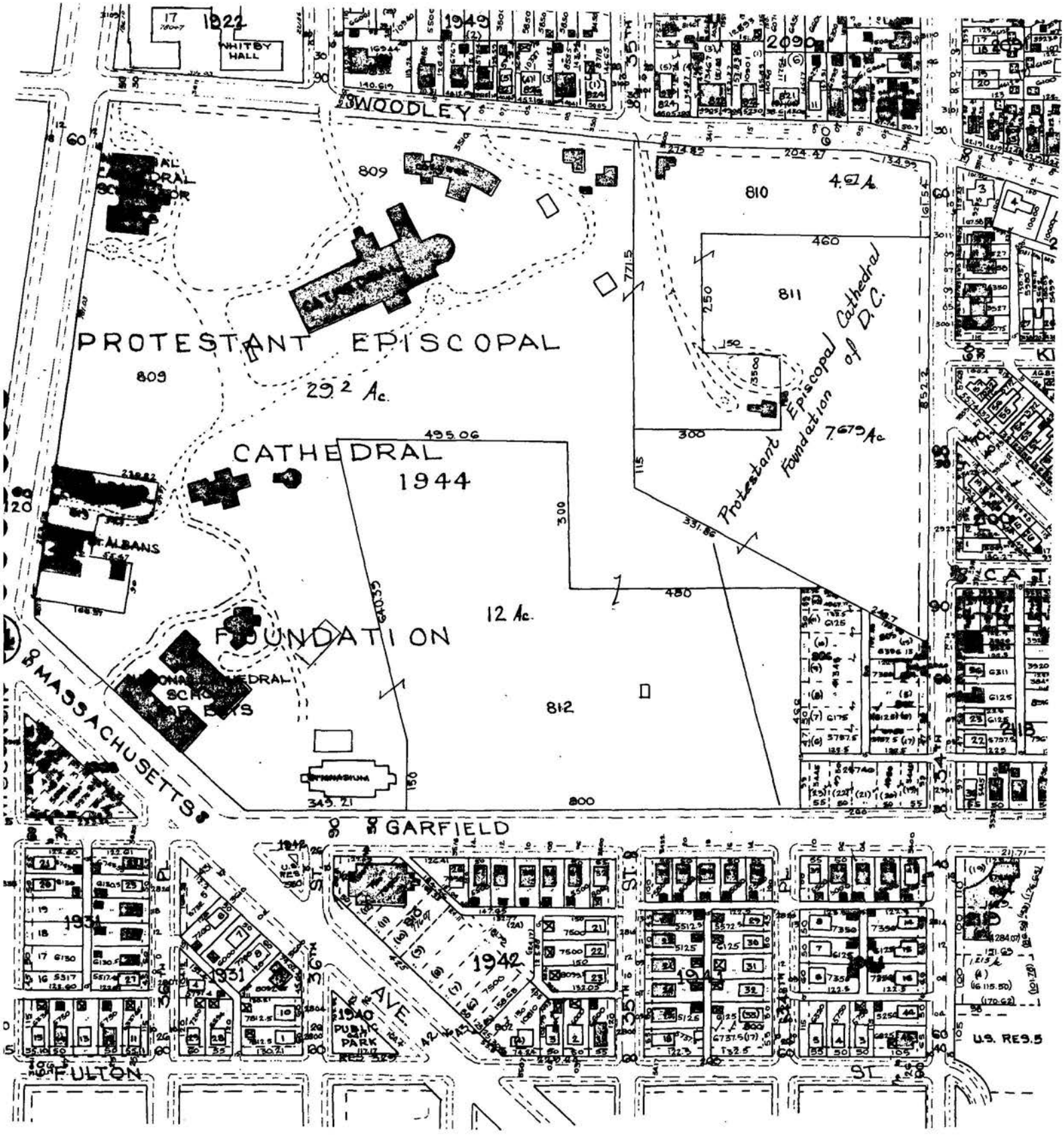
PORTION OF ZONING MAP
ST. ALBANS SCHOOL



B


AVE.
1921
1952
2089
LOWELL ST.
29
27
30
LOWELL ST.
WISCONSIN
1922
17
35TH ST.
1949
22
2090
35TH ST.
WOODLEY ROAD
AVENUE
STREET
25
2,435,922±
1944
WISCONSIN
26
MASSACHUSETTS AVENUE
34th
1928
ST.


LOWELL N.W.
ST. N.W.
36TH
35TH
1922
1949
2090
533
WOODLEY RD. N.W.
COLLEGE OF PREACHERS
1948
2099
1925
WISCONSIN AV. N.W.
WASHINGTON CATHEDRAL
1926
1947
536
BEAUVOIR ELEMENTARY SCHOOL
NATIONAL CATHEDRAL SCHOOL
1926
534
ST. ALBAN'S PROTESTANT EPISC. CHURCH
1946
1927
ST. ALBAN'S SCHOOL FOR BOYS
MASSACHUSETTS AV. N.W.
GYM.
1944
PARK
1928
PL. N.W.
34TH
GARFIELD N.W.
555
556
528


WOODLEY
PROTESTANT EPISCOPAL
809
29.2 Ac.
CATHEDRAL
1944
FOUNDATION
12 Ac.
810
4.67 Ac.
811
Protestant Episcopal Cathedral Foundation of D.C.
7.679 Ac.
812
MASSACHUSETTS
GARFIELD
WHITBY HALL
ST. ALBANS
GYMNASIUM
FULTON
PUBLIC PARK
U.S. RES.5
460
495.06
480
800
343.21
331.86
772.3
771.5

C

8207 2
3:31 42

Before the Board of Zoning Adjustment, D.C.

PUBLIC HEARING -

Appeal No. 8867 Protestant Episcopal Foundation of Washington, appellant.

THE ZONING ADMINISTRATOR OF THE DISTRICT OF COLUMBIA, appellee.

On motion duly made, seconded and unanimously carried, the following Order of the Board was entered at the meeting of September 20, 1966.

EFFECTIVE DATE OF ORDER - October 1, 1971

ORDERED:

That the appeal for permission to erect a two-story addition to existing school for boys for a library, classrooms and offices at 3000 Wisconsin Avenue, N.W., parcels 41/56 and 41/55 near Square 1942 be Granted.

FINDINGS OF FACT:

1. The subject property is located in an R-1-B District.

2. The subject property is improved with existing brick buildings which are a part of the school campus.

3. The lot frontage of subject property is 584.74 feet on the Southeast side. 1409.21 feet in length on the south side. 781.03 feet on the east side. 1359.41 on the west side.

4. The proposed building is constructed in the middle of the existing North and South buildings and on the end of the existing North building.

5. The proposed building will be used for classrooms, library and office space.

6. No opposition to the granting of this appeal was registered at the Public Hearing.

OPINION:

We are of the opinion that erection of the proposed building is not likely to become objectionable to neighboring property because of noise, traffic, number of students or other objectionable conditions. Further, we conclude that the requested relief can be granted without substantially impairing the intent, purpose, and integrity of the zone plan as embodied in the Zoning Regulations and Maps.

BY ORDER OF THE D.C. BOARD OF ZONING ADJUSTMENT

ATTESTED:

By: _____
GEORGE A. GROGAN
Secretary of the Board

THAT THE ORDER OF THE BOARD IS VALID FOR A PERIOD OF SIX MONTHS ONLY UNLESS APPLICATION FOR A BUILDING AND/OR OCCUPANCY PERMIT IS FILED WITH THE DIRECTOR OF INSPECTIONS WITHIN A PERIOD OF SIX MONTHS AFTER THE EFFECTIVE DATE OF THIS ORDER.

Before the Board of Zoning Adjustment, D.C.

Application No. 12174 of the Protestant Episcopal Cathedral Foundation pursuant to Sub-section 8207.2 of the Zoning Regulations, for a special exception under Paragraph 3101.42 to permit erection of a classroom building and gymnasium addition to a private school in the R-1-B District at the premises 3625 Massachusetts Avenue N.W. (Square 1944, Lot 24)

HEARING DATE: June 22, 1976; October 20, 1976
DECISION DATE: October 26, 1976

FINDINGS OF FACT

1. Protestant Episcopal Cathedral Foundation has applied, pursuant to Sub-section 8207.2 of the Zoning Regulations, for a special exception under Paragraph 3101.42 of the Zoning Regulations to permit erection of a classroom building and gymnasium addition to a private school at the premises 3625 Massachusetts Avenue, N.W., (Square 1944, Lot 24).

2. The site in question is zoned R-1-B.

3. The project involves the remodeling of the present Activities Building (as to which no BZA approvals are required or sought), the construction of a gymnasium wing (12,500 SF) attached to the existing gymnasium, and the construction of a new Academic Building (20,000 SF) to replace five classroom to be lost in remodeling the existing Activities Building. The proposed classroom and gymnasium addition meet the requirements of the Zoning Regulation with respect to lot area, lot occupancy, lot width, side yard and rear yard.

4. St. Albans is a private preparatory school for boys that has been located at the site in question since before 1937 when the present Activities Building was constructed.

5. The purpose of the proposed buildings is not to serve any increase in the number of students enrolled or attending the school. St. Albans intends that its enrollment will remain the same. The buildings will be utilized to make available to the existing student body a better range of educational and athletic facilities. There will be no increase in classroom capacity or in the number of faculty members.

6. St. Albans School, throughout the school year, will provide some events in the preposed gymnasium that projects an attendance of 1300 visitors for 7 days per year and 1000 visitors for 4 days per year. The school now provides 68 parking spaces and/or a first come first serv basis. It has normally available to it 350 parking spaces from the Cathedral Close

Under Article 72 of the Regulations the amount of parking space required is one parking space for each ten auditorium seats.

7. No objection was raised at the public hearing.

CONCLUSIONS OF LAW AND OPINION:

The Board concludes that subject to the conditions hereinafter stated this private school use is so located that it is not likely to become objectionable to adjoining and nearby property because of noise, traffic, number of students, or otherwise objectionable conditions and that ample parking space is provided to accomodate the students, teachers and visitors likely to come to the site by automobile. The Board further concludes that approval of this application will be in harmony with the general prepose and intent of the Zoning Regulations and Map and will not tend to affect adversely the use of neighboring property. The requirement of Subsection 8207.2, 3101.42 and Article 72 of the Zoning Regulations have been met. Accordingly, it is ORDERED that the application be GRANTED subject to the following conditions:

1. Maximum attendance permitted for any event shall be limited to 1300.

2. 130 parking spaces shall be provided.

VOTE: 3-0

(William F. McIntosh, William S. Harps and Lilla Burt Cummings, Leonard L. McCants not voting, not having heard the application)

BY ORDER OF THE D.C. BOARD OF ZONING ADJUSTMENT

ATTESTED BY: Arthur B. Hatton
ARTHUR B. HATTON
Executive Secretary

FINAL DATE OF ORDER: November 5, 1976

GOVERNMENT OF THE DISTRICT OF COLUMBIA
BOARD OF ZONING ADJUSTMENT

Application No. 15987 of the Protestant Episcopal Cathedral Foundation, pursuant to 11 DCMR 3108.1, for a special exception under Section 206 to allow an addition to an existing private school in an R-1-B District at premises 3625 Massachusetts Avenue, N.W. (Square 1944, Lot 25).

HEARING DATE: October 12, 1994
DECISION DATE: October 12, 1994 (Bench Decision)

SUMMARY ORDER

The Board provided proper and timely notice of public hearing on this application by publication in the D.C. Register, and by mail to Advisory Neighborhood Commission (ANC) 3C and to owners of property within 200 feet of the site.

The site of this application is located within the jurisdiction of ANC 3C. ANC 3C, which is automatically a party to this application, submitted a written statement of issues and concerns in support of the application.

As directed by 11 DCMR 3324.2, the Board has required the applicant to satisfy the burden of proving the elements which are necessary to establish the case for a special exception pursuant to 11 DCMR 206. No person or entity appeared at the public hearing in opposition to this application or otherwise requested to participate as a party in this proceeding. Accordingly, a decision by the Board to grant this application would not be adverse to any party.

Based upon the record before the Board, the Board concludes that the applicant has met the burden of proof, pursuant to 11 DCMR 3108, that the requested relief can be granted as being in harmony with the general purpose and intent of the Zoning Regulations and Map. The Board further concludes that granting the requested relief will not tend to affect adversely the use of neighboring property in accordance with the Zoning Regulations and Map. It is therefore **ORDERED** that this application is **GRANTED**.

Pursuant to 11 DCMR 3301.1, the Board has determined to waive the requirement of 11 DCMR 3331.3 that the order of the Board be accompanied by findings of fact and conclusions of law. The waiver will not prejudice the rights of any party, and is appropriate in this case.

VOTE: 4-0 (Craig Ellis, Maybelle Taylor Bennett, Susan Morgan Hinton and Angel F. Clarens to grant; Laura M. Richards not present, not voting).

BY ORDER OF THE D.C. BOARD OF ZONING ADJUSTMENT

ATTESTED BY: Madeliene H. Robinson
MADELIENE H. ROBINSON
Director

FINAL DATE OF ORDER: OCT 28 1994

PURSUANT TO D.C. CODE SEC. 1-2531 (1987), SECTION 267 OF D.C. LAW 2-38, THE HUMAN RIGHTS ACT OF 1977, THE APPLICANT IS REQUIRED TO COMPLY FULLY WITH THE PROVISIONS OF D.C. LAW 2-38, AS AMENDED, CODIFIED AS D.C. CODE, TITLE 1, CHAPTER 25 (1987), AND THIS ORDER IS CONDITIONED UPON FULL COMPLIANCE WITH THOSE PROVISIONS. THE FAILURE OR REFUSAL OF APPLICANT TO COMPLY WITH ANY PROVISIONS OF D.C. LAW 2-38, AS AMENDED, SHALL BE A PROPER BASIS FOR THE REVOCATION OF THIS ORDER.

UNDER 11 DCMR 3103.1, "NO DECISION OR ORDER OF THE BOARD SHALL TAKE EFFECT UNTIL TEN DAYS AFTER HAVING BECOME FINAL PURSUANT TO THE SUPPLEMENTAL RULES OF PRACTICE AND PROCEDURE BEFORE THE BOARD OF ZONING ADJUSTMENT."

THIS ORDER OF THE BOARD IS VALID FOR A PERIOD OF SIX MONTHS AFTER THE EFFECTIVE DATE OF THIS ORDER, UNLESS WITHIN SUCH PERIOD AN APPLICATION FOR A BUILDING PERMIT OR CERTIFICATE OF OCCUPANCY IS FILED WITH THE DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS.

15987Order/SS/bhs

D

ArupAcoustics

SOM

St. Albans School

Athletic Fields Seating Area Noise Survey

Report ref
AAc/130437-91/R01

Report

EXECUTIVE SUMMARY

For the St. Albans School Athletic Fields Renovation it is proposed that:

- Football field be relocated north of the baseball field
- Seating area be moved north of the football field, facing Garfield

resulting in an overall shift of the seating area 500 ft north and 60 ft east of the current seating.

Concern has been raised by residents on Garfield Street that this proposed configuration will cause the noise from the athletics crowd to be louder at their property, and therefore, be considered a disturbance.

In order to understand a "worst case scenario" for crowd noise, measurements taken in the current seating area during the homecoming football game were used as the noise source in the study. This included noise from the spectators in the seats, the band playing, the announcer calling the game, whistles from the referees, and other football game related noise.

Analysis was conducted using measured crowd noise levels from the recent homecoming game, and typical measured ambient levels along Garfield Street and 34th Street. Analysis has concluded that a key factor in the overall perceived ambient noise level at the residences is the ambient noise due to traffic.

The proposed seating location due to the Athletic Field Renovation is expected to result in a decreased game time noise level at the residences along Garfield Street. The houses along 34th Street will receive slightly louder game-noise levels, but the overall increase in the ambient level is not expected to be perceivable when compared to current game-time noise levels.

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INFORMATION

The current Multipurpose Athletic Fields at St. Albans School is located south and east of the campus, bounded by Garfield Street to the south and 34th Street to the east. The seating is located on the south side of the football field facing away from Garfield Street.

During the Athletic Fields Renovation, it is proposed that the football field be relocated north of the baseball field, and the seating area be moved to the north side of the football field. This would result in a shift of the seating area approximately 500 feet north, and 60 feet east of its current position. This proposed seating configuration will be enlarged in comparison to the current seating, and will face the residences on Garfield Street.

Concern has been raised by residents on Garfield Street that this proposed configuration will cause the noise from the athletics crowd to be louder at their property, and therefore, be considered a disturbance.

The need for a site noise survey was identified to:

- Quantify the prevailing noise environment around the site during game and non-game times.
- Advise St. Albans school of the potential level of disturbance to the neighboring residences on Garfield Street and 34th Street, and make any recommendations to the design team and St. Albans School that may reduce the projected future noise level if necessary.

The definitions of acoustic terminology used within this report are presented in Appendix A.

1. SURVEY

The Athletic Fields Seating Area Noise Survey was conducted on Monday, October 4th and Saturday, November 6th, 2004. Measurement locations are provided on a map in Appendix B.

Two football games were played on October 4th; the first was a Lower School game with approximately 35 people in the stands, and the second was a Junior Varsity game with approximately 50 people in attendance. According to St. Albans School, the homecoming game played on November 6th, allowed for noise measurements of a "worst case scenario". There are 3 games every 2 years which draw a very large crowd: twice for homecoming and once for a game against a rival school. During the homecoming game, St. Albans school estimates there were approximately 800 spectators in attendance.

1.1 Equipment

Measurements were made using one B&K 2260 sound level meter. Data was stored in the B&K 2260 analyzer, and simultaneously recorded on DAT (Digital Audio Tape) using a Sony PCM-M1. The sound level meter was calibrated before and after use, and no drift of calibration occurred.

1.2 Personnel

Alexis Kurtz of Arup Acoustics conducted the survey.

1.3 Time and Date of Survey

The St. Albans School Athletic Fields Seating Area Noise Survey was conducted from 11:00 am to 5:00 pm on Monday, October 4th, 2004, and from 2:00 pm to 6:00 pm on Saturday, November 6th, 2004.

1.4 Ambient Noise Measurement Procedure

All noise measurements were made directly using the sound level meters, and simultaneous recorded into the analyzer and onto tape to enable a more detailed analysis of the frequency spectrum and time variance in the laboratory.

For each measurement, the microphone was approximately 3 feet above local ground level. The measurement period was 10 minutes.

2. ANALYSIS

In order to understand a "worst case scenario" for crowd noise, measurements taken in the current seating area during the homecoming football game were used as the noise source in the study. This included noise from the spectators in the seats, the band playing, the announcer calling the game, whistles from the referees, and other football game related noise.

In order to verify the analysis method, predictions were made as to the noise received at the houses given the current seating configuration and location. These levels correlated with actual measurements taken at the houses during the homecoming game. Figure 1 in Appendix C shows this correlation. It should be noted that the ambient noise level at the houses from car traffic is the key factor in the overall measurement.

With the predicted noise levels calibrated against the measured levels, analysis was completed for the proposed new location of the seating. Initially, the measured crowd noise levels from within the stands at the homecoming game were used, followed by a study which utilized a "virtual" crowd, of 1,100 spectators. The crowd of 800 people measured during the homecoming game represents the expected peak attendance for most years, while the 1,100 person crowd represents the expected number of spectators during a homecoming game against Landon, a rival school, with a championship on the line. It is expected that a 1,100 person crowd would occur once every five years.

3. RESULTS

The detailed results of the survey are presented in graphical format in Appendix C.

3.1 Existing Conditions

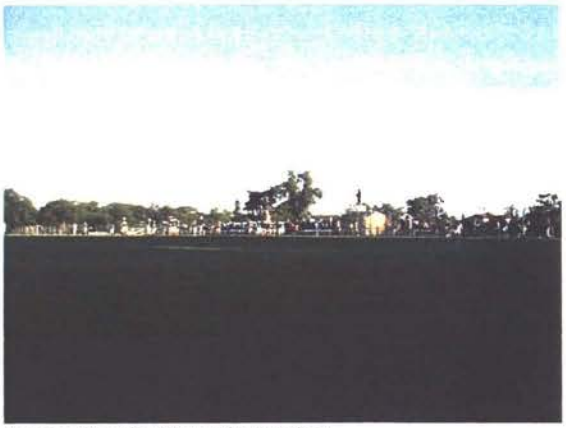
Garfield Street and 34th Street are both two lane, two-way roads, and are relatively busy for the suburban area they pass through. There was little change between "rush hour" and "non-rush hour" measured noise levels.

In a 5-minute period around 1:00 pm on Monday, 68 cars and 2 trucks passed through the intersection of Garfield and 34th. In front of 2923 34th Street at 1:30 pm on Monday, 41 cars and 3 trucks or busses passed within a 5 minute period, and 37 cars and 2 trucks or busses passed the measurements position at 3422 Garfield around 11:30 am on Monday.

The survey showed typical, non-game ambient noise levels between 64 and 68 dB(A) L_{eq} at the sidewalks in front of the houses along Garfield, and 67 to 69 dB(A) L_{eq} at the sidewalks in front of the houses along 34th Street.

Measurements of crowd noise in front of the houses were not able to be taken during the Lower School football game, as traffic noise was well above that of any crowd noise. During the Junior Varsity game, ambient noise levels at 35th Street and Garfield Street were measured at 64 dB(A) L_{eq} , a measurement dominated by the traffic noise. During the homecoming game, measurements at the houses on Garfield Street showed levels of 66 dB(A), while 68 dB(A) was measured on 34th Street.

It should be noted that ambient noise levels measured at the houses remain fairly constant regardless of whether or not a game is being played, implying that the ambient traffic noise is a primary component of the noise levels at the residences.



Junior Varsity Game Spectators



Homecoming Spectators

3.2 Proposed Seating Location Conditions

Initially, the proposed seating location conditions analysis was run using the current noise levels recorded in the seating area during the homecoming game. The crowd size and level was kept constant while the location of the seating changed. This allows a comparison of seating noise levels at the houses from both the current and proposed seating locations.

3.2.1 Garfield Street

The current ambient noise levels along Garfield Street (65 dB(A)) are slightly increased (66 dB(A)) during a football game. Given the proposed location for the new seating area, the levels *from the crowd alone* would decrease by more than 10 dB at the Garfield Residences (54 dB(A)). With a crowd of 1,100 spectators, the overall *crowd level* is expected to be 55 dB, below the current ambient, non-game noise levels.

When the predicted crowd noise and current non-game ambient noise are combined, ambient levels at the residences along Garfield are not expected to rise above the current non-game ambient levels.

The proposed seating location is expected to result in a decreased game-time noise level at the residences along Garfield when compared to the current, measured game-time noise level. *(See Figure 2).*

3.2.2 34th Street between Garfield and Cathedral

The current ambient noise levels along 34th Street, 68 dB(A), was measured to be at the same level with or without a game in play. Given the proposed location for the new seating area, the noise from the crowd alone is expected to be below current ambient levels, 63 dB(A). When the game and traffic noise are measured together at the residences, a game-time ambient level of 69 dB(A) is expected. This represents an increase of 1 dB over the current game-time level, which is less than the minimal perceptible level change for humans of 3 dB.

If the crowd were to increase to 1,100 people, their noise along with the ambient traffic noise in front of the residences in this area of 34th Street is expected to increase to 70 dB(A), again, a change over current game time ambient levels which is less than the minimal perceptible level change for humans. *(See Figure 3).*

3.2.3 34th Street North of Cathedral

North of Cathedral on 34th Street, the current ambient noise level, with or without a football game is (68 dB(A)). Ambient noise from the *football crowd alone* is expected to be 66 dB(A) due to the proposed seating area change. When combined with the typical ambient noise level for this street, the noise level at the houses is expected to be 70 dB(A), again, a change in level not typically perceivable by humans.

If the crowd size were to increase to 1,100 spectators, the level at the residences would increase slightly to 71 dB(A). *(See Figure 4).*

3.2.4 Maximum Levels due to the School Band Continuously Playing

A small, amplified band played at certain key moments throughout the game. Their noise levels are included in the overall spectator noise level used for this analysis. However, at the end of the game, the band turned their volume up and played as the spectators left. Using measured levels of this event, it is possible to predict the maximum crowd noise level heard at the houses in the field's current position, as well as in the proposed location. *(See Figures 5, 6, and 7).*

The current noise from the band is calculated to be 72 dB(A) along Garfield Street, and 69-70 dB along 34th Street. This in an increase of 1 -2 dB above typical ambient levels along 34th Street, and 6-7 dB above typical ambient noise levels along Garfield Street.

With the band moving to the proposed seating area, residences along Garfield Street are expected to received maximum game noise levels of 66 dB(A), slightly above current, non-game time ambient levels.

Along 34th Street, perceived ambient levels are expected to increase by less than 2 dB for the residences north of Cathedral, and are expected to decrease over current band noise levels by 1 dB. Neither one of these levels would be considered to be "perceptible" changes from the current configuration.

4. CONCLUSIONS

Analysis was conducted using measured crowd noise levels from the recent homecoming game, and typical measured ambient levels along Garfield Street and 34th Street. Analysis has concluded that a key factor in the overall perceived ambient noise level at the residences is the ambient noise due to traffic. Although audible, noise form the game currently is not significantly above the ambient levels at the houses along Garfield Street or 34th Street.

With the proposed Athletic Fields design shifting the seating area approximately 500 feet north and 60 feet east, the houses on Garfield Street will experience a decrease in the game-time ambient level when compared to current game-time ambient levels.

The houses along 34th Street will receive slightly louder game-noise levels than the residences along Garfield Street, but the overall increase in the ambient level is not expected to be perceivable when compared to current game-time noise levels.

Appendix A – Acoustic Terminology and Units

Ambient Noise

Ambient noise is a combination of all the noise sources measured at a site, usually composed of sounds from many sources near and far: e.g., traffic noise, mechanical equipment noise, people noise.

dB(A)

The unit generally used for the measurement of environmental, transpiration or industrial noise is the A-weighted sound pressure level in decibels, denoted dB(A). The A-weighting is based on the frequency response of human hearing (for a given sound pressure level, low frequency sounds do not seem as loud as mid or high frequency sounds) and has been found to correlate well with human subjective reaction to various sounds.

An A-weighting network is built into sound level measuring instrumentation such that sound levels can be read directly from the meter in dB(A). An increase or decrease in sound level of approximately 10 dB(A) corresponds to a subjective doubling or halving in loudness. A change in sound level of 2 to 3 dB(A) is subjectively barely noticeable.

Frequency

The rate of repetition of a sound wave measured in cycles per second (Hertz, Hz). Subjectively this can be equated to pitch. Human hearing ranges approximately from 20 Hz to 20,000 Hz.

L_{eq}

The L_{eq} denotes the equivalent continuous sound level. It is used in the assessment of noise levels, which vary with time (for example road traffic noise). The L_{eq} represents the notional steady level which would, over the relevant time period, deliver the same sound energy as the actual fluctuating sound level. Hence fluctuating sound levels can be described by a single value. A-weighted L_{eq} sound levels are denoted L_{Aeq}.

Noise Criteria (NC)

Although the specification of an A-weighted level is easy and convenient, it gives no indication of which frequency components may be the source of the non-compliance. It is sometimes more useful to make use of a weighting curve which defines a spectrum of ban levels in terms of a single number. Noise Criteria (NC) curves were originally developed in response to the need for specification of just acceptable air-conditioning noise. They are still sometimes used for that purpose, but their use has been extended to include general, continuous background noise.

To determine the NC rating of a noise, measured octave band sound pressure levels are plotted on the NC scale, and the rating is determined by the highest weighting curve, which just envelops the data.

Octave Band Center Frequency

An octave is a frequency internal between two sounds whose frequency ration is 2 (e.g. 707 Hz to 1414 Hz) and an octave band is the range of frequencies contained in an octave (all frequencies from 707 Hz to 1414 Hz). Octave bands are described by their center frequency (the 707 to 1414 Hz band is called 1000 Hz octave band).

Sound Pressure Level (SPL)

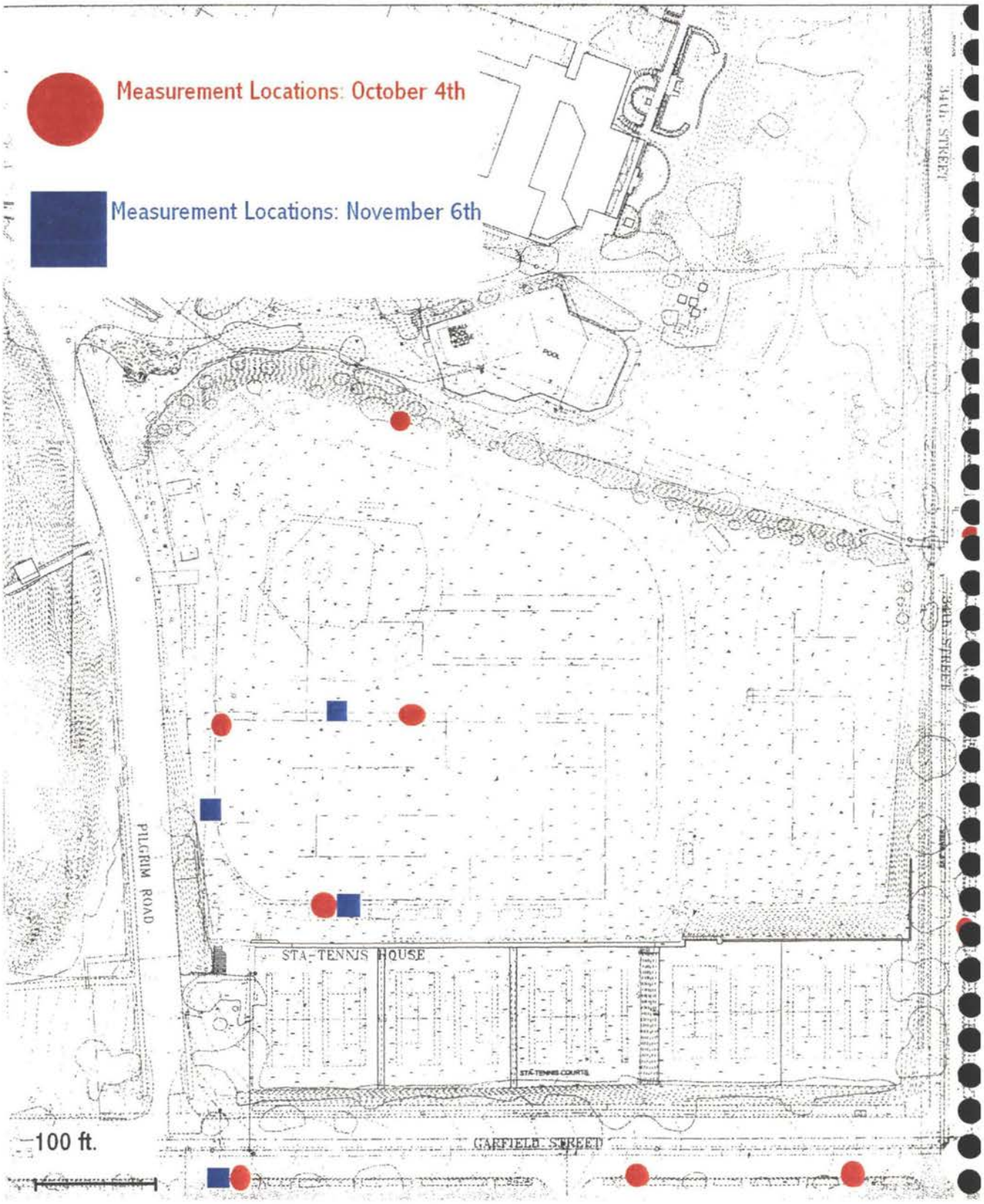
Sound pressure level is a logarithmic variation of the static pressure of air, which describes the physical intensity of sound. This is measured in dB.

A listing of typical noise sources and their corresponding sound pressure levels are provided in the chart below.

Source	Sound Pressure Level (dB)
Threshold of hearing	0
Rustling leaves	20
Quiet whisper (3 ft)*	30
Home	40
Quiet street	50
Normal Conversation	60
Inside a car	70
Loud singing	75
Automobile (30 ft)*	80
Motorcycle (30 ft)*	88
Food blender (3 ft)*	90
Subway (inside)	94
Diesel truck (30 ft)*	100
Lawn mower (3 ft)*	107
Pneumatic riveter (3 ft)*	115
Chainsaw (3 ft)*	117
Amplified Hard Rock (6 ft)*	120
Jet plane (100 ft)*	130
Threshold of Pain	140

**- denotes listener's distance from the noise source*

Appendix B – Map of Measurement Locations



Appendix C – Detailed Results of the Survey

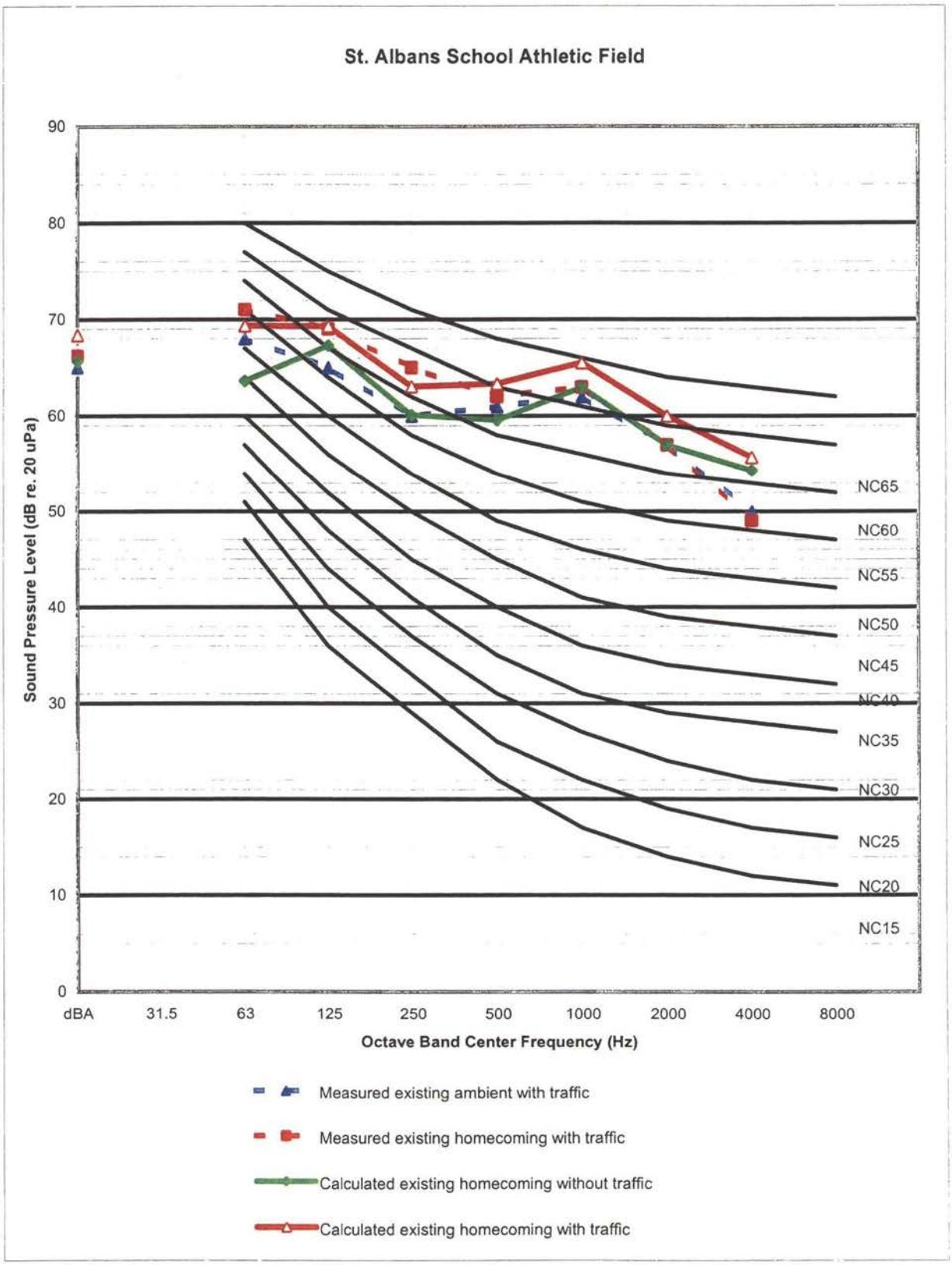


FIGURE 1: Comparison of data measured on Garfield St. with calculated values

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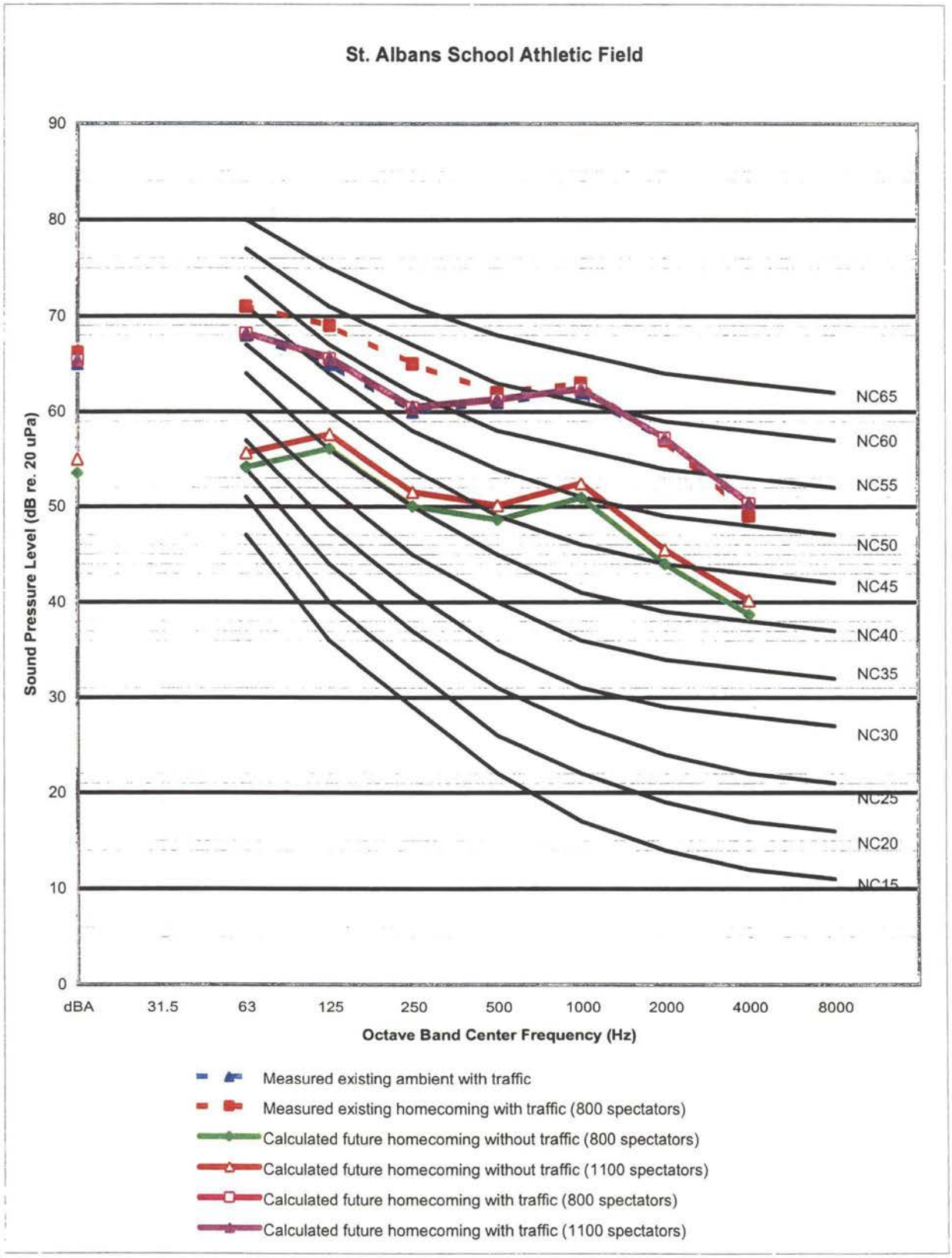


FIGURE 2: Garfield St. - current and proposed

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Fig 2.xls

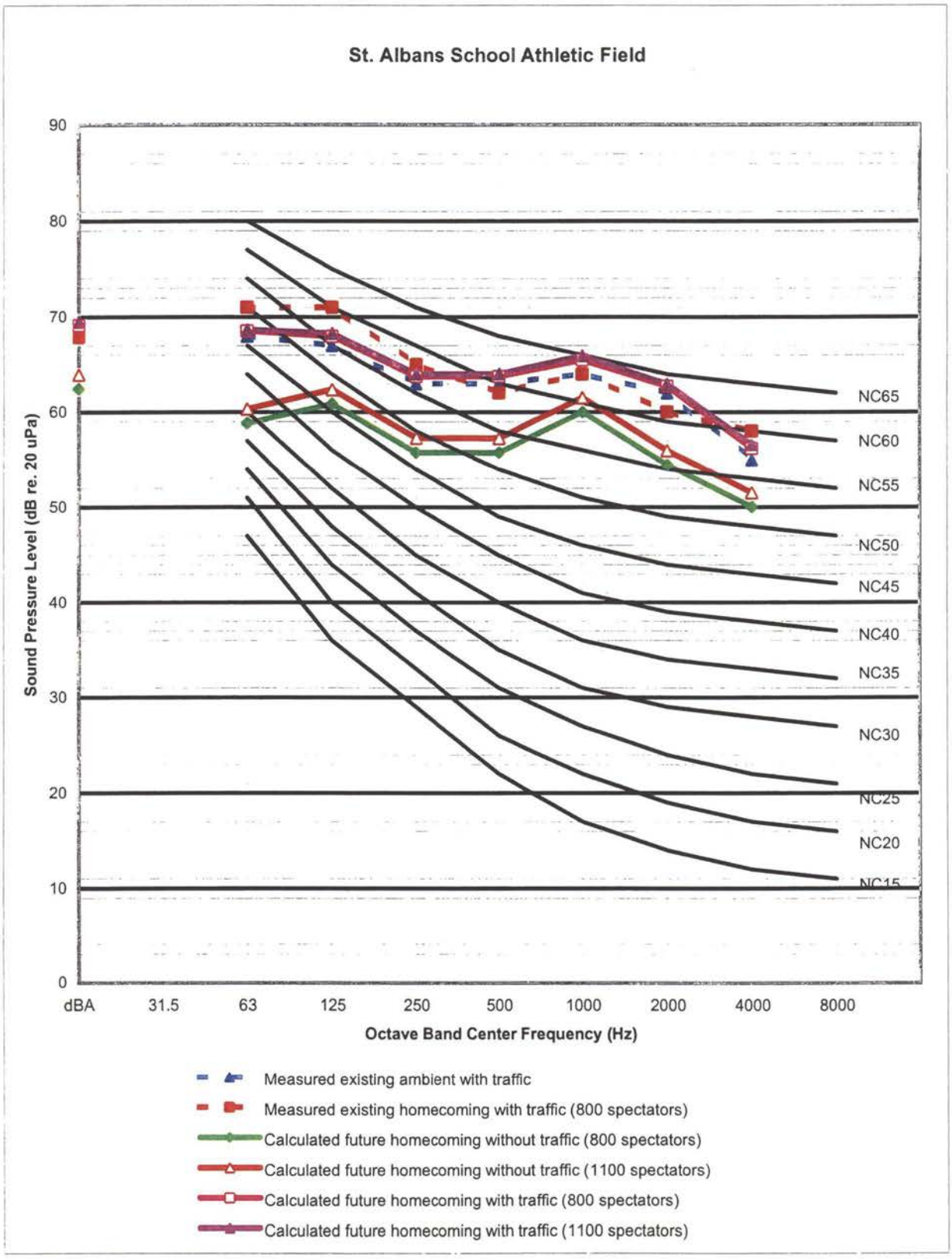


FIGURE 3: 34th St. between Garfield St. and Cathedral - current and proposed

ARUP

Fig 3.xls

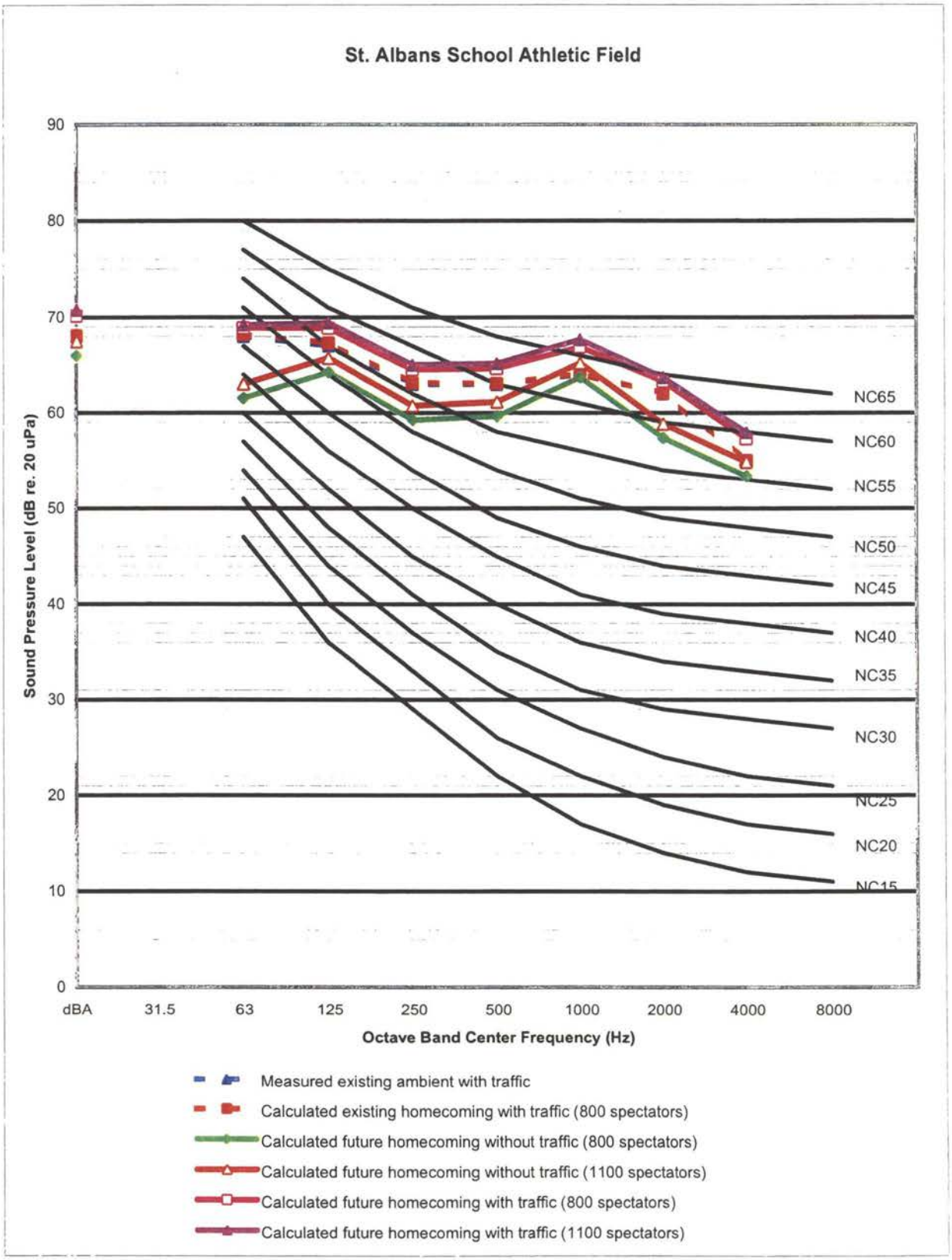


FIGURE 4: 34th St. north of Cathedral - current and proposed

ARUP

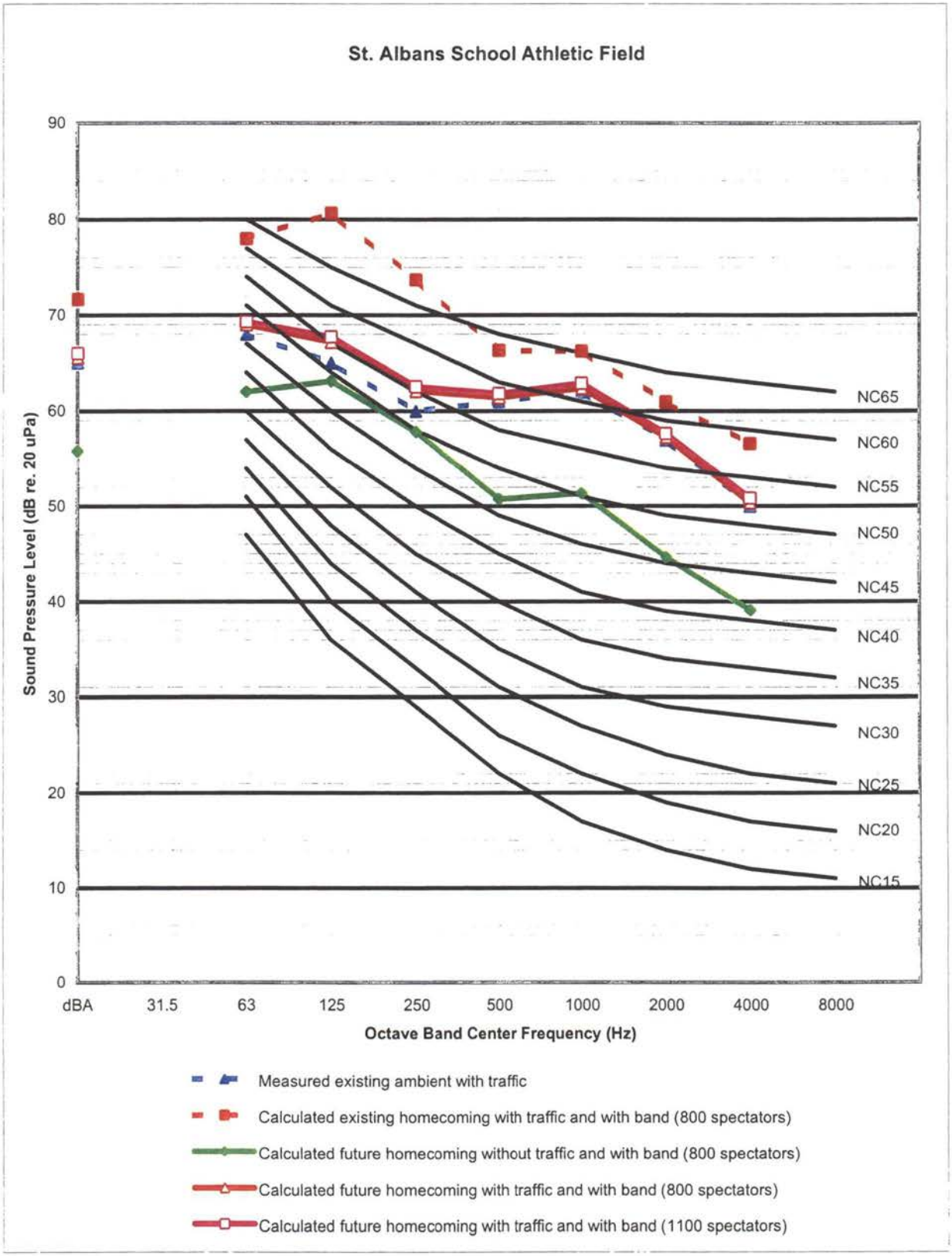


FIGURE 5: Garfield St. - current and proposed with the school band

ARUP

Fig 5.xls

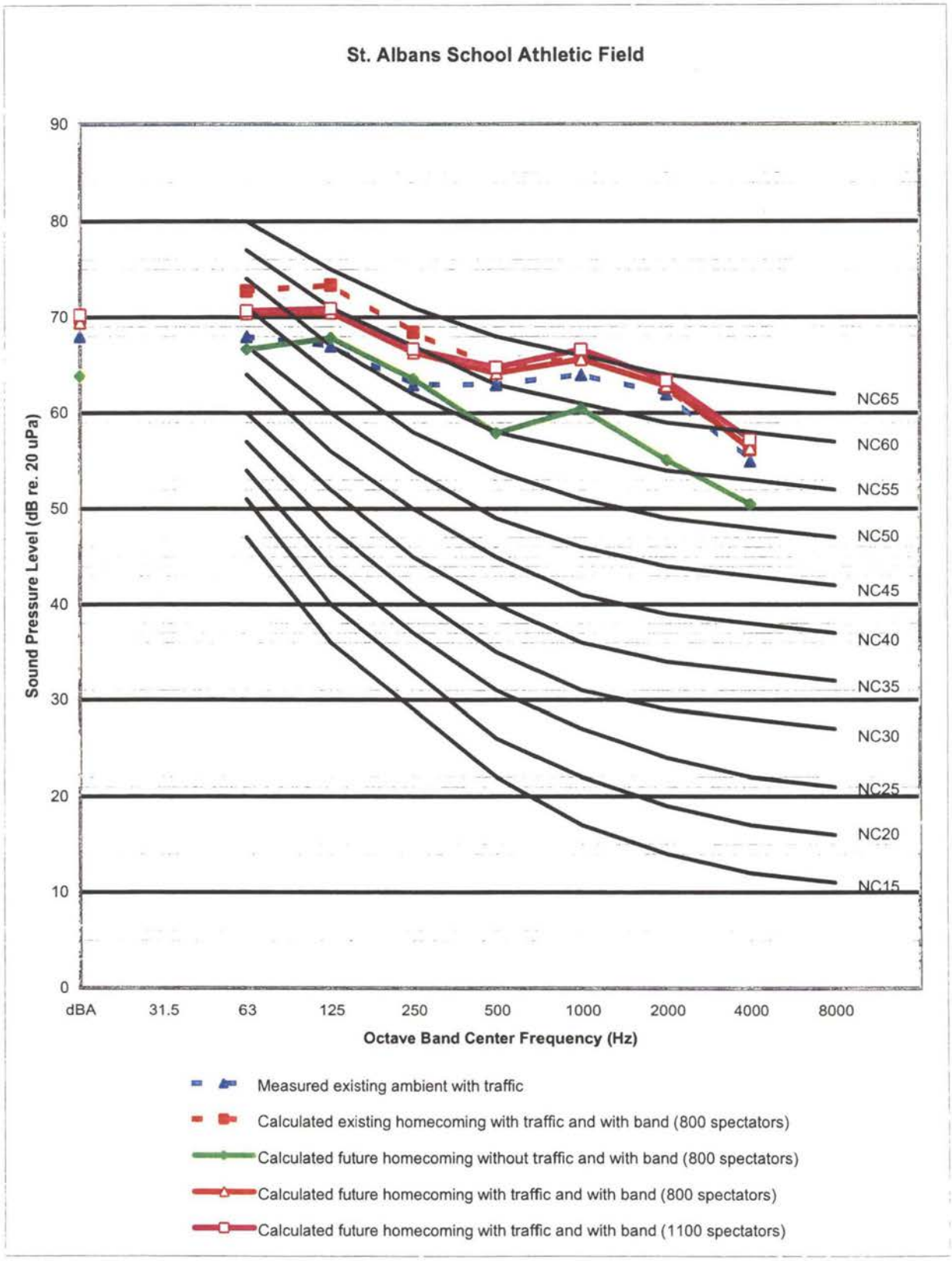


FIGURE 6: 34th St. between Garfield St. and Cathedral - current and proposed with school band

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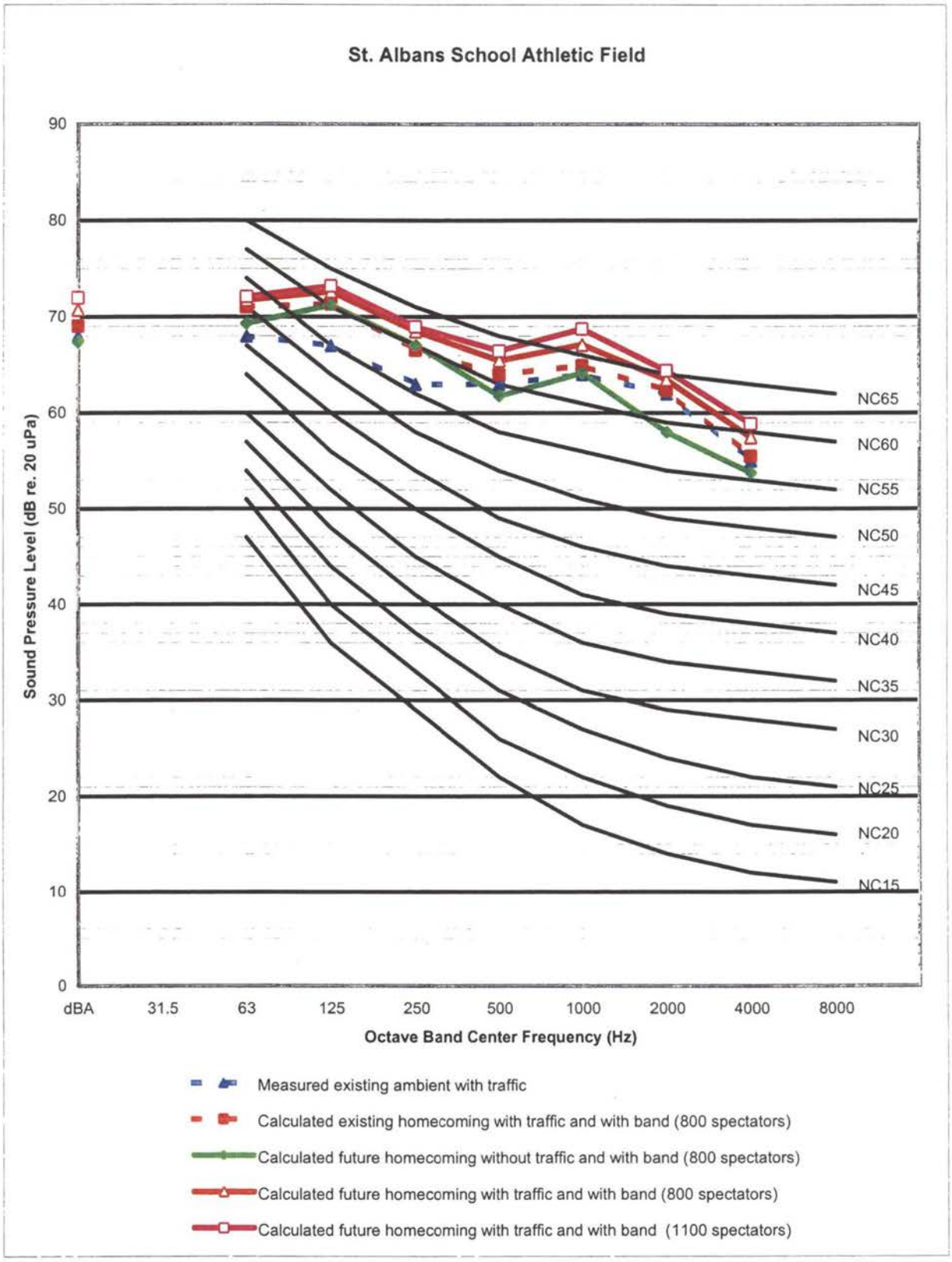


FIGURE 7: 34th St. north of Cathedral - current and proposed with school band

ARUP

E

Parking and Traffic Study

St. Albans School

Washington, D.C.

May 24, 2005

Prepared For:
St. Albans School
Mount Saint Alban
Washington, D.C. 20016
202.537.6435

Prepared By:
Gorove/Slade
Associates, Inc.



GOROVE/SLADE ASSOCIATES, INC.
Transportation, Traffic and Parking

PREPARED BY:

Gorove/Slade Associates, Inc.
1140 Connecticut Avenue
Suite 700
Washington, DC 20036

Tel: 202.296.8625
Fax: 202.785.1276

ADDITIONAL OFFICES:

3914 Centreville Road
Suite 330
Chantilly, VA 20151

Tel: 703.797.9595
Fax: 703.787.9905

www.goroveslade.com

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INTRODUCTION

This report presents a parking and traffic study for proposed modifications to the St. Albans School in Northwest Washington, D.C. St. Albans School (STA) is a college preparatory school for boys located on the Close of the Washington National Cathedral. A site location and campus map are shown in Figures 1 and 2, respectively.

BACKGROUND

New developments are in the planning and design phase for the Cathedral Foundation and these changes will improve traffic and parking conditions for St. Albans School. The Cathedral Foundation plans to construct an automobile and tour bus parking garage to be complete by the fall of 2006. The planned automobile garage will provide parking for the current "normal peak" demand for the Washington National Cathedral and will alleviate neighborhood congestion that currently occurs as motorists search for parking spaces on neighborhood streets. Since visitors to the Washington National Cathedral will be able to park in the garage, STA faculty, staff, and students will be able to utilize designated surface parking on the Close. The STA Parking Plan is shown in Figure 3.

St. Albans School has applied for approval to construct academic facilities, modify their athletic fields, and build a performing arts facility. St. Albans School has developed its programs and plans for these facilities such that it has a clear expectation of how traffic and parking will be impacted. This is summarized as follows:

- The construction of the academic facilities will not increase the number of students, but may include a nine-person increase in faculty and staff. The increase in faculty/staff will be accommodated with an addition of six parking places on the Close.

- The changes to the athletic fields will not result in an increase in the number of games per season for all sports except Track and Field. STA Track and Field may be required to host the IAC League meet once every six years and one to two dual meets annually.

- The performing arts facility will be utilized for performances on evenings and weekends when there will be abundant parking available on the existing surface parking lots on the Close and in the new parking garage.

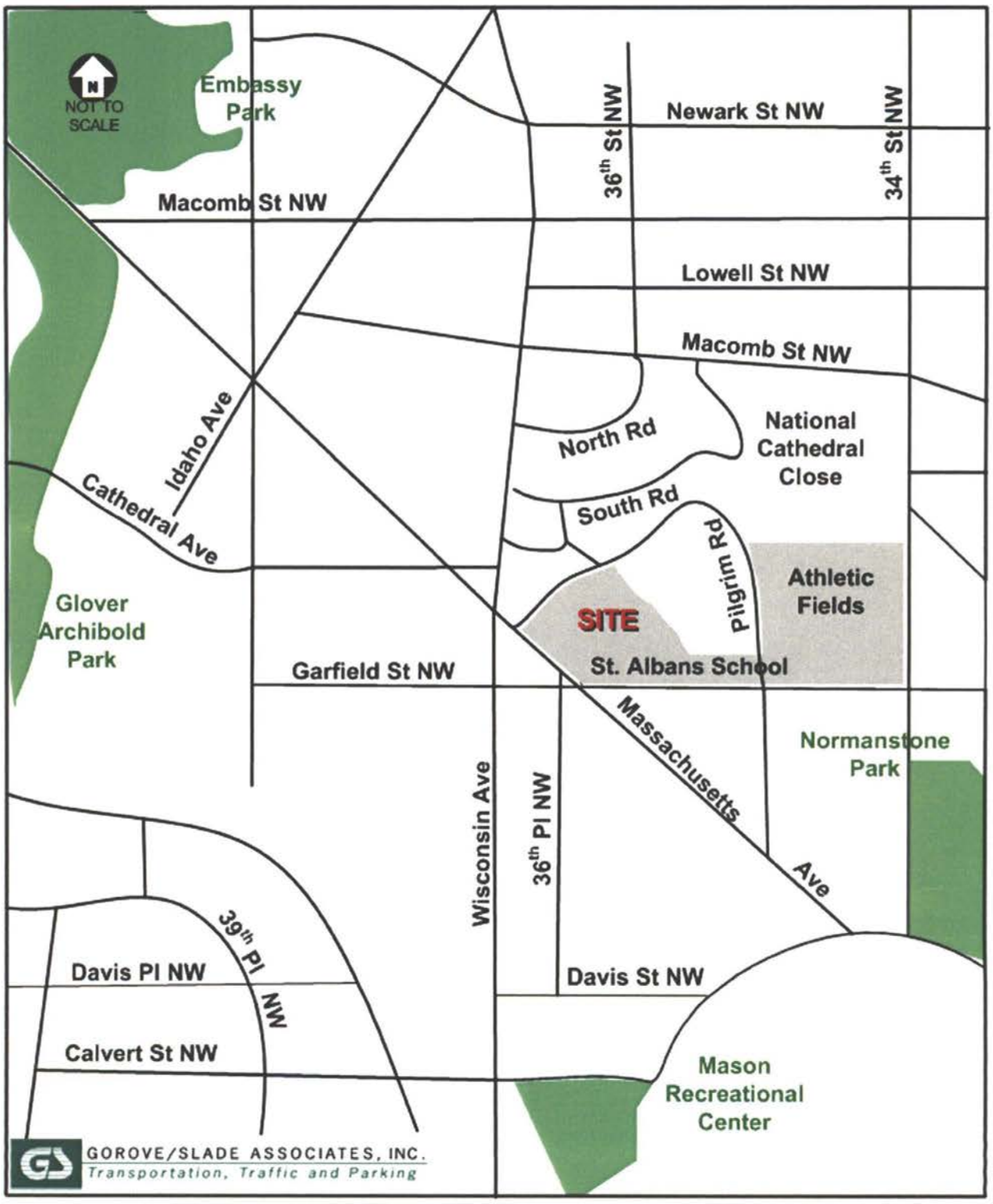


Figure 1 – Site Location Map

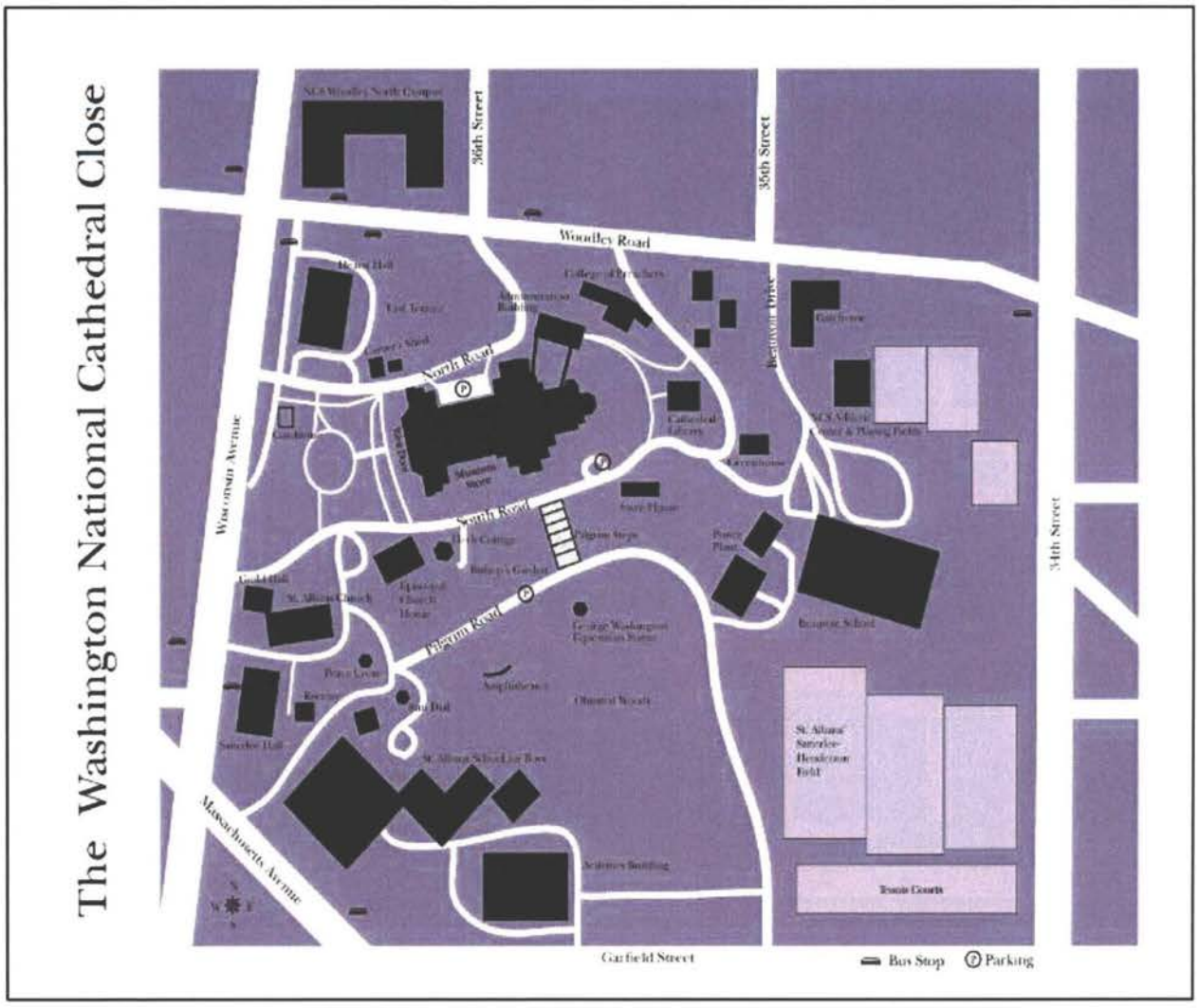


Figure 2 – STA Campus Map

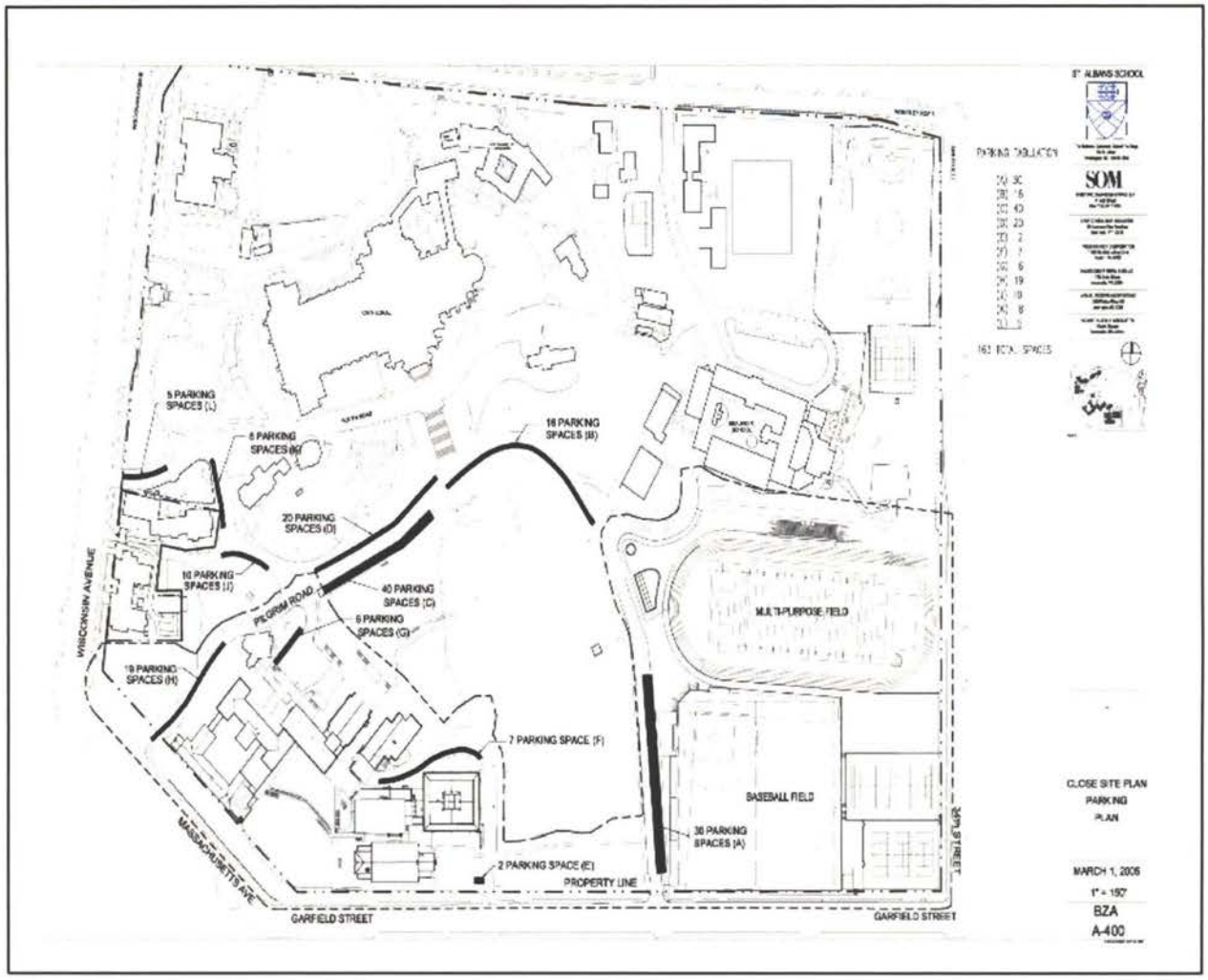


Figure 3 – STA Designated Parking Plan

PARKING SUPPLY AND DEMAND

At present, St. Albans School provides 154 off-street parking spaces to accommodate the current size of the school and their population of faculty, staff, and students. This calculation is a requirement of zoning and is based on two parking spaces for every three faculty and staff members (133 x 2/3 = 89), plus one parking space for every 10 seats in the largest assembly space (650 seats x 1/10 = 65). The proposed modifications to the school may increase the cap of faculty and staff employment by 9 persons which would require six additional parking spaces, bringing the new total to 160 parking spaces. The STA Parking Plan shows that 163 parking spaces will be available (see Figure 3).

GENERAL IMPACTS

Analysis of potential traffic impacts of the proposed modifications to St. Albans School were made in the context of traffic changes that will result from the construction of the Cathedral Foundation parking garage. In April 2004, Gorove/Slade Associates (G/SA) completed a study of the traffic impact of the garage that was based on existing and forecast parking conditions on the Cathedral Close. This overview study included all the schools on the Close and is attached as Appendix A to this report.

The Cathedral Foundation study shows that under current conditions, parking demand on a typical peak day at the Cathedral is approximately 826 vehicles. The existing parking supply on the Cathedral Close accommodates 532 vehicles; therefore, there is a current parking supply shortfall of 294 parking spaces. This means that at the present time, approximately 294 motorists are parking on the neighborhood streets adjacent to the Washington National Cathedral. The excess parking demand that cannot be accommodated on the Close today is spread out in the residential neighborhoods to the south, west, and north of the Close. Thus, even though 154 parking places are presently designated on the Close for STA students, faculty, staff, and visitors, many STA parkers arrive in the morning to find that all of the STA designated parking places on the Close are occupied. Therefore, STA parkers then must seek a parking place in the nearby residential neighborhood. In addition to the parking shortfall, some STA parkers may choose to park in the neighborhood because it is more convenient.

With the development of the automobile parking garage on the Close by the Cathedral Foundation, two sets of parking policies will be implemented that will ensure that the need and the choice for STA parkers to park in the neighborhood will be reduced to a minimum. The net number of new spaces on the Close resulting from the construction of the Cathedral Foundation garage will increase by more than 300 spaces. This will ensure that at current demand levels, all of the parking demand generated on the Close, including STA parkers, will be accommodated on the Close.

ST. ALBANS SCHOOL PARKING POLICY

St. Albans School, in cooperation with the surrounding community, plans to develop a new parking policy that will help alleviate parking on neighborhood streets. With this policy, STA plans to outline

parking regulations for STA students, faculty, and staff, as well as provide parking information for visitors and parents.

The first goal of the new parking policy would involve the designation of specific parking locations for St. Albans School on the Close. Thus, STA parkers would find STA designated parking spaces free and available at all times. The STA parking spaces would be on the surface streets of the Close and convenient for STA parkers to walk to the school buildings and athletic fields.

The second goal of the policy would be to provide parking requirements that would make parking on the Close a more attractive alternative to parking on neighborhood streets. The St. Albans School Parking Policy would be coupled with improvements on the Close that would provide clear direction and pedestrian walkway enhancements that would make parking on the Close an easier and more attractive option. As a good neighbor policy, the St. Albans School Parking Policy and these pedestrian enhancements would help develop a culture at the school that discourages parking in the neighborhood.

TRAFFIC ANALYSIS

As noted above, a traffic analysis of the changes in patterns of the Cathedral Close traffic that will result from the development of the Cathedral Foundation Parking Garage was addressed in detail in a study completed in 2002. That study showed that traffic on the streets adjacent to the Cathedral including local streets in the neighborhoods would be relieved of approximately 294 vehicle trips each day that arrive into the neighborhoods and circulate on neighborhood streets to seek parking, and then depart at the end of the day. Thus, without the three new modifications that are proposed by St. Albans School, there will be a significant reduction in traffic in the south, west, and north residential blocks near the Close.

The following sections review the traffic implications of the three St. Albans School proposals:

ACADEMIC FACILITY CONSTRUCTION

St. Albans School is not requesting an increase in the size of the student body. The proposed academic facility modifications will provide the opportunity to increase faculty and staff employment by nine persons. As noted above, parking for these nine individuals will be provided with six additional parking spaces which is proportionate to the likely increase in parking demand. The addition of these six vehicle trips to and from the school each day will have an insignificant impact on traffic conditions in the area and will be more than offset by the reduction in existing traffic impacts by the development of the Cathedral Foundation garage.

ATHLETIC FIELD CHANGES

The reconfigured athletic fields will provide fields that meet league standard dimensions and will reduce the overlapping of activities which results in extreme wear and tear on the fields. The athletic

field changes will not result in any alteration of the current athletic programs at St. Albans School. Thus, the athletic field proposal will have no impact on day-to-day traffic conditions.

Since St. Albans School's new athletic facilities will meet league standards, they will be able to host occasional track and field events which the school is not eligible to host at this time. This would result in one track and field league meet once every six years and up to two dual track and field meets each year. These track and field meets do not generate significant spectator traffic, but will generate additional buses. The increase in buses will have negligible traffic impacts but will require parking for the duration of the meets. The plan for the athletic fields includes additional bus parking on Pilgrim Road.

PERFORMING ARTS FACILITY

The new performing arts facility will have a 650 seat capacity and will replace the current Trapier Theatre 325 seat facility providing significantly more capacity for audiences. St. Albans School will share the use of the new facility with the National Cathedral School for Girls. Both the St. Albans School for Boys and the National Cathedral School for Girls do not intend to modify their current programs of theater, music, and other performing arts activities.

The current 2004-2005 Trapier Theatre schedule of events was analyzed to determine the frequency of performances. A copy of the Trapier Theatre schedule is attached to this report as Appendix B. During the season, there were a total of ten events of which all but two were near capacity. The largest event involved 90 cast members and crew with approximately 300 audience members in attendance. A "maximum impact scenario" of 100 cast members and crew and 650 audience members was assumed for the traffic impact analysis; this is representative of future capacity conditions for the new performing arts facility. It was also assumed that 100% of the cast members, crew, and audience would arrive by automobile.

The school provided additional information that enabled us to project traffic patterns for the performing arts facility and a copy of this information can be found in Appendix C. A synopsis of the information is as follows:

- The cast members and crew arrive during a 45 minute time period starting approximately two hours prior to the beginning of a show.

- The audience begins to arrive approximately one hour before a show and continues to arrive up to and slightly after the beginning of the show.

Based on observations, the average number of individuals (cast members, crew, and audience) average three people per automobile. Thus, the largest event this season at Trapier Theatre with 90 cast members and crew would generate approximately 30 automobiles while the 300 audience members

would generate 100 automobiles. Comparing our "maximum impact scenario" to the largest event this season, we have an incremental increase of 10 cast members and crew and three automobiles, and 350 audience members with 116 automobiles.

Based on the analysis of the 2004-2005 schedule, the impact of most events occur outside of the commuter peak periods so they would be easily accommodated by the roadway network. The worst exception is the Lower School Spring Musical which starts at 6:00 p.m. on a Friday; this event occurs during a peak commuter travel time. Thus, the assumption for the "maximum impact scenario" would be approximately 116 additional automobiles arriving at the Close in the hour between 5:00 p.m. and 6:00 p.m. on a Friday evening. In order to ensure that we addressed the absolute maximum impact situation, we further assumed that today, approximately 34 audience members automobiles park on neighborhood streets but in the future they would choose to park on the Close because it is more convenient. This may be an over-estimate of current parking in the neighborhood, but for the "maximum impact scenario" a high conservative number was chosen. Thus, our "maximum impact scenario" examines the impact of 150 additional vehicles arriving on the Close between 5:00 p.m. and 6:00 p.m. on a Friday evening.

Figure 4 shows the estimated existing and future traffic at North Road and Wisconsin Avenue for the 5:00 p.m. to 6:00 p.m. commuter peak period on a Friday. This is the absolute "maximum impact scenario" when a 6:00 p.m. start time of a performance at the new facility would generate 150 additional vehicles entering and 10% (or 15 vehicles) exiting the garage via North Road. This forecast also assumes a one percent per year growth in through traffic along Wisconsin Avenue.

We performed intersection capacity analysis computations, which provide estimates of intersection delay and queuing and an indication of the level of congestion at an intersection. These calculations also provide the standard traffic engineering scoring of the quality of service in terms of average delay on a grading index from a level of service (LOS) A through F. The results of the analysis show that the future signalized intersection of North Road and Wisconsin Avenue will operate during the "maximum impact scenario" at a level of service B during a typical Friday evening 5:00 to 6:00 p.m. peak hour. This is considered to be in the desirable range in urban areas and indicates that delays will average less than 40 seconds for all vehicles using this intersection.

A direct comparison between existing conditions at this intersection and future conditions is not possible because the intersection is not currently signalized. Because it is not signalized, traffic on Wisconsin Avenue traveling north and south is not delayed at this intersection. Delays for motorists turning left from southbound Wisconsin Avenue into North Road are delayed significantly because vehicles must wait for gaps in opposing traffic. This creates an undesirable safety condition today that will be eliminated with the installation of the traffic signal.

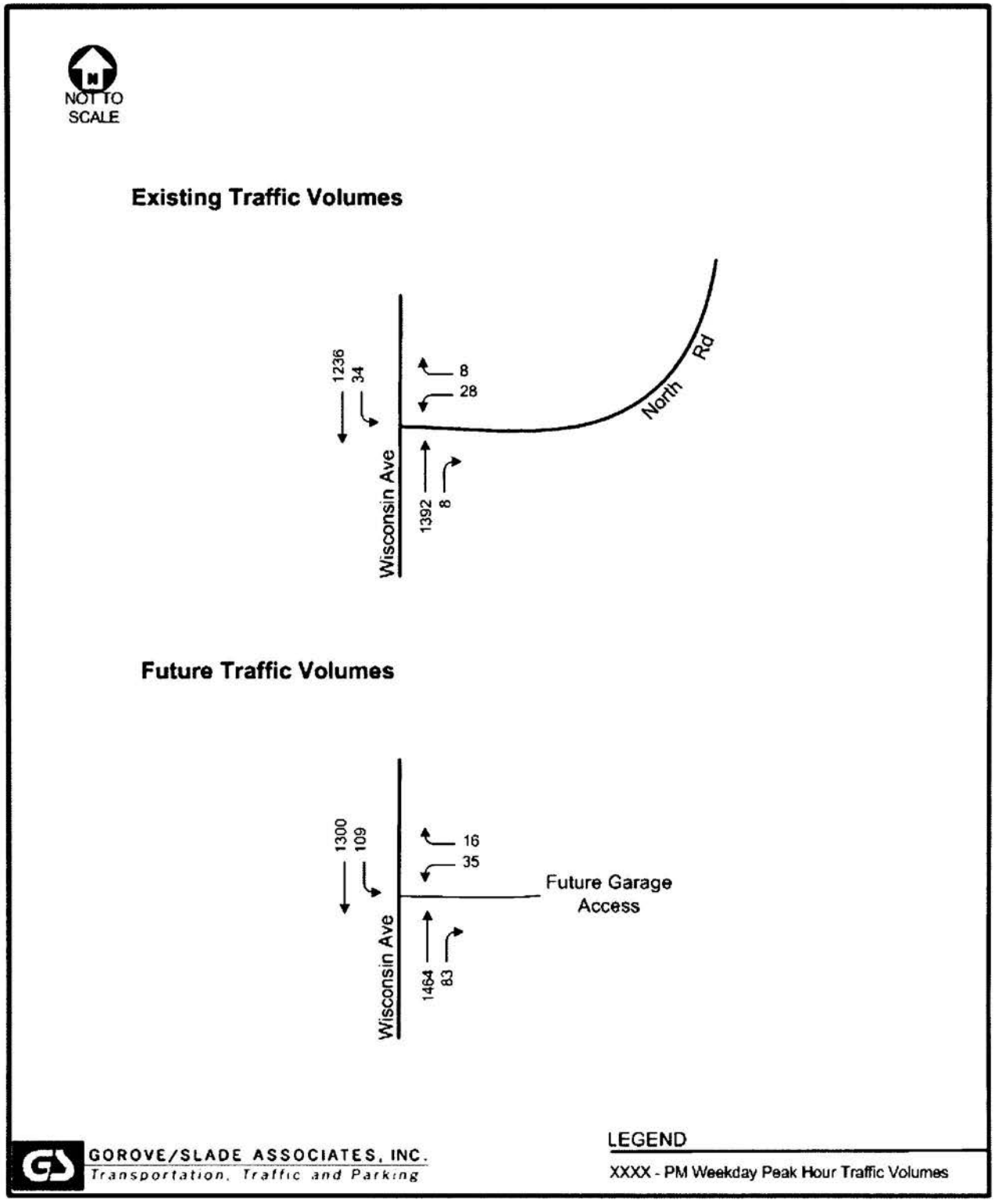


Figure 4 – Existing and Future Traffic Volumes

CONCLUSION

The analyses summarized in this report result in the following conclusions:

- The proposed modifications to the St. Albans School will not have significant impacts on existing parking and traffic conditions on the public streets adjacent to the Cathedral Close and in the nearby neighborhoods.

- The development of the Cathedral Foundation garage will ensure that all STA faculty, staff, students, and visitors will be accommodated on the Close in designated parking spaces. There will be adequate parking capacity on the Close to ensure that these designated spaces are always available for STA parkers.

- St. Albans School Parking Policy and improvements for pedestrians on the Close will provide a situation that makes it more attractive for STA parkers to use designated parking spaces and less attractive for them to park on neighborhood streets.

- The modifications to the academic building on the Close and the associated increase in faculty and staff employment will have no impact on neighborhood parking because additional parking will be provided on the Close. Also, the small number of additional staff will have an insignificant impact on neighborhood traffic conditions.

- Modifications to the athletic facilities will not change the athletic programs except for the hosting of one or two dual track and field meets each year and one league meet every six years. These track and field meets will have an insignificant impact on traffic conditions. Visiting team buses will be required to park on the Close in new parking spaces provided as part of the athletic field modifications.

- The increase in the capacity of the performing arts facility will generate significant additional traffic coming to the Close. The maximum impact of this will occur only a few times per year on Friday evenings when up to 150 additional vehicle trips will arrive at the Close during the hour prior to a performance. These vehicles will utilize the North Road entrance of the parking garage, which will be a signalized intersection at Wisconsin Avenue. Traffic operations at that signalized intersection will be in the desirable range (according to standards set by the traffic engineering profession and the District DOT). The traffic signal will also alleviate existing safety hazards at this intersection for vehicles which have to currently turn without the protection of a traffic signal.

- The traffic signal to be located at the intersection of North Road and Wisconsin Avenue has been designed and the design has been approved by District DOT. That signal will be integrated with the signal system along Wisconsin Avenue, which means that the signals are coordinated

by a master computer. The synchronized traffic signals ensure minimum delay and interruption for the major southbound and northbound through traffic movements particularly during the AM and PM peak commuter periods.