COMMONWEALTH OF VIRGINIA
COUNTY OF FAIRFAX
4100 CHAIN BRIDGE ROAD
FAIRFAX, VIRGINIA 22030

# STAFF REPORT

## APPLICATION NUMBER PCA 76-P-104-1

## PROVIDENCE DISTRICT

Applicant: Calibre Companies of Virginia

Present Zoning: R-20 Requested Zoning: N/A

Proposed Use: Garden Apartments Acreage: 5.4 acres

Subject Parcels: 47-4 ((1)) pt. 34

Application Filed: March 9, 1983

Planning Commission Public Hearing: June 16, 1983

Board of Supervisors Public Hearing: June 20, 1983

Staff Recommendation: Staff recommends that PCA 76-P-104-1 be approved with the draft proffers as submitted by the application.

It should be noted that it is not the intent of the staff to recommend that the Board, in adopting any conditions offered by the owner, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted standards.

JD
2412

# Proffered Condition Amendment

Number: PCA 76-P-104-1

District: Providence

Acreage: 5.4

Section Sheet: 47-4

Existing Zoning: R-20

Subdivision: ((1))

Lot: pt. 34

Applicant: Calibre Companies of Va.

# Proffered Condition Amendment

Number: PCA 76-P-104-1

District: Providence

Acreage: 5.4

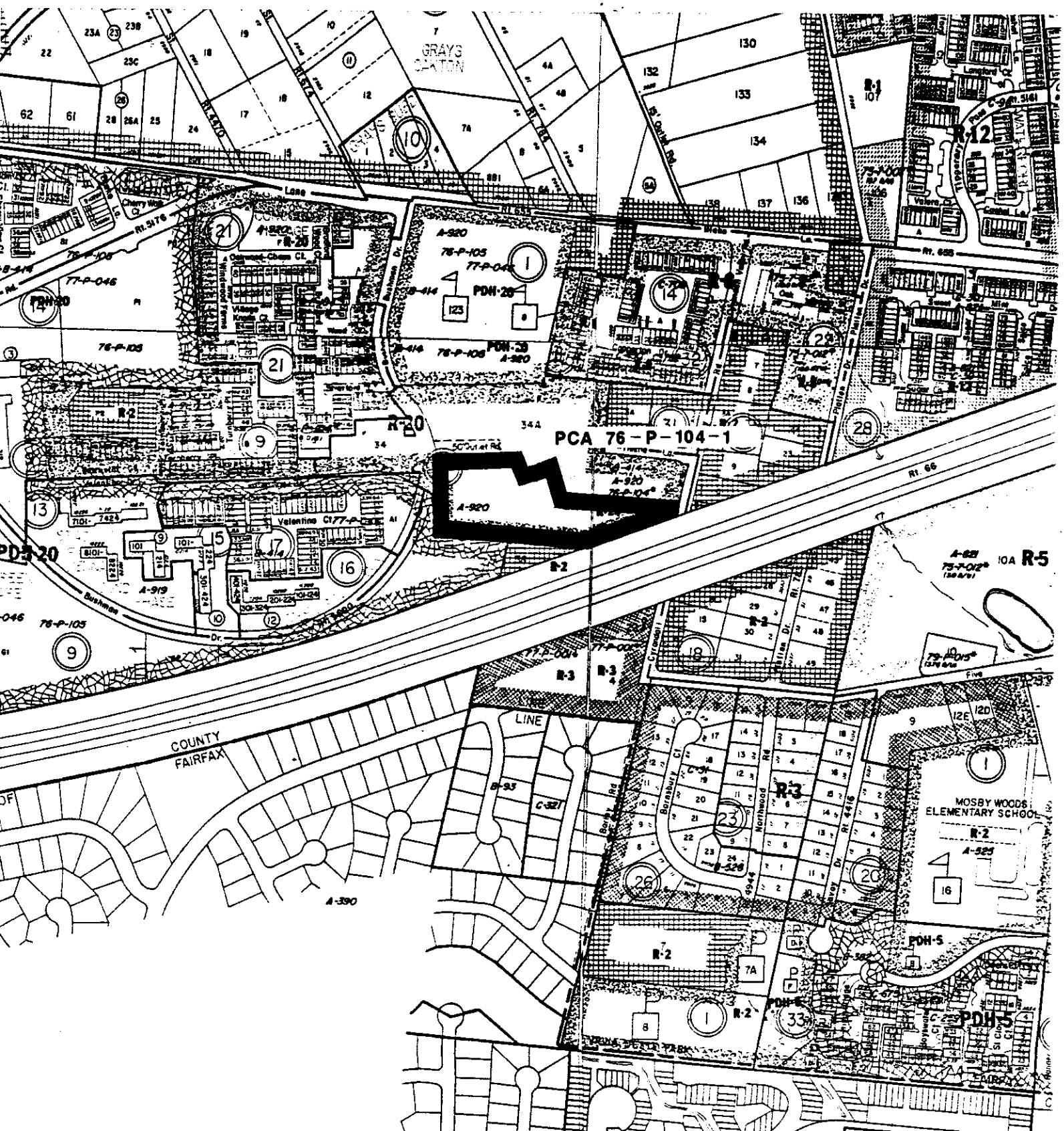
Section Sheet: 47-4

Existing Zoning: R-20

Subdivision: ((1))

Lot: pt. 34

Applicant: Calibre Companies of Va.


PCA 76-P-104-1
R-20
R-2
R-3
R-5
R-12
PDH-20
PDH-5
COUNTY OF FAIRFAX
MOSBY WOODS ELEMENTARY SCHOOL
GRAYS TAVERN
Rt. 66
Rt. 50
Rt. 236
Rt. 5176
Rt. 5174
Rt. 5170
Rt. 5161
Rt. 655
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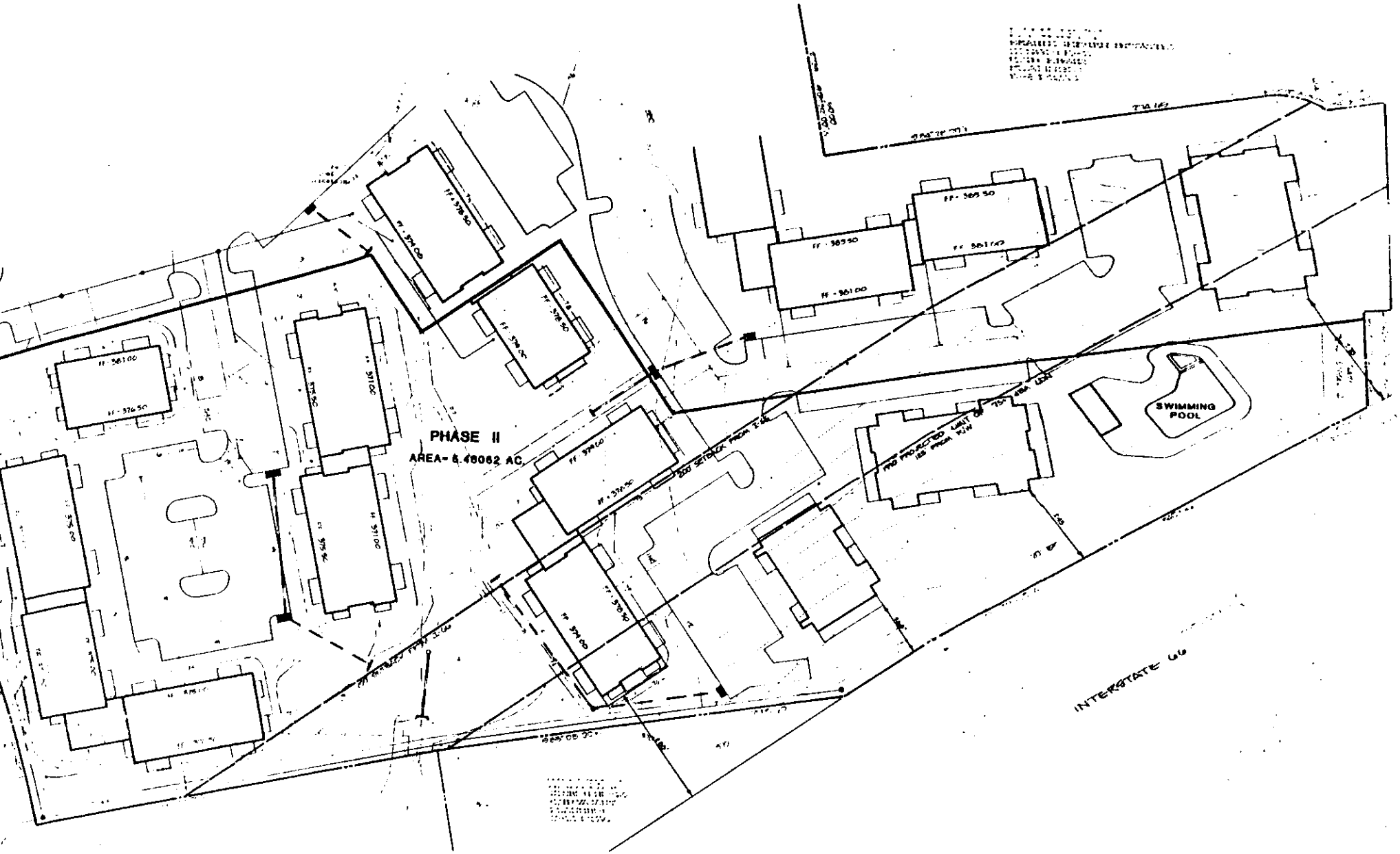
PHASE II
AREA- 5.48062 AC.
SWIMMING POOL
INTERSTATE 66

A GLOSSARY OF TERMS FREQUENTLY
USED IN STAFF REPORTS WILL BE
FOUND AT THE BACK OF THIS REPORT

## DESCRIPTION OF THE APPLICATION

The applicant is proposing to amend the approved proffers on a 5.4 acre portion of RZ 76-P-104, a 37.6 acre application approved on November 21, 1977. The proffers approved with RZ 76-P-104 permitted a maximum of 752 units resulting in a density of 20 dwelling units per acre. It should be noted that the development plan submitted at that time was not proffered. This allowed the applicant the flexibility to develop with a variety of housing types as long as the number of units did not exceed 752. This application is prompted by the applicant's desire to place three structures within 200 feet of Interstate 66. Sect. 2-414 of the Zoning Ordinance states that a minimum distance of 200 feet must be maintained between all principal building and right(s)-of-ways of interstate highways. Deviations from this requirement...

> "...may be permitted wih the Board of Supervisors approval of appropariate proffered conditions, if it finds that such deviations will further the intent of the Ordinance, adopted Comprehensive Plan, and other adopted policies."

The applicant is requesting approval to locate units within the 200 foot setback and has provided noise attenuation proffers designed to address staff concerns regarding appropriate noise mitigation measures. The applicant's proffers are contained in Appendix 3.

## LOCATION AND CHARACTER OF THE AREA

The site is bounded to the south by Route 66 and a tract of land zoned PDH-20. To the west of the site is Bushman Drive, and to the north is a tract of land zoned R-20. Across Bushman Drive to the west are the Vistas Of Vienna Condominiums.

## COMPREHENSIVE PLAN RECOMMENDATION

The subject property is located in Community Planning Sector F3 (Mosby Woods) of the Fairfax Planning District in Area II.

There is no specific Plan text which refers to the proposed amendment.

The adopted Area II Plan map indicates the subject property as planned for 8-12 and 16-20 dwelling units per acre.

TRANSPORTATION ANALYSIS

The proposed proffered condition amendment would result in only a minimal amount of additional traffic for the 5.4 acre portion of the site because of the change in housing type. Because the applicant has been developing the site at densities much lower than was originally approved, the overall transportation impact would actually be less.

ENVIRONMENTAL SITE ANALYSIS

Noise originating from traffic on Interstate 66 is the major environmental constraint for this development. Three apartment buildings are proposed within 35 feet of the I-66 right-of-way. These buildings are estimated to be impacted by projected (1995) noise levels of 75 dBA Ldn and greater. A combination of noise attenuation measures will have to be implemented if acceptable interior noise levels of 45 dBA Ldn or less are to be achieved. There are several alternative approaches. One would be to relocate the three buildings outside of the 75+ dBA Ldn noise zone, that is beyond 300 feet from the centerline of I-66, and to acoustically treat these buildings to achieve a 45 dBA Ldn maximum interior noise level. If the buildings cannot be moved from the 75 dBA Ldn noise zone, more extensive structural noise attenuation devices will be needed. A noise barrier sufficient in height to break the line of sight between all building windows and trucks and cars on I-66 will be required to reduce noise levels to some extent. Acoustical treatment of the buildings will be needed to reduce noise levels further to the recommended maximum of 45 dBA Ldn. Unshielded portions of the buildings should be acoustically treated to the standards for 75+ dBA Ldn. Shielded portions of the buildings should be acoustically treated to the standards in Appendix 5.

The remaining buildings on-site are subjected to projected (1995) noise levels of 70-75 dBA Ldn and should be acoustically treated to the standards in Appendix 5. Acoustical fencing should be designed to shield outdoor recreation areas to assure these areas are useable. Other approaches to achieving a maximum interior (projected 1995) noise level of 45 dBA Ldn for all buildings and a maximum exterior (projected 1995) noise level of 65 dBA Ldn for outdoor recreation areas may be possible. Proposals by the applicant's acoustical engineer are welcome.

Landscaping should be provided throughout the site to enhance its attractiveness. Specifically, evergreen trees should be planted along I-66 to screen views of the road and/or the noise barrier.

DEVELOPMENT PLAN ANALYSIS

The development plan as submitted by the applicant depicts the construction of 11 garden apartment structures resulting in 110 units within the 5.4 acre site. A swimming pool would be located in the southeastern portion of the site.

The applicant has provided noise attenuation measures as detailed in the draft proffer statement. A noise barrier would be provided to shield all residential units located within 125 feet of the Interstate 66 right-of-way. It is noted that the barrier would also provide noise attenuation for the proposed structures located on the contiguous property to the north.

The height of the barrier would be based on shielding the "line-of-signt" from a noise source located eight feet above the centerline of I-66 to the top of the operable window located on the top floor on each building. The barrier would be comprised of a combination of earth berms and an architecturally solid wood fence or other similar material.

The applicant has proffered to provide an accoustical engineering study to be submitted to the Office of Comprehensive Planning and the Department of Environmental Management to allow for appropriate staff review and comments.

The above-referenced noise attenuation proffers adequately address staff concerns regarding noise mitigation.

The applicant's draft proffers state that all the previously approved proffers resulting from RZ 76-P-104 would be in effect and complied with.

STAFF CONCLUSIONS AND RECOMMENDATIONS

The applicant has submitted a draft proffer statement to provide noise attenuation measures in accordance with staff analysis. The proposed barier and acoustical treatment measures would provide adequate noise mitigation measures.

The proposed Proffered Condition Amemdment would not adversely impact the remaining issues regarding public facilities and transportation.

Conclusion

Staff recommends that PCA 76-P-104-1 be approved with the draft proffers as submitted by the application.

It should be noted that it is not the intent of the staff to recommend that the Board, in adopting any conditions offered by the owner, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted standards.

APPENDICES

1. Affidavit
2. Letter of Justification
3. Proffers
4. Transportation Analysis
5. Environmental Analysis
6. Originally Approved Proffers
7. Glossary

I, Chip Kelley, do hereby make oath or affirmation that I am an applicant in Rezoning Application Number _____ and that to the best of my knowledge and belief, the following information is true:

1. (a) That the following constitutes a listing of names and last known addresses of all applicants, title owners, contract purchasers, and lessees of the land described in the application, and if any of the foregoing is a trustee, each beneficiary having an interest in such land, and all attorneys, real estate brokers, architects, engineers, planners, surveyors, and all agents who have acted on behalf of any of the foregoing with respect to the application:

| Name | Address | Relationship |
|---|---|---|
| The Milton Company | 1951 Kidwell Drive, Vienna,VA. | Title Owner |
| The Calibre Co. of Virginia,Inc. | 3869 Plaza Dr.Fairfax,Va. | Contract Owner |
| Patton,Harris,Rust & Assoc.,P.C., | 10523 Main St. Fairfax,VA. | Planners/ Engineers |

(b) That the following constitutes a listing of the shareholders of all corporations of the foregoing who own ten (10) per cent or more of any class of stock issued by said corporation, and where such corporation has ten (10) or less shareholders, a listing of all the shareholders:

| Name | Address | Relationship |
|---|---|---|
| The Milton Company | | |
| Milton Schneiderman - Stockholder of 10% or greater | | |
| Patton, Harris, Jr.,P.E.,L.S. | | |
| W. G. Harris, Jr., P.E., L.S. | | |
| T.D. Rust, P.E. | | |
| E. F. Fournier, L.S. | Stockholders. | |
| C. R. Weber, P.E. | | |
| W. F. Ostrander, Jr., AICP | | |

(c) That the following constitutes a listing of all partners, both general and limited, in any partnership of the foregoing:

| Name | Address | Relationship |
|---|---|---|
| Calibre | | |
| Chip Kelley | 3869 Plaza Dr. Fairfax, Virginia 22030 | Partner |
| Edward L. Brinson | | Partner |
| Jack W. Morse, Jr. | | Partner |
| Douglas C. Mullin | | Partner |
| James R. Treadwell | | Partner |

2. That no member of the Fairfax County Board of Supervisors or Planning Commission owns or has any interest in the land to be rezoned or has any interest in the outcome of the decision.
EXCEPT AS FOLLOWS: (If none, so state)
No member of the Fairfax County Board of Supervisors or Planning Commission owns or has any interest in the land to be rezoned or has any interest in the outcome of the decision.

3. That within the five (5) years prior to the filing of this application, no member of the Fairfax County Board of Supervisors or Planning Commission or any member of his immediate household and family, either directly or by way of partnership in which any of them is a partner, employee, agent, or attorney, or through a partner of any of them, or through a corporation in which any of them is an officer, director, employee, agent, or attorney, or holds outstanding bonds or shares of stock with a value in excess of fifty dollars ($50), has or has had any business or financial relationship, other than any ordinary depositor or customer relationship with or by a retail establishment, public utility, or bank, including any gift or donation having a value of fifty dollars ($50) or more with any of those listed in Par. 1 above.
EXCEPT AS FOLLOWS: (If none, so state)
Calibre - None
Milton - None
Patton, Harris, Rust and Associates, P.C. - None

WITNESS the following signature: _____
Applicant

The above affidavit was subscribed and confirmed by oath or affirmation before me this 19 day of May 19 83
in the State of Virginia
My commission expires: May 31, 1986
Notary Public

In accordance with Section 2-414 of the Fairfax County Zoning Ordinance, the Applicant herein requests that the Board of Supervisors permit deviation from the provisions of Paragraph 1 therein, as provided for in Paragraph 3, and accept a proffered condition amendment to Case #76-P-104 to satisfy the intent of the Ordinance, Comprehensive Plan, and other adopted policies in this matter.

The Applicant suggests the addition of a proffered condition to provide noise attenuation, through architectural treatment and other construction measures, for those multi-family units to be located less than 200 feet from the Interstate 66 right-of-way.

The Applicant proposes to build Phase II of Oakton Terrace, a 240 unit multi-family development consisting of 24 buildings. Phase I, which is now under construction, includes 120 units of half of the total development. Phase II will entail locating 4 multi-family buildings (40 units) and portions of one additional multi-family building (4 units) within the 200 foot setback form the I-66 right-of-way; the remaining 7 multi-family buildings to be built in Phase II will be beyond the 200 foot setback.

In November of 1977, under application #76-P-104, this property was rezoned from PAD - Planned Apartment District to the RM-2 Multi-Family Residential District. The development plan for the rezoning case was not proffered so that flexibility could be retained in the provision of different unit types on the property. The zoning on the property is now R-20 Residential (20 d.u./acre). Originally, the proposed development envisioned a mid-to-high rise multi-family structure. Later, a townhouse project was proposed. Recently, the Applicant has built Phase I of Oakton Terrace with low-rise apartment structures. The Applicant is now under contract to purchase the remainder of the subject property in order to complete the development of this project under a common site plan.

When the property was rezoned to the RM-2 district, there was no provision in the then current ordinance stipulating a mandatory building setback from the I-66 right-of-way. The Applicant believes that the provision of architectural measures for noise abatement will in effect satisfy the intent of the 200 foot setback requirements of the now current ordinance.

In addition, application of the 200 foot setback regualtion would prevent the Applicant from achieving the density authorized for the property when it was rezoned. Although the rezoning development plan illustrated a different type of multi-family structure, the plan was not proffered and

the Owner specifically retained the right to develop the property with any type of residential unit allowed under the RM -2 district regulations. The current application proposes that two and one half story condominium apartments be constructed. Strict application of the 200 foot setback would reduce the authorized density by over 18%, and would render the project infeasible.

Chip Kelley
President
March 7, 1983

Patton Harris
Rust and
Associates

PROFFER STATEMENT

PROFFER CONDITION AMENDMENT #76-P-104-1

The Calibre Companies of Virginia, Inc.

The Applicant and Owner of the property subject to Proffer Condition Amendment #76-P-104-1 hereby proffer that, if the Fairfax County Board of Supervisors grants a waiver of the 200 foot setback from Interstate 66 (Section 2-414 paragraph 1 of the Zoning Ordinance) for construction of 2-3 story "garden" apartments as proposed, such development shall be in accordance with the following conditions:

1. All previous proffered conditions of rezoning case #76-P-104 shall remain in full force and effect.

2. If 2-3 story "garden" apartment buildings are developed with 200 feet of the Interstate 66 right-of-way line, as generally shown on the Preliminary Site Plan prepared by Patton, Harris, Rust & Associates (dated March 28, 1983 and revised June 2, 1983), the Applicant will provide noise attenuation measures as follows. These noise

mitigation measures will be based upon the 1995 projections contained in the Staff Report, in conjunction with onsite precision noise measurements and an analysis of all pertinent factors by a qualified acoustical engineer. These measures will ensure that projected (1995) interior noise levels will not exceed the maximum acceptable noise level of 45 dBA Ldn and ensure that some passive recreational space will be provided where projected (1995) exterior noise levels will not exceed 65 dBA Ldn. In addition, the measures will ensure that no resident standing directly in front of a window or on any balcony will be subjected to noise levels which exceed 75 dBA Ldn.

A. A noise barrier will be provided to shield all apartment buildings which lie within 150 feet of the Interstate 66 right-of-way line (area projected to exceed 75 dBA Ldn by 1995), to include three buildings on the subject parcel, and a fourth building located on the adjacent property owned by Calibre and which is an integral part of this apartment project. The height of this barrier shall be determined by

the principle of shielding the "line-of-sight" from a noise source located eight feet above the centerline of Interstate 66 to the top of the operable window vent on each building within this area.

The height of this noise barrier and specifications of construction materials shall be in accordance with an acoustical engineering study, prepared by a qualified acoustical engineer. This study will be submitted to Fairfax County/OCP with the Final Site Plan for these buildings. It shall be the responsibility of the Applicant to provide relevant information to verify that the proposed measures will meet the above noted noise level criteria.

It is proposed that the construction of this noise barrier will consist of a combination of earth berms and an architecturally solid wood fence, or other such materials which will provide the desired shielding effect. This noise barrier will be maintained by the property owner.

B. All apartment buildings within 200 feet of the Interstate 66 right-of-way will be constructed of building materials which meet the Federal H.U.D. environmental criteria and standards, Title 24 CFR Part 51.

Applicant/Contract Owner:

_____

for the Calibre Companies of Virginia, Inc.

_____

date

Owner:

_____

for the Milton Company

_____

date

Appendix 4

# FAIRFAX COUNTY, VIRGINIA

## MEMORANDUM

TO: Sidney R. Steele, Division Director
Zoning Evaluation Branch, OCP DATE May 16, 1983

FROM: Robert L. Moore
Office of Transportation

FILE NO: 3-4

SUBJECT: Transportation Impact

REFERENCE: PCA76-P-104-1, Realty Growth Investors, 47-4 ((9)) pt. 34A
Traffic Zone 1129

IMPACT ANALYSIS

Compatibility with the Adopted Plan

No conflicts with the transportation element of the Countywide Plan are anticipated.

Traffic Impact

This Office understands that although the intensity of development on the land included in this application would increase, the density of the overall development would remain within the original approval and within the Comprehensive Plan recommendation. Therefore, additional commitments for transportation improvements would not be warranted.

DESIGN CONSIDERATIONS

The revised development plan for this apartment complex appears to be sufficiently integrated with the public and private street system proposed for this area. Therefore, access and traffic circulation should be adequate.

It should be noted, however, that the proposed relocation of the buildings into the 200 foot setback area along Route I-66 could result in noise impacts. VDH&T has informed this Office that the Department has no plans for provision of a sound barrier in this area. Therefore, it would be incumbent upon the applicant/developer to provide noise attenuation as deemed necessary.

SUMMARY

There are three development issues associated with this application. The trip generation of this development phase would increase, but its impact should be minimal and would not warrant additional transportation improvements. The development plan indicates that adequate access and traffic circulation would be available. However, the structure relocation may necessitate attenuation of noise impacts. The applicant/developer should provide attenuation of noise as deemed necessary.

# ENVIRONMENTAL CHECKLIST

Project Number: PCA-76-P-104-1 Location: 47-4 ((1)) 34

Existing Zoning: R-20 Proposed Zoning and/or Use: Residential Acreage: 5.48

Relevant Comprehensive Plan Language: _____

| Site Features | Presence: Yes | Presence: No | Comments |
|---|---|---|---|
| A. Geology: Coastal Plain, Piedmont, Triassic | | | |
| 1. shallow bedrock | | X | |
| 2. groundwater resource | | X | |
| 3. geologic hazards | | X | |
| B. Topography: (steep slopes 15%+) | | X | |
| C. Hydrology: | | | |
| 1. water features | | X | |
| 2. critical location in watershed | | X | |
| 3. water supply watershed | | X | |
| D. Soils: | | | |
| 1. marine clays | | X | |
| 2. shrink-swell clays | | X | |
| 3. highly erodible soils | | X | |
| 4. high water table soils | | X | |
| 5. soils with low bearing strength | | X | |
| 6. poor infiltration soils | | X | |
| E. Vegetation, Wildlife and Open Space | | | |
| 1. quality vegetation | | X | |
| 2. wildlife habitat | | X | |
| 3. EQC | | X | |

## Concerns

| Environmental Quality | Yes | No | Comments |
|---|---|---|---|
| F. Noise | | | |
| 1. airport noise | | X | F. Noise |
| 2. highway noise | X | | 2. Noise impacts from I-66 at 65-75 dBA Ldn levels. |
| 3. railroad noise | | X | |
| 4. other types of noise | | X | |
| G. Water | | | G. Water |
| 1. point source pollution | | X | 2. Construction will increase runoff. |
| 2. nonpoint source pollution | X | | |
| H. Air: (mobile or stationary source) | | X | |
| I. Toxic or Hazardous Substances | | X | |
| J. Aesthetics: (internal views, views from site, views of site from adjacent development, landscaping) | X | | J. Aesthetics<br>Evergreen plantings need to be provided along I-66. |
| K. Nonmotorized Circulation | | | |
| 1. access and internal circulation | | X | |
| 2. pedestrian/vehicular conflicts | | X | |
| 3. trails plan requirement | | X | |
| L. Energy Conservation | | X | |
| M. Pipeline and Utility Line Hazards | | X | |
| N. Site Design Quality (layout, site facilities) | X | | N. Site Design<br>The three buildings which are 35' from I-66 should be redesigned so that the parking area is along I-66 rather than the units. |
| O. Nuisances (glare, odor) | | X | |
| P. Agricultural and Forest Land Preservation | | X | |
| Q. Other | | X | |

Appendix 6

September 22, 1977

Urban Board of Supervisors of
Fairfax County, Virginia
4100 Chain Bridge Road
Fairfax, Virginia 22030

RE: Proffer, Application 76-P-104

Gentlemen:

I hereby proffer that the development of the property subject to this application shall be in strict accordance with the following conditions unless an amendment thereto is mutually agreed upon by the Board of Supervisors and the applicant:

1. 4/10 of an acre will be dedicated to the Fairfax County School Board for the enlargement of the school site which is adjacent to subject property. It is contemplated by the applicant that the School Board in turn will dedicate approximately 1/10 of an acre to the Board of Supervisors or VDH&T for the right of way of the proposed Bushman Drive as shown on the generalized development plan submitted with the application.

2. The applicant will dedicate, at time of rezoning, free from liens and encumbrances, that part of Jermantown Road that is located on site, and further, will dedicate at the same time from the premises, additional right of way for Blake Lane and Jermantown Road so that these roads will have a right of way 45 feet from their respective centerlines.

3. Applicant will construct, in connection with the widening of Blake Lane, and at time of site development, a road section 35 feet from centerline which will include curb, gutter, and sidewalk of sufficient width to accomodate the Countywide Trail System.

4. Applicant will construct within the right of way of Jermantown Road at time of site development a road section 35 feet from centerline including curb, gutter, and sidewalk, of sufficient width to accomodate the Countywide Trail System.

5. Applicant will eliminate connection to Cyrandall Valley Drive.

6. Applicant will dedicate right of way 30 feet from centerline of Cyrandall Valley Drive.

7. Applicant will restrict traffic to right turn only at the apartment entrance to Jermantown Road unless a median cut is provided in Jermantown Road opposite subject entrance, or the apartment entrance is relocated so as to be opposite a median cut.

## GLOSSARY

This Glossary is presented to assist citizens in a better understanding of Staff Reports; it should not be construed as representing legal definitions.

BUFFER - A strip of land established as a transition between distinct land uses. May contain natural or planted shrubs, walls or fencing, singly or in combination.

CLUSTER - The "alternate density" provisions of the Zoning Ordinance, which permits smaller lots and pipestem lots, if specified open space is provided. Primary purpose is to preserve environmental features such as stream valleys, steep slopes, prime woodlands, etc.

COVENANT - A private legal restriction on the use of land, recorded in the land records of the County.

DEVELOPMENT PLAN - Conceptual, Final, Generalized. A Development Plan consists of graphic, textual or pictorial information, usually in combination, which shows the nature of development proposed for a parcel of land. The Zoning Ordinance contains specific instructions on the content of development plans, based upon the purpose which they are to serve. In general, development plans contain such information as: topography, location of streets and trails, means by which utilities and storm drainage are to be provided, general location and types of structures, open space, recreation facilities, etc. A Conceptual Development Plan is required to be submitted with an application for the PDH or PDC District; a Final Development Plan is a more detailed plan which is required to be submitted to the Planning Commission after approval of a PDH or PDC District and the related Conceptual Development Plan; a Generalized Development Plan is required to be submitted with all residential, commercial and industrial applications other than PDH or PDC.

DEDICATE - Transfer of property from private to public ownership.

DENSITY - Number of dwelling units divided by the gross acreage being developed (DU/AC). Density Bonus is an increase in the density otherwise allowed, and granted under specific provisions of the Zoning Ordinance when developer provides excess open space, recreation facilities, moderately priced housing, etc.

DESIGN REVIEW - The Division of the Department of Environmental Management which reviews all subdivision plats and site plans for conformance with County policies and requirements contained in the Zoning Ordinance, the Subdivision Control Ordinance, the Public Facilities Manual, the Building Code, etc, and for conformance with any proffered plans and/or conditions.

EASEMENT - A right given by the owner of land to another party for specific limited use of that land. For example, an owner may give or sell easements to allow passage of public utilities, access to another property, etc.

OPEN SPACE - The total area of land and/or water not improved with a building, structure, street, road or parking area, or containing only such improvements as are complementary, necessary or appropriate to use and enjoyment of the open area.

Common - All open space designed and set aside for use by all or designated portions of residents of a development, and not dedicated as public lands (dedicated to a homeowners association which then owns and maintains the property).

Dedicated - Open space which is conveyed to a public body for public use.

Developed Recreation - That portion of open space, whether common or dedicated, which is improved for recreation purposes.

PROFFER - A Development plan and/or written condition, which, when offered by an owner and accepted by the Board of Supervisors, becomes a legally binding part of the regulations of the zoning district pertaining to the property in question. Proffers, or proffered conditions, must be considered by the Planning Commission and submitted by an owner in writing prior to the Board of Supervisors public hearing on a rezoning application, and thereafter may be modified only by an application and hearing process similar to that required of a rezoning application.

PUBLIC FACILITIES MANUAL - The manual, adopted by the Board of Supervisors, which defines guidelines which govern the design of those facilities which must be constructed to serve new development. The guidelines include streets, drainage, sanitary sewers, erosion and sediment control and tree preservation and planting.

SERVICE LEVEL - An estimate of the effectiveness with which a roadway carries traffic, usually determined under peak anticipated load conditions.

SETBACK, REQUIRED - The distance from a lot line or other reference point, within which no structure may be located.

SITE PLAN - A detailed plan, to scale, depicting development of a parcel of land and containing all information required by the Zoning Ordinance. Site plans are required, in general, for all townhouse and multi-family residential development and for all commercial and industrial development.

SUBDIVISION ORDINANCE - An ordinance regulating the division of land into smaller parcels and which, together with the Zoning Ordinance, defines required conditions laid down by the Board of Supervisors for the design, dedication and improvement of land.

SUBDIVISION PLAT - A detailed drawing, to scale, depicting division of a parcel of land into two or more lots and containing engineering considerations and other information required by the Subdivision Ordinance.

USE - The specific purpose for which a parcel of land or a building, is designed, arranged, intended, occupied or maintained.

Permitted - Uses specifically permitted by the Zoning Ordinance Regulations of the Zoning District within which the parcel is located. Also described as a Conforming Use.

Non-Conforming - A use which is not permitted in the Zoning District in which the use is located but is allowed to continue due to its existance prior to the effective date of the Zoning Regula-

USE - Continued.

Special Permit - A use specified in the Zoning Ordinance which may be authorized by the Board of Zoning Appeals or the Board of Supervisors in specified zoning districts, upon a finding that the use will not be detrimental to the character and development of the adjacent land and will be in harmony with the policies contained in the latest adopted comprehensive pl for the area in which the proposed use is to be located. A Special Permit is called a Special Exception when granted by the Board of Supervisors.

Transitional - A use which provides a moderation of intensity of use between uses of higher and lower intensity.

VARIANCE - A permit which grants a property owner relief from certain provisions of the Zoning Ordinance when, because of the particular physical surroundings, shape or topographical condition of the property, compliance would result in a particular hardship or practical difficulty which would deprive the owner of the reasonable use of the land or building involved. Variances may be granted by the Board of Zoning Appeals after notification, advertising, posting and conduct of a public hearing on the matter in question.

VPD - Vehicle trips per day (for example, the round trip to and from work equals two VPD). Also ADT - Average Daily Traffic.

## ENVIRONMENTAL TERMS

ACOUSTICAL BERM - Usually a triangular-shaped earthen structure paralleling a highway noise source and extending up from the elevation of the roadway a distance sufficient to break the line of sight with vehicles on the roadway.

AQUIFER - A permeable underground geologic formation through which groundwater flows.

AQUIFER RECHARGE AREA - A place where surface runoff enters an aquifer.

CHANNEL ENLARGEMENT - A development-related phenomenon whereby the stream's bank full capacity is exceeded with a greater frequency than under natural undeveloped conditions, resulting in bank and stream bottom erosion. Hydrology literature suggests that flows produced by a storm event which occurs once in 1.5 years are the channel defining flows for that stream.

COASTAL PLAIN GEOGRAPHIC PROVINCE - In Fairfax County, it is the relatively flat southeastern 1/4 of the County, distinguished by low relief and a preponderance of sedimentary rocks and materials (sands, gravels, silts) and a tendency towards poorly drained soils.

dB(A) - Abbreviation for a decibel or measure of the noise level perceived by the ear in the A scale or range of best human response to a noise source.

DRAINAGE DIVIDE - The highest ground between two different watersheds or subsheds.

ENVIRONMENTAL LAND SUITABILITY - A reference to a land use intensity or density which should occur on a site or area because of its environmental characteristics.

ERODIBLE SOILS - Soils susceptible to diminishing by exposure to elements such as wind or water.

FLOODPLAIN - Land area, adjacent to a stream or other surface waters, which may be submerged by flooding; usually the comparatively flat plain within which a stream or riverbed meanders.

IMPERVIOUS SURFACE - A natural or man-made surface (road, parking lot, roof top, patio) which forces rainfall to runoff rather than infiltrate.

MONTMORILLONITIC CLAY - A fine grained earth material whose properties cause the clay to swell when wet and shrink when dry. In addition, in Fairfax County these clays tend to slip or slump when they are excavated from slope situations.

NEF - Noise Exposure Forecast - A noise description for airport noise sources.

PERCENT SLOPE - The inclination of a landform surface from absolute horizontal; formula is vertical rise (feet) over horizontal distance (feet) or V/H.

PIEDMONT GEOGRAPHIC PROVINCE - The central portion of the County, characterized by gently rolling topography, substantial stream dissection, V-shaped stream valley, an underlying metamorphic rock matrix (schist, gneiss, greenstone) and generally good bearing soils.

PIES/ENVIRONMENT - Project Impact Evaluation - A systematic, comprehensive environmental review process used to identify and evaluate likely environmental impacts associated with individual project or area plan proposals.

SHRINK-SWELL RATE - The susceptibility for a soil's volume to change due to loss or gain in moisture content. High shrink-swell soils can buckle roads and crack foundations.

SOIL BEARING CAPACITY - The ability of the soil to support a vertical load (mass) from foundations, roads, etc.

STREAM VALLEY - Any stream and the land extending from either side of it to a line established by the high point of the concave/convex topography, as delineated on a map adopted by the Stream Valley Board. For purposes of stream valley acquisition, the five-criteria definition of stream valleys contained in "A Restudy of the Pohick Watershed" (1969) will apply. The two primary criteria include all the land within the 100-year floodplain and the area along the floodplain in slopes of 15 percent or more.

STORM WATER MANAGEMENT - An emerging art/science that attempts to treat storm water runoff at the source and as a resource. Storm water management programs seek to mitigate or abate quantity and quality impacts typically associated with development by the specific design of onsite systems such as Detention Devices which slow down runoff and in some cases improve quality, and Retention [illegible]