310.26 A LIST OF BIBLIOGRAPHIC AND OTHER SOURCES USED TO PREPARE THE APPLICATION; INDICATE WHERE THE REFERENCE MATERIAL IS ARCHIVED.

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_____. "Robert O. Scholz, Architect-Builder in Area 50 Years," June 8, 1978.

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POWELL, GOLDSTEIN, FRAZER & MURPHY
ATTORNEYS AT LAW

Sixteenth Floor
191 Peachtree Street, N.E.
Atlanta, Georgia 30303
404 572-6600
Facsimile 404 572-6999

PLEASE RESPOND: Washington Address

Sixth Floor
1001 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
202 347-0066
Facsimile 202 624-7222

February 16, 1996

VIA FEDERAL EXPRESS

Eric M. Rome, Esq.
Eisen & Rome, P.C.
One Thomas Circle, N.W.
Suite 350
Washington, DC 20005

Re: Alban Towers - 70% Agreement

Dear Eric:

Enclosed please find the 70% Agreement and the cover letter to the Rental Accommodations and Conversion Division ("RACD") that I circulated several weeks ago. After the tenants or their attorneys-in-fact have executed the agreement, please sign the cover letter as tenants' counsel and submit the package to the RACD.

Please call me at (202) 624-7388 with any questions you may have.

Best regards.

Very truly yours,

Robin

Robin Heimann-McGhee

POWELL, GOLDSTEIN, FRAZER & MURPHY

Enclosures

cc: Wendy L. Fields, Esq. (w/ enclosures)
Ronald S. Gart, Esq. (w/ enclosures)

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09/02/98 WED 08:02 FAX 1 301 948 7642

PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
311	2	Vacant	Vacant	$1569.23		$3400		
312	3	Vacant	Vacant	1226.50		$4400		
313	3	Vacant	Vacant	$2143.84		$4400		
314	1	Vacant	Vacant	$ 893.94		$2450		
315	1	Vacant	Vacant	$1001.75		$2450		
315-D	1	Vacant	Vacant	$1001.75		$2450		
316	1	11-30-05	$257.40	$ 413.92		$2450		
317	1	Vacant	Vacant	$1118.70		$2450		
318	1	Vacant	Vacant	$ 571.55		$2450		
318-D	1	Vacant	Vacant	$ 610.20		$2450		
319	2	Vacant	Vacant	$1879.42		$3400		
320-B	1	Vacant	Vacant	$ 316.96		$2450		

* Column F represents the rent increase in the event the maximum rent is charged. The actual rent charged, and therefore the actual rent increase, may be lower than the figure shown in this column.

** Column G shows the new maximum rent that may be charged; the actual rent charged may be lower.

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
321	3	11-30-05	$306.15	$1779.75		$4400		
322	1	Vacant	Vacant	$1001.75		$2450		
323	2	Vacant	Vacant	$1560.08		$3400		
324	1	Vacant	Vacant	$1118.70		$2450		
325	1	Vacant	Vacant	$ 928.52		$2450		
326	1	Vacant	Vacant	$ 900.05		$2450		
327	1	Vacant	Vacant	$1118.70		$2450		
328	1	Vacant	Vacant	$1118.70		$2450		
329	3	Vacant	Vacant	$2143.84		$4400		
330	2	Vacant	Vacant	$1569.23		$3400		
330-G	1	Vacant	Vacant	$1001.75		$2450		
331	2	Vacant	Vacant	$1181.75		$3400		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
332	2	Vacant	Vacant	$1569.23		$3400		
333	2	Vacant	Vacant	$1182.77		$3400		
334	1	Vacant	Vacant	$1182.77		$2450		
335	3	Vacant	Vacant	$1617.03		$4400		
336	3	Vacant	Vacant	$1916.03		$4400		
401	3	Vacant	Vacant	$2564.87		$4400		
401-A	1	Vacant	Vacant	$ 464.77		$2450		
402	1	Vacant	Vacant	$1118.70		$2450		
403	2	Vacant	Vacant	$1569.23		$3400		
404	2	2-29-96	$934.00	$ 978.35		$3400		
405	1	Vacant	Vacant	$ 635.63		$2450		
405-A	1	Vacant	Vacant	$ 610.20		$2450		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
405-C	1	Vacant	Vacant	$1001.75		$2450		
406	2	Vacant	Vacant	$1182.77		$3400		
407	2	Vacant	Vacant	$1879.42		$3400		
408	1	Vacant	Vacant	$1118.70		$2450		
409	1	Vacant	Vacant	$ 444.43		$2450		
410	2	Vacant	Vacant	$ 863.52		$3400		
411	2	Vacant	Vacant	$1569.23		$3400		
412	3	Vacant	Vacant	$2143.84		$4400		
413	2	Vacant	Vacant	$1569.23		$3400		
414	1	Vacant	Vacant	$ 880.01		$2450		
414-A	1	Vacant	Vacant	$ 635.63		$2450		
415	1	Vacant	Vacant	$ 893.94		$2450		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
415-D	1	Vacant	Vacant	$1001.75		$2450		
416	1	Vacant	Vacant	$ 647.36		$2450		
417	1	Vacant	Vacant	$ 587.83		$2450		
418	1	Vacant	Vacant	$ 786.14		$2450		
418-D	1	Vacant	Vacant	$ 610.20		$2450		
419	2	Vacant	Vacant	$1879.42		$3400		
420	1	Vacant	Vacant	$1118.70		$2450		
421	3	Vacant	Vacant	$2143.84		$4400		
422	1	Vacant	Vacant	$ 654.55		$2450		
423	2	Vacant	Vacant	$1558.04		$3400		
424	1	Vacant	Vacant	$1118.70		$2450		
425	1	Vacant	Vacant	$1118.70		$2450		

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February 16, 1996

VIA HAND DELIVERY

District of Columbia Department
of Consumer and Regulatory Affairs
Housing and Environmental Regulation Administration
Rental Accommodations and Conversion Division
614 H Street, N.W.
4th Floor
Washington, D.C. 20001

Re: 3700 Massachusetts, N.W., Washington, DC

Dear Ladies and Gentlemen:

Eisen & Rome, P.C., represents the Mt. St. Alto Tenants Association of Alban Towers, Inc., the tenants (the "Tenants") of the above-referenced property (the "Property"). The Tenants and the owner of the Property, Alban Towers, L.L.C. (the "Owner"), have reached certain agreements with regard to renovations to the Property and the rents to be charged at the Property. In connection therewith, the Tenants hereby submit this 70% Voluntary Agreement (the "Agreement"), and request that the Rental Accommodations and Conversion Division ("RACD") approve the same.

The Tenants deem it to be in their best interest to execute this Agreement, as is evidenced by their submission of the document to the RACD and the fact that the Agreement has been executed by one hundred percent (100%) of the Tenants, far in excess of the minimum requirement of seventy percent (70%).

The agreements between the Tenants and the Owner contemplate, among other things, that the Owner will undertake the demolition and reconstruction of the interior of the Property. It is contemplated that the Property will be totally renovated and that the renovations will include (but not be limited to) the following: renovations necessary to bring the Property into compliance with current health and safety codes, the installation of new appliances, carpeting and heating, air conditioning, mechanical and electrical systems, the relocation of demising walls, and the removal of asbestos and lead paint. The Tenants will receive a substantial benefit and other consideration as a result of the improvements to be made to the Property.

February 16, 1996
Page 2

In connection with the submission of the enclosed Agreement, the Owner has agreed that it will not apply for rent ceiling increases based on the aforesaid improvements that it will be making to the Property.

Should you have any questions on the enclosed, please do not hesitate to call Eric Rome, Esq. of Eisen & Rome, P.C., counsel to the Tenants, at (202) 659-2822.

EISEN & ROME, P.C.

By: _____
Eric Rome, Partner

READ AND CONSENTED TO:

ALBAN TOWERS, L.L.C.

By: Powell, Goldstein, Frazer & Murphy,
Agent for Alban Towers, L.L.C.

By: _____
Ronald S. Gart, Partner

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OF THE
DISTRICT OF COLUMBIA

RA 10(Rev.6/85) DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS
HOUSING AND ENVIRONMENTAL REGULATION ADMINISTRATION
RENTAL ACCOMMODATIONS AND CONVERSION DIVISION
614 H Street, N.W. 4th Floor, Washington, D.C. 20001
(202)727-7315

70% VOLUNTARY AGREEMENT

THIS PETITION IS FILED PURSUANT TO
Section 215, D.C. Act 6-10

PRINT OR TYPE ONLY

FOR OFFICIAL USE ONLY

Case VA# _____ Ward 3

Date Filed _____

Walk-in [] Mail [] Registered []

Contact Representative _____

Approval Chief _____

This 70% Voluntary Agreement must be completed and filed according to the provisions of Section 4213 of the Regulations (attached) for the Rental Housing Emergency Act of 1985, (D.C. Act 6-10).

Section I

1. Address of Property 3700 Massachusetts Ave., N.W. Washington, DC Zip Code 20016

   If the housing accommodations are part of a complex, supply complex name.

   Alban Towers No. of Units _____

2. Date property was registered with the D.C. Rental Accommodations and Conversion Division as required by the Rental Housing Emergency Act of 1985. Date: December 1, 1995

3. Registration Number LR 9301 A

ASSISTANCE IN COMPLETING THIS FORM IS AVAILABLE AT THE RENTAL ACCOMMODATIONS AND CONVERSION DIVISION

4. Owner's Name Alban Towers, L.L.C. Phone (703) 528-3537

5. Address 1525 Wilson Boulevard, Suite 575 Zip Code 22209
Arlington, Virginia

6. Name of representative authorized to receive papers and notices from the Rental Accommodations and Conversion Division on behalf of the owner:

Name Anthony H. Harrigan, III Phone (703) 528-3537

7. Address c/o IBG Partners, L.L.C. 1525 Wilson Blvd., Ste. 575 Zip Code 22209
Arlington, VA

8. Type of Property:
( ) Single Family Home
( ) Two Unit Building
(X) Multi-Unit Building
( ) Complex With Two or More Buildings

9. Describe non-residential income producing space, if any.

Section II

For Services, Facilities, and/or Repairs for which changes are proposed, briefly describe in the space below all changes which will be made pursuant to this Voluntary Agreement.

The Mt. St. Alto Tenants Association of Alban Towers and its members who are all of the tenants residing in the Property (collectively, the "Tenants") have agreed to execute and deliver this 70% Agreement in consideration of receiving (i) $225,000 in cash paid to the tenant association for the benefit of the Tenants, (ii) agreed upon rental payments for up to ten years, some of which are at or below current market rates, and (iii) substantial relocation payments of up to $32,500 per family from the Owner. Additionally, the Owner will make certain renovations to the Property including, but not limited to separate metering of certain utilities, paint and carpeting improvements, installation of new appliances, asbestos and lead paint removal, other fire and safety measures, and other general improvements to the Property.

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PROPOSED RENT ADJUSTMENT SCHEDULE

A. Rent Schedule

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
002	2	Vacant	Vacant	$ 535.96		$3400		
003	2	Vacant	Vacant	$1569.23		$3400		
004	2	Vacant	Vacant	$1300.74		$3400		
006-B	1	Vacant	Vacant	$711.90		$2450		
011	2	Vacant	Vacant	$1049.50		$3400		
012	3	Vacant	Vacant	$1453.29		$4400		
013	3	Vacant	Vacant	$2143.83		$4400		
020	1	Vacant	Vacant	$ 829.87		$2450		
021	3	Vacant	Vacant	$2143.84		$4400		
022	1	Vacant	Vacant	$1001.75		$2450		

* Column F represents the rent increase in the event the maximum rent is charged. The actual rent charged, and therefore the actual rent increase, may be lower than the figure shown in this column.

** Column G shows the new maximum rent that may be charged; the actual rent charged may be lower.

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT ** $	%	COMMENTS
023	3	Vacant	Vacant	$2143.83		$4400		
024	2	Vacant	Vacant	$1569.23		$3400		
025	1	Vacant	Vacant	$1000.73		$2450		
026	1	Vacant	Vacant	$1117.68		$2450		
027	1	Vacant	Vacant	$ 782.07		$2450		
028	1	Vacant	Vacant	$1117.68		$2450		
029	3	2-29-96	$1152.00	$1230.57		$4400		
030	3	11-30-05	$377.65	$1221.42		$4400		
031	2	Vacant	Vacant	$1569.23		$3400		
032	2	Vacant	Vacant	$ 928.52		$3400		
033	2	Vacant	Vacant	$1569.23		$3400		
034	2	Vacant	Vacant	$1049.54		$3400		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT ** $	%	COMMENTS
035	3	Vacant	Vacant	$1398.88		$4400		
036	2	Vacant	Vacant	$ 762.75		$3400		
101	2	Vacant	Vacant	$ 711.90		$3400		
101-B	1	Vacant	Vacant	$ 331.54		$2450		
102	1	02-29-96	$767.00	$ 802.41		$2450		
103	2	Vacant	Vacant	$1569.23		$3400		
104	2	11-30-97	$487.00	$ 509.52		$3400		
105	1	Vacant	Vacant	$ 686.48		$2450		
105-C	1	Vacant	Vacant	$1001.75		$2450		
106	2	Vacant	Vacant	$1181.75		$3400		
107	2	Vacant	Vacant	$1879.42		$3400		
108	1	Vacant	Vacant	$ 539.01		$2450		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
109	1	Vacant	Vacant	$1117.68		$2450		
110	2	Vacant	Vacant	$ 863.52		$3400		
111	2	Vacant	Vacant	$1569.23		$3400		
112	3	Vacant	Vacant	$2143.84		$4400		
113-F	1	Vacant	Vacant	$ 571.55		$2450		
114	1	Vacant	Vacant	$1001.75		$2450		
114-A	1	Vacant	Vacant	$ 610.20		$2450		
115	1	Vacant	Vacant	$1001.75		$2450		
115-D	1	Vacant	Vacant	$1001.75		$2450		
116	1	Vacant	Vacant	$1117.68		$2450		
117	1	11-30-05	$365.50	$ 802.41		$2450		
118	1	Vacant	Vacant	$1001.75		$2450		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
118-D	1	Vacant	Vacant	$ 610.20		$2450		
119	2	Vacant	Vacant	$1879.42		$3400		
120	1	Vacant	Vacant	$1117.68		$2450		
121	3	11-30-05	$519.35	$ 836.99		$4400		
122	1	Vacant	Vacant	$1001.75		$2450		
123	2	Vacant	Vacant	$1826.53		$3400		
124	1	Vacant	Vacant	$1117.68		$2450		
125	1	11-30-05	$498.55	$ 802.41		$2450		
126	1	Vacant	Vacant	$1117.68		$2450		
127	1	Vacant	Vacant	$1117.68		$2450		
128	1	Vacant	Vacant	$1117.68		$2450		
129	3	Vacant	Vacant	$1221.42		$4400		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
130	3	Vacant	Vacant	$2143.83		$4400		
131	2	11-30-97	$572.00	$1569.23		$3400		
132	2	Vacant	Vacant	$1569.23		$3400		
133	2	Vacant	Vacant	$1569.23		$3400		
134	1	Vacant	Vacant	$1049.54		$2450		
135	3	03-04-96	$473.00	$ 875.64		$4400		
136	2	Vacant	Vacant	$1181.75		$3400		
136-E	1	Vacant	Vacant	$ 610.20		$2450		
200	2	Vacant	Vacant	$1879.42		$3400		
201	2	Vacant	Vacant	$1849.92		$3400		
202	1	Vacant	Vacant	$1117.68		$2450		
203	2	Vacant	Vacant	$1569.23		$3400		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
204	2	11-30-05	$365.30	$ 587.83		$3400		
205	1	Vacant	Vacant	$ 686.48		$2450		
205-C	1	2-29-96	$751.00	$ 786.14		$2450		
206	2	Vacant	Vacant	$1182.77		$3400		
207	2	Vacant	Vacant	$1879.42		$3400		
208	1	2-29-96	$562.00	$ 587.83		$2450		
209	1	Vacant	Vacant	$ 439.34		$2450		
210	3	Vacant	Vacant	$ 762.72		$4400		
211	2	Vacant	Vacant	$1569.23		$3400		
212	3	11-30-97	$428.00	$1221.42		$4400		
213	4	Vacant	Vacant	$2564.87		$4400		
214	1	Vacant	Vacant	$ 893.94		$2450		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
214-A	1	Vacant	Vacant	$ 635.63		$2450		
215	1	Vacant	Vacant	$1001.75		$2450		
215-D	1	Vacant	Vacant	$1001.75		$2450		
216	1	Vacant	Vacant	$1117.68		$2450		
217	1	Vacant	Vacant	$1117.68		$2450		
218	1	Vacant	Vacant	$1001.75		$2450		
218-D	1	Vacant	Vacant	$ 610.20		$2450		
219	2	Vacant	Vacant	$1879.42		$3400		
220	1	Vacant	Vacant	$ 467.82		$2450		
221	3	Vacant	Vacant	$2143.84		$4400		
222	1	Vacant	Vacant	$1001.75		$2450		
223	3	Vacant	Vacant	$2143.84		$4400		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
224	1	Vacant	Vacant	$1117.68		$2450		
225	1	Vacant	Vacant	$1117.68		$2450		
226	1	Vacant	Vacant	$1118.70		$2450		
227	1	Vacant	Vacant	$ 928.52		$2450		
228	1	Vacant	Vacant	$1118.70		$2450		
229	3	Vacant	Vacant	$1331.25		$4400		
230	3	Vacant	Vacant	$ 797.33		$4400		
231	2	Vacant	Vacant	$1432.48		$3400		
232	2	Vacant	Vacant	$1569.23		$3400		
233	2	Vacant	Vacant	$2143.84		$3400		
234	2	Vacant	Vacant	$1118.70		$3400		
235	3	Vacant	Vacant	$1118.70		$4400		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
236	2	Vacant	Vacant	$1118.70		$3400		
236-B	1	Vacant	Vacant	$ 610.20		$2450		
301	3	Vacant	Vacant	$2564.87		$4400		
302	2	Vacant	Vacant	$ 587.83		$3400		
303	2	Vacant	Vacant	$ 467.82		$3400		
304	2	Vacant	Vacant	$1728.16		$3400		
305	1	Vacant	Vacant	$ 686.48		$2450		
306	2	Vacant	Vacant	$1181.75		$3400		
307	2	Vacant	Vacant	$1560.08		$3400		
308	1	Vacant	Vacant	$1232.00		$2450		
309	1	Vacant	Vacant	$1399.39		$2450		
310	2	11-30-05	$395.20	$ 635.63		$3400		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
426	1	Vacant	Vacant	$1118.70		$2450		
427	1	11-30-97	$392.00	$ 409.85		$2450		
428	1	Vacant	Vacant	$1118.70		$2450		
429	3	Vacant	Vacant	$1457.36		$4400		
430	3	Vacant	Vacant	$1879.42		$4400		
431	2	Vacant	Vacant	$1569.23		$3400		
432	2	Vacant	Vacant	$1569.23		$3400		
433	2	Vacant	Vacant	$1569.23		$3400		
434	1	11-30-97	$417.00	$ 436.29		$2450		
435	3	11-30-05	$278.20	$1221.42		$4400		
436	2	Vacant	Vacant	$1569.23		$3400		
436-E	1	Vacant	Vacant	$ 610.20		$2450		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
501	3	Vacant	Vacant	$1506.18		$4400		
504	2	Vacant	Vacant	$ 802.42		$3400		
505	2	Vacant	Vacant	$ 742.56		$3400		
505-C	1	Vacant	Vacant	$1001.75		$2450		
506	2	Vacant	Vacant	$ 890.89		$3400		
506-B	2	Vacant	Vacant	$ 711.90		$3400		
507	2	Vacant	Vacant	$1879.42		$3400		
508	1	Vacant	Vacant	$1118.70		$2450		
509	1	Vacant	Vacant	$1118.70		$2450		
510	2	Vacant	Vacant	$1678.05		$3400		
511	2	Vacant	Vacant	$ 894.96		$3400		
512	3	11-30-05	$278.20	$1221.42		$4400		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
513	3	Vacant	Vacant	$2143.84		$4400		
513-F	1	Vacant	Vacant	$1001.75		$2450		
514	1	Vacant	Vacant	$1001.75		$2450		
514-A	1	Vacant	Vacant	$ 635.63		$2450		
515	1	Vacant	Vacant	$1001.75		$2450		
515-D	1	Vacant	Vacant	$ 610.20		$2450		
516	1	Vacant	Vacant	$1118.70		$2450		
517	1	11-30-05	$269.75	$ 434.26		$2450		
518	1	Vacant	Vacant	$1001.75		$2450		
518-D	1	Vacant	Vacant	$ 600.00		$2450		
519	2	Vacant	Vacant	$1879.42		$3400		
520	3	Vacant	Vacant	$ 844.11		$4400		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT ** $	%	COMMENTS
521	3	Vacant	Vacant	$2143.84		$4400		
522	1	Vacant	Vacant	$ 661.05		$2450		
523	3	Vacant	Vacant	$1879.42		$4400		
524	1	Vacant	Vacant	$1118.70		$2450		
525	1	Vacant	Vacant	$1118.70		$2450		
526	1	Vacant	Vacant	$ 928.52		$2450		
527	1	Vacant	Vacant	$ 802.41		$2450		
528	1	Vacant	Vacant	$1118.70		$2450		
529	3	Vacant	Vacant	$2143.84		$4400		
530	5	Vacant	Vacant	$2564.87		$4400		
532	2	Vacant	Vacant	$1569.23		$3400		
533	2	Vacant	Vacant	$1569.23		$3400		

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PROPOSED RENT ADJUSTMENT SCHEDULE

A	B	C	D	E	F	G		H
APARTMENT NUMBER	NUMBER OF BEDROOMS	DATE CURRENT LEASE EXPIRES	CURRENT RENT	MAXIMUM ALLOWABLE RENT	PROPOSED RENT INCREASE*	PROPOSED NEW RENT AMOUNT** $	%	COMMENTS
534	1	Vacant	Vacant	$1049.54		$2450		
535	3	11-30-05	$484.90	$1461.43		$4400		
536	2	Vacant	Vacant	$1569.23		$3400		
536-E	1	Vacant	Vacant	$1001.75		$2450		
B	1	Vacant	Vacant	$ 241.03		$2450		
		a. Totals						

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* Column F represents the rent increase in the event the maximum rent is charged. The actual rent charged, and therefore the actual rent increase, may be lower than the figure shown in this column.

** Column G shows the new maximum rent that may be charged; the actual rent charged may be lower.

TENANT CERTIFICATION OF VOLUNTARY AGREEMENT

WHEN SIGNING THIS AGREEMENT BE SURE TO CHECK WHETHER YOU AGREE OR DISAGREE.

If you have any questions about this Agreement or need an explanation of what it says and means, you may contact the Rental Accommodations and Conversion Division for assistance. (727-7310)

WE CERTIFY TO THE RENT ADMINISTRATOR FOR THE DISTRICT OF COLUMBIA THAT THIS AGREEMENT WAS ENTERED INTO VOLUNTARILY, AND THAT NO FORM OF COERCION WAS IMPOSED BY THE LANDLORD OR ANY TENANT IN SECURING THE SIGNATURES BELOW.

(A) Agree (D) Disagree

NO.	TENANT NAME	% INC.	SIGNATURE OF TENANT	DATE	PHONE	(A)	(D)
12	Luciana Rodriquez						
20	Saer N'Diaye						
29	Juan Sanchez						
30	David Suomi						
102	Rafael Mora						
104	Yorka Ortiz						
117	Frank Finke						
121	Jody Palmour						
125	Carmen Abahasen						
131	Niloofar Farrokhpay						
135	Mercedes McDonnell						
204	Tim Ahern						
205C	Joanne Kowalski						
208	Vincenta Avendano						
212	Jane Mba						
302	Mary Ann Hollis						
310	Roy Banner						
316	Brigitte Alexandres						
321	Stephanie Griffiths						

See Next Page

NO.	TENANT NAME	% INC.	SIGNATURE OF TENANT	DATE	PHONE	(A)	(D)
326	Anna Zakarija						
404	David Sanchez						
427	Mary Lee Nissley						
434	Barbara Brissett						
435	Anne Hollander						
512	Maria Zehren						
517	Linda Ward						
535	Sandra Kay/Debra Charles						

HOUSING PROVIDER CERTIFICATION

I/We understand that:

(1) It shall be the responsibility of the Housing Provider to report any substantive changes in the information provided herein if the changes occur while this petition is pending before the Rent Administrator.

(2) Any person who knowingly charges rent in excess of the maximum allowable under the Rental Housing Emergency Act of 1985 may be subject to a fine imposed under the provisions of Section 901 of the Act.

(3) Any person who knowingly decreases a related service and/or facility without the approval of the Rent Administrator, may be subject to a fine imposed under the provisions of Section 901 of the Act.

(4) Any person who willfully violates any provisions of the Rental Housing Emergency Act of 1985, is subject to a fine up to $5,000 or other penalties for each violation.

(5) Each tenant was provided with a copy of the complete Voluntary Agreement proposal and that each tenant was provided at least fourteen (14) days to consider this proposal.

I/We hereby certify that the information given herein is true to the best of my knowledge.

_____ Date_____
Signature of Housing Provider or Agent

22262179.451



NOTICE

3700 Massachusetts Ave., Nw

Project Address(s)

N/A

Zoning Division Project Number(s)

Sq. 1929, Lot(s) 13,14,803,804,805

Square and Lot(s)

R-2

Zone District(s)

At the request of the undersigned owner, the above-referenced project has not been reviewed by the Office of the Zoning Administrator to determine whether or to what extent Board of Zoning Adjustment relief is required in this matter.

DEPARTMENT OF CONSUMER & REGULATORY AFFAIRS

By: _____

Office of the Zoning Administrator

CERTIFICATION

The undersigned agent hereby certifies that the following zoning relief is required from the Board of Zoning Adjustment in this matter:

X _____ Special Exception _____ Variance

11 DCMR Section No(s). 214

The undersigned agent and owner do hereby hold the District of Columbia Department of Consumer and Regulatory Affairs harmless from any liability for failure of the undersigned to seek complete and proper zoning relief from the Board of Zoning Adjustment. The undersigned owner does hereby authorize the undersigned agent to act on the owner's behalf in this matter.

_____

Owner's Signature

_____

Agent's Signature

_____

Owner's Name (Please Print)

Richard B. Nettler.

Agent's Name (Please Print)

D.C. Bar No. or
Architect Registration No.: 929471

DCRA:BLRA:ZD
rev. 2/11/98

NOTICE

3700 Massachusetts Ave., NW
Project Address(s)

Square 1929, Lot(s) 13, 14, 803, 804, 805
Square and Lot(s)

Zoning Division Project Number(s)

R-2, R-5-D
Zone District(s)

At the request of the undersigned owner, the above-referenced project has not been reviewed by the Office of the Zoning Administrator to determine whether or to what extent Board of Zoning Adjustment relief is required in this matter.

DEPARTMENT OF CONSUMER &
REGULATORY AFFAIRS

By: _____
Office of the Zoning Administrator

CERTIFICATION

The undersigned agent hereby certifies that the following zoning relief is required from the Board of Zoning Adjustment in this matter:

_____ Special Exception _____x_____ Variance

11 DCMR Section No(s). 300.3

The undersigned agent and owner do hereby hold the District of Columbia Department of Consumer and Regulatory Affairs harmless from any liability for failure of the undersigned to seek complete and proper zoning relief from the Board of Zoning Adjustment. The undersigned owner does hereby authorize the undersigned agent to act on the owner's behalf in this matter.

_____
Owner's Signature

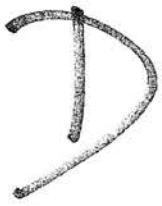
_____
Agent's Signature

_____
Owner's Name (Please Print)

Richard B. Nettler
Agent's Name (Please Print)

D.C. Bar No. or
Architect Registration No.: 929471

DCRA:BLRA:ZD
rev. 2/11/98



ROBINS, KAPLAN, MILLER & CIRESI L.L.P.
ATTORNEYS AT LAW

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CHICAGO
LOS ANGELES
MINNEAPOLIS
ORANGE COUNTY
SAINT PAUL
SAN FRANCISCO
WASHINGTON, D. C.

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WASHINGTON, D. C. 20006-1301
TELEPHONE (202) 775-0725
FACSIMILE (202) 223-8604
TELEX 4931197 RKMC

RICHARD B. NETTLER
(202) 775-0725

August 2, 1999

Mr. Armando Lourenco
Zoning Administrator
Building & Land Regulation Administration
Department of Consumer & Regulatory Affairs
941 North Capitol Street, N.W.
Room 2500
Washington, D.C. 20002

Re: Western Portion of Square 1929, Lots 804, 803, 805 & 810 (Record Lots 8-11, 13 and a portion of Record Lot 7)

Dear Mr. Lourenco:

I am requesting that you affirm and acknowledge below that the above-referenced property is zoned R-2 which permits the development of single family residences or semi-detached residences on lots having a minimum area of 4,000 square feet and a minimum width of 30 feet. I am also requesting that you affirm that the subject property may be developed with semi-detached residence on lots which meet the standards for R-2 over an underground parking facility that exceeds 200 vehicles and crosses under the lots associated with each semi-detached residence without requiring a special exception or variance, provided that the subject property is developed under a condominium regime and subdivision.

Thank you for your cooperation.

Sincerely,

ROBINS, KAPLAN, MILLER & CIRESI L.L.P.

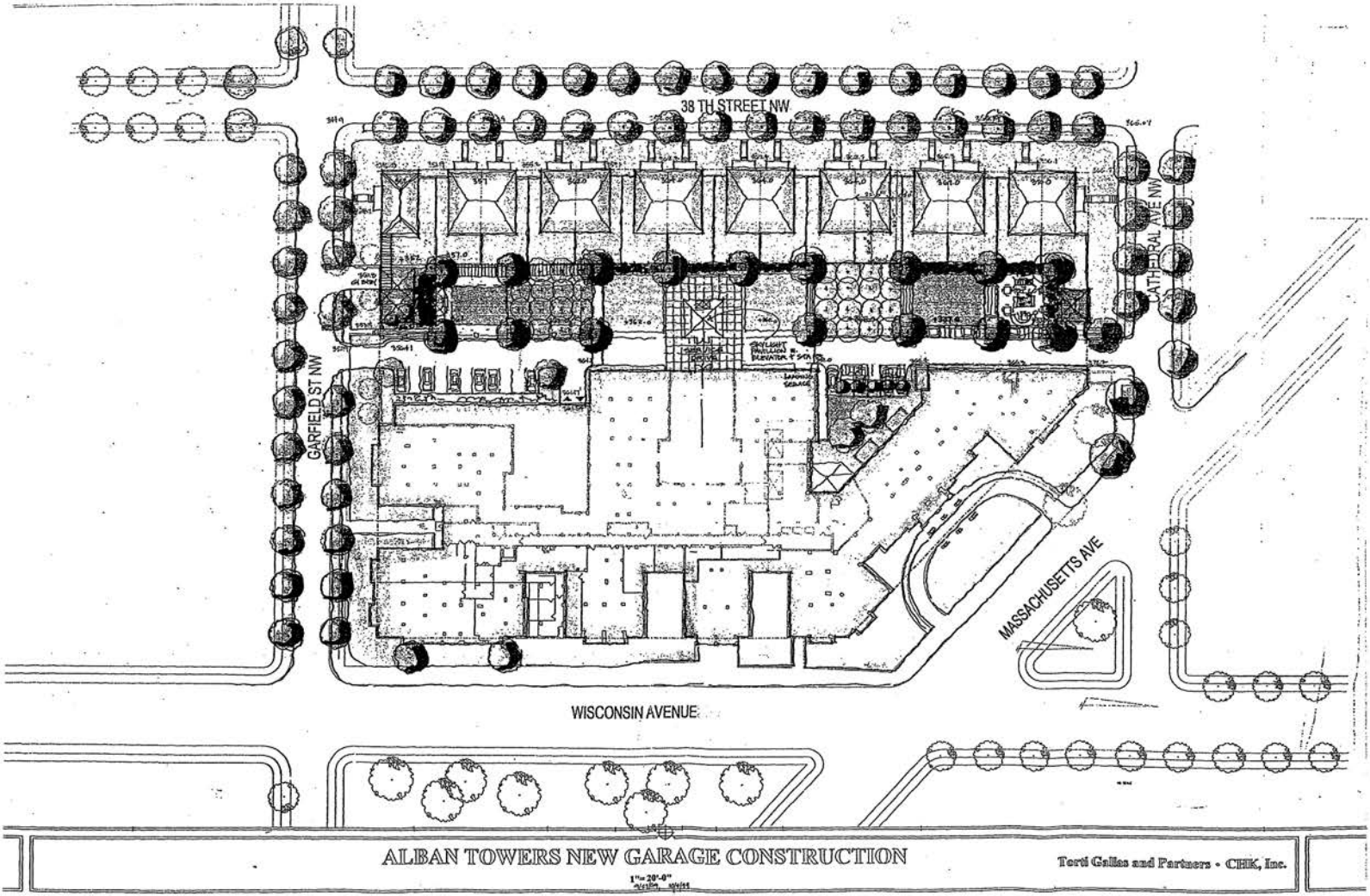
Richard B. Nettler

AFFIRMED & ACKNOWLEDGED

8/2/99

Armando Lourenco
District of Columbia Zoning Administrator (ACTING)





ALBAN TOWERS NEW GARAGE CONSTRUCTION

Torti Gallas and Partners • CHK, Inc.

1"= 20'-0"

F

EXHIBIT 27F

FROM

CASE 16586

IS AN OVERSIZED DOCUMENT

PLEASE SEE AT OFFICE



Exhibit G

Mobile Emission Source

Air Quality Study

and

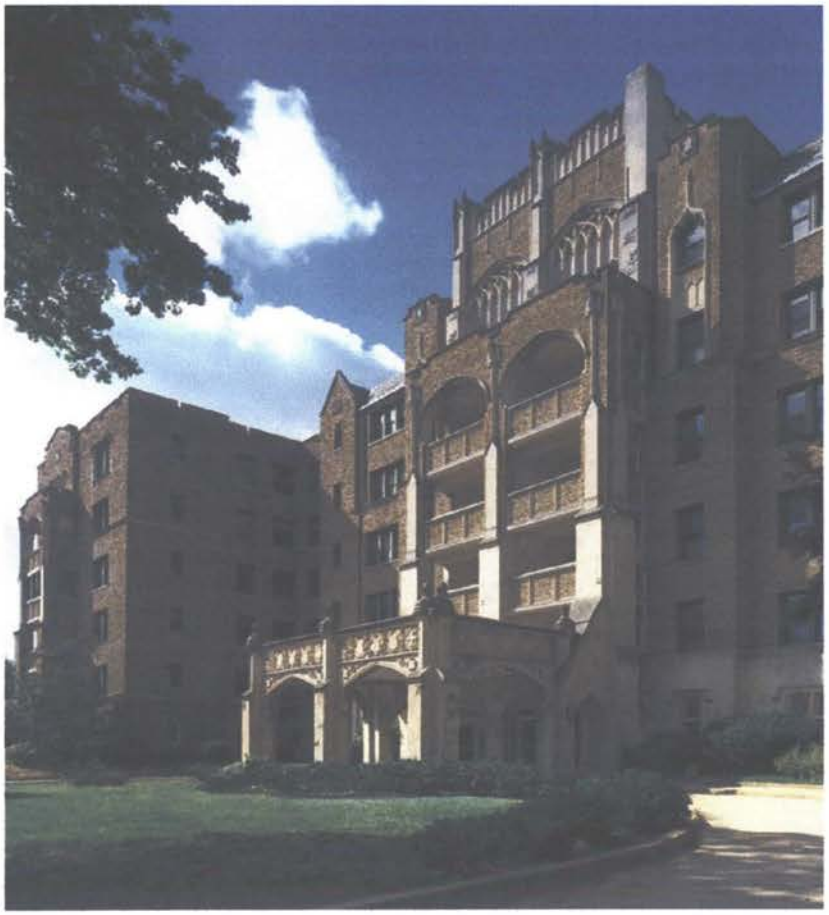
Traffic and Queue Impact Analysis

(See Volume II)

VOLUME II
PRE-HEARING STATEMENT ON
BZA APPLICATION NO. 16586

MOBILE EMISSION SOURCE AIR QUALITY STUDY
AND
TRAFFIC AND QUEUE IMPACT ANALYSIS
EXHIBIT G

'00 JUN 27 A9:07



SAINT ALBAN TOWERS
WISCONSIN AVENUE, NW

MOBILE EMISSION SOURCE AIR QUALITY STUDY

Prepared By:

DELON HAMPTON & ASSOCIATES, CHARTERED
8403 COLESVILLE ROAD, SUITE 600
SILVER SPRING, MD 20910
(301) 585-0100

April 13, 2000

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- Project Description 1
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- Input Data 2

MOBILE 5B MODEL RESULTS 2

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- Input Data 4

CAL3QHCR MODEL CORRELATION WITH MONITORING STATION 4

PROJECT CAL3QHCR MODELING 5
- Intersections 5
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CAL3QHCR RESULTS 5

CONCLUSIONS 6

Appendix A: WMCOG Mobile Standard Input Tables
Appendix B: Traffic Study
Appendix C: Mobile 5B Input and Output Files
Appendix D: CAL3QHCR Input and Output (Project Site)
Appendix E: CAL3QHCR Input and Output (21 & L Streets)
Appendix F: Meteorological Data Analysis

Figure 1 CAL3QHCR DIAGRAM (Monitoring Station)
Figure 2 CAL3QHCR DIAGRAM (Project Site)

MOBILE EMISSIONS AIR QUALITY REPORT
SAINT ALBAN TOWER
WISCONSIN AVENUE, NW
WASHINGTON, DC

BACKGROUND

Environmental Impact Screening Requirements

To comply with the requirements of the District of Columbia Environmental Policy Act, Part 1 of the District's Environmental Screening Form must be completed by the applicant for any permit for construction, where the construction cost in 1989 dollars adjusted annually according to the Consumer Price Index exceeds 1 million dollars.

As stated on the Screening Form, an air quality analysis must be submitted if a series of questions can be answered YES. The analysis of emissions is to include carbon monoxide (CO), volatile organic compounds (VOCs) and nitrogen oxides (No_x) resulting from operations of the mobile sources associated with the proposed project. The most current version of the U.S. Environmental Protection Agency's (EPA's) "MOBILE" emissions factor model must be used in deriving the emissions estimates. In addition an analysis of the impact from mobile sources on CO concentrations (in parts per million) in the vicinity of the proposed project must also be provided. The one (1) hour and eight (8) hour average must be compared with the appropriate National Ambient Air Quality Standards (NAAQS) for CO.

Project Description

The proposed building to be constructed at the corner of Wisconsin Avenue and Garfield Street, NW meets the dollar requirement where an Environmental Impact Screening Form must be prepared. The proposed residential complex contains 226 apartment units and 15 attached housing units. A total of 271 parking spaces are provided in the garage underneath the building. There is a service drive which comes directly off of Garfield Street to the garage entrance.

Project Thresholds

The project meets the following threshold that requires the preparation of an air quality analysis:

- Includes more than 50 dwelling units, and
- Includes parking facilities have a capacity of 50 or more vehicle and
- An street intersection in the vicinity of the project are level of service D or worst.

MBILE 5B METHODOLOGY

The latest version of the "MOBILE" air quality model is "MOBILE5B". MOBILE5B was used for this study. The program files and document for the model were downloaded from the U.S. Environmental Protection Agency TTN World Wide Web site. Before running the model it was verified that the model on hand was the latest version through comparison of file preparation dates. The model was run for January and July traffic flow scenarios, and for January idle scenarios.

Input Data

To ensure compatibility with other modeling of air quality being conducted in the Washington Metropolitan Area, data input information was obtained from the Council of Governments(COG), including parameters for determining vehicle mix by registration. The data used is contained in Appendix D "Emission Rates" of a report dated July 15, 1998; entitled *Air Quality Conformity Determination of the Constrained Long Range Plan and the FY 99 - 2004 Transportation Improvement Program for the Washington Metropolitan Region.* Appendix D has been made part of this report (Appendix A). The following user information was included in addition to or as a change to the input files:

- Since Mobile5b does not contain code for the calculation of idle emissions, the procedures as outlined in Mobile 5b Information Sheet #2, were used. The January scenarios were modified to reflect a vehicle speed of 2.5 miles per hour. The Idle emission for CO is then calculated by multiplying the total vehicle exhaust emissions by 2.5.

- The temperature data contained in the COG memorandum for the ozone producing period was used for the July run. Based by guidance from the District of Columbia Environmental Health Agency, a minium temperature of 20 degrees and a maximum temperature of 30 degrees was used in the model for carbon monoxide producing periods.

- Based upon observations a mix of age of vehicle registration was obtained using data from Montogomery County, Maryland, and the District of Columbia (Appendix C).

Appendix C contains copies of the input data for January at speeds of 35, 30, 25, 20, 15, 10, 5 and 2.5 miles per hour, as well as input data for July at a speed of 25 and 20 miles per hour. The appendix has the vehicle mix data spreadsheet used in determining vehicle registration mix.

MOBILE 5B MODEL RESULTS

Appendix C also contains the output results of the ten scenarios.

Table 1 provide a summary of the results of the Mobile5B output.

Table 1

	January							
	35mph	30mph	25mph	20mph	15mph	10 mph	5 mph	Idle
Total HC(gm/mile)	1.717	1.971	2.326	2.855	3.441	4.519	7.585	13.379
Exhaust CO(gm/mile)	9.271	11.176	13.861	17.891	21.474	28.024	46.909	82.785
Idle CO(gm/hour)								206.963
Exhaust NO_x(gm/mile)	1.609	1.594	1.584	1.578	1.637	1.750	2.003	2.388

	July	
	25mph	20mph
Total HC(gm/mile)	2.096	2.451
Exhaust CO(gm/mile)	8.674	11.174
Exhaust NO_x(gm/mile)	1.272	1.273

For purposes of this study it is assumed that there would be a turn over of parking spaces 2 time a day, the with one half of the trips being in the morning and evening rush hours.

If the average trip length is 10 miles and the travel speed for the entire trip averages 20 miles per hour, the average travel time is 0.50 hours. Based upon these assumptions and an idle time during the trip of 0.13 hours the total daily pollutant generated per day during January are:

VOC 2 x 271 x 2.86 x 10 = 15.50 Kg or 7.05 pounds/day

NO_x 2 x 271 x 1.58 x 10= 8.56 Kg or 3.89 pounds/day

CO (2 x 271 x 13.86 x 10)+(2 x 271 x .13 x 206.96)=89.70 Kg or 40.77 pounds/day

CAL3QHCR METHODOLOGY

When originally published in 1978, Volume 9 of the EPA *Guidelines for Air Quality Maintenance Planning and Analysis* was considered to be the most appropriate methodology for calculating CO concentrations near congested intersections. The manual workbook procedures were cumbersome, time consuming and used outdated modal

emissions models. In the mid 1980's EPA developed the CAL3Q model to handle the dispersion of emissions at intersections. The latest version of the model is CAL3QHCR.

CAL3QHCR was used to determine the impacts of the proposed project on CO concentrations. The latest version of the program and documentation was downloaded from the U.S. Environmental Protection Agency World Wide Web Site. The CAL3QHC User Manual and the CAL3QHCR manual modifying the procedure was use in preparation of the modeling runs.

Input Data

Figures are prepared showing the location of potential receptors in the vicinity of the effected intersections around the project. The figures are prepared in accordance with the instructions contained in the CAL3QHC users manual. Street dimensions and elevations as contain in WASA documents were used to construct the figure. The figure was used to identify X, Y, and Z coordinates for each receptor and queue link.

A meteorological data file was prepared using the parameters suggested by the Environmental Health Agency, but since the program has a cutoff of 1m/s, the results showed only null values. Appendix F provides a discussion on various meteorological data trials run. Meteorological data for a one year period as used in a previously approved study was used. Since this data contained a mix of steady winds, calm periods, and varying wind directions for an entire year, based upon the trials, it was decided that it provided the most rational results. Because it neglected the calms in determining the concentrations at each receptor, as suggested by Mr. Bloom of the Environmental Health Agency, analysis was conducted to determine the probable concentrations at 1 mph (Appendix F)

Tier 1 analysis was used for all modeling. The Tier 1 approach uses the same traffic values for all hours.

CAL3QHCR MODEL CORRELATION WITH MONITORING STATION

There is no monitoring station in the vicinity of the proposed apartment building. To demonstrate that the approach can replicate conditions at a know monitoring station a study was conducted a one of the a monitoring station where traffic data and weather were know for a specific date. The study was conducted for the traffic at the intersection of 21st and L Streets and the intersection of 20th and L Streets. The diagram for this study is at Figure 1. The input and output files for the modeling of this location are contained in Appendix E. The receptor of interest is Receptor 5 since this is the location of the monitoring station.

The results of the study show that with a background level of 1 ppm the results are consistent with the observed results. This indicates with the correct background levels the model can replicate measured conditions.

PROJECT CAL3QHCR MODELING

Intersections

Figure 1 shows the intersections included in the study, the diagram shows the location of receptors, the coordinates of beginning and ending points of links.

Traffic Input

Traffic volumes for use in the model and queuing information were obtained from the traffic study contained in Appendix B. The traffic volumes include all existing traffic as the existing condition with the proposed project added as the future case. The proposed conditions change the traffic volumes based upon the apartment building being occupied. Based upon observations at similar projects in the area, the number of vehicles added to peak hour traffic is only in the range of five or six. The primary mode of transportation during peak hours is Metro.

Free flow speeds for each link were based upon field observations. The following free flow speeds were used.

- Wisconsin Avenue south of Cathederal Avenue 30 mph
- Wisconsin Avenue north of Cathederal Avenue 35 mph
- Massachusetts Avenue southeast of Cathederal Avenue 25 mph
- Massachusetts Avenue northwest of Cathederal Avenue(AM) 30 mph
- Massachusetts Avenue northwest of Cathederal Avenue(PM) 30 mph
- Cathedral Avenue 20 mph
- Garfield Street 15 mph

Input files were created for four basic scenarios, two with existing traffic volumes (AM and PM) and two with future traffic volumes (AM and PM). Files were created for each intersection involved, the receptors for each input was limited to those for which there was line of sight from the source intersection. Since the results from each intersection were to be added, background values were not inputted into the model to preclude count the background levels more than once.

CAL3QHCR RESULTS

The results of the model runs for the four scenarios for each of the two intersections are contained in Appendix D. Even though the maximum one hour and the maximum 8 hour overlaps do not occur at each receptor and during each scenario at the same time, they were totaled to determine the highest possible results. Summary tables are provide after the CAL3QHCR output files.

To compensate for the calms and difference between normal traffic patterns and the steady state traffic patterns used by the model, a multiply was derived. As discussed in Appendix F, a value for the extended calm period where the wind speed is 1 mph per hour was determined to be approximately 1.6. Using the methodology developed in conjunction with Mr. Bloom of the Environmental Health Agency a normal traffic pattern multiplier of 0.75 was derived. Thus a multiplier of 1.21 was used.

The adjusted one and eight hour maximum amount of CO in ppm received by a receptor based upon the existing and future conditions using AM Peak hour traffic volumes for all hours without background concentrations are shown in Table 2. The unadjusted values are at the end of Appendix E.

The adjusted one and eight hour maximum amount of CO in ppm received by a receptor based upon the existing and future conditions using PM Peak hour traffic volumes for all hours without background concentrations are shown in Table 3. The unadjusted values are at the end of Appendix E.

None of the above one hour maximum and eight hour average values exceed the one hour and eight hour average National Ambient Air Quality Standards (NAAQS) for CO. The Standards are 35 ppm for the one hour maximum and 9 ppm for the eight hour average.

CONCLUSIONS

The amount of increases in pollutants caused by this proposed residential complex are small. The eight hour average values even with adjustments for persistent calm periods with wind speeds less than 1 m/s for eight hours that normally occur in the summer months, do not exceed the NAAQS standard of 9ppm.

TABLE 2

CO IN PPM
USING AM PEAK HOUR TRAFFIC WITH BACKGROUND LEVELS ADDED

	Total Existing AM		Total Future AM		Total Change AM	
Receptor	1 hr.	8 hr.	1 hr.	8 hr.	1 hr.	8 hr.
1	2.18	1.15	2.54	1.44	0.36	0.29
2	3.63	1.92	4.36	2.24	0.73	0.31
3	3.39	1.54	3.87	1.92	0.48	0.39
4	2.90	1.22	3.03	1.34	0.12	0.12
5	3.27	1.37	3.99	1.68	0.73	0.31
6	4.36	1.94	4.96	2.35	0.61	0.41
7	4.24	2.00	4.84	2.41	0.61	0.41
8	1.82	0.91	3.51	1.75	1.69	0.85
9	3.75	1.95	4.36	2.18	0.61	0.23
10	6.17	3.28	6.53	3.36	0.36	0.08
11	5.57	2.72	5.69	2.77	0.12	0.05
12	6.66	3.34	6.78	3.33	0.12	-0.01
13	4.24	2.47	4.24	2.47	0.00	0.00
14	1.69	0.90	1.82	0.91	0.12	0.01
15	1.21	0.76	1.33	0.82	0.12	0.06

TABLE 3
CO IN PPM
PM PEAK HOUR TRAFFIC WITH BACKGROUND ADDED

	Total Existing PM		Total Future PM		Total Change PM	
Receptor	1 hr.	8 hr.	1 hr.	8 hr.	1 hr.	8 hr.
1	0.73	0.24	1.21	0.39	0.48	0.15
2	3.39	1.77	3.75	1.89	0.36	0.12
3	3.15	1.43	3.27	1.61	0.12	0.18
4	1.94	0.77	1.82	0.81	-0.12	0.04
5	2.54	1.13	3.03	1.21	0.48	0.08
6	3.63	1.78	3.99	1.92	0.36	0.15
7	3.99	2.04	4.36	2.15	0.36	0.11
8	0.97	0.30	2.06	0.73	1.09	0.42
9	3.51	1.79	3.87	1.91	0.36	0.12
10	3.99	1.94	4.11	1.94	0.12	0.00
11	5.20	2.30	5.08	2.27	-0.12	-0.02
12	5.81	2.41	5.93	2.40	0.12	-0.01
13	4.11	2.02	4.11	2.01	0.00	-0.01
14	1.57	0.61	1.57	0.61	0.00	0.00
15	1.09	0.47	1.21	0.53	0.12	0.06

APPENDIX A

WMCOG MOBILE STANDARD INPUTS

Table 1
MOBILE5a Control Flag Settings

Record Number	Variable Name	Content and Code Used	
1	PROMPT	1 =	No prompting, vertical format
2	PROJID		COG MOBILE Files
3	TAMFLG	1 =	Use MOBILE5a tampering rates
4	SPDFLG	4 =	One average speed for all vehicle types, plus one alternate set of trip length distribution data for all scenarios
5	VMFLAG	3 =	Input one VMT mix for all scenarios
6	MYMRFG	3 =	Use MOBILE5a annual mileage accumulation rates and county-specific registration distributions
7	NEWFLG	2 =	Use alternative heavy-duty diesel emission rates
8	IMFLAG	3 =	Two user-specified I/M programs
9	ALHFLG	1 =	No corrections
10	ATPFLG	8 =	User-specified ATP program
11	RLFLAG	5 =	No refueling emission factors calculated
12	LOCFLG	1 =	One LAP record input for all scenarios
13	TEMFLG	1 =	Exhaust temperatures calculated by MOBILE5a
14	OUTFMT	3 =	112 column descriptive output format
15	PRTFLG	4 =	Print HC, NOx, and CO
16	IDLFLG	1 =	No idle emission factors
17	NMHFLG	2 =	NMHC emission factors
18	HCFLAG	3 =	Component and total HC emission factors printed

Table 2
VMT Distribution by Vehicle Type (percentages)

Vehicle Type	Urban VMT Mix	Exurban VMT Mix
LDGV	82.0	75.0
LDGT1	9.1	15.0
LDGT2	1.4	1.3
HDGV	1.6	2.1
LDDV	1.4	1.2
LDDT	0.0	0.0
HDDV	2.9	3.8
MC	1.6	1.6

Table 3
Summary of Basic I/M Program Descriptive Input Records

Field	Description and Codes	Values Used		
		DC	MD	VA
1	Program start year	83	83	83
2	Stringency level (%)	40	40	40
3	First model year	68	68	68
4	Last model year	20	20	20
5	Waiver rate for pre-1981 model year vehicles (%)	03	03	03
6	Waiver rate for 1981 and later model year vehicles (%)	03	03	03
7	Compliance rate (%)	96	96	96
8	Program type 1 = Test only 2 = Test and repair (computerized) 3 = Test and repair (manual)	1	1	2
9	Inspection frequency 1 = Annual 2 = Biennial	2	2	2
10	Vehicle types subject to inspection (1 = No, 2 = Yes)			
	LDGV	2	2	2
	LDGT1	2	2	2
	LDGT2	1	2	2
	HDGV	1	1	1
11	Test type 1 = Idle test 2 = 2500/Idle test 3 = Loaded idle test 4 = Transient (IM240) test	2	2	2
12	Default cutpoints flag 1 = Defaults 2 = User supplied	2	2	2
13	Alternate I/M credits flag for Tech I-II vehicles 1 = Use MOBILE5a defaults 2 = Use user-input credits	1	1	1
14	Alternate I/M credits flag for Tech IV+ vehicles 1 = Use MOBILE5a defaults 2 = Use user-input credits	1	1	1
15	User Supplied Cutpoints for			
	HC (ppm)	220	220	220
	CO (%)	1.20	1.20	1.20
	NOx (NA)	999	999	999

Table 4
Summary of I/M-240 Program Descriptive Input Records

Field	Description and Codes	Values Used		
		DC	MD	VA
1	Program start year	83	83	83
2	Stringency level (%)	40	40	40
3	First model year	81	81	81
4	Last model year	20	20	20
5	Waiver rate for pre-1981 model year vehicles (%)	03	03	03
6	Waiver rate for 1981 and later model year vehicles (%)	03	03	03
7	Compliance rate (%)	96	96	96
8	Program type 1 = Test only 2 = Test and repair (computerized) 3 = Test and repair (manual)	1	1	1
9	Inspection frequency 1 = Annual 2 = Biennial	2	2	2
10	Vehicle types subject to inspection (1 = No, 2 = Yes)			
	LDGV	2	2	2
	LDGT1	2	2	2
	LDGT2	2	2	2
	HDGV	1	1	1
11	Test type 1 = Idle test 2 = 2500/Idle test 3 = Loaded idle test 4 = Transient (IM240) test	4	4	4
12	Default cutpoints flag 1 = Defaults 2 = User supplied	2	2	2
13	Alternate I/M credits flag for Tech I-II vehicles 1 = Use MOBILE5a defaults 2 = Use user-input credits	1	1	1
14	Alternate I/M credits flag for Tech IV+ vehicles 1 = Use MOBILE5a defaults 2 = Use user-input credits	1	1	1
15	User Supplied Cutpoints for			
	HC (ppm)	0.80	0.80	0.80
	CO (%)	20.0	20.0	20.0
	NOx (NA)	2.00	2.00	2.00

Table 5
Summary of ATP Descriptive Input Records

Field	Description and Codes	DC	MD	VA
1	Program start year	83	83	83
2	First model year	75	75	75
3	Last model year	20	20	20
4	Vehicle types subject to ATP inspections (1 = No, 2 = Yes)			
	LDGV	2	2	2
	LDGT1	2	2	2
	LDGT2	2	2	2
	HDGV	1	1	1
5	Program type 1 = Test only 2 = Test and repair	1	1	1
6	Inspection frequency 1 = Annual 2 = Biennial	2	2	2
7	Compliance rate (%)	96	96	96
8	Inspections performed (1 = Inspection not performed, 2 = Inspection performed)			
	Air pump system	2	2	2
	Catalyst	2	2	2
	Fuel inlet restrictor	2	2	2
	Tailpipe lead deposit test	1	1	1
	EGR system	1	1	1
	Evaporative emission control system	1	1	1
	PCV system	1	1	1
	Gas cap	1	1	1

Table 6
Summary of Functional Pressure Input Records

Field	Description and Codes	DC	MD	VA
1	Program start year	83	83	83
2	First model year	75	75	75
3	Last model year	20	20	20
4	Vehicle types subject to functional pressure (1 = No, 2 = Yes)			
	LDGV	2	2	2
	LDGT1	2	2	2
	LDGT2	2	2	2
	HDGV	1	1	1
5	Program type 1 = Test only 2 = Test and repair	1	1	1
6	Inspection frequency 1 = Annual 2 = Biennial	2	2	2
7	Compliance rate (%)	96	96	96

Table 7
Summary of Purge Testing Input Records

Field	Description and Codes	DC	MD	VA
1	Program start year	83	83	83
2	First model year	81	81	81
3	Last model year	20	20	20
4	Vehicle types subject to purge testing (1 = No, 2 = Yes)			
	LDGV	2	2	2
	LDGT1	2	2	2
	LDGT2	2	2	2
	HDGV	1	1	1
5	Program type 1 = Test only 2 = Test and repair	1	1	1
6	Inspection frequency 1 = Annual 2 = Biennial	2	2	2
7	Compliance rate (%)	96	96	96

Table 8
Trip Length Distribution Inputs

Interval	MWCOG Trip Length Distributions	MOBILE5a Defaults
< 10 Minutes	16.6	6.744
11 - 20 Minutes	33.9	18.507
21 - 30 Minutes	23.4	16.775
31 - 40 Minutes	13.3	13.108
41 - 50 Minutes	6.1	8.335
> 50 Minutes	6.7	36.531

Table 9
Summary of Scenario Descriptive Records

Field	Description and Codes	DC	MD	VA
1	Region 1 for Low Altitude	1	1	1
2	Calendar year of evaluation	multi	multi	multi
3	Speeds to be used	5-65	5-65	5-65

Table 10
Summary of Local Area Parameter Records

Field	Description and Codes	DC	MD	VA
1	Fuel volatility class	B	B	B
2	Period 1 RVP (psi)	7.8	7.8	7.8
3	Period 2 RVP (psi)	7.8	7.8	7.8
4	Period 1 RVP start year	20	20	20
5	Oxygenated Fuel Flag (not modeled)	1	1	1
6	Diesel sales fraction flag (User specified)	2	2	2
7	Reformulated Gasoline flag (modeled)	2	2	2

Table 11
Ozone Season and CO Season Temperatures Modeled for the Metropolitan Washington Area

	Minimum Daily Temperature (°F)	Maximum Daily Temperature (°F)	Ambient Daily Temperature (°F)
Ozone Season	72.0	93.0	85.7
CO Season	33.0	53.0	46.5

Table 12
Operation Mode Fractions

PCCN	PCHC	PCCC
20.6	27.3	20.6

Table 13
Registration Distribution Percentages by Age for the District of Columbia

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	4.84	12.20	5.71	2.30	3.40	2.34
2	9.19	18.05	8.76	4.70	6.70	4.94
3	9.74	12.10	8.62	4.70	6.70	8.25
4	8.74	11.10	7.35	4.70	6.70	14.56
5	8.21	7.88	5.66	4.70	6.70	11.66
6	7.89	5.54	4.02	3.80	7.30	7.43
7	5.77	4.15	4.35	3.30	6.10	9.10
8	5.11	2.79	4.37	2.10	4.00	13.55
9	5.17	2.82	9.21	2.60	4.10	9.29
10	5.10	2.30	9.30	2.90	5.10	7.92
11	5.77	2.19	8.02	3.40	5.30	5.35
12	5.46	2.02	5.63	6.40	6.60	5.61
13	4.63	1.38	3.24	5.40	5.50	0.00
14	3.52	2.59	3.11	5.80	5.70	0.00
15	2.18	2.31	2.63	5.10	4.50	0.00
16	1.94	2.20	2.08	3.80	1.90	0.00
17	1.75	1.47	1.49	4.30	2.30	0.00
18	1.30	1.25	1.33	4.10	2.80	0.00
19	0.92	1.28	1.21	3.50	2.40	0.00
20	0.62	0.89	0.71	2.90	1.60	0.00
21	0.47	0.69	0.51	2.10	1.10	0.00
22	0.39	0.62	0.56	2.20	0.90	0.00
23	0.31	0.55	0.51	2.20	0.70	0.00
24	0.23	0.41	0.35	1.40	0.50	0.00
25	0.78	1.24	1.27	11.70	1.60	0.00

Table 14
Registration Distribution Percentages by Age for Calvert County, Maryland

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	4.04	6.61	3.92	2.30	3.40	1.09
2	8.52	13.47	8.40	4.70	6.70	1.93
3	10.02	15.53	10.40	4.70	6.70	1.53
4	9.75	14.23	10.71	4.70	6.70	1.39
5	10.30	13.12	9.81	4.70	6.70	2.03
6	9.93	9.30	11.08	3.80	7.30	3.71
7	8.22	7.30	7.29	3.30	6.10	2.97
8	7.26	5.77	6.34	2.10	4.00	2.23
9	4.86	3.02	4.28	2.60	4.10	2.72
10	3.73	1.45	3.10	2.90	5.10	3.61
11	3.65	1.03	2.77	3.40	5.30	3.36
12	2.93	0.99	2.48	6.40	6.60	73.43
13	3.23	2.16	3.77	5.40	5.50	0.00
14	2.69	1.74	3.52	5.80	5.70	0.00
15	2.16	1.24	2.57	5.10	4.50	0.00
16	1.46	0.84	1.74	3.80	1.90	0.00
17	0.83	0.55	1.00	4.30	2.30	0.00
18	0.61	0.29	1.40	4.10	2.80	0.00
19	0.80	0.31	0.82	3.50	2.40	0.00
20	0.69	0.44	1.11	2.90	1.60	0.00
21	0.54	0.27	0.55	2.10	1.10	0.00
22	0.43	0.08	0.83	2.20	0.90	0.00
23	0.42	0.08	0.66	2.20	0.70	0.00
24	0.36	0.06	0.42	1.40	0.50	0.00
25	2.57	0.10	1.06	11.70	1.60	0.00

Table 15
Registration Distribution Percentages by Age for Charles County, Maryland

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	4.32	6.73	4.29	2.30	3.40	2.86
2	8.50	12.76	8.13	4.70	6.70	8.00
3	9.98	15.31	9.74	4.70	6.70	5.29
4	9.94	14.87	10.61	4.70	6.70	5.21
5	10.06	12.05	10.09	4.70	6.70	5.80
6	9.73	9.04	10.75	3.80	7.30	10.06
7	8.52	7.07	7.53	3.30	6.10	7.05
8	7.52	5.67	6.31	2.10	4.00	6.17
9	5.02	2.97	4.36	2.60	4.10	7.05
10	3.66	1.69	3.23	2.90	5.10	8.08
11	3.47	1.19	2.67	3.40	5.30	6.98
12	2.98	1.03	2.53	6.40	6.60	27.46
13	3.34	2.37	3.99	5.40	5.50	0.00
14	2.70	2.20	3.25	5.80	5.70	0.00
15	2.24	1.57	2.50	5.10	4.50	0.00
16	1.40	0.94	1.66	3.80	1.90	0.00
17	0.73	0.58	1.19	4.30	2.30	0.00
18	0.69	0.52	1.40	4.10	2.80	0.00
19	0.77	0.45	0.98	3.50	2.40	0.00
20	0.69	0.24	1.03	2.90	1.60	0.00
21	0.51	0.28	0.76	2.10	1.10	0.00
22	0.42	0.16	0.66	2.20	0.90	0.00
23	0.47	0.08	0.59	2.20	0.70	0.00
24	0.33	0.09	0.51	1.40	0.50	0.00
25	2.00	0.14	1.23	11.70	1.60	0.00

Table 16
Registration Distribution Percentages by Age for Frederick County, Maryland

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	3.90	6.94	3.91	2.30	3.40	3.08
2	9.04	12.55	7.87	4.70	6.70	3.86
3	10.52	14.02	9.71	4.70	6.70	5.06
4	9.88	13.11	10.37	4.70	6.70	5.06
5	9.80	11.62	9.66	4.70	6.70	6.20
6	9.53	9.94	11.01	3.80	7.30	8.54
7	7.95	7.70	7.22	3.30	6.10	6.91
8	7.34	6.17	6.38	2.10	4.00	6.17
9	4.87	2.73	4.50	2.60	4.10	6.52
10	3.86	1.63	3.05	2.90	5.10	8.80
11	3.45	1.05	2.73	3.40	5.30	8.28
12	3.18	1.17	2.77	6.40	6.60	31.52
13	3.13	3.25	4.38	5.40	5.50	0.00
14	2.74	2.41	3.69	5.80	5.70	0.00
15	1.96	1.59	2.62	5.10	4.50	0.00
16	1.26	1.05	1.89	3.80	1.90	0.00
17	0.73	0.63	1.04	4.30	2.30	0.00
18	0.73	0.52	1.22	4.10	2.80	0.00
19	0.81	0.43	1.04	3.50	2.40	0.00
20	0.67	0.46	1.10	2.90	1.60	0.00
21	0.49	0.32	0.71	2.10	1.10	0.00
22	0.51	0.20	0.62	2.20	0.90	0.00
23	0.45	0.13	0.59	2.20	0.70	0.00
24	0.40	0.08	0.49	1.40	0.50	0.00
25	2.79	0.29	1.41	11.70	1.60	0.00

Table 17
Registration Distribution Percentages by Age for Montgomery County, Maryland

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	4.62	8.99	3.58	2.30	3.40	3.07
2	9.81	15.30	8.68	4.70	6.70	5.26
3	9.83	15.55	11.29	4.70	6.70	6.27
4	10.57	14.51	11.52	4.70	6.70	6.33
5	11.04	12.22	10.57	4.70	6.70	6.79
6	10.61	9.26	12.19	3.80	7.30	9.90
7	8.77	7.05	8.02	3.30	6.10	7.00
8	7.83	5.13	6.96	2.10	4.00	5.37
9	5.25	2.39	4.39	2.60	4.10	6.79
10	3.99	1.32	2.99	2.90	5.10	8.88
11	3.39	1.02	2.36	3.40	5.30	6.26
12	2.79	0.80	2.25	6.40	6.60	28.09
13	2.53	1.71	3.37	5.40	5.50	0.00
14	2.01	1.37	2.67	5.80	5.70	0.00
15	1.49	0.96	2.06	5.10	4.50	0.00
16	0.93	0.68	1.43	3.80	1.90	0.00
17	0.54	0.37	0.84	4.30	2.30	0.00
18	0.51	0.30	0.90	4.10	2.80	0.00
19	0.52	0.34	0.79	3.50	2.40	0.00
20	0.49	0.22	0.81	2.90	1.60	0.00
21	0.36	0.17	0.48	2.10	1.10	0.00
22	0.31	0.08	0.45	2.20	0.90	0.00
23	0.30	0.08	0.39	2.20	0.70	0.00
24	0.24	0.05	0.25	1.40	0.50	0.00
25	1.28	0.14	0.76	11.70	1.60	0.00

Table 18
Registration Distribution Percentages by Age for Prince Georges County, MD

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	4.16	7.21	3.58	2.30	3.40	3.23
2	8.57	14.15	8.55	4.70	6.70	5.33
3	9.46	15.01	10.04	4.70	6.70	6.17
4	10.40	14.29	10.95	4.70	6.70	5.01
5	10.52	12.20	9.33	4.70	6.70	6.68
6	9.46	8.19	10.62	3.80	7.30	11.86
7	8.42	7.03	7.72	3.30	6.10	8.16
8	7.75	5.43	6.41	2.10	4.00	6.33
9	5.14	2.97	4.26	2.60	4.10	6.63
10	3.99	1.73	2.95	2.90	5.10	8.48
11	3.71	1.23	2.71	3.40	5.30	5.52
12	3.10	1.09	2.40	6.40	6.60	26.62
13	3.29	2.59	3.79	5.40	5.50	0.00
14	2.71	1.83	3.28	5.80	5.70	0.00
15	2.09	1.46	2.73	5.10	4.50	0.00
16	1.43	1.06	2.09	3.80	1.90	0.00
17	0.83	0.58	1.26	4.30	2.30	0.00
18	0.75	0.52	1.46	4.10	2.80	0.00
19	0.76	0.45	1.11	3.50	2.40	0.00
20	0.61	0.37	1.11	2.90	1.60	0.00
21	0.47	0.22	0.86	2.10	1.10	0.00
22	0.38	0.09	0.67	2.20	0.90	0.00
23	0.34	0.10	0.63	2.20	0.70	0.00
24	0.29	0.04	0.45	1.40	0.50	0.00
25	1.40	0.16	1.05	11.70	1.60	0.00

Table 19
Registration Distribution Percentages by Age for Alexandria City, Virginia

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	6.76	7.04	5.58	2.30	3.40	3.06
2	8.20	11.40	7.35	4.70	6.70	3.95
3	9.55	11.12	9.45	4.70	6.70	4.47
4	9.37	11.18	7.65	4.70	6.70	5.82
5	8.93	12.82	8.12	4.70	6.70	9.10
6	7.77	7.34	6.53	3.80	7.30	8.28
7	7.32	6.21	5.46	3.30	6.10	5.89
8	5.39	4.21	3.99	2.10	4.00	6.79
9	4.85	3.66	3.95	2.60	4.10	13.80
10	4.78	3.05	3.82	2.90	5.10	10.07
11	4.48	2.00	3.22	3.40	5.30	5.00
12	4.33	2.28	6.79	6.40	6.60	23.79
13	4.03	2.51	6.01	5.40	5.50	0.00
14	3.25	2.16	5.28	5.80	5.70	0.00
15	2.55	1.66	4.17	5.10	4.50	0.00
16	1.46	1.17	2.15	3.80	1.90	0.00
17	1.43	1.76	2.79	4.30	2.30	0.00
18	1.31	1.48	1.33	4.10	2.80	0.00
19	1.00	1.48	1.29	3.50	2.40	0.00
20	0.73	1.09	0.95	2.90	1.60	0.00
21	0.54	0.83	0.99	2.10	1.10	0.00
22	0.43	0.73	0.95	2.20	0.90	0.00
23	0.34	0.65	0.90	2.20	0.70	0.00
24	0.27	0.57	0.86	1.40	0.50	0.00
25	0.92	1.62	0.43	11.70	1.60	0.00

Table 20
Registration Distribution Percentages by Age for Arlington County, Virginia

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	11.21	5.61	3.71	2.30	3.40	2.54
2	9.25	9.21	5.35	4.70	6.70	4.12
3	8.35	11.03	7.42	4.70	6.70	3.79
4	8.41	10.85	6.68	4.70	6.70	4.94
5	8.23	11.83	6.99	4.70	6.70	8.72
6	7.35	7.63	7.07	3.80	7.30	9.20
7	7.19	7.40	5.35	3.30	6.10	5.80
8	5.39	5.47	4.37	2.10	4.00	8.10
9	4.86	4.72	3.48	2.60	4.10	13.28
10	4.75	4.13	4.26	2.90	5.10	7.96
11	4.49	2.57	3.59	3.40	5.30	6.28
12	4.00	2.60	7.81	6.40	6.60	25.26
13	3.65	2.21	7.73	5.40	5.50	0.00
14	2.75	2.20	6.05	5.80	5.70	0.00
15	2.12	2.02	5.54	5.10	4.50	0.00
16	1.19	1.19	2.46	3.80	1.90	0.00
17	1.18	1.74	2.30	4.30	2.30	0.00
18	1.14	1.14	1.95	4.10	2.80	0.00
19	0.97	1.24	1.52	3.50	2.40	0.00
20	0.74	0.76	1.21	2.90	1.60	0.00
21	0.54	0.70	1.17	2.10	1.10	0.00
22	0.47	0.85	0.86	2.20	0.90	0.00
23	0.41	0.70	0.62	2.20	0.70	0.00
24	0.36	0.59	0.47	1.40	0.50	0.00
25	0.96	1.61	2.03	11.70	1.60	0.00

Table 21
Registration Distribution Percentages by Age for Fairfax County, Virginia

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	7.22	6.87	5.46	2.30	3.40	3.73
2	9.22	10.76	7.95	4.70	6.70	4.42
3	10.08	12.23	9.44	4.70	6.70	4.24
4	10.53	12.91	9.00	4.70	6.70	5.75
5	10.19	13.46	9.21	4.70	6.70	9.52
6	8.99	8.49	8.24	3.80	7.30	8.24
7	8.06	7.78	6.30	3.30	6.10	5.77
8	5.53	5.41	4.61	2.10	4.00	7.83
9	4.48	3.62	3.12	2.60	4.10	11.92
10	4.20	2.82	3.32	2.90	5.10	8.15
11	3.69	1.95	3.10	3.40	5.30	6.09
12	3.55	2.00	6.18	6.40	6.60	24.34
13	3.09	1.48	6.53	5.40	5.50	0.00
14	2.41	1.43	4.87	5.80	5.70	0.00
15	1.71	1.09	3.40	5.10	4.50	0.00
16	1.00	0.69	1.76	3.80	1.90	0.00
17	0.99	1.12	1.62	4.30	2.30	0.00
18	0.98	1.05	1.29	4.10	2.80	0.00
19	0.82	0.98	1.02	3.50	2.40	0.00
20	0.64	0.60	0.66	2.90	1.60	0.00
21	0.50	0.59	0.57	2.10	1.10	0.00
22	0.45	0.54	0.52	2.20	0.90	0.00
23	0.41	0.49	0.48	2.20	0.70	0.00
24	0.38	0.45	0.44	1.40	0.50	0.00
25	0.88	1.19	0.91	11.70	1.60	0.00

Table 22
Registration Distribution Percentages by Age for Loudoun County, Virginia

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	6.60	6.42	5.21	2.30	3.40	3.56
2	9.10	9.17	8.05	4.70	6.70	4.84
3	10.01	11.03	9.13	4.70	6.70	4.97
4	10.09	11.38	6.87	4.70	6.70	6.50
5	9.59	12.60	6.99	4.70	6.70	9.38
6	8.30	9.14	6.29	3.80	7.30	6.81
7	7.75	8.69	5.57	3.30	6.10	3.99
8	5.03	5.55	3.92	2.10	4.00	7.48
9	4.16	3.77	2.45	2.60	4.10	12.14
10	4.00	3.15	3.07	2.90	5.10	7.23
11	3.63	2.28	3.43	3.40	5.30	6.38
12	3.94	2.36	6.96	6.40	6.60	26.73
13	3.61	2.29	6.94	5.40	5.50	0.00
14	2.91	1.75	6.24	5.80	5.70	0.00
15	2.20	1.54	3.67	5.10	4.50	0.00
16	1.28	0.93	2.36	3.80	1.90	0.00
17	1.31	1.03	2.61	4.30	2.30	0.00
18	1.26	1.26	1.86	4.10	2.80	0.00
19	1.15	1.03	1.72	3.50	2.40	0.00
20	0.84	0.80	1.33	2.90	1.60	0.00
21	0.65	0.66	1.05	2.10	1.10	0.00
22	0.59	0.66	1.12	2.20	0.90	0.00
23	0.53	0.66	1.05	2.20	0.70	0.00
24	0.48	0.66	0.97	1.40	0.50	0.00
25	1.00	1.19	1.17	11.70	1.60	0.00

Table 23
Registration Distribution Percentages by Age for Prince William County, Virginia

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	6.69	8.35	4.25	2.30	3.40	2.90
2	9.19	10.90	7.31	4.70	6.70	3.26
3	9.85	12.14	8.46	4.70	6.70	4.11
4	9.97	12.87	7.63	4.70	6.70	5.49
5	9.37	13.03	8.19	4.70	6.70	8.70
6	8.01	8.29	7.42	3.80	7.30	8.91
7	7.38	7.50	6.41	3.30	6.10	6.11
8	5.02	4.76	4.78	2.10	4.00	7.41
9	4.17	3.61	2.93	2.60	4.10	13.00
10	4.20	2.54	3.36	2.90	5.10	8.67
11	3.82	1.72	3.13	3.40	5.30	6.32
12	4.03	1.88	6.79	6.40	6.60	25.12
13	3.73	1.59	6.49	5.40	5.50	0.00
14	3.10	1.29	5.42	5.80	5.70	0.00
15	2.24	0.97	3.58	5.10	4.50	0.00
16	1.33	0.62	2.17	3.80	1.90	0.00
17	1.34	1.05	2.13	4.30	2.30	0.00
18	1.33	1.06	1.83	4.10	2.80	0.00
19	1.11	1.19	1.37	3.50	2.40	0.00
20	0.82	0.64	1.08	2.90	1.60	0.00
21	0.69	0.69	1.06	2.10	1.10	0.00
22	0.60	0.70	1.12	2.20	0.90	0.00
23	0.52	0.69	1.06	2.20	0.70	0.00
24	0.46	0.68	1.01	1.40	0.50	0.00
25	1.04	1.24	1.01	11.70	1.60	0.00

Table 24
Registration Distribution Percentages by Age for Stafford County, Virginia

Vehicle Age	LDGV and LDDV	LDGT1 and LDDT	LDGT2	HDGV	HDDV	MC
1	5.51	5.89	4.16	2.30	3.40	3.41
2	8.30	9.05	7.01	4.70	6.70	3.21
3	8.91	10.77	7.01	4.70	6.70	4.72
4	8.66	11.52	5.10	4.70	6.70	4.02
5	8.46	11.49	5.68	4.70	6.70	9.34
6	7.24	6.43	5.68	3.80	7.30	9.04
7	7.17	7.15	4.64	3.30	6.10	6.12
8	5.01	5.55	3.24	2.10	4.00	7.93
9	4.42	3.91	2.76	2.60	4.10	12.85
10	4.56	3.00	3.40	2.90	5.10	7.53
11	4.20	2.53	3.17	3.40	5.30	5.82
12	4.87	2.53	7.84	6.40	6.60	26.00
13	4.36	2.64	8.37	5.40	5.50	0.00
14	3.64	2.13	7.33	5.80	5.70	0.00
15	2.99	1.65	4.80	5.10	4.50	0.00
16	1.78	1.17	2.97	3.80	1.90	0.00
17	1.76	1.67	3.72	4.30	2.30	0.00
18	1.66	1.69	3.01	4.10	2.80	0.00
19	1.51	1.83	2.09	3.50	2.40	0.00
20	0.94	1.03	1.40	2.90	1.60	0.00
21	0.81	1.21	1.59	2.10	1.10	0.00
22	0.69	1.10	1.31	2.20	0.90	0.00
23	0.60	0.99	1.08	2.20	0.70	0.00
24	0.51	0.90	0.90	1.40	0.50	0.00
25	1.43	2.20	1.72	11.70	1.60	0.00

APPENDIX B
TRAFFIC STUDY

GOROVE/SLADE ASSOCIATES, Inc.
Suite 700 / 1140 Connecticut Ave NW / Washington, DC 20036

TRANSPORTATION, TRAFFIC and PARKING CONSULTANTS
tel: (202) 296-8625 fax: (202) 785-1276
toll free: (888) 212-4242 www.gsatrans.com

FACSIMILE TRANSMISSION

DATE: 04/03/2000 **G/SA PROJECT #:** 1407-004

TO:	COMPANY:	FAX #
Fred Parker	DHA	301-585-6486

FROM: Jay Nam (initial) _____
Lou Slade, P.E. (initial) _____
_____ (initial) _____

REMARKS:

Attached is the traffic study for Alban Towers. Please call with questions or comments.

Jay Nam

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ALBAN TOWERS

Washington, DC

Queue Impact Analysis

Prepared For

Charles E. Smith Realty Companies

Prepared by

Gorove/Slade Associates, Inc.
1140 Connecticut Avenue NW
Suite 700
Washington, D.C. 20036
202-296-8625

January 20, 2000

PROJECT BACKGROUND

The purpose of this technical memorandum is to summarize the findings of the queue impact analysis for the proposed residential complex to be located at near the National Cathedral in Northwest Washington, D.C. The results of this analysis will provide information regarding vehicular traffic forecasts and selected intersection queues required for an air quality analysis. The proposed site is bounded by Cathedral Avenue, Massachusetts Avenue, Wisconsin Avenue, Garfield Street, and 38th Street. The study area and the site location are shown in Figure 1.

INTERSECTIONS

Methodology for Inclusion

In order to identify which intersections should be included in the study, a set of criteria was established. The factors in considering which intersections should be included are listed below:

- Existing traffic volumes
- Future traffic volume impact on intersection
- Peak direction
- Accessibility to other streets

Upon consideration of these factors and the location of the site access road, the following four intersections have been selected for inclusion in this study:

- Massachusetts Avenue / Cathedral Avenue
- Wisconsin Avenue / Cathedral Avenue
- Massachusetts Avenue / Wisconsin Avenue
- Wisconsin Avenue / Garfield Street

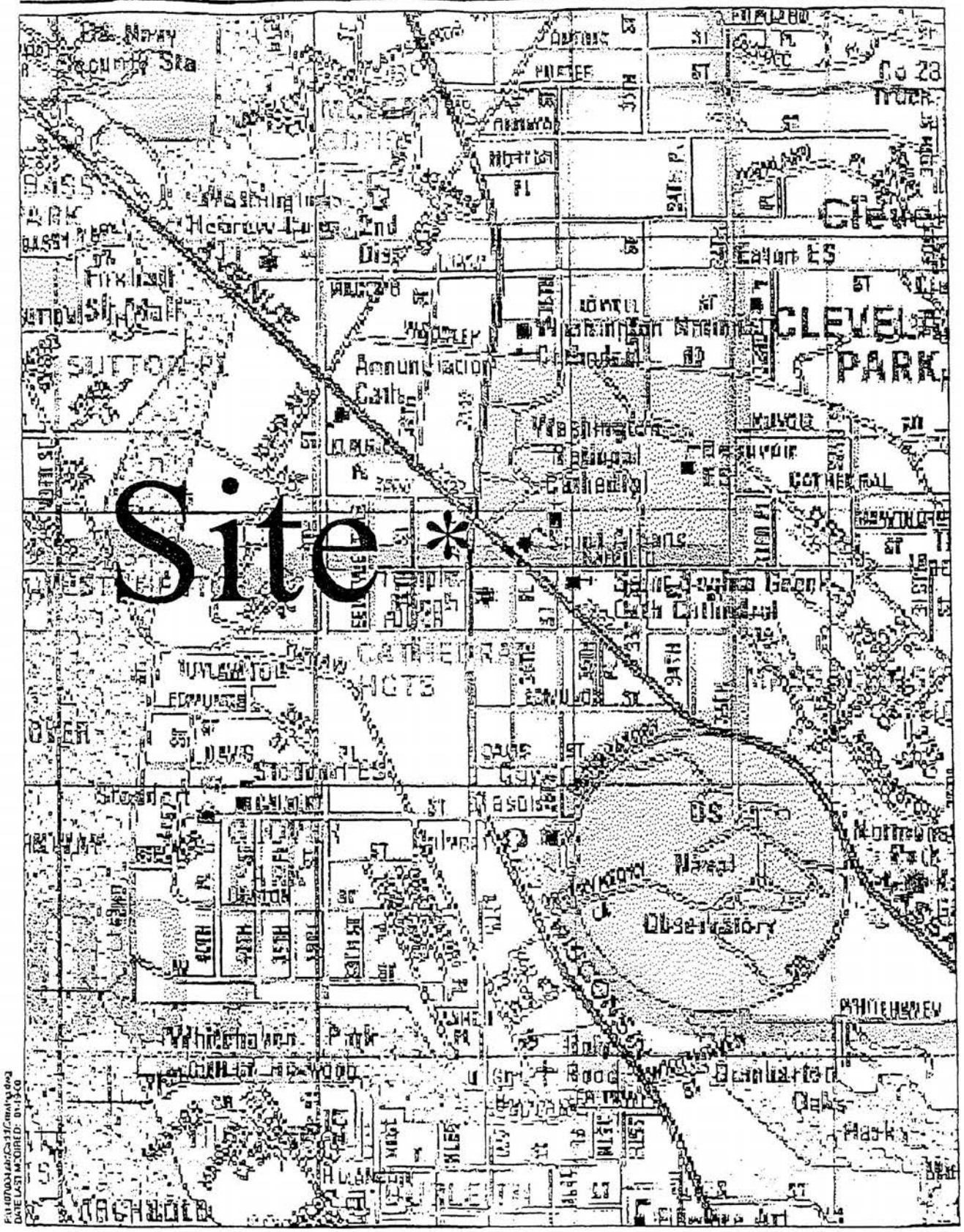


Figure 1
Study Area and Site Location

EXISTING CONDITIONS ANALYSIS

Existing Traffic Volumes

As part of the documentation of existing conditions, field observations were undertaken to document existing intersection lane configurations within the study area. Manual traffic volume counts were taken at all four intersections midweek during the A.M. and P.M. peak hour to capture the commuter traffic. The lane configuration of the selected intersections are shown in Figure 2. The existing traffic volumes are shown in Figure 3.

Existing Average Speed

Throughout the A.M. and P.M. peak hour, travel times were collected for randomly selected vehicles for each approach to each intersection. Based on the distances measured, the average travel times would give average speed for each approach to each intersection. The results are shown in Table 1 below. The actual travel times for each link are included in the appendix.

Table 1
Alban Towers
Average Speed

	Average Speed in 5 mph Increments	
	A.M. Peak Hour	P.M. Peak Hour
NB Massachusetts	25	30
SB Massachusetts	30	25
WB Cathedral	20	20
NB Wisconsin	35	35
SB Wisconsin	25	25
NB Wisconsin	30	30
SB Wisconsin	30	30
EB Massachusetts	25	25
WB Massachusetts	25	25
NB Wisconsin	25	30
SB Wisconsin	25	30
EB Garfield	10	15
WB Garfield	10	10

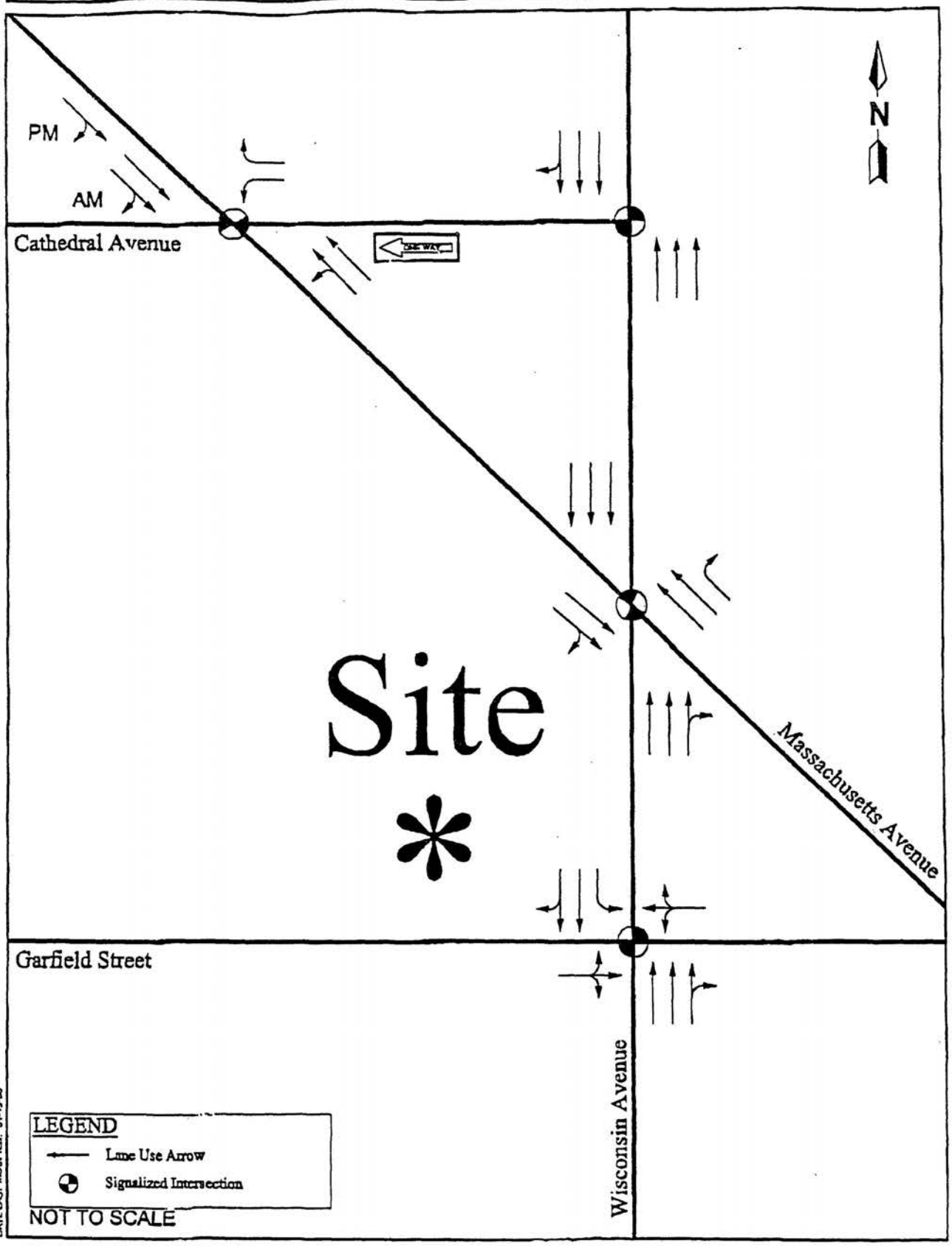


Figure 2
Existing Lane Configuration

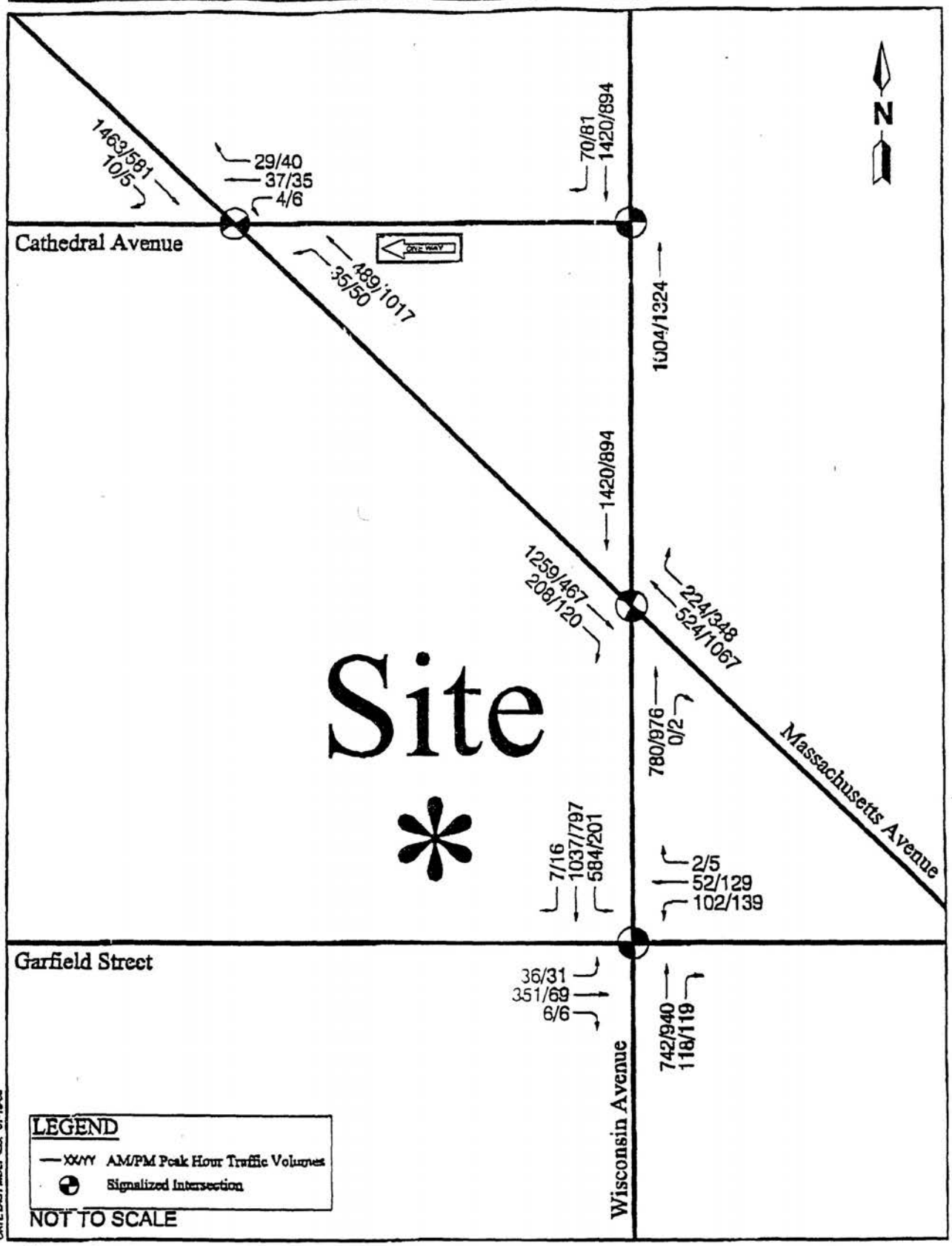


Figure 3
Existing Traffic Volumes