**MEMORANDUM**

DATE: December 14, 2001

TO: Montgomery County Planning Board
Joseph R. Davis, Chief *JRD*

VIA: Larry R. Ponsford, Supervisor *LRP*
Development Review Division

FROM: Mary Beth O'Quinn, Planner *mboq*
Planning Department Staff
(301) 495-4587
(301) 495-1322

REVIEW TYPE: Site Plan

APPLYING FOR: 10, 558 sf Veterinary Clinic and Hospital

PROJECT NAME: Germantown Veterinary Clinic

CASE #: 8-02028

REVIEW BASIS: Site Plan Review required in the Town Sector zone (59-D)
Updating of Supplemental Plan for the TS zone (59-D-1.3 (g)(7))

ZONE: TS (Churchill Town Sector)

LOCATION: Father Hurley Boulevard, 250 feet northeast of Wisteria Drive

MASTER PLAN: Germantown

APPLICANT: Dr. Mark and Lucy Olcott

FILING DATE: November 27, 2001

HEARING DATE: December 20, 2001



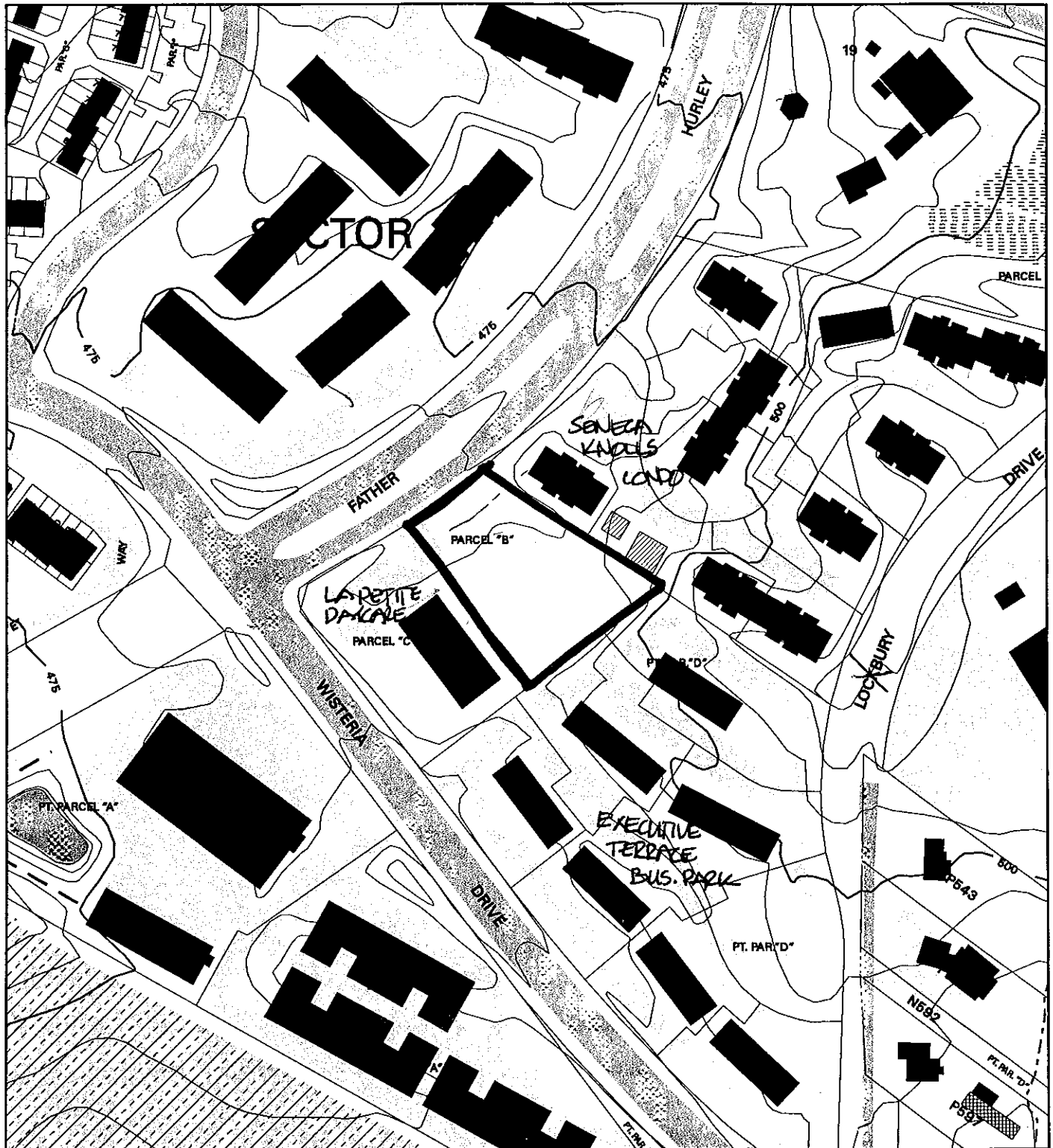
STAFF RECOMMENDATION FOR SITE PLAN: Approval of Site Plan, up to 10,558 sf of veterinary clinic and hospital space with the following conditions:

1. Standard Conditions dated October 10, 1995, Appendix A.
2. Conditions of MNCPPC Division of Transportation memo dated December 14, 2001.
3. Limit structure, including veterinary clinic, hospital, retail, boarding and the residential apartment to no more that 10,558 square feet.
4. Prior to signature set approval the following revisions and/or information shall be submitted, subject to review and approval of staff:

- a. Site and Building Design
 - i. Provide soundproofing for all building areas for the keeping of animals; provide proof of compliance with Montgomery County noise ordinance standards;
 - ii. Verify that the proposed use will provide no runs, exercise yards or other facilities for the keeping of animals in any exterior space.
 - b. Design Details and Specifications
 - i. Provide details of paving, furnishings and fixtures for entrance areas, and
and amenity areas;
 - ii. Provide details and specifications for bicycle rack;
 - iii. Provide details for signage and include signage lighting level.
 - iv. Provide design drawings for dumpster screening materials to achieve compatibility with façade materials; provide details and specifications.
 - c. Landscaping and Lighting
 - i. Submit tree protection plan showing tree save on site and mitigation/protection measures for trees on adjacent properties; provide tree protection plan and root zone analysis for the oak trees on Father Hurley Boulevard.
 - ii. Provide screening hedge at least 3 feet in height along property frontage at PUE line;
 - iii. Provide additional screening of White Pines along the north property boundary; provide screening along south property boundary using Leyland Cypress; coniferous screening trees to be installed at 6-8 feet in height and 12 feet on center;
 - iv. Provide additional Okame Cherry tree at front near lead sidewalk;
 - v. Provide specifications and locations for all fixtures, including fixture type, pole type, wattage, house shields, mounted height, and hours of operations.
 - vi. Provide revised photometric lighting plan, using IESNA standards of 0.5 footcandles at all property lines; provide average max/min ratio of 5:1.
5. Limit hours of operation to the following:
Monday – Thursday 8:00 am - 8:00 pm; Friday 8:00 am - 6: 00 pm; and Saturday 8:00 am - 2:00 pm.
6. Provide for staff review and approval details and specifications for any façade design alterations (such as wall openings for windows and doors) affecting soundproofing and noise control.

VICINITY MAP FOR

GERMANTOWN VETERINARY CLINIC



Map compiled on May 28, 2001 at 1:37 AM | Site located on base sheet no - 227NW13

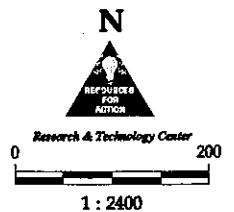
NOTICE

The planimetric, property, and topographic information shown on this map is based on copyrighted Map Products from the Montgomery County Department of Park and Planning of the Maryland-National Capital Park and Planning Commission, and may not be copied or reproduced without written permission from M-NCPPC.

Property lines are compiled by adjusting the property lines to topography created from aerial photography and should not be interpreted as actual field surveys. Planimetric features were compiled from 1:14400 scale aerial photography using stereo photogrammetric methods.

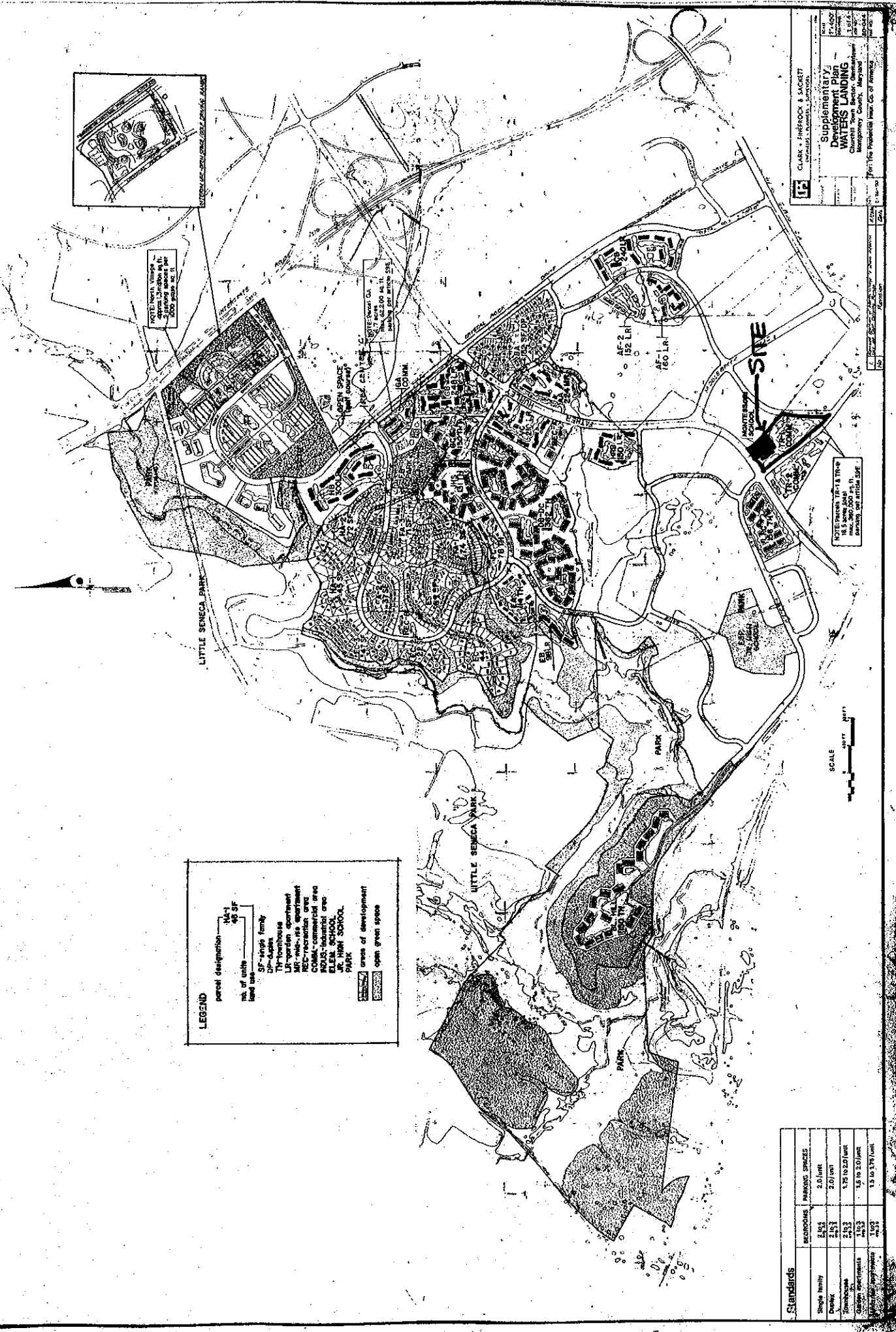
This map is created from a variety of data sources, and may not reflect the most current conditions in any one location and may not be completely accurate or up to date. All map features are approximately within five feet of their true location. This map may not be the same as a map of the same area plotted at an earlier time as the data is continuously updated. Use of this map, other than for general planning purposes is not recommended. - Copyright 1988

MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING
 THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
 8787 Georgia Avenue - Silver Spring, Maryland 20910-3760



VICINITY PLAN 1

CHURCHILL TOWN SECURE DEVELOPMENT PLAN



LEGEND

parcel designation — Max 40 SF

no. of units based on — 40 SF

SF — single family

TR — townhouse

LP — garden apartment

MR — multi-unit apartment

REC — recreation area

COM — commercial area

IND — industrial area

EL — elementary school

JR — junior high school

P — park

area of development

open green space

Standards

RECORDS	MAXIMUM SPACES
Single family	2.0/1
Double	2.0/1
Townhouse	1.75 to 2.0/1 unit
Multi-unit apartment	1.5 to 2.0/1 unit
Open green space	1.0/1
Elementary school	1.5 to 2.0/1 unit

CLARK + FINELOCK & SACRETT
 ARCHITECTS, PLANNERS, ENGINEERS
 1215 W. 14th St.
 Annapolis, MD 21403
 Phone: (410) 293-1100
 Fax: (410) 293-1101

Supplemental to
WATERS LANDING
 Churchill Town Sector, Georgetown
 Montgomery County, Maryland
 Prepared for: The Republican Party, Co. of America

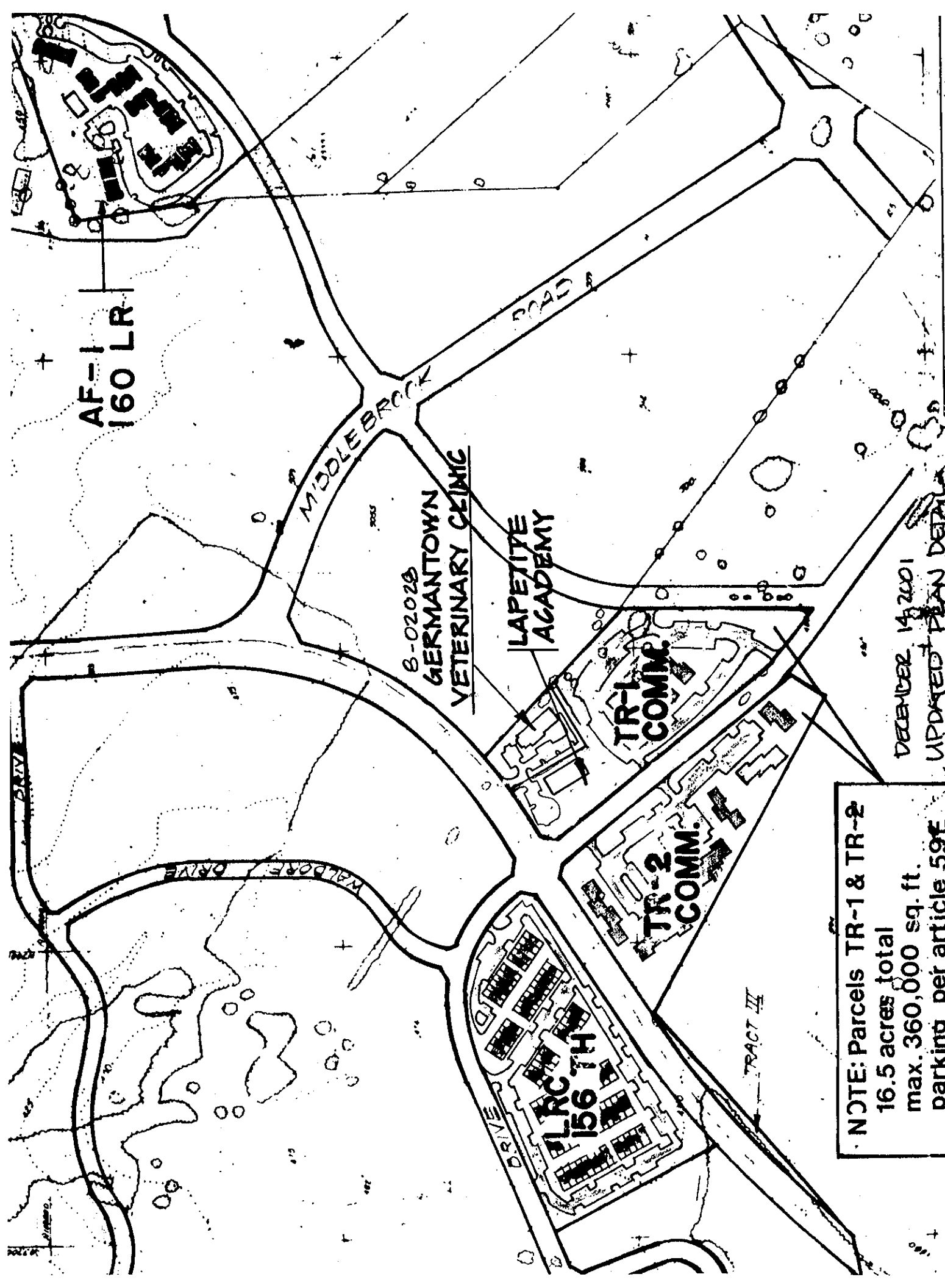


NOTE: NORTH ARROW
 shows 12 degrees 44' N. of
 true north
 2000 2000 42 11

NOTE: NORTH ARROW
 shows 12 degrees 44' N. of
 true north
 2000 2000 42 11

NOTE: NORTH ARROW
 shows 12 degrees 44' N. of
 true north
 2000 2000 42 11

SCALE
 1" = 100'
 1" = 200'



AF-1
160 LR

MIDDLEBROOK ROAD

B-0202B
GERMANTOWN
VETERINARY CLINIC

LAPETITE
ACADEMY

TR-1
COMM.

TR-2
COMM.

WALDORE DRIVE

DRIVE

156 TH

TRACT III

NOTE: Parcels TR-1 & TR-2
16.5 acres total
max. 360,000 sq. ft.
parking per article 59F

DECEMBER 14, 2001

UPDATED PLAN DETAILS

CH 12/18/01 TO SUPPLEMENTAL PLAN 2. Revised to show Germantown Vet. Clinic

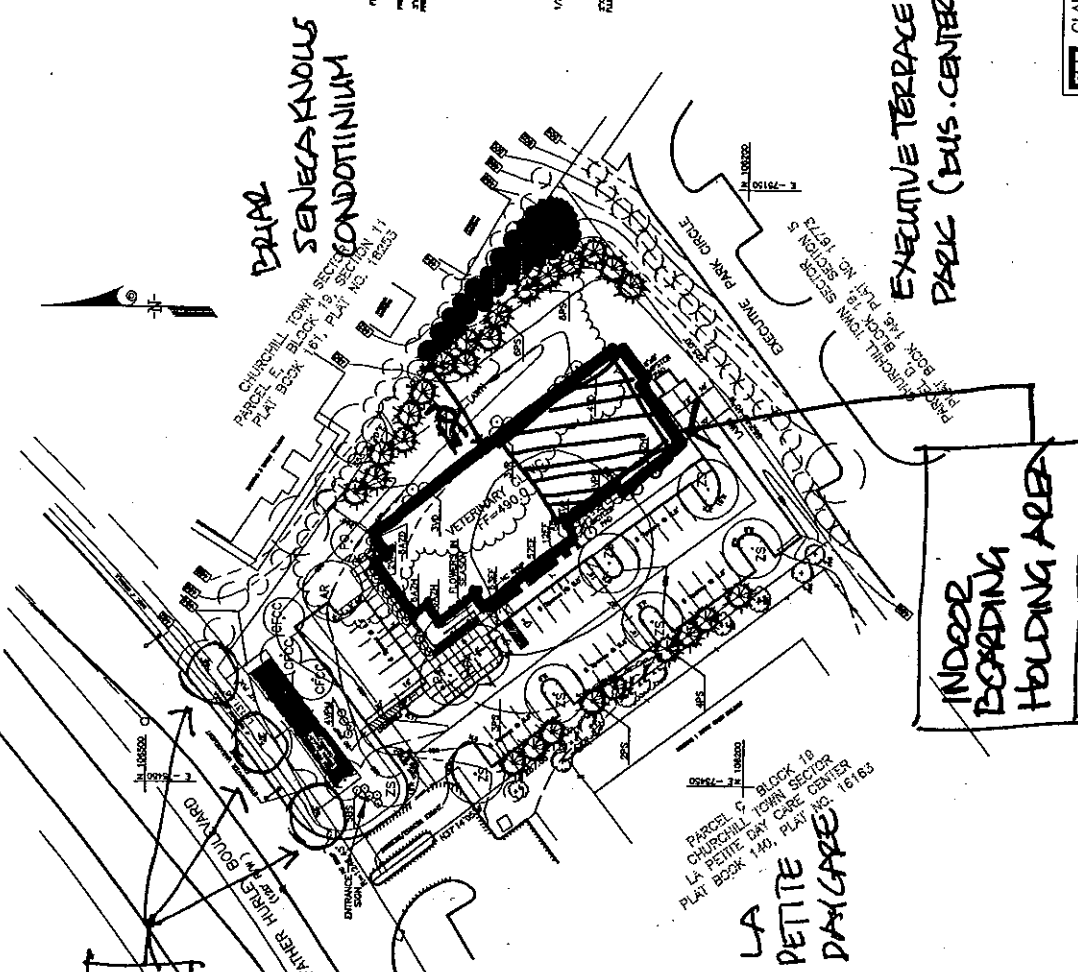
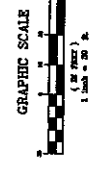
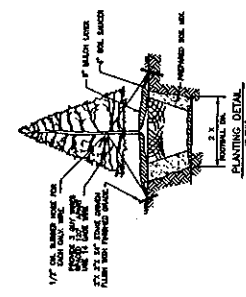
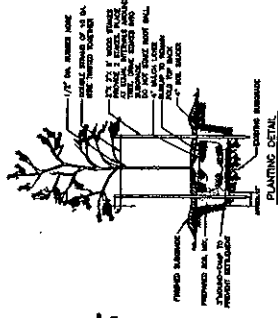
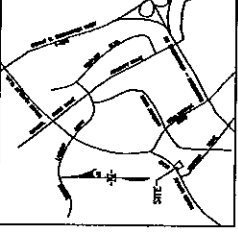
SITE PLAN

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS

GERMANTOWN VETERINARY CLINIC

PARCELS E, BLOCK 19
 CHURCHILL TOWN SECTION 19
 MONTGOMERY COUNTY, MARYLAND

DATE: 09-14-88
 SCALE: 1" = 30' DIMENSIONS
 SHEET NO. 4 OF 5
 JOB NO. 00-148
 FILE NO. 00-148-N
 DATE: 12-12-01
 FILE NO. 00-148-N
 DATE: 09-14-88



LEGEND

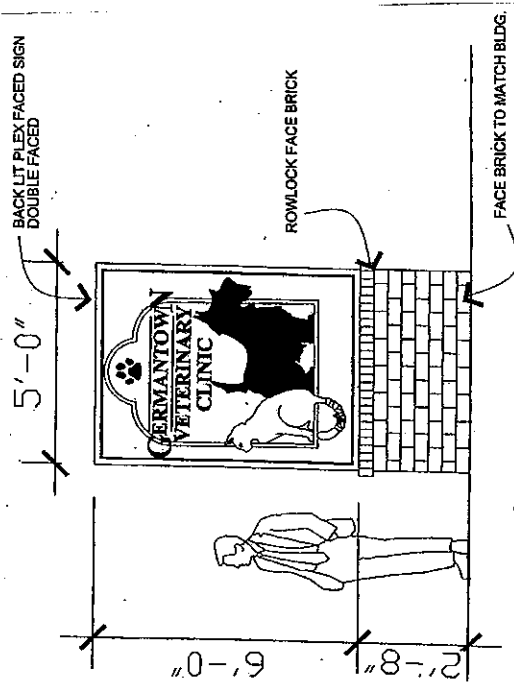
— 6" DIA. CONC. CURB
 — 12" DIA. CONC. CURB
 — 18" DIA. CONC. CURB
 — 24" DIA. CONC. CURB
 — 30" DIA. CONC. CURB
 — 36" DIA. CONC. CURB
 — 42" DIA. CONC. CURB
 — 48" DIA. CONC. CURB
 — 54" DIA. CONC. CURB
 — 60" DIA. CONC. CURB

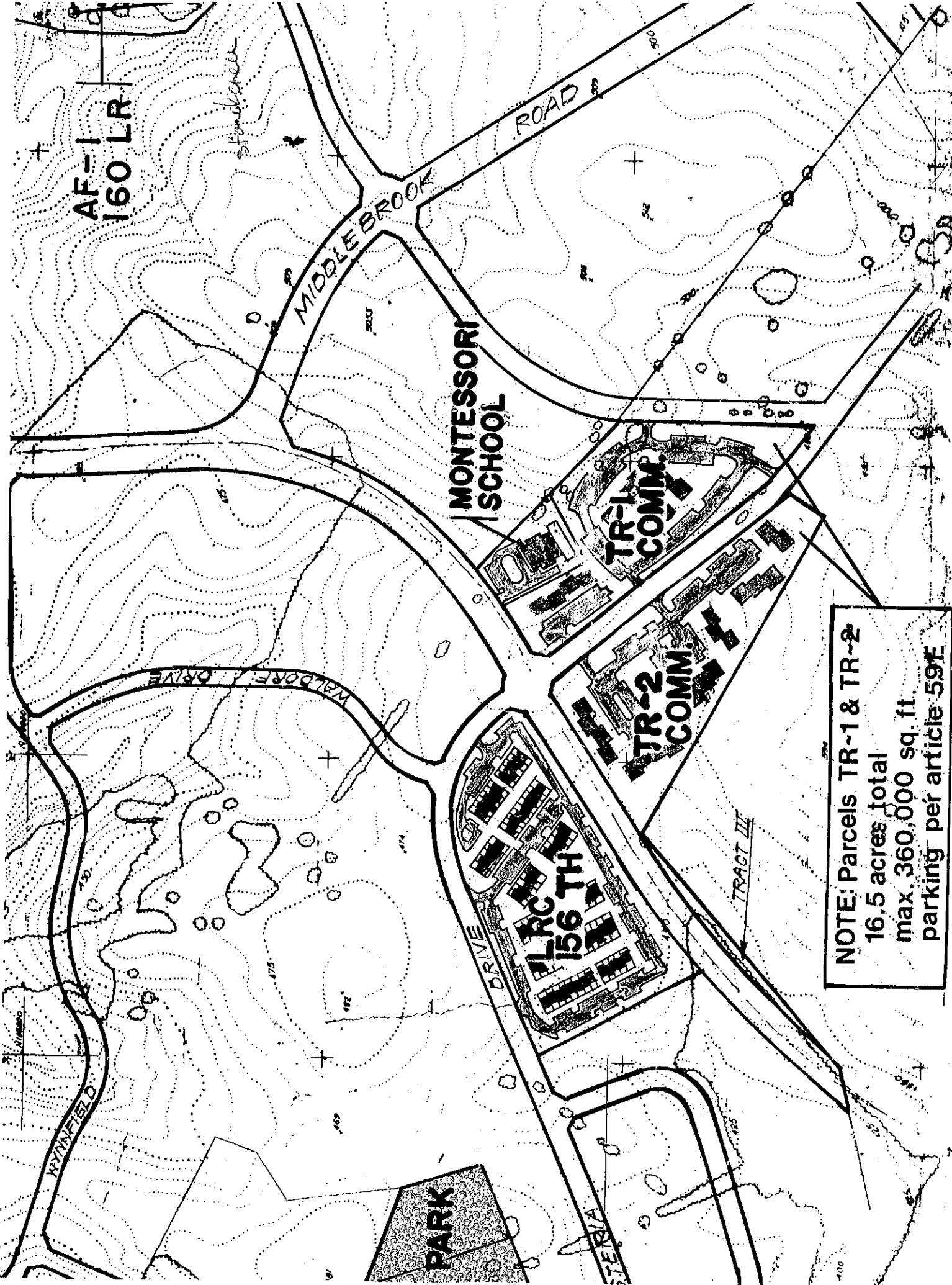
TREES TO BE PRESERVED

PARCEL G, BLOCK 19
 CHURCHILL TOWN SECTION 19
 LA PETITE DAY CARE CENTER
 PLAY BOOK 149, PLAT NO. 16183

PLANT SCHEDULE

SYMBOL	PLANT NAME	HEIGHT	SPACING
AK	ACER BIRCH	12-15' HT.	8' x 8'
PA	PLATANUS ACERIFOLIA	12-15' HT.	8' x 8'
ZS	ZELKOVA SEROTINA	12-15' HT.	8' x 8'
COPO	CORNUS FLORIDA	1-3' HT.	8' x 8'
PO	PRUNUS SP.	1-3' HT.	8' x 8'
PS	SAUON WHITE PINE	5-6' HT.	8' x 8'
BS	BIRCH SWAMP	2-3' HT.	8' x 8'
AD	AZALEA	18-24' HT.	8' x 8'
ADH	AZALEA	18-24' HT.	8' x 8'
VO	VIBURNUM	2-3' HT.	8' x 8'
VP	VIBURNUM	2-3' HT.	8' x 8'
VR	VIBURNUM	2-3' HT.	8' x 8'
BF	BURNING BUSH	1-2' HT.	8' x 8'





AF-1
160 LR

MONTESSORI
SCHOOL

TR-1
COMM.

TR-2
COMM.

LRC
156 TH

TRACT III

NOTE: Parcels TR-1 & TR-2
16.5 acres total
max. 360,000 sq. ft.
parking per article 59F

EXISTING PLAN - SHOWS - BUILDING TO BE CONSTRUCTED



100 North Street
 Newark, NJ 07102
 973-261-1111
 Fax: 973-261-1112
 www.gag.com

GERMANTOWN
 VETERINARY CLINIC

REVISIONS

DATE

PROJECT

DESCRIPTION

DATE

SCALE

DATE

DATE

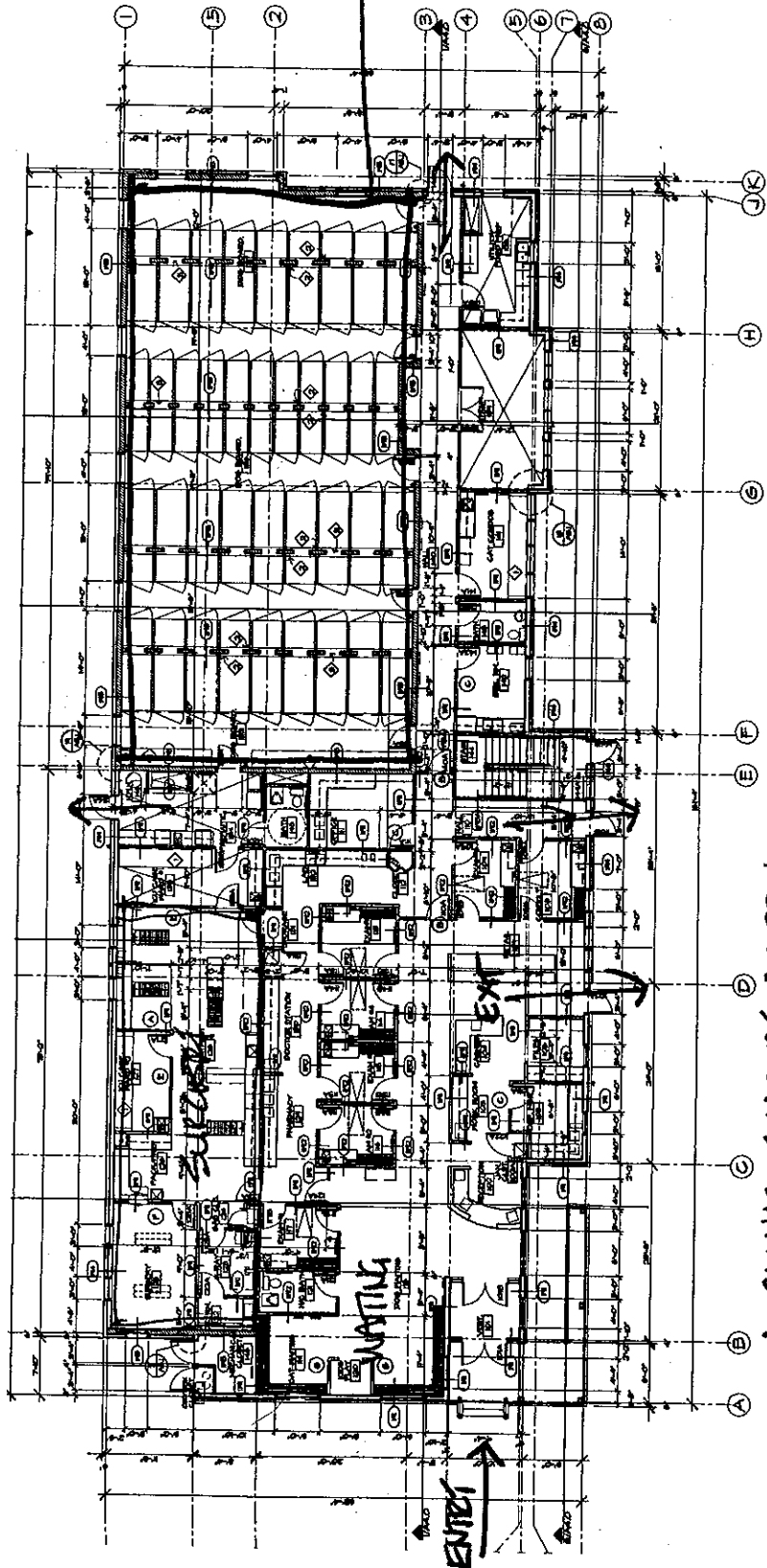
DATE

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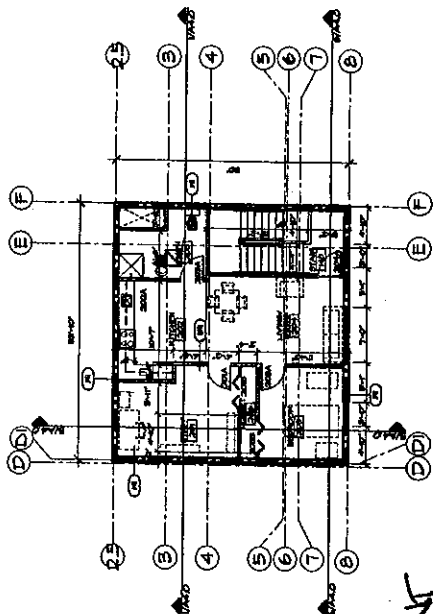
DATE

A2.C

NOT FOR CONSTRUCTION



1 FIRST FLOOR PLAN : CLINIC, SURGERY, BOARDING
 SCALE 1/8" = 1'-0"



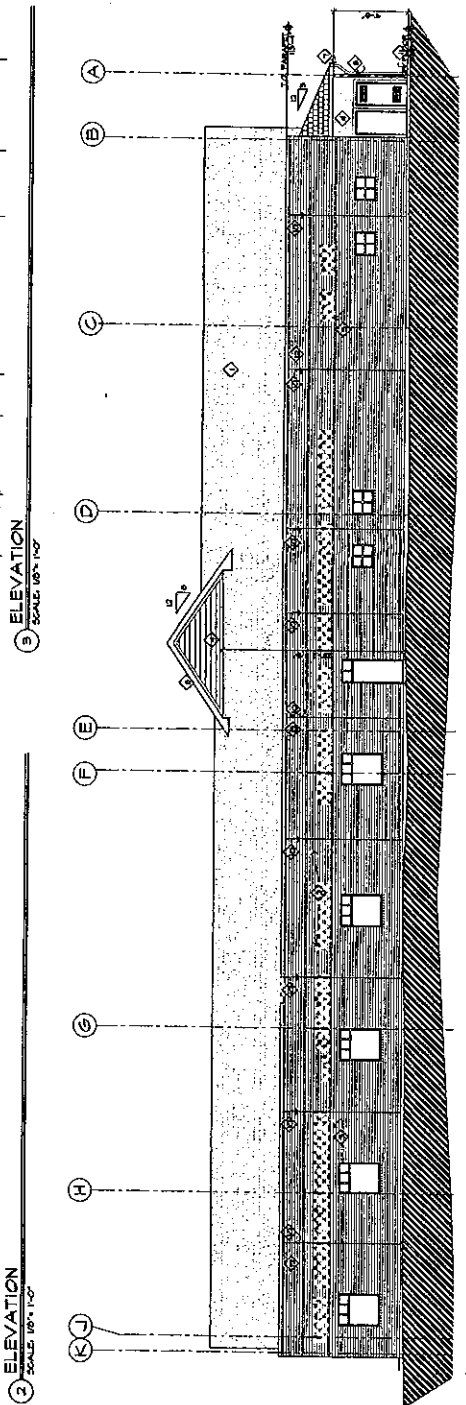
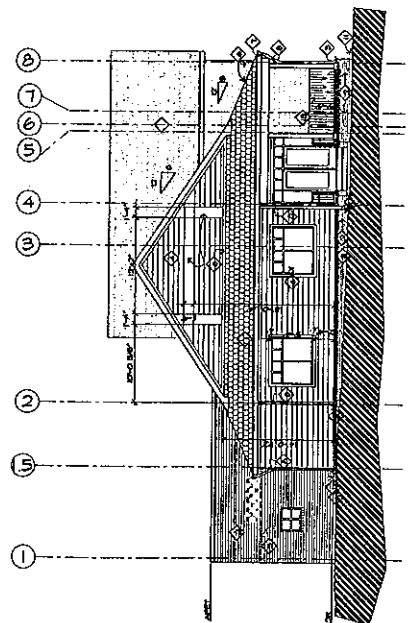
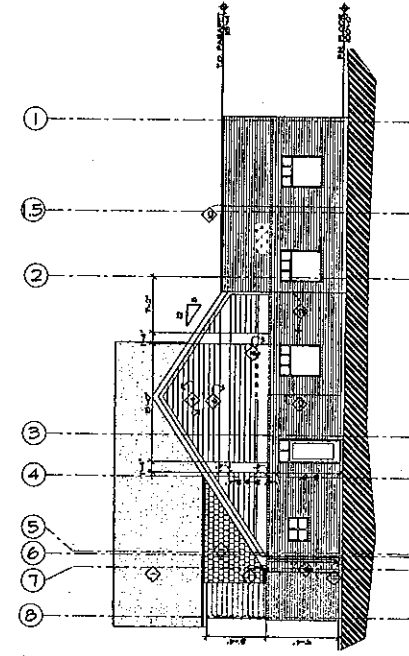
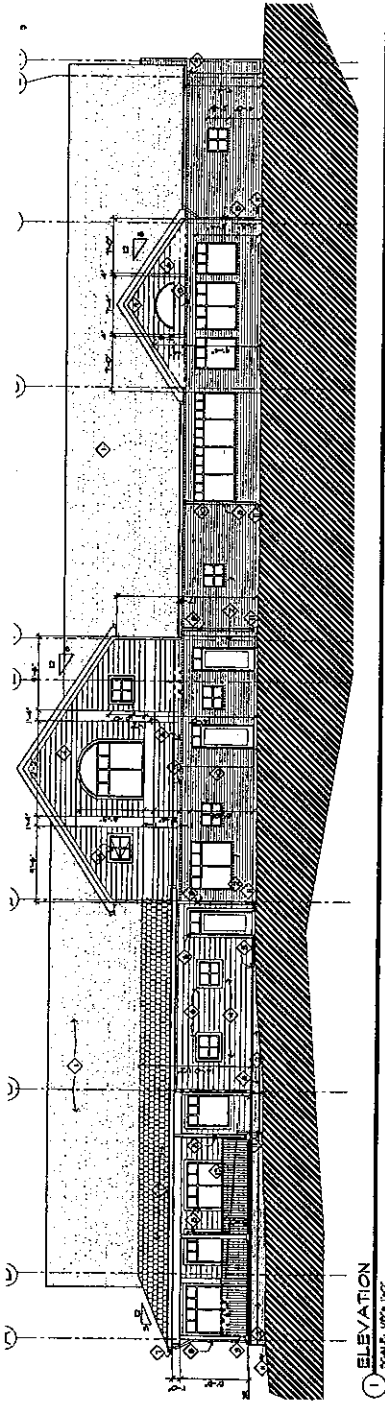
2 SECOND FLOOR PLAN : APARTMENT
 SCALE 1/8" = 1'-0"

KEY NOTES:

- 1. ALL 2 HOUR RATED ASSEMBLY
- 2. ALL 1 HOUR RATED ASSEMBLY
- 3. ALL 1 HOUR RATED ASSEMBLY
- 4. ALL 1 HOUR RATED ASSEMBLY
- 5. ALL 1 HOUR RATED ASSEMBLY
- 6. ALL 1 HOUR RATED ASSEMBLY
- 7. ALL 1 HOUR RATED ASSEMBLY
- 8. ALL 1 HOUR RATED ASSEMBLY

RESIDENTIAL
 APARTMENT
 2ND FLOOR

- KEY NOTES:**
- 1 ARCHITECTURAL SYMBOLS
 - 2 FINISHES (SEE FINISH SCHEDULE)
 - 3 MATERIALS (SEE FINISH SCHEDULE)
 - 4 HATCHING (SEE FINISH SCHEDULE)
 - 5 NOT USED
 - 6 HATCH-PANEL TYPING
 - 7 RETAIL SITTER (SEE FINISH SCHEDULE)
 - 8 RETAIL SITTER (SEE FINISH SCHEDULE)
 - 9 CONCRETE (SEE FINISH SCHEDULE)
 - 10 CONCRETE (SEE FINISH SCHEDULE)
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 - 19 CONCRETE (SEE FINISH SCHEDULE)
 - 20 CONCRETE (SEE FINISH SCHEDULE)



GERMANTOWN
VETERINARY CLINIC

DATE: _____
 CONTRACTOR: _____
 ARCHITECT: _____
 ENGINEER: _____
 CONTRACTOR: _____
 ARCHITECT: _____
 ENGINEER: _____

A3.C

NOT FOR CONSTRUCTION

ARCHITECTURAL ELEVATIONS

SUMMARY OF ISSUES ADDRESSED AT SITE PLAN:

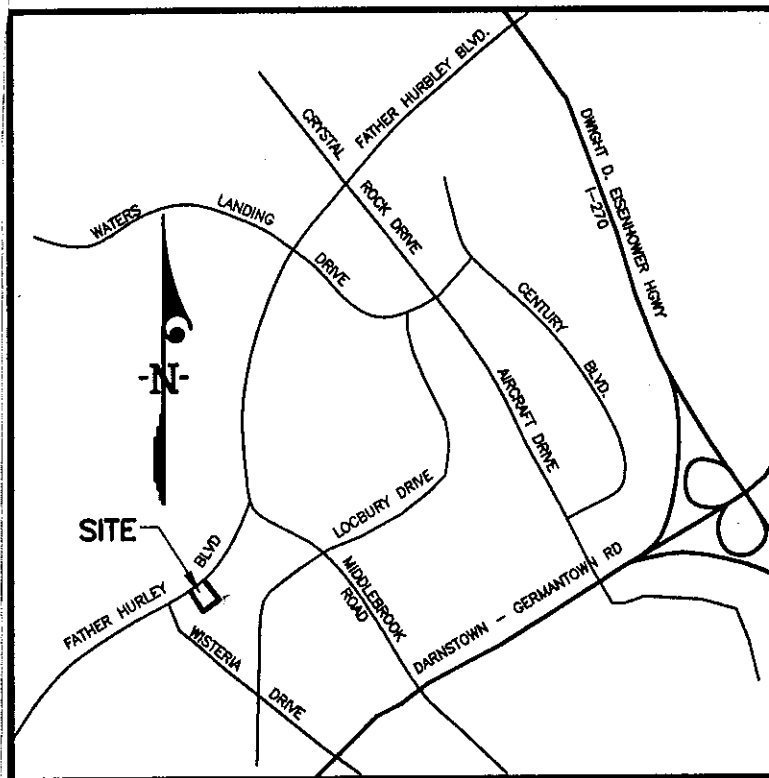
During the course of Site Plan Review, applicant and staff reviewed the overall goals of the Town Sector zone, commercial uses and limits within the zone, and the Master Plan recommendations for the Churchill Town Sector. Development standards for veterinary clinic uses in other zones were studied for guidance on compatibility issues for applications in the less restrictive Town Sector zone.

Details of the review covered the compatibility issues related to the proposed use such as noise and traffic, functional requirements of the facility, parking requirements, and landscaping.

PROJECT DESCRIPTION: Surrounding Vicinity

The subject site is located on Father Hurley Boulevard, approximately 250 east of Wisteria Drive and approximately one mile from I-270 interchange at Darnestown Road. The surrounding vicinity features the Churchill Business Center, Mother Seaton Catholic Church, and the Executive Terrace Business Park.

The property, within the Churchill Town Sector, is included in the commercial sector of the Development Plan for the Sector.



VICINITY MAP

Scale : 1"=2000'

PROJECT DESCRIPTION: Site Description

The site (~50,000 sf), rectangular in shape, is currently a vacant lot with approximately 130 feet of frontage on its northern boundary at Father Hurley Boulevard. The La Petite Day Care Center occupies the parcel to the west on the southeast corner Father Hurley Boulevard and Wisteria Drive. The Executive Park Business Center is located directly adjacent to the south; the Seneca Knolls Condominiums are located to the east.

The site contains a minimal tree line on the south and east property lines with modest growth of small caliper early successional hardwood. The site topography features a even slope downward from the rear to the frontage on Father Hurley Boulevard.

PROJECT DESCRIPTION: Proposal

The proposal features a single building, linear in form, sited lengthwise on its lot. The two-story building features a small main façade directly facing the street, with a wrapping entrance porch that sits back about 100 feet from the street. The facility provides full clinic services including waiting areas, small retail space, exam and treatment rooms, surgery and holding (boarding) areas. A small residential apartment will be provided on the second floor.

The design, with its residential architectural features is intended to provide a compatible relation in scale and materials with the adjoining condominiums and terraced offices., Some parking is provided at the building front, visible from the street; however, most of the parking is arranged along the west side of the building.

The entry from Father Hurley Boulevard features a divided vehicular lane for the shared ingress/egress with the adjacent day care center. The proposal will provide significant enhancements to the streetscape on Father Hurley Boulevard with sidewalk and retention of the mature oak trees on the street. The landscaped area at the front will support the water quality filtration trench, ornamental and shade trees.

PROJECT DESCRIPTION: Prior Approvals

The Development Plan Opinion for the approval of the Churchill Town Sector, E-148 Amendment to the Zoning Ordinance is dated October 30, 1968.

The Planning Board previously approved a number of site plans for this parcel: the most recent approval, on October 10, 1985 was for known as the Churchill Montessori School (8-85092) for day care/pre-school, a total of 6,264 sf.

The current, approved Preliminary Plan (1-82067) was approved on November 11, 1982, with the following conditions:

- (1) *Dedication along Germantown Drive (120' ROW) in accordance with the Master Plan;*
- (2) *No clearing, grading or recording of plats prior to approval of site plan by MCPB;*
- (3) *Necessary slope and drainage easements;*
- (4) *Participation in the 118 II Club.*

DISCUSSION OF ISSUES

ANALYSIS: Conformance to Master Plan

The proposal conforms to Master Plan recommendations for development type, use, and pedestrian access within the Churchill Town Sector.

ANALYSIS: Conformance to Development Standards

Germantown Veterinary Clinic Site Plan 8-02028		
<u>Development Standard: TS Zone</u>	<u>Permitted/Reqd</u>	<u>Proposed</u>
Gross Lot Area	N/A	1.17 ac (50,880 sf)
Gross Floor Area	N/A	10,558 sf
FAR	N/A	0.21
Building coverage	N/A	19.6% (0.23 ac)
Green Area	10% entire TS Zone	53.% (0.63 ac)
Impervious Area	N/A	46.1% (0.43 ac)
Setbacks		
Front yard	N/A	100'
East side yard	N/A	24.5' - 50'
West side yard	N/A	78'
Rear yard	N/A	30'
Parking		35 spaces
Commercial limit in Zone	< 10 of entire TS Zone	8.6% total

FINDINGS for Site Plan Review:

1. The site plan is consistent with Development Plan E-148 and with Preliminary Plan 1-82067.
2. The site plan meets all of the requirements of the zone in which it is located. [See Project Data Table above.]

The proposed use respects the TS Zone requirement of no more than 10% total commercial use in the Churchill Town Sector Zone [reference: statistics of Rezoning Case G-742, May 16, 1997]. The Supplemental Plan Update has been submitted.

3. The locations of the buildings and structures, the open spaces, the landscaping, recreation facilities, and the pedestrian and vehicular circulation systems are adequate, safe and efficient.

a. Location of Buildings

The building is located optimally to achieve compatibility with the adjoining structures and to provide adequate distance for noise mitigation for the adjoining neighbors. The building is designed and sited to place the animal boarding areas at least 50 feet from the property line adjoining the residential condominiums and 75 feet from the boundary adjoining the daycare center. The siting of the building provides safe, adequate, and efficient access and attractive, safe entry.

b. Open Spaces

The open space is adequate, safe, and efficient. The building is placed on the site such that the open spaces provide visual buffering and adequate distance for noise mitigation. Staff recommends tree protection measures for trees on adjacent properties near the boundary lines.

c. Landscaping and Lighting

Landscaping and lighting provides safe and attractive use of the site; the mature street trees proposed to be saved on Father Hurley Boulevard will preserve a continuous attractive street tree line that is a visual public amenity.

Staff recommends an additional ornamental tree and hedge at the property frontage and additional screening and landscaping on these boundaries which adjoin residential and office park uses.

d. Recreation

The plan is exempt from recreation requirements.

e. Vehicular and Pedestrian Circulation

The vehicular and pedestrian circulation is adequate, safe, and efficient. The sidewalk installation proposed for the Father Hurley Boulevard will increase the safe access to the facility.

4. Each structure and use is compatible with other uses and other site plans and with existing and proposed adjacent development.

The proposed building is compatible in use, scale, and design with the existing residential-style office park and with the structures along Father Hurley Boulevard. The buildings provide an attractive transitional use between the residential community to the east and the arterial road with business and commercial establishments on Wisteria. The building materials, modulated in scale, enhance the transitional role of the building.

The TS Zone itself requires no specific development limitations for the veterinary clinic use. Staff and applicant have studied the guidelines for this use as specified in other zones and special exception applications to apply standards on this site that will provide a facility that is compatible in its design and use and character. The building is set back a reasonable distance of 50 feet from the property line adjoining the residential Seneca Knolls Condominiums; the building is separated from the daycare center by a minimum 75 feet space on the west that includes the parking lot with shade trees and landscaping.

5. The site plan meets all applicable requirements of Chapter 22A regarding forest conservation.

The site is exempt from forest conservation requirements.

APPENDIX

- A. Standard conditions dated October 10, 1995
B. Correspondence referenced in report

APPENDIX A: STANDARD CONDITIONS OF APPROVAL DATED 10-10-95:

1. Submit a Site Plan Enforcement Agreement and Development Program for review and approval prior to approval of the signature set as follows:
 - a. Development Program to include a phasing schedule as follows:
 - 1) Landscaping associated with each parking lot and building shall be completed as construction of each facility is completed.
 - 2) Pedestrian pathways and seating areas associated with each facility shall be completed as construction of each facility is completed.
 - 3) Clearing and grading to correspond to the construction phasing, to minimize soil erosion;
 - 4) Phasing of dedications, stormwater management, sediment/erosion control, recreation, forestation, community paths, trip mitigation or other features.
 - b. Site Plan Enforcement Agreement to delineate transportation management program, park maintenance agreement or other requirement of a condition.
2. Signature set of site, landscape/lighting, forest conservation and sediment and erosion control plans to include for staff review prior to approval by Montgomery County Department of Permitting Services (DPS):
 - a. Limits of disturbance;
 - b. Methods and location of tree protection;
 - c. Conditions of DPS Stormwater Management Concept approval letter;
 - d. Note stating the M-NCPPC staff must inspect tree-save areas and protection devices prior to clearing and grading;
 - e. The development program inspection schedule.
3. No clearing or grading prior to M-NCPPC approval of signature set of plans.

Date called: October 15, 1985

THE MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20907

MONTGOMERY COUNTY PLANNING BOARD

OPINION

Site Plan Review #8-85092

Project Churchill Montessori School

On August 30, 1985, Cordero, Steadman & Ward submitted an application for the approval of a site plan in the TS zone. The application was designated Site Plan Review #8-85092.

On October 10, 1985, Site Plan Review #8-85092 was brought before the Montgomery County Planning Board for a public hearing. At the public hearing, the Montgomery County Planning Board heard testimony and received evidence submitted in the record on the application. Based on the testimony and evidence presented by the staff and on the staff report with modifications to the conditions hereby adopted by the Montgomery County Planning Board, which is attached hereto and made a part hereof, the Montgomery County Planning Board finds:

1. the site plan meets all of the requirements of the zone in which it is located;
2. the locations of the buildings and structures, the open spaces, the landscaping, and the pedestrian and vehicular circulation systems are adequate, safe and efficient;
3. each structure and use is compatible with other uses and other site plans and with existing and proposed adjacent development; and
4. the Site Plan is consistent with the approved Application 1-148, Amendment to Zoning Ordinance from R-R to Town Sector Zone.

and approves Site Plan Review #8-85092 subject to the following conditions:

1. Applicant is to save existing trees along the eastern property line. Area of tree preservation to be indicated on site plan is subject to staff approval.

Landscape design for entrance and front yard area of parking lot is to be coordinated with adjacent site plan. This design is subject to staff approval.

Site plan is to be approved for use as a private educational institution only. Any change in use, such as day care, will require amendments to preliminary plan and a new site plan.

MONTGOMERY COUNTY PLANNING BOARD

OPINION

Preliminary Plan 1-52067

NAME OF PLAN: CHURCHILL TOWN SECTOR

On 04-27-82, PRUDENTIAL INS. CO. , submitted an application for the approval of a preliminary plan of subdivision of property in the IS zone. The application proposed to create 1 lots on 1.17 ACRES of land. The application was designated Preliminary Plan 1-82067. On 11-18-82, Preliminary Plan 1-82067 was brought before the Montgomery County Planning Board for a public hearing. At the public hearing , the Montgomery County Planning Board heard testimony and received evidence submitted in the record on the application. Based upon the testimony and evidence presented by staff and on the information on the Preliminary Subdivision Plan Application Form attached hereto and made a part hereof, the Montgomery County Planning Board finds Preliminary Plan 1-82067 to be in accordance with the purposes and requirements of the Subdivision Regulations (Chapter 50, Montgomery County Code, as amended) and approves Preliminary Plan 1-82067, subject to the following conditions:

1. Dedication along Germantown Drive (120' r/w) in accordance with master plan
2. No clearing, grading or recording of plats prior to approval of site plan by MCPB
3. Necessary slope and drainage easements
4. Participation in 118 II Club

Date of Mailing: December 1, 1982

PRELIMINARY PLAN
1-82067 OPINION



19411 Walter Johnson Road • Germantown, MD 20874

301-972-9730 • www.germantownvet.com

To: Mary Beth O'Quinn
From: Drs. Mark & Lucy Olcott
Re: Hours of Business
Date: 12/10/01

Please note the amended business hours for our proposed veterinary hospital on Father Hurley Boulevard. This schedule will apply for the foreseeable future.

Hours of Business

8am-8pm	M-Th
8am-6pm	Fri
8am-2pm	Sat.

Please feel free to call if you have any further questions.

Sincerely,

A handwritten signature in cursive script that reads "Mark & Lucy Olcott".

Drs. Mark & Lucy Olcott

FAX/MEMO

DATE: November 29, 2001

TO: Ms. Mary Beth O'Quinn
Development Review Division
Montgomery County

FROM: Mark R. Hafen

RE: Germantown Veterinary Clinic
Noise Control Analysis

COPIES: Drs. Lucy and Mark Olcott

NUMBER OF PAGES:

NOTES:

As specialists in the design of veterinary hospitals, animal boarding facilities and animal shelters, we have often encountered neighborhood opposition to proposed projects, based on the perception that these facilities will be noisy. This is a real concern and often based on the experiences some people have had living adjacent to open-air and outdated facilities.

Fortunately, the new facilities that we have been designing around the country are of a new generation. The practice of veterinary medicine has undergone significant changes in the last ten years. Driven by advances in medical technology and more stringent client expectations, the present-day veterinary facility is a dramatic departure from facilities of the past in virtually every regard.

The following is an analysis of the noise issues as they relate to the proposed Germantown Veterinary Clinic.

Notes on the Properties of Noise

Noise is a physical phenomenon created primarily from mechanical vibration. Man's response to noise is determined by the source, the frequencies, and the loudness. Noise intensity is weighted on a scale that approximates the apparent loudness perceived by a human observer. This number is expressed in "A" weighted decibels and is

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written as dBA. The "A" weighting scale reduces (weights) the sound levels in the lower (10-800 Hertz) and higher (8000-20,000 Hertz) frequency ranges. This "A" weighting descriptor is the one generally accepted as having the best correlation with human judgements of loudness. Each increase of 10 dBA in the noise level is subjectively judged as an approximate doubling of loudness.

Noise intensity covers such a broad range that it is measured on a logarithmic scale, and as such, cannot be accurately represented on a percentile basis; e.g. a 3 dBA increase is equivalent to a 100 percent increase in noise, but is barely noticeable as a change in perceived noise to the average human observer. For example: adding two sources, both generating the same noise level, e.g. 70 dBA each, yields a net noise level of 73 dBA ($70 \text{ dBA} + 70 \text{ dBA} = 73 \text{ dBA}$). If one source were 10 dBA less than the other source, the resultant noise level would be 70.4 dBA ($70 \text{ dBA} + 60 \text{ dBA} = 70.4 \text{ dBA}$).

Noise propagates from a source, in general, according to the inverse square law, e.g. as the distance is doubled the sound level is reduced by half - with the resultant sound level 1/4 (6 dBA) lower than the original level. Noise propagation is influenced by many factors, with topography, atmospheric conditions, and frequency the most prominent. Topography, either hills or berms, can form a barrier to noise propagation. Wind and atmospheric inversions can influence noise propagation rates and increase, or decrease, perceptible noise at distances greater than can be heard under more common atmospheric conditions. Low frequency sounds are influenced to a greater extent by atmospheric conditions, especially inversions, permitting sounds to "carry" and be heard at distances greater than can be accounted for under the inverse square law.

Noise levels usually represent a statistical "average" over a specified period of time. Since noise is rarely steady or constant for long periods, average noise levels do not readily account for high noise levels of short duration. For example, an "average" noise level of 60 dBA over 24 hours may include peak sounds of 110 dBA, but such sounds may occur for only a few seconds. To account for this fluctuating noise, a statistical descriptor "L" is used and represents the noise level exceeded for a specified percentage of the time. Some commonly used descriptive levels are the L10, L50, and L90 descriptors and represent the noise levels that are exceeded 10%, 50%, and 90% of the time, respectively.

The most common noise metrics are the Lmax, Lmin, and Leq noise levels. These are the metrics we will be referencing in this memo. Lmax and Lmin represent, respectively, the highest and lowest observed sound levels during a measurement period. Leq represents the mean, or average, sound level over a measurement period. All noise measurements are taken with the meter on "A" Weighting - Slow Response unless otherwise specified.

Noise from a Comparable Project

Several years ago we were asked to help a veterinarian in Tacoma, Washington respond to some concerns that his local planning department had about noise issues in his proposed facility. Working with Errol Nelson an Environmental Analyst Engineer in Washington state and Dr. Luc Mongeau, Associate of Acoustics at Purdue University we analyzed a facility in Lafayette, Indiana. The facility, Petsburg, was comparable in scale and scope to the proposed Germantown facility.

In that study we found:

1. That the peak, maximum noise level within the facility was 96 dBA and the peak outside noise level was 65 dBA. This meant that the wall of the Petsburg facility reduced, or attenuated, the peak noise level by 31 dBA.
2. Turning to the average noise level within the facility - it was measured at 65 dBA (a noise level equal to normal conversational speech). The outside noise level was measured at 60 dBA, but this was not attributed to the noise transmission from within the facility but rather from normal background traffic noise. In fact, using the attenuation numbers that were generated from the peak noise level analysis we concluded that the actual average outside noise level produced by the dogs, when you factor out all other contributing outside sources would be 35 dBA. In fact this conclusion was consistent with the experience of Dr. Mongeau. He noted that at the outside measurement location, 10 feet from the building wall, the barking dogs could barely be heard.
3. Lastly Dr. Mongeau noted that 20 feet from the building the sound of the dogs had faded to inaudibility. This experience makes sense in light of the 60 dBA of traffic and background noise mentioned before and also the inverse square law which dictates that the noise levels outside fall off by half for every doubling of distance from the source.

Applying this information to the Germantown Facility

Turning then to the Germantown facility we would expect the same level of performance from the proposed facility. In both cases the facilities housed approximately the same number of animals. In the Petsburg facility the building was a concrete block single wythe structure, typically with a Sound Transmission Coefficient of 52. In contrast the boarding portion of the Germantown facility is double wythe, (Wall Assembly W3 - eight inch concrete masonry unit, a two inch air space and four more inches of brick veneer). Even factoring in the five double pane, 1" insulated windows, each of which is twenty square feet in size, the composite STC would still potentially be greater than the Petsburg facility (the double wall STC is 59 and the insulated windows are 39).

Additionally we anticipate that the noise level within the rooms themselves will be reduced because the reverberant noise within the facility will be reduced. Unlike the Petsburg facility which was essentially a large warehouse space the Germantown facility is divided into smaller

wards each housing a maximum of 20 animals. There will be fewer dogs in each room, so they will be less likely to bark, and the rooms will have an absorbent ceiling treatment. The ceiling tiles that we have specified for this project have a Noise Reduction Coefficient of .65 this means that 65% of the reverberant noise that strikes the ceiling will be absorbed. Based on previous studies we would anticipate the reduction of the noise based solely on treating the ceiling to be 10 dBA.

While being conservative in our analysis we would still anticipate that the noise levels in the proposed Germantown facility to be 90 dBA peak noise at the interior of the building and 55 dBA peak noise exterior (measured 10 feet from the building). Based on the inverse square law, the peak noise level at the property line, which is 50 feet from the building would then be less than 27 dBA. Not counting the incidental background noise we would anticipate that the average noise level at the exterior of the building that would be attributable to the dogs barking would be 35 dBA. In both cases, the peak and average impact of the noise on the adjacent properties would obviously be less than the maximum allowed 50 dBA. Additionally both the peak and average noise levels would be completely masked by the normal outside average noise level of 50 dBA.

(Note see attached Contract Documents for listing of the Sound Transmission Coefficient of the various wall assemblies)

Conclusion

In sharing this information with you, I hope I have been able to dispel some of the concerns that surround the noise issues in modern veterinary and boarding facilities. Today's veterinary medicine is very comparable to human medicine, utilizing many of the same procedures and equipment. Today's pet owners expect and demand the best possible care for their pets. For this reason, the facility must provide the best possible environment for the successful care, treatment and even boarding of the animal. Frankly, the modern veterinary facility cannot afford to be noisy or smelly. For the patient, the client, and even the medical staff, the successful veterinary facility has to be a modern environment. For both this reason, and the analysis we offer above, we are confident that the proposed Germantown Veterinary Clinic will not only conform to the applicable planning and code requirements, but will truly be a good neighbor too.

Mark



DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan
County Executive

March 19, 2001

Robert C. Hubbard
Director

Mr. Richard Stepp, PE
Clark, Finnefrock, & Sacket, Inc.
7135 Minstrel Way
Columbia, MD 21045

Re: Stormwater Management **CONCEPT** Request
for Germantown Veterinary Clinic
Preliminary Plan #: 1-82067
SM File #: 203198
Tract Size/Zone: 1.17 Ac/TS
Total Concept Area: 1.17 Ac
Tax Plate: EU342
Lots/Block: BLK 19, Section 5
Parcel: Par. B
Montg. Co. Grid: 18D01
Watershed: Little Seneca Creek

Dear Mr. Stepp:

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above mentioned site is **acceptable**. The stormwater management concept consists of on-site water quantity control via Lake Churchill and on-site water quality control via an infiltration trench/sand filter.

The following **conditions** will need to be addressed during the detailed sediment control/stormwater management plan stage:

1. Provide a complete Geo-technical Report, which verifies that infiltration will work for water quality.
2. Should infiltration prove to be infeasible, provide adequate space for a surface sand filter.
3. Provide a copy of the actual acceptance letter from the Lake Churchill Foundation, which confirms the March 12, 2001 letter from their attorney Ronald J. Early.
4. Based on the plan submitted, the use of a surface sand filter may require any or all of the following:
 - The installation of a storm drain extension.
 - A reduction in parking.
 - A reduction in the building size or layout.
 - A site plan modification request.

This list may not be all-inclusive and may change based on available information at the time.

Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 is not required.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. Any divergence from the information provided to this office; or additional information received

Richard Stepp
March 19, 2001
Page 2

during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact Richard Gee at 240-777-6333.

Sincerely,

Richard R. Brush, Manager
Water Resources Section
Division of Land Development Services

RRB:enm CN203198

cc: M. Shaneman
S. Federline
SM File # 203198

QN -On-site; Acres: 1.17
QL -On-site; Acres: 1.17