APPLICATION FILED: June 19, 2007
PLANNING COMMISSION: October 3, 2007
BOARD OF SUPERVISORS: October 15, 2007

County of Fairfax, Virginia

September 19, 2007

STAFF REPORT

SPECIAL EXCEPTION AMENDMENT APPLICATION

SEA 97-D-020-2

DRANESVILLE DISTRICT

APPLICANT:	Verizon, Virginia, Inc.
ZONING:	R-3
PARCEL(S):	30-3 ((1)) 46
ACREAGE:	2.54 acres
FLOOR AREA RATIO (FAR):	0.45
OPEN SPACE:	70,750 sq. ft. (65%)
PLAN MAP:	5-8 du/ac
SE CATEGORY:	Category 1
PROPOSAL:	Amend SE 97-D-020 previously approved for a Telecommunications Facility to add Cooling Equipment to the Roof of the Existing Building

STAFF RECOMMENDATIONS:

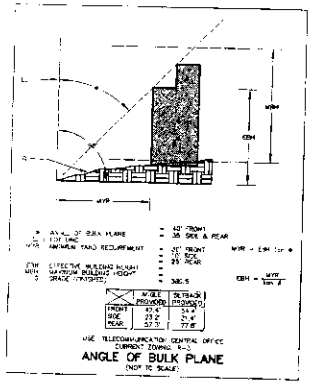
Staff recommends that SEA 97-D-020-2 be approved subject to the proposed development conditions in Appendix 1.

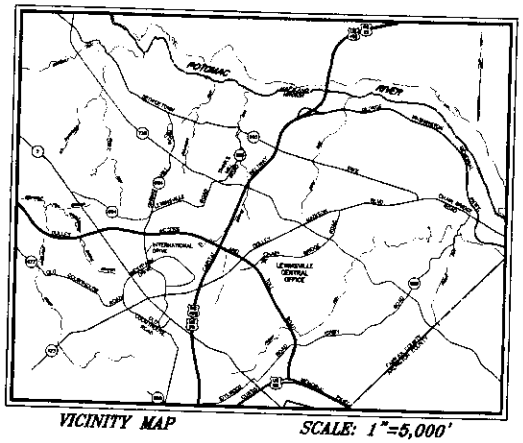
Staff further recommends that the transitional screening yard requirements along all boundaries be modified as shown on the SEA Plat.

O:\pbraha\WPDOCS\SE\SEA 97-D-020, Verizon, McLean\SE Cover.doc

Department of Planning and Zoning
Zoning Evaluation Division
12055 Government Center Parkway, Suite 801
Fairfax, Virginia 22035-5509
Phone 703 324-1290
FAX 703 324-3924
www.fairfaxcounty.gov/dpz/

SPECIAL EXCEPTION AMENDMENT PLAT
VERIZON – LEWINSVILLE CENTRAL OFFICE
SEA 97-D-020





VICINITY MAP SCALE: 1"=5,000'

GENERAL NOTES:

1. THE PROPERTY DELINEATED ON THIS PLAT CONTAINS 2.5433 ACRES AND IS LOCATED ON FAIRFAX COUNTY TAX MAP 30-3-((1))-46. THE PROPERTY IS ZONED R-3 AND IS CURRENTLY USED AS A TELECOMMUNICATIONS CENTRAL OFFICE.
2. THE APPROVAL OF THIS SPECIAL EXCEPTION APPLICATION IS REQUESTED FOR CATEGORY 1, LIGHT PUBLIC UTILITY USES FOR TELECOMMUNICATION FACILITIES.
3. BOUNDARY INFORMATION IS FROM A SURVEY PREPARED BY TRI-TEK ENGINEERING.
4. TOPOGRAPHY INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY BY TRI-TEK ENGINEERING.
5. THE PROPERTY DELINEATED ON THIS PLAT IS NOW IN THE NAME OF THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF VIRGINIA, RECORDED IN DEED BOOK 1387 AT PAGE 100 AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA.
6. THIS SITE IS TO BE SERVED BY PUBLIC WATER AND PUBLIC SANITARY SEWER.
7. OFF STREET PARKING AND LOADING IS PROVIDED IN ACCORDANCE WITH ARTICLE 11 OF THE FAIRFAX COUNTY ZONING ORDINANCE. (SEE SHEET 2)
8. THE PROPOSED DEVELOPMENT CONFORMS TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS OF FAIRFAX COUNTY, EXCEPT THE FOLLOWING:
   A) PER SECTION 9-104, THIS USE SHALL NOT HAVE TO COMPLY WITH THE LOT SIZE REQUIREMENTS OR BULK REGULATIONS SET FORTH BY THE ZONING DISTRICT.
   B) A MODIFICATION OF THE REQUIREMENT TO PROVIDE TRANSITIONAL SCREENING AND BARRIERS AROUND THE PERIMETER OF THE SITE WILL BE REQUESTED AS PART OF THIS SPECIAL EXCEPTION APPLICATION.
   C) A WAIVER OF THE REQUIREMENT TO PERMIT THE EXISTING SIDEWALK TO REMAIN IN LIEU OF PROVIDING A TRAIL ACROSS THE FRONTAGE OF THE SITE.
9. THIS PLAN IS COMPATIBLE WITH THE ADOPTED COMPREHENSIVE PLAN OF FAIRFAX COUNTY AND ADJACENT DEVELOPMENT.
10. THE PROPOSED DEVELOPMENT IS NOT ANTICIPATED TO HAVE ANY ADVERSE EFFECT ON ADJACENT OR NEIGHBORING PROPERTIES.
11. THE SITE IS CURRENTLY DEVELOPED AND USED AS A TELECOMMUNICATIONS FACILITY. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO GENERAL AREAS THAT HAVE SCENIC ASSETS OR NATURAL FEATURES DESERVING OF PROTECTION AND PRESERVATION.
12. THIS SITE DOES NOT HAVE AREA SUBJECT TO 100 YEAR FLOODING OR EQC CRITERIA.
13. IMPROVEMENTS ASSOCIATED WITH THIS APPLICATION ARE NOT ANTICIPATED TO CREATE ANY INCREASE IN STORMWATER RUNOFF. FURTHER, THE CHANGES TO THIS PLAN WILL NOT REQUIRE A SITE PLAN TO BE SUBMITTED. AS SUCH, NO STORMWATER MANAGEMENT PEAK/BMP CONTROLS ARE REQUIRED.
14. DEVELOPMENT OF THIS PROJECT SHALL COMMENCE AT SUCH TIME AS APPROPRIATE COUNTY APPROVALS HAVE BEEN OBTAINED
15. TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THERE IS NO EVIDENCE OF ANY GRAVE, OBJECT OR STRUCTURE MARKING A PLACE OF BURIAL.
16. TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THERE ARE NO KNOWN HAZARDOUS OR TOXIC SUBSTANCES THAT ARE TO BE GENERATED, UTILIZED, STORED, TREATED AND/OR DISPOSED OF ON THIS SITE WITH THE EXCEPTION OF DIESEL STORAGE TANKS USED FOR THE ONSITE GENERATORS.
17. SIGNAGE ONSITE SHALL BE PROVIDED IN ACCORDANCE WITH APPLICABLE STANDARDS SET FORTH BY THE COUNTY OF FAIRFAX.
18. BASED ON AVAILABLE RECORDS, THE EXISTING STRUCTURES WERE CONSTRUCTED IN 1988 AND ADDITION ADDED IN 1974. A GENERATOR ENCLOSURE BUILDING WAS CONSTRUCTED IN 1998.
19. NO EASEMENTS HAVE BEEN IDENTIFIED ON THE PROPERTY THAT ARE IN EXCESS OF 25 FT.

SHEET INDEX:

1. COVER SHEET
2. SPECIAL EXCEPTION AMENDMENT PLAT
3. EXISTING VEGETATION MAP
4. DETAILS AND CROSS SECTIONS

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ENVIRONMENTAL
LAND PLANNING
SURVEYING

VERIZON – LEWINSVILLE CENTRAL OFFICE

FAIRFAX COUNTY, VIRGINIA

DRANESVILLE DISTRICT

COVER SHEET

REVISION	DATE
PER COUNTY COMMENTS	12/12/02
PER COUNTY COMMENTS	2/17/03
PER COUNTY COMMENTS	4/22/03

PM TRB SCALE N/A
PE DATE 6/16/03
CO. SHEET 1 OF 4

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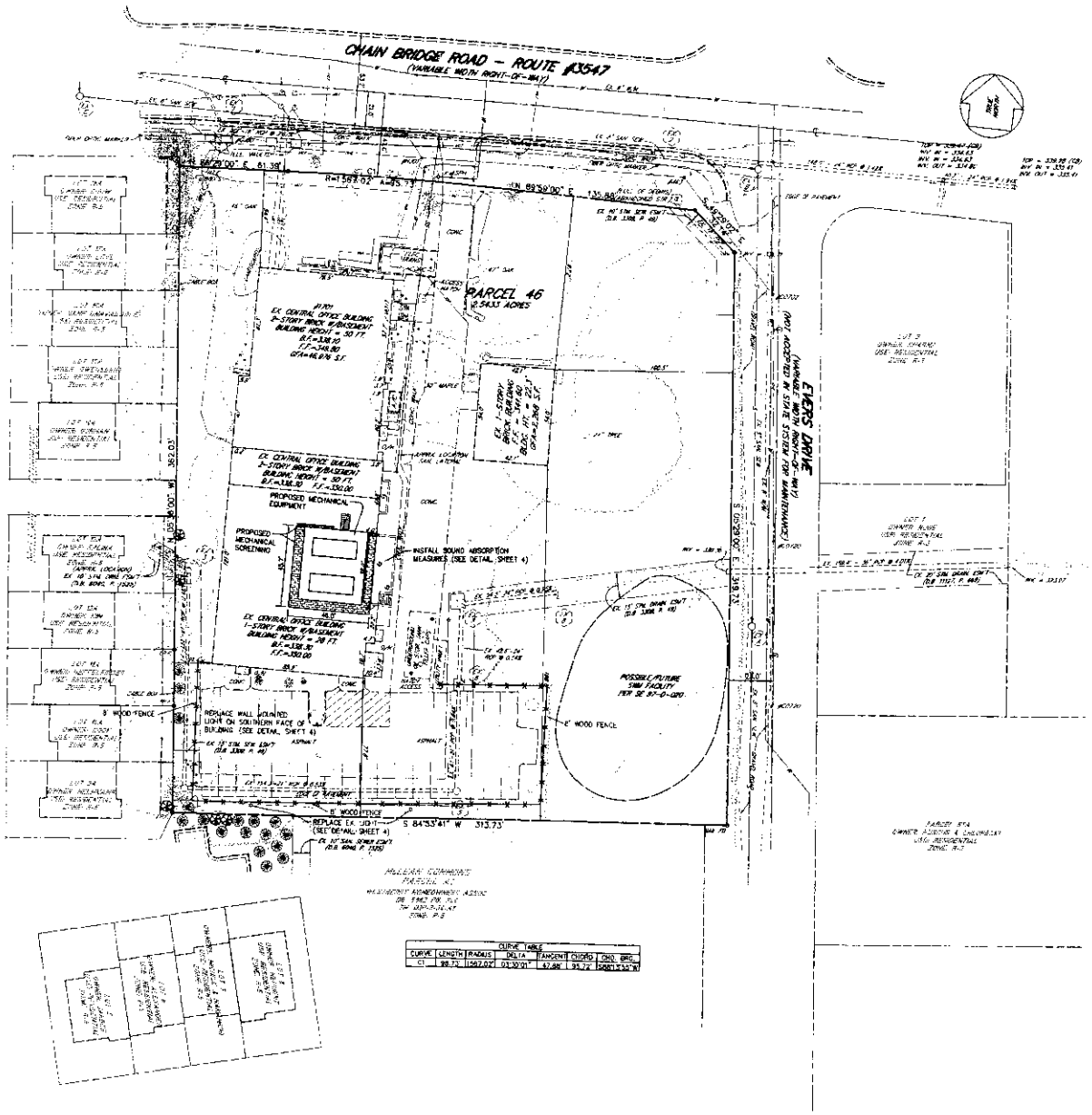

CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHD. BRG.
C1	88.79	1567.02'	03°30'01"	57.88'	88.78'	S86°13'33" W

SITE DATA:

- TAX MAP LOCATION: 30-3-((1))-46
- SITE ADDRESS: 1701 CHAIN BRIDGE ROAD
- TOTAL SITE AREA: 2.5433 ACRES OR 110,785 S.F.
- ZONING: R-3
- PROPOSED USE: TELECOMMUNICATION FACILITY – CATEGORY 1
  SPECIAL EXCEPTION – LIGHT PUBLIC UTILITY USE
- BUILDING AREA:
  EXISTING: 49,244 S.F.
  PROPOSED: 0 S.F.
  TOTAL: 49,244 S.F.

SITE TABULATIONS:

	REQUIRED:	PROPOSED:
• LOT SIZE REQUIREMENTS:		
LOT AREA:	10,500 SF	110,786 S.F.
LOT WIDTH:	80 LF	315 LF
• BULK REGULATIONS:		
BUILDING HEIGHT:	60 FT.	50 FT.
YARD REQUIREMENTS:		
FRONT:	CONTROLED BY A 40° ANGLE OF BULK PLANE, BUT NOT LESS THAN 30 FT.	54.4 FT.
SIDE:	CONTROLLED BY A 35° ANGLE OF BULK PLANE, BUT NOT LESS THAN 10 FT.	21.4 FT.
REAR:	CONTROLLED BY A 35° ANGLE OF BULK PLANE, BUT NOT LESS THAN 25 FT.	77.8 FT.
F.A.R.:	0.30	0.45*

*NOTE: PER SECTION 9-104, THIS USE SHALL NOT HAVE TO COMPLY WITH WITH THE BULK REGULATIONS SET FORTH BY THE ZONING DISTRICT.

- PARKING SCHEDULE:
  REQUIRED: 1 SPACE PER EMPLOYEE ON MAJOR SHIFT (12 EMPLOYEES)
  PLUS 1 SPACE PER COMPANY VEHICLE AND PIECE OF MOBILE EQUIPMENT (NONE) = 12 SPACES
  PROVIDED: 27 SPACES
- OPEN SPACE: 70,750 S.F. OR 64%

LANDSCAPE SCHEDULE

EXISTING EVERGREEN TREES PLANTED BY VERIZON

PROPOSED EVERGREEN TREES TO BE PLANTED BY VERIZON

EVERGREENS (6'–8')

WHITE PINE, AUSTRIAN PINE, NORWAY SPRUCE, LEYLAND CYPRESS, CANADIAN HEMLOCK, HOLLENS HOLLY, AMERICAN HOLLY, AMERICAN ARBORVITAE, EASTERN RED CEDAR

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VERIZON – LEWINSVILLE CENTRAL OFFICE

DRANESVILLE DISTRICT

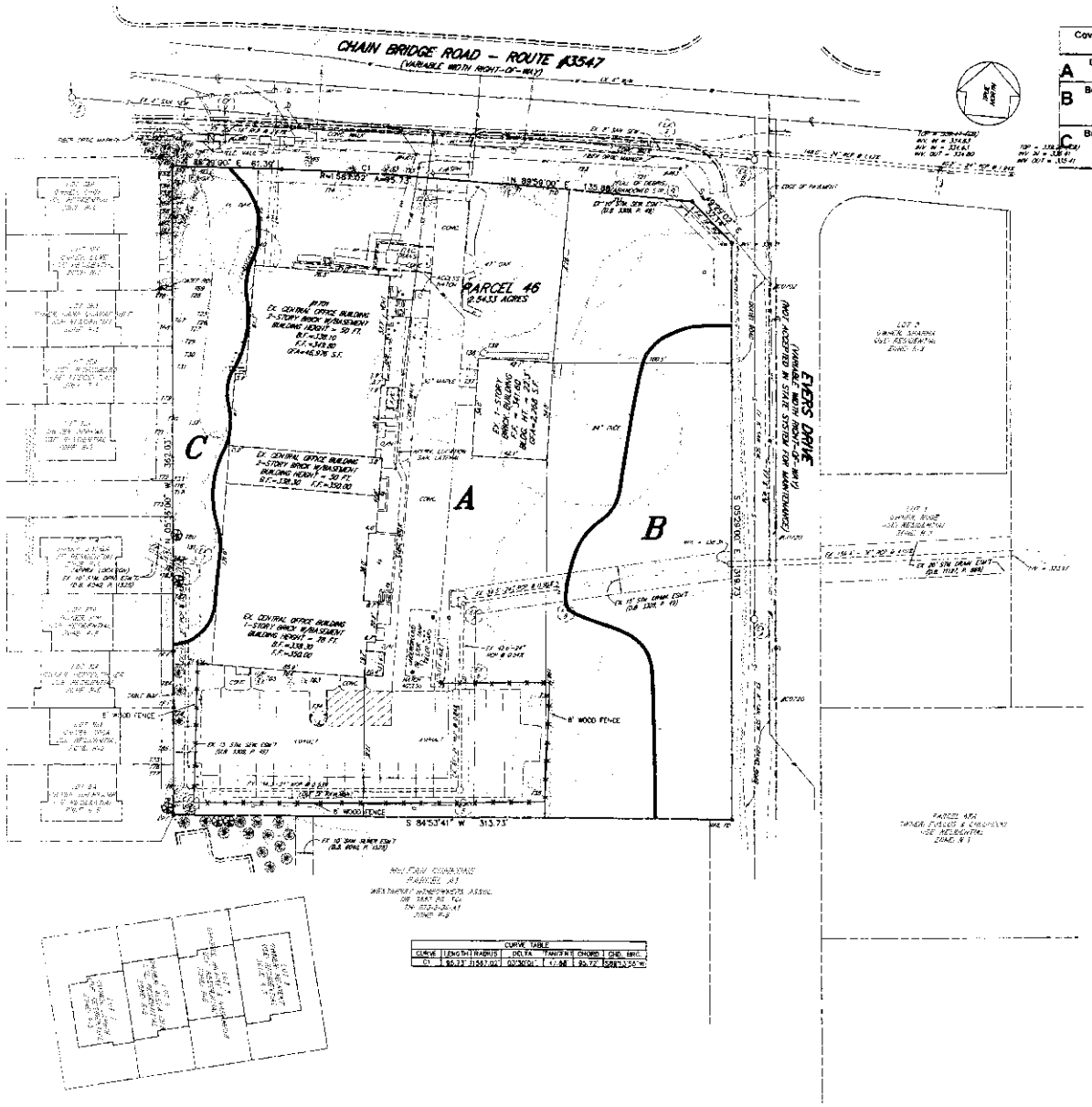
SPECIAL EXCEPTION AMENDMENT PLAT

REVISION	DATE
1ST COUNTY COMMENTS	7/23/07
2ND COUNTY COMMENTS	9/22/07
3RD COUNTY COMMENTS	2/01/08

DRN TCB SCALE 1"=30'
DES DG DATE 7/23/07
CK MRD SHEET 2 OF 4

Existing Vegetation Map — Verizon on Chainbridge Road

	Cover Type	Primary Species	Understory Species	Successional Stage	Condition	Area
A	Developed	Quercus phellos	lawn and landscape	N/A	very good	1.98 ACRES
	Comments	Two specimen quality willow oaks.				
B	Bottomland Forest	Acer saccharinum, Robinia pseudoacacia, Acer rubrum, Liriodendron tulipifera, Morus alba	Lonicera japonica, Rhus radicans, Rosa multiflora, Hedera helix	sub-climax	fair to good	0.36 ACRES
	Comments	young regrowth in wet area				
C	Bottomland Forest	Acer saccharinum, Robinia pseudoacacia, Morus alba	weeds and lawn, a few Lindera benzoin	sub-climax	poor	0.20 ACRES
	Comments	young regrowth				



CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHD. BRG.
C1	95.73'	11587.00'	00°30'00"	47.86'	95.72'	S89°14'55"W

TREE TABLE

T1	3" PINE
T2	4" PINE
T3	4" PINE
T4	4" PINE
T5	4" PINE
T6	3" PINE
T7	4" PINE
T8	2" PINE
T9	3" PINE
T10	2" OAK
T11	2" OAK
T12	40" OAK
T13	2" OAK
T14	2" OAK
T15	48" OAK
T16	5" OAK
T17	17" OAK
T18	2" OAK
T19	2" OAK
T20	3" OAK
T21	3" TREE
T22	2" TREE
T23	24" TREE
T24	11" TREE
T25	11" TREE
T26	7" TREE
T27	8" TREE
T28	3" TREE
T29	13" TREE
T30	8" TREE
T31	11" TREE
T32	9" TREE
T33	10" TREE
T34	11" TREE
T35	1" TREE
T36	1" TREE
T37	1" HOLLY
T38	1" HOLLY
T39	1" HOLLY
T40	5" DOGWOOD
T41	8" CEDAR
T42	8" CEDAR
T43	7" CEDAR
T44	5" CEDAR
T45	8" CEDAR
T46	9" CEDAR
T47	5" CEDAR
T48	1" CEDAR
T49	5" CEDAR
T50	5" CEDAR
T51	7" CEDAR
T52	6" CEDAR
T53	8" CEDAR
T54	8" CEDAR
T55	4" CEDAR
T56	4" CEDAR
T57	8" CEDAR
T58	6" CEDAR
T59	4" CEDAR
T60	7" CEDAR
T61	5" CEDAR
T62	3" CEDAR
T63	3" CEDAR
T64	3" CEDAR
T65	3" CEDAR
T66	2" CEDAR
T67	4" CHERRY
T68	13" LOCUST
T69	8" LOCUST
T70	10" LOCUST
T71	11" LOCUST
T72	17" LOCUST
T73	8" LOCUST
T74	18" LOCUST
T75	15" LOCUST
T76	11" LOCUST
T77	25" LOCUST
T78	13" MAP
T79	18" MAP
T80	13" MAP
T81	10" MAP
T82	4" MAP
T83	17" MAP
T84	29" MAP
T85	39" MAP
T86	30" MAP
T87	34" POP
T88	17" POP

LANDSCAPE SCHEDULE

EXISTING EVERGREEN TREES PLANTED BY VERIZON

PROPOSED EVERGREEN TREES TO BE PLANTED BY VERIZON

EVERGREENS (6'–8')

WHITE PINE, AUSTRIAN PINE, NORWAY SPRUCE, LEYLAND CYPRESS, CANADIAN HEMLOCK, FOSTERI HOLLY, AMERICAN HOLLY, AMERICAN ARBORVITAE, EASTERN RED CEDAR

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VERIZON – LEWINSVILLE CENTRAL OFFICE

FAIRFAX COUNTY, VIRGINIA

DRANESVILLE DISTRICT

EXISTING VEGETATION MAP

DATE	
7/23/07	PER COUNTY COMMENTS
8/15/07	PER COUNTY COMMENTS
8/27/07	PER COUNTY COMMENTS

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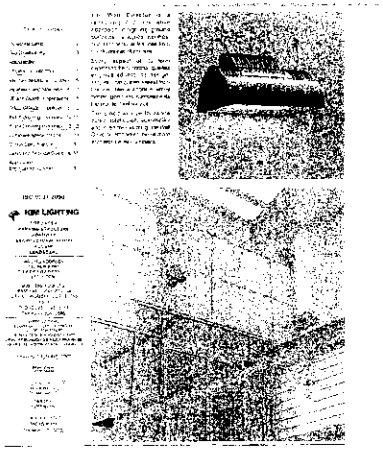
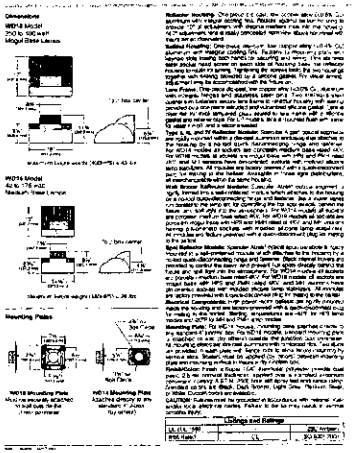
Model Specifications



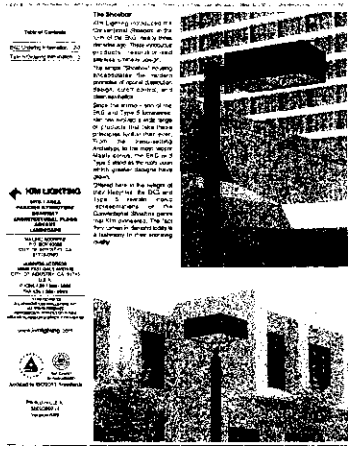
NOTE: THE APPLICANT RESERVES THE RIGHT TO SUBSTITUTE FIXTURE TYPES SO LONG AS THEY MEET THE STANDARDS SET FORTH BY ARTICLE 14, PART 9.

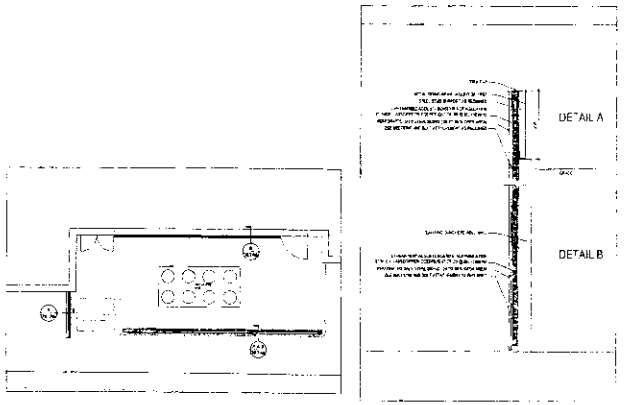
Luminaire Specifications

WD18 and WD14 Models

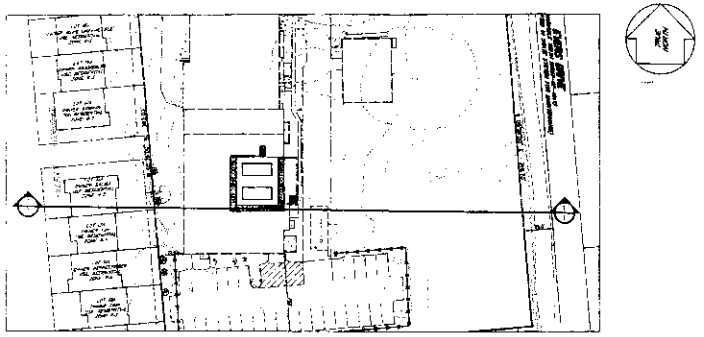


Conventional Shoeboxes

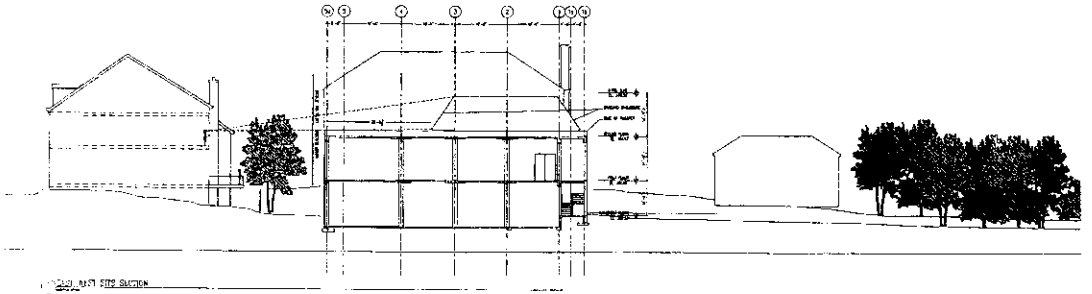




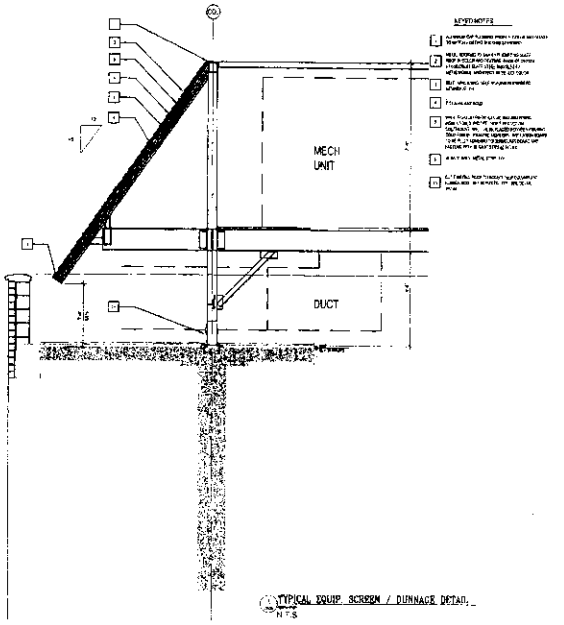
SOUND ABSORPTION DETAIL
N.T.S.



PLAN VIEW
1"=30'



SITE SECTION
1"=20'



TYPICAL EQUIP. SCREEN / DUNNAGE DETAIL
N.T.S.

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COMMONWEALTH OF VIRGINIA
LICENSED PROFESSIONAL ENGINEER

VERIZON – LEWINSVILLE CENTRAL OFFICE

FAIRFAX COUNTY, VIRGINIA

LEWINSVILLE DISTRICT

DETAILS & CROSS SECTIONS

DATE	REVISION
7/27/07	PER COUNTY COMMENTS
8/17/07	NEW DWG. COMMENTS
8/20/07	PER COUNTY COMMENTS

PLOT TIME SCALE: AS SHOWN
DATE PLOTTED: 8-16-07
DWG. NO. SHEET 1 OF 1

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

DESCRIPTION OF THE APPLICATION

Proposal:	The application proposes to add two chilled-water cooling units to the roof of the rear portion of the existing telecommunications switching center.
Size:	No increase in the existing gross floor area, 48,244 sq. ft.
Employees:	Approximately 6 per day; however, the number may increase during repairs or during the installation of new equipment or when other service providers maintain their equipment.
Hours:	24 hours a day, 7 days a week; most activity occurs during normal business hours; however, repair activities and/or equipment installation may extend beyond normal business hours during emergencies.
Waivers & Modifications:	Transitional Screening along all boundaries to allow use of existing vegetation. Barrier along northern, eastern and western boundaries. Eight foot fence along portions of the rear and side yards. Trail requirement along Chain Bridge Road frontage.

LOCATION AND CHARACTER

The 2.54 acre application property is located on the south side of Chain Bridge Road, approximately 550 feet east of its intersection with Great Falls Street (Rt. 694). The eastern boundary of the property abuts Evers Lane, an unimproved right-of-way.

The property is developed with an existing 48,244 sq. ft. telecommunications switching center that consists of the 50-foot tall main building and a 22 foot tall second building housing an emergency generator set back approximately 100 feet from the eastern property line.

The main building is parallel to the western property line, with its setback from the western property line varying between approximately 45 feet at the front of the building and 21 feet at its rear. The main building has two sections—the portion of the building closest to Chain Bridge Road is 50-foot tall, however, the rear portion of the building is 28-foot tall. This shorter part of the building is closest to the adjacent single family attached homes in McLean Commons. The closest point of the main building sits approximately 50-55 feet from the closest homes in McLean Commons. A 27 space asphalt parking lot is located behind the main building. The parking lot is approximately

10 feet from the southern and western property lines. The site is accessed from Chain Bridge Road via a driveway located in the middle of the site. This driveway runs along the eastern side of the main building, between it and the generator building. The eastern half of the site, east of the generator building, is undeveloped and is covered with existing vegetation including mature trees and undergrowth. This area has also been shown as a possible future site of a Stormwater Management facility per SE 97-D-020.

Surrounding Area Description			
Direction	**Use**	**Zoning**	**Plan Map**
North	Single Family Attached (Evans Farm)[1]	PDH-8	3-4 du/ac
South	Single Family Attached (McLean Commons aka Westberry)[2]	R-5	5-8 du/ac
East	Single Family Detached	R-3	2-3 du/ac
West	Single Family Attached (McLean Commons)[2]	R-5	5-8 du/ac

1. Developed pursuant to RZ/FDP 1998-D-049 approved July 26, 1999.
2. Developed pursuant to RZ 81-D-109 approved November 22, 1982.

BACKGROUND

Application	Request	Action	Date of Action
Special Use Permit 10776	Construct Switching Center (Telecommunications Facility)	Approved by the Board of Zoning Appeals (BZA)	May 8, 1956
S-809-68	Addition to Rear of facility	Approved (BZA)	March 26, 1968
S-201-73	Addition to Rear of facility	Approved (BZA)	October 31, 1973
SE 97-D-020	Building for Emergency Generators	Approved by the Board of Supervisors	June 23, 1997
SEA 97-D-020	9,100 sq. ft. Addition to Main Building	Withdrawn	March 5, 2003

Appendix 4 contains the records with regard to the approval of SE 97-D-020. The records regarding the previous special permits approvals and the withdrawn special exception amendment are on file with the Department of Planning and Zoning.

The applicant was issued a building permit, # 60940087, for what the submitted permit listed as "equipment upgrades" on April 12, 2006. Pursuant to this permit, the applicant commenced to install three chilled-water cooling units on the roof of the rear part of the existing main building. In response to complaints from nearby residents, the applicant ceased the construction activity. Upon further review by staff, the applicant was informed that approval of a special exception amendment would be required before the units could be installed on the roof.

COMPREHENSIVE PLAN PROVISIONS

Plan Area:	Area II
Planning District:	McLean Planning District
Planning Sector:	Kirby Planning Sector (M3)
Plan Map:	5 – 8 dwelling units per acre
Plan Text:	There is no site specific text related to the application property.

The Comprehensive Plan text related to public utilities of this type is excerpted in Appendix 8.

ANALYSIS

Special Exception Plat (Copy at front of staff report)

Title of Special Exception Plat:	Verizon – Lewinsville Central Office
Prepared By:	Tri-Tek Engineering
Original and Revision Dates:	June 18, 2007 as revised through August 22, 2007

SE Plat (Verizon – Lewinsville)	
Sheet #	**Description of Sheet**
1 of 4	Cover Sheet including General Notes and Vicinity Map
2 of 4	Plan View of Project and Tabulations
3 of 4	Existing Vegetation Map
4 of 4	Section showing Relationship to Adjacent Residences, Lighting Details, Detail of Screening and Noise Attenuation for Rooftop Mechanicals

The applicant is proposing to place two air water-chilled cooling units on the roof of the rear part of the existing main central building. This portion of the existing building is twenty-eight feet tall with a flat roof; (the roof on the other portion of main building is 50-feet tall.) The remainder of the site will not be changed; the existing mature vegetation in front of this brick colonial style building will remain as will the wooded area located to the east of the building and drive.

The water-chilled cooling units will be placed on top of a steel framework approximately four feet above the roof deck. Each unit is 6'10-1/2" tall by 24' 3-1/2" Long and 11' 6-13/16" Wide. To screen this mechanical equipment from the adjacent dwelling units to the west and south of the application property, a screen resembling a mansard roof will be built around these units. The proposed equipment at the specified location is required as part of the overall cooling system for the building and to provide proper cooling of the telephone switching and other equipment inside the building.

As depicted on Sheet 4 of the SEA Plat, the mansard style screening will be faced metal that is treated to resemble slate shingles. Noise attenuation measures will also be provided as part of the screening. A rigid fiberglass sheet (Certainteed Acousta Board is an example of this type of material) that is weatherproofed provides the acoustical treatment. In addition, the applicant is proposing, as shown on Sheet 4, to install acoustical screening around an existing cooling unit located on the east side of the building at ground level. This screening will also contain Certainteed Acousta Board. As a further measure to reduce noise impacts on the nearby residences, testing of the emergency generator is restricted by development conditions to weekday business hours, between 9:00 a. m. and 5:00 p. m.

The evergreen screening shown on the approved SEA Plat was recently installed and has died. The SEA Plat proposes to revise that screening and to cluster it to provide more effective screening for the nearest residences. However, since the existing parking area is located within ten feet of the property line, to meet this goal much of the proposed plant material will have to be planted within land held by the Homeowners Association (HOA) for the adjacent townhouse community. The proposed development conditions reflect the applicant's agreement with the adjacent HOA to install the vegetation off-site; however, it also provides that if permission for the planting is not granted by the HOA, the landscaping would be installed within the application property.

Land Use Analysis

The land use issues associated with this case are the impacts of the proposed additional facilities on the transition between this telecommunication facility and the adjacent residential properties. The visual impact is addressed in detail in the section of this report addressing the requested transitional screening and barrier requirements modifications. The chilling units will be screened from view by a mansard style screen with shingles. The closest residences will see this screening from the upper levels of their homes. Structural noise attenuation will also be part of this screening. Noise issues associated with the location of the cooling units on the roof are addressed in the environmental analysis below.

Transportation Analysis (See Appendix 9)

There are no transportation issues associated with this proposal to add these cooling units to the existing telephone switching center.

Environmental Analysis (See Appendix 10)

Neither the Comprehensive Plan nor the Zoning Ordinance contains explicit standards for mitigation of noise from a stationary noise source. The proposed water-chilled cooling units are to be added on the roof of an existing structure.

While there are no explicit standards contained in the Zoning Ordinance or Comprehensive Plan which would typically be applied to such uses, some of the common limitations noted in the Noise Code, such as limiting the hours of operation for such uses and/or the application of structural attenuation measures, may present a logical limitation on the use. Chapter 108, of the County Code (see Appendix 11) limits exterior impacts from stationary noise sources according to specific octave bandwidth limitations. In this instance, given the nature of the existing uses at this location and the proposed additions to serve the existing facilities; any limit on the hours of operation would be impractical. As such, the only noise mitigation option remaining would be the application of structural noise reduction measures to ensure that the existing and projected noise generated by this facility will remain within the limits set forth in the County Code.

The applicants have submitted several noise studies, prepared by Hessler and Associates, which present existing and projected noise levels at this location (see Appendices 5 and 6). The studies note the standards set forth in the County Code as well as measurements taken from the site and project the noise impacts of the specific equipment to be installed on the roof along with the proposed screening around the new equipment. Based on the on-site measurements and proposed structural noise mitigation measures, it appears that the applicants will be able to meet the County standards for stationary noise sources.

To ensure that the projection of the study that the noise emanating from the new equipment will conform to the limitations of the County Code, a development condition which would require the applicants to conduct a noise study at the same locations noted in the current study some time after the new facilities have been completed would be appropriate. In the event the Code requirements are not being met, the condition requires the applicants to devise and install additional noise mitigation measures at this location.

The existing stormwater from the site is captured by existing drop inlets on the eastern side of the parking lot and one near the generator building. These facilities connect to an in-ground system. As no additional impervious surfaces are proposed by this application, this stormwater management system is not expected to change. The SEA plat shows a possible location for a SWM facility should this type of facility be required in the future.

ZONING ORDINANCE PROVISIONS (See Appendix 12)

This facility is a telecommunications facility, which is a Category 1 Special Exception use in the R-3 District. It should be noted that Par. 1 of Sect. 9-104, Standards for all Category 1 Uses, states:

> "Category 1 special exception uses shall not have to comply with the lot size requirements or the bulk regulations set forth for the zoning district in which located."

The following chart provides the bulk standards for non-residential uses in the R-3 for comparison only. It should also be noted that Telecommunications Facilities are subject to the transitional screening yard and barrier requirements contained in Article 13, Landscaping and Screening. NOTE: This telecommunications center was originally built prior to the adoption of the current Zoning Ordinance in 1978.

Bulk Standards for Non-Residential Uses – R-3 District		
Standard	**Required**	**Provided**
Lot Size	10,500 sq. ft.	110,786 sq. ft.
Lot Width	105 feet	312 feet
Building Height	60 feet	50 feet (28 feet at site of proposed water-chilled cooling units)
Front Yard	40° ABP[1]; ≥ 30 feet	54 feet
Side Yard	35° ABP[1]; ≥ 10 feet	21 feet
Rear Yard	35° ABP[1]; ≥ 25 feet	77 feet
Floor Area Ratio (FAR)	0.30	0.45

1. ABP – Angle of Bulk Plane; for a 50 foot tall building the yard requirement for a 40° ABP is 42 feet; the yard requirement for a 35° ABP is 32 feet.

Other Requirements – R-3 District		
Standard	**Required**	**Provided**
Open Space	N/A	70,750 sq. ft. (65%)
Parking Spaces	12	27
Loading Spaces	2	2

Transitional Screening		
Direction	**Required**	**Provided**
North (SFA)	Yard 2 – 35 feet in depth	Existing landscaping within 54 ft. deep front yard
South (SFA)	Yard 2 – 35 feet in depth	10 foot strip with fence and evergreen trees
East (SFD)	Yard 3 – 50 feet in depth	Existing Vegetation within a 100 foot deep yard
West (SFA)	Yard 2 – 35 feet in depth	Existing Vegetation in a yard that varies in depth 10 feet to 45 feet

Barrier		
Direction	**Required**	**Provided**
North (SFA)	Barrier D, E or F	None
South (SFA)	Barrier D, E or F	8 foot tall wooden fence to screen building & parking
East (SFD)	Barrier D, E or F	None
West (SFA)	Barrier D, E or F	8 foot tall wooden fence to screen building & parking

1. Barrier D is a 42-48 inch chain link fence; Barrier E is a 6 foot wall of brick or architectural block; Barrier F is a 6 foot high solid wood fence.

WAIVERS/MODIFICATIONS REQUESTED

This telecommunication facility was initially approved as a special permit in 1956. With that approval, the building was required by the Board of Zoning Appeals to be constructed of brick and in a colonial architectural style. This initial approval also established the location of the building on the property. Subsequently, with the approval of the second addition to the rear of the building in 1973, the size and location of the existing parking area was established. This application proposes to install equipment on the roof of the rear portion of the existing building, the addition approved in 1973. The requested waivers and modifications reflect these existing conditions.

Modification: Transitional Screening **Basis**: Par. 3, Sect. 13-304

Eastern Boundary: The existing main building is set back approximately 195 feet from the unimproved right-of-way for Evers Drive. The one-story generator building is approximately 100 feet from Evers Drive. The 100 foot wide area wide area contains existing mature trees and undergrowth to provide screening for the three residential lots along the site's frontage on Evers Drive. Staff has concluded that the existing vegetation provides appropriate screening along this boundary with the stipulation contained in the proposed development conditions that, if the SWM facility is constructed in the future, landscaping be provided around the SWM facility to provide replacement screening, as determined by the Urban Forestry Division.

Southern Boundary: The existing parking area behind the building is located within ten feet of the southern property line. An eight foot tall fence has been installed to screen the parking area from the adjacent property. The majority of the off-site property to the south is HOA open space. Staff has concluded that the proposed landscaping in combination with the eight foot tall wooden fence provides an appropriate transition between this site and the adjacent residential community.

Western Boundary: The setback of the existing building from the western property varies from 45 feet at the front of the building to 21 feet at its rear and the parking lot is within 10 feet of this boundary. The area between the building and the property line contains existing deciduous and evergreen trees. Along the common boundary with the adjacent townhouse community, there are a number of mature trees located along a seven foot deep strip of HOA land along the boundary. The proposed development conditions require that seven new holly trees, each a minimum of eight feet in height, be installed between the building and the western property line. The additional evergreen plantings will provide additional screening for the adjacent residences; staff has concluded that this is an appropriate treatment, given the location of the existing building and the fact that there are no activities associated with the telecommunications center along this boundary.

Northern Boundary: The northern side of the application property abuts Chain Bridge Road. The property across this road, Evans Farm, has been recently developed with townhouse style single family attached dwelling units. The existing building is constructed of brick and has a colonial architectural style. The building is setback from the road approximately 54 feet. The front yard contains mature vegetation including shrubs and trees typical of a suburban landscape. To the east of driveway is a 47 inch diameter breast height willow oak and to the west of the building is another 46 inch dbh oak. Staff has concluded that this is an appropriate transitional screening yard along Chain Bridge Road for this facility in this location.

Where additional plantings are required by the proposed development conditions, the proposed development conditions require that the new landscaping be installed prior to April 1, 2008. This provides the applicant with two planting seasons to install the plant material and get it established prior to summer, 2008. While redundant of the provisions of Article 13, Landscaping and Screening, which require that all landscaping, required to meet the requirements of that Article be maintained and replaced, the proposed development conditions also require that the landscaping on the site be regularly maintained and that dead and dying plant material be replaced as needed.

Modification: Barrier **Basis**: Par. 12, Sect. 13-304

The applicant has verbally informed staff that that the eight foot tall board-on-board wooden fence has been recently installed to replace the previous fence which was in disrepair. The new fence extends along the southern boundary from the easternmost portion of the parking lot to the western property line. The fence then extends northward along the western property line, turning ninety degrees to the southwestern corner of the building. The fence is located within the ten foot wide strip between the parking lot and both boundaries. Barriers are not provided in other locations on the property. Staff has concluded that the requested modification of the barrier requirement is appropriate in this instance because, in areas where the fence was not installed the existing landscaping provides an appropriate transition between the existing telecommunications facility and the adjacent residential properties. Further, staff

has concluded that the existing fence screens the parking area from the adjacent residences. A fence of this height requires a waiver of the maximum height limitations for fence height, as discussed below.

Modification: Increase in Fence Height **Basis**: Par. 3(H), Sect. 10-104

The cited paragraph permits the Board of Supervisors to approve an increase in fence height in conjunction with a special exception for another use. Per Par. 3(C), Sect. 10-104, a fence in a rear yard or a side yard is limited to seven feet. However, the existing unpainted board-on-board fence is eight feet tall. Par. 3(H) states that the Board may approve an increase in fence height if it determines, based on material depicting the location, height, color and material, of the proposed fence, that it is in character with the existing development of the site, is harmonious with the surrounding development and will not adversely affect the use and enjoyment of any nearby property. The fence was installed to screen the adjacent townhouse community from the parking area behind the existing telecommunications facility and as noted above, staff has concluded that it meets that function. The fence is located only in the area of the parking lot so it does not isolate the existing facility from its surroundings. As described above, the existing landscaping and natural vegetation in combination with the architectural style of the building allow this non-residential facility to be harmonious with the surrounding neighborhood. Staff recommends that the Board grant the requested increase in fence height.

Modification: Trail **Basis**: Sect. 17-201

There is an existing four foot sidewalk located along the site's frontage on Chain Bridge Road. With the approval of SE 97-D-020, the Board of Supervisors waived this requirement in favor of the existing sidewalk. The Trails Plan includes a major trail along Chain Bridge Road in this location on both sides of Chain Bridge Road. With the approval of the rezoning of Evans Farm on the opposite side of Chain Bridge, the Board waived the requirement for the installation of a trail and accepted a proffer that allowed those funds to be utilized to implement a trail system in the Pimmit Run stream valley. Staff recommends that a similar approach be taken in this instance, and proposes that the applicant provide the funds necessary for the construction of a ten foot wide asphalt trail along the site's frontage to be utilized for other trails projects within the vicinity.

Special Exception Requirements (See Appendix 12)

Category 1 Standards (Sect. 9-104)
General Special Exception Standards (Sect. 9-006)

With regard to Sect. 9-104, Standards for All Category 1 Uses:

- Par. 1 addresses conformance with the lot size and bulk standards in the underlying zoning district. As discussed above, this paragraph states that the

bulk and lot size requirements are not applicable to Category 1 special exception uses.

- Par. 2 states that outdoor storage is not allowed except when a Category 1 use is located in either the I-5 District or the I-6 District. Since this site is zoned R-3, outdoor storage is not allowed.
- Par. 3 addresses the analysis of alternate sites for such a use, stating that, with regard to telecommunication facilities, alternate sites within a C or I District within 1 mile of the proposed location of a facility. However, this application concerns the addition of water-chilled cooling units on the roof of an existing telecommunications office initially approved in 1968 and not the establishment of a new facility.
- Par. 4 states the provisions of Article 17, Site Plans, are applicable.

With regard to the provisions of Sect. 9-006, General Standards, which are applicable to all special exception uses, staff has concluded the following:

- This property is identified for residential development at 2-3 du/ac on the Comprehensive Plan Map. This is the site of an existing public facility that the operator proposed to expand by placing two water-chilled cooling units on the roof of the main building. The Public Facilities element of the Comprehensive Plan states that existing facilities should be maintained and expanded to meet service needs while maintaining the levels of screening while allowing for expansion of the uses. This proposal to expand the existing facility is consistent with those policies in that the new equipment will be screened by the new mansard style screening, the applicant has constructed an 8-foot fence in the rear, and the other screening onsite will remain the same. Therefore, this proposal is consistent with the stated policies thereby satisfying the requirement of Par. 1 to be in harmony with the adopted Comprehensive Plan.

- As described above, the proposed alterations at this existing telecommunications facility are in harmony with the purpose and intent of the applicable zoning district regulations as required by Par. 2.
- As discussed under "Waivers and Modifications" Staff has concluded that the proposed changes to the property will not affect the visual relationship of the facility with the adjacent properties. As described in the Environmental Analysis, the projected noise levels associated with the new equipment meet the requirements of the Noise Ordinance. Therefore, staff has concluded the proposed changes at this existing telecommunications facility will not hinder or discourage the development and use of the adjacent or nearby properties.
- The proposed changes are such that they will increase the vehicular and pedestrian traffic associated with this use; therefore, the application will not be hazardous nor conflict with neighborhood traffic, as required by the provisions of Par. 4. The existing sidewalk provides pedestrian access along Chain Bridge Road.

- Transitional screening and barriers existing around the property have been discussed above. Those comments note that the existing transitions to the adjacent uses are not being affected by the proposed changes to this facility. The site contains 65 percent open space satisfying the requirements of Par. 6.

- Par. 7 addresses utilities and parking at the site. The utilities serving the site are adequate and the proposed parking will exceed the minimum requirements specified in the Zoning Ordinance.
- Par. 8 addresses signage. It should be noted that all signage on the site would be required to conform to the provisions of Article 12, Signs.

CONCLUSIONS AND RECOMMENDATIONS

Staff Conclusions

Staff concludes that the subject application to add to the existing facility is in harmony with the Comprehensive Plan and in conformance with the applicable Zoning Ordinance provisions, with the implementation of the Proposed Development Conditions contained in Appendix 1 of the Staff Report.

STAFF RECOMMENDATIONS

Staff recommends the approval of SEA 97-DR-020-2, subject to the Proposed Development Conditions contained in Appendix 1.

Staff further recommends that the transitional screening yard requirements along all boundaries be modified as shown on the SEA Plat.

Staff further recommends that the barrier requirement be waived along Chain Bridge Road, along the eastern boundary and along the portions of the southern and western boundaries where a fence is not shown on the SEA Plat.

Staff further recommends that the request to modify and allow an eight foot tall board-on-board fence in the location shown on the SEA Plat pursuant to the provisions of Sect. 10-104.

Staff further recommends that the trail requirement be modified in favor of the existing conditions.

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

The approval of this special exception does not interfere with, abrogate or annul any easements, covenants, or other agreements between parties, as they may apply to the property subject to this application.

It should be further noted that the content of this report reflects the analysis and recommendations of staff; it does not reflect the position of the Board of Supervisors.

APPENDICES

1. Proposed Development Conditions
2. Affidavit
3. Statement of Justification
4. May 31, 2007 letter from Sheri Hoy, McGuire Woods and agent for the applicant, including letters sent on behalf of the applicant to the Westberry HOA addressing various steps the applicant is willing to take to address issues raised by the Westberry HOA including recommendations by Hessler and Associates, Consultants in Engineering Acoustics to address the noise from the existing HVAC unit located east of the building
5. July 25, 2007 letter from Sheri Hoy, containing noise studies prepared by Hessler and Associates measuring existing noise and other materials regarding this project
6. Chart prepared by Hessler and Associates providing a comparison of the noise from the proposed air handlers with the requirements of the County Code
7. Clerk to the Board's letter regarding the approval of SE 97-D-020 and a copy of the associated SE Plat
8. Excerpts from the Public Facilities Element of the Policy Plan volume of the Comprehensive Plan
9. Transportation Analysis
10. Environmental Analysis
11. Chapter 108 of the County Code, the Noise Ordinance
12. Selected Excerpts from the Zoning Ordinance
13. Glossary of Terms

APPENDIX 1

PROPOSED DEVELOPMENT CONDITIONS

SEA 97-D-020-02

September 20, 2007

If it is the intent of the Board of Supervisors to approve SEA 97-D-020-02 located at Tax Map 30-3 ((1)) 46 (1701 Chain Bridge Road) for expansion of an existing telecommunications building (switching facility) pursuant to Sect. 3-304 of the Fairfax County Zoning Ordinance, the staff recommends that the Board condition the approval by requiring conformance with the following development conditions which supercede the previously approved development conditions. Previously approved conditions or those with minor modifications are marked with an asterisk (*).

1. This Special Exception Amendment is granted for and runs with the land indicated in this application and is not transferable to other land.*

2. This Special Exception Amendment is granted only for the purpose(s), structure(s) and/or use(s) indicated on the Special Exception Amendment plat approved with the application, as qualified by these development conditions.*

3. This Special Exception Amendment is subject to the provisions of Article 17, Site Plans, as may be determined by DPWES. Any plan submitted pursuant to this special exception shall be in substantial conformance with the approved Special Exception Amendment plat entitled "Verizon – Addition to Fox Mill Central Office", prepared by Tri-Tek Engineering, Corp. which is dated June 6, 2001 as revised through August 22, 2007, and these conditions. Minor modifications to the approved Special Exception Amendment may be permitted pursuant to Par. 4 of Sect. 9-004 of the Zoning Ordinance.

4. A copy of this Special Exception Amendment SHALL BE POSTED in a conspicuous place on the property along with the Non-Residential Use Permit of the use and shall be made available to all Departments of the County of Fairfax during hours of operation of the permitted use.*

5. Unless waived or modified by DPWES, stormwater management facilities and best management practices shall be provided on-site in accordance with Public Facilities Manual requirements. A special exception amendment may be required if the proposed location of the SWM/BMPS is not in substantial conformance with the approved SEA Plat, as determined by DPWES. If the stormwater management facility is required, the SWM pond area shall be landscaped to the maximum extent allowed by DPWES, subject to the review and approval of the Urban Forestry Branch.

6. The existing 8-foot fence along the southern and eastern boundaries shown of the SEA plat shall be maintained in good condition.

7. All freestanding and building mounted signs shall comply with the provisions of Article 12. No pole signs shall be permitted nor shall signage be illuminated.

8. The testing of the generators shall be limited to one 30 minute period per month and shall be limited to the hours between 9:00 a. m. to 5:00 p. m., Monday through Friday.*

9. The additions to the existing facility shall be limited to the two chilled-water cooling units to be installed on the lower roof at the rear of the main building. The two chilled-water cooling units shall be placed on the roof in the location shown on the SEA Plat and shall be screened by the mansard style screening depicted on the SEA Plat. The screen shall be faced with the shingles depicted on the SEA Plat and shall include the noise attenuation material depicted on the SEA Plat.

10. Noise attenuation screening shall be installed around the existing equipment located adjacent to the rear part of the main building as depicted on the SEA Plat.

11. A landscape plan shall be submitted to Urban Forest Management and the Department of Public Works and Environmental Services with the first submission of the building plans for the proposed additional equipment and with all subsequent plans. This first submission of the building plans shall be accompanied with a letter of explanation that notes this plan has been submitted pursuant to this special exception amendment and is not associated with a site plan. A copy of these conditions shall be submitted with the first submission of the building plans. Copies of the letter and the landscape plan shall be sent to the president of the Westberry Homeowners Association and the office of the Dranesville District supervisor concurrent with the submittal to the County. The plan shall provide for landscaping consistent in quality and quantity with that shown on the SEA Plat and required by these conditions:

    - Existing vegetation along the western boundary shall be preserved and supplemented by seven holly trees, which shall be a minimum of eight feet tall at the time of planting.

    - The existing eight foot tall solid wood fence along the southern and western boundaries of the parking lot shall be maintained in good repair.

    - Landscaping shall be maintained in good condition. The plantings shall be cared per the appropriate specifications as described on the landscaping plan reviewed by DPWES. This maintenance

includes, but is not limited to, removal of dead/diseased plantings and their prompt replacement to maintain the required landscaping of this Special Exception Amendment.

- If appropriate permission is received from the Westberry HOA, the plantings shown on the SEA Plat to be planted off-site on the property of the Westberry HOA shall be planted prior to April 31, 2008. Verizon will establish a two year maintenance agreement with Westberry to assure the viability of such plantings.

- If permission to plant the plantings within the property of Westberry HOA is not granted, the trees shall be planted on-site in the rear of the property. Necessary portions of the parking lot may be removed to accommodate landscaping, so long as parking is not reduced below 12 spaces.

12. The existing lighting on site shall be replaced with light fixtures that conform with the current requirements of Part 9 of Article 14 for fully shielded fixtures that are directed downward, to prevent glare and light spillover onto the surrounding residential properties. Pole mounted lighting shall be limited to a height of 15 feet.

13. The applicant shall institute measures to reduce the amount of noise generated by Verizon and non-Verizon personnel at the site between the hours of 9:00 p.m. and 7:00 a.m. The applicant shall institute internal controls such as distributing notices and posting signs to inform all personnel of noise regulations and to limit noise between the hours of 9:00 p. m. and 8:00 a. m. Any noise complaints received by the contact established in Condition 19 shall be addressed so as to ensure that the noise does not occur on additional days.

14. Deliveries shall be restricted to the hours of 7 a.m. to 6 p.m., except those Verizon deliveries that must be made between 6 p.m. and 7 a.m. due to emergency interruption of service. No other deliveries shall be permitted between 6 p.m. and 7 a.m., Monday through Friday. Saturday deliveries shall occur only between 9 a.m. and 5 p.m. There shall be no Sunday deliveries, except as necessary due to the emergency interruption of service. Appropriate signage shall be maintained at the site to set out these restrictions. The Applicant shall control the site to monitor activity and to aid in determining violations of noise and delivery restrictions. Any violator shall be warned and, upon a repeat offense, the Applicant shall take appropriate steps to remediate, which may include the denial of access to the site and building.

15. Construction activity associated with the installation of the rooftop chilled-water cooling units shall be limited as follows:

- Week day construction activity shall occur only between the hours of 8 a.m. and 6 p.m., Monday through Friday;
- Saturday construction activity shall occur only between 8 a.m. and 2 p.m
- There shall be no construction activity on Sundays and/or Federal holidays.

In the event of an emergency interruption of service at the building, repairs may be made at any time. This condition shall not restrict interior equipment installation and maintenance activities.

16. All parking of vehicles associated with the installation of the equipment on the roof shall be on-site, to include, but not be limited to, construction vehicles, private vehicles of the construction workers, and vehicles delivering equipment to the site. All contracts shall require that contractors and subcontractors use the on-site parking area. There shall be no parking of construction worker vehicles on Evers Drive, within the adjacent townhouse subdivision, or on Chain Bridge Road.

17. Construction materials shall be staged and stored on-site.

18. Any additional increase in height on other segments of this building shall not be allowed in the absence of an approved Special Exception Amendment.

19. During normal operations, all parking shall occur on-site in designated paved parking spaces. Over-sized vehicles shall use the loading space or parking spaces not needed to meet the minimum parking requirement.

20. One point of contact ("Contact") shall be designated for all issues during normal operation of the facility. The contact's name, title and twenty-four (24) hour, seven (7) days a week phone number shall be mailed to the office of the Dranesville Supervisor, all property owners of record and homeowners associations surrounding the facility that were provided notice for this Special Exception Amendment application, and posted at the building entrances. Said notification and posting shall be updated to ensure that the name and contact information is accurate and accessible at all times.

21. A noise study of this facility shall be conducted in August, 2008, to determine if this facility conforms to the requirements of Chapter 108 of the County Code, Noise. This study shall be submitted to the Director, Zoning Evaluation Division, for comment and/or approval. If the cooling units authorized by this approval are not installed by August, 2008, the applicant may request that this study be postponed until a time certain during the next summer period. If the facility does not conform to the

requirements Chapter 108 of the County Code, the applicants must devise and install additional noise mitigation measures at this location to achieve compliance.

The above-proposed conditions are staff recommendations and do not reflect the position of the Board of Supervisors unless and until adopted by that Board.

This approval, contingent on the above noted conditions, shall not relieve the applicant from compliance with the provisions of any applicable ordinances, regulations, or adopted standards. The applicant shall be himself responsible for obtaining any required Non-Residential Use Permit through established procedures, and this Special Exception Amendment shall not be valid until this has been accomplished.

Pursuant to Section 9-015 of the Zoning Ordinance, this special exception shall automatically expire, without notice, eighteen (18) months after the date of approval unless the proposed chilled-water cooling units have been installed.

The Board of Supervisors may grant additional time to establish the use or to commence construction if a written request for additional time is filed with the Zoning Administrator prior to the date of expiration of this Special Exception Amendment. The request must specify the amount of additional time requested, the basis for the amount of time requested and an explanation of why additional time is required.

SPECIAL EXCEPTION AFFIDAVIT

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

I, Sheri L. Hoy, Land Use Planner, do hereby state that I am an
(enter name of applicant or authorized agent)

(check one) [ ] applicant
[✓] applicant's authorized agent listed in Par. 1(a) below

96368

in Application No.(s): SEA 97-D-020-2
(enter County-assigned application number(s), e.g. SE 88-V-001)

and that, to the best of my knowledge and belief, the following information is true:

1(a). The following constitutes a listing of the names and 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** of such trust, and all **ATTORNEYS** and **REAL ESTATE BROKERS,** and all **AGENTS** who have acted on behalf of any of the foregoing with respect to the application:

(**NOTE:** All relationships to the application listed above in **BOLD** print are to be disclosed. Multiple relationships may be listed together, e.g., **Attorney/Agent, Contract Purchaser/Lessee, Applicant/Title Owner**, etc. For a multiparcel application, list the Tax Map Number(s) of the parcel(s) for each owner(s) in the Relationship column.)

NAME (enter first name, middle initial, and last name)	**ADDRESS** (enter number, street, city, state, and zip code)	**RELATIONSHIP(S)** (enter applicable relationships listed in **BOLD** above)
Verizon Virginia, Inc. f/k/a Bell Atlantic-Virginia, Inc. f/k/a The Chesapeake and Potomac Telephone Company of Virginia Agents: Barbara J. Nissel Gary R. Hucka	600 E. Main Street 7th Floor Richmond, VA 23219	Applicant/Title Owner of Tax Map No. 30-3-((1)) parcel 46
Tri-Tek Engineering, Inc. Agent: Theodore D. Britt	600 Center Street Suite 300 Herndon, VA 20170	Engineers/Agent
Wisneweski Blair & Associates, Ltd. Agents: Teresa M. Hueg Kevin M. Farquhar	44 Canal Center Plaza Suite 100 Alexandria, VA 22314	Architects/Agent

(check if applicable) [✓] There are more relationships to be listed and Par. 1(a) is continued on a "Special Exception Attachment to Par. 1(a)" form.

* In the case of a condominium, the title owner, contract purchaser, or lessee of 10% or more of the units in the condominium.

** List as follows: Name of trustee, Trustee for (name of trust, if applicable), for the benefit of: (state name of each beneficiary).

Special Exception Attachment to Par. 1(a)

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

963686

for Application No. (s): SEA 97-D-020-2
(enter County-assigned application number (s))

(**NOTE**: All relationships to the application are to be disclosed. Multiple relationships may be listed together, e.g., **Attorney/Agent, Contract Purchaser/Lessee, Applicant/Title Owner**, etc. For a multiparcel application, list the Tax Map Number(s) of the parcel (s) for each owner(s) in the Relationship column.)

NAME (enter first name, middle initial, and last name)	**ADDRESS** (enter number, street, city, state, and zip code)	**RELATIONSHIP(S)** (enter applicable relationships listed in **BOLD** above)
McGuireWoods LLP	1750 Tysons Bouelvard, Suite 1800 McLean, VA 22102	
Agents: Carson Lee Fifer, Jr.		Attorney/Agent
Joanna C. Frizzell		Attorney/Agent
David R. Gill		Attorney/Agent
Jonathan P. Rak		Attorney/Agent
Gregory A. Riegle		Attorney/Agent
Mark M. Viani		Attorney/Agent
Lisa M. Chiblow		Planner/Agent
Lori R. Greenlief		Planner/Agent
Sheri L. Hoy		Planner/Agent
Hessler Associates, Inc. Agent: George F. Hessler	3862 Clifton Manor Place Suite B Haymarket, VA 20169	Consultant/Agent

(check if applicable) [ ] There are more relationships to be listed and Par. 1(a) is continued further on a "Special Exception Attachment to Par. 1(a)" form.

SPECIAL EXCEPTION AFFIDAVIT

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

96368

for Application No. (s): SEA 97-D-020-2
(enter County-assigned application number(s))

1(b). The following constitutes a listing*** of the **SHAREHOLDERS** of all corporations disclosed in this affidavit who own 10% or more of any class of stock issued by said corporation, and where such corporation has 10 or less shareholders, a listing of all of the shareholders:

(**NOTE**: Include **SOLE PROPRIETORSHIPS, LIMITED LIABILITY COMPANIES,** and **REAL ESTATE INVESTMENT TRUSTS** herein.)

CORPORATION INFORMATION

NAME & ADDRESS OF CORPORATION: (enter complete name and number, street, city, state, and zip code)

Verizon Virginia, Inc.
f/k/a Bell Atlantic-Virginia, Inc.
f/k/a The Chesapeake and Potomac Telephone Company of Virginia

600 Main Street, 7th Floor
Richmond, VA 23219

DESCRIPTION OF CORPORATION: (check one statement)

[ ] There are 10 or less shareholders, and all of the shareholders are listed below.
[✓] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF SHAREHOLDERS: (enter first name, middle initial and last name)

Verizon Virginia, Inc., a Virgina corporation is a wholly owned subsidiary of Verizon Communications Inc. that is publicly traded on the New York Stock Exchange

(check if applicable) [✓] There is more corporation information and Par. 1(b) is continued on a "Special Exception Affidavit Attachment 1(b)" form.

*** All listings which include partnerships, corporations, or trusts, to include the names of beneficiaries, must be broken down successively until: (a) only individual persons are listed or (b) the listing for a corporation having more than 10 shareholders has no shareholder owning 10% or more of any class of stock. ***In the case of an APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land that is a partnership, corporation, or trust, such successive breakdown must include a listing and further breakdown of all of its partners, of its shareholders as required above, and of beneficiaries of any trusts. Such successive breakdown must also include breakdowns of any partnership, corporation, or trust owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land. Limited liability companies and real estate investment trusts and their equivalents are treated as corporations, with members being deemed the equivalent of shareholders; managing members shall also be listed.*** Use footnote numbers to designate partnerships or corporations, which have further listings on an attachment page, and reference the same footnote numbers on the attachment page.

Special Exception Attachment to Par. 1(b)

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

963685

for Application No. (s): SEA 97-D-020-2
(enter County-assigned application number (s))

NAME & ADDRESS OF CORPORATION: (enter complete name, number, street, city, state, and zip code)

Verizon Communications Inc.
1095 Avenue of the Americas
New York, NY 10036

DESCRIPTION OF CORPORATION: (check one statement)

[ ] There are 10 or less shareholders, and all of the shareholders are listed below.
[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[✓] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF THE SHAREHOLDERS: (enter first name, middle initial, and last name)

Verizon Communications Inc. is publicly traded on a national stock exchange having more than 500 shareholders, none of whom owns 10% or more of any stock issued by said corporation

---

NAME & ADDRESS OF CORPORATION: (enter complete name, number, street, city, state, and zip code)

Tri-Tek Engineering, Inc.
690 Center Street, Suite 300
Herndon, VA 20170

DESCRIPTION OF CORPORATION: (check one statement)

[✓] There are 10 or less shareholders, and all of the shareholders are listed below.
[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF THE SHAREHOLDERS: (enter first name, middle initial, and last name)

Kevin E. Murray
Theodore D. Britt

(check if applicable) [✓] There is more corporation information and Par. 1(b) is continued further on a "Special Exception Attachment to Par. 1(b)" form.

Special Exception Attachment to Par. 1(b)

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

96368b

for Application No. (s): SEA 97-D-020-2
(enter County-assigned application number (s))

==========

NAME & ADDRESS OF CORPORATION: (enter complete name, number, street, city, state, and zip code)

Wisnewski Blair & Associates, Ltd.
44 Canal Center Plaza, Suite 100
Alexandria, VA 22314

DESCRIPTION OF CORPORATION: (check one statement)

[✓] There are 10 or less shareholders, and all of the shareholders are listed below.
[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF THE SHAREHOLDERS: (enter first name, middle initial, and last name)

Joseph J. Wisnewski
Luther C. Blair

==========

NAME & ADDRESS OF CORPORATION: (enter complete name, number, street, city, state, and zip code)
Hessler Associates, Inc.
3862 Clifton Manor Place, Suite B
Haymarket, VA 20169

DESCRIPTION OF CORPORATION: (check one statement)

[✓] There are 10 or less shareholders, and all of the shareholders are listed below.
[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF THE SHAREHOLDERS: (enter first name, middle initial, and last name)
George F. Hessler
Mary E. Hessler

==========

(check if applicable) [ ] There is more corporation information and Par. 1(b) is continued further on a "Special Exception Attachment to Par. 1(b)" form.

SPECIAL EXCEPTION AFFIDAVIT

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

96368

for Application No. (s): SEA 97-D-020-2
(enter County-assigned application number(s))

1(c). The following constitutes a listing*** of all of the **PARTNERS,** both **GENERAL** and **LIMITED**, in any partnership disclosed in this affidavit:

PARTNERSHIP INFORMATION

PARTNERSHIP NAME & ADDRESS: (enter complete name, and number, street, city, state, and zip code)
McGuireWoods LLP
1750 Tysons Boulevard, Suite 100
McLean, VA 22102

(check if applicable) [✓] The above-listed partnership has no limited partners

NAMES AND TITLE OF THE PARTNERS (enter first name, middle initial, last name, and title, e.g. **General Partner, Limited Partner, or General and Limited Partner)**

Equity Partners of McGuireWoods LLP

Alphonso, Gordon R.
Anderson, Arthur E., II
Anderson, Donald D.
Andre-Dumont, Hubert
Bagley, Terrence M.
Baril, Mary Dalton
Barnum, John W.
Barr, John S.
Beane, John C.
Becker, Scott L.
Becket, Thomas L.
Beil, Marshall H.
Belcher, Dennis I.
Bell, Craig D.
Boland, J. William
Brown, Thomas C., Jr.
Busch, Stephen D.
Cabaniss, Thomas E.
Cacheris, Kimberly Q.
Cairns, Scott S.
Capwell, Jeffrey R.
Carter, Joseph C., III
Cason, Alan C.

(check if applicable) [✓] There is more partnership information and Par. 1(c) is continued on a "Special Exception Affidavit Attachment to Par. 1(c)" form.

*** All listings which include partnerships, corporations, or trusts, to include the names of beneficiaries, must be broken down successively until: (a) only individual persons are listed or (b) the listing for a corporation having more than 10 shareholders has no shareholder owning 10% or more of any class of stock. ***In the case of an APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land that is a partnership, corporation, or trust, such successive breakdown must include a listing and further breakdown of all of its partners, of its shareholders as required above, and of beneficiaries of any trusts. Such successive breakdown must also include breakdowns of any partnership, corporation, or trust owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land. Limited liability companies and real estate investment trusts and their equivalents are treated as corporations, with members being deemed the equivalent of shareholders; managing members shall also be listed.*** Use footnote numbers to designate partnerships or corporations, which have further listings on an attachment page, and reference the same footnote numbers on the attachment page.

Special Exception Attachment to Par. 1(c)

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

96368v

for Application No. (s): SEA 97-D-020-2
(enter County-assigned application number (s))

PARTNERSHIP NAME & ADDRESS: (enter complete name & number, street, city, state & zip code)

McGuireWoods LLP
1750 Tysons Bouelvard, Suite 1800
McLean, VA 22102

(check if applicable) [✓] The above-listed partnership has no limited partners

NAMES AND TITLES OF THE PARTNERS: (enter first name, middle initial, last name, and title, e.g., **General Partner, Limited Partner, or General and Limited Partner)**

Cogbill, John V., III
Costan, James M.
Cromwell, Richard J.
Culbertson, Craig R.
Cullen, Richard (nmi)
Cutchins, Clifford A., IV
de Cannart d'Hamale, Emmanuel
De Ridder, Patrick A.
Dickerman, Dorothea W.
Dillon, Lee Ann
DiMattia, Michael J.
Dimitri, James C.
Dorman, Keith A.
Douglass, W. Birch, III
Dyke, James Webster, Jr.
Edwards, Elizabeth F.
Evans, David E.
Feller, Howard (nmi)
Fennebresque, John C.
Fifer, Carson Lee, Jr.
Foley, Douglas M.
Fox, Charles D. IV
France, Bonnie M.
Freedlander, Mark E.
Freye, Gloria L.
Fuhr, Joy C.
Germaise, Susan L.
Getchell, E. Duncan, Jr.
Gibson, Donald J., Jr.
Glassman, Margaret M.
Glickson, Scott L.
Gold, Stephen (nmi)
Goldstein, Philip (nmi)
Goodall, Larry M.
Gordon, Alan B.
Grandis, Leslie A.
Greenberg, Richard T.
Grieb, John T.
Harmon, Jonathan P.
Harmon, T. Craig
Harmon, Yvette (nmi)
Hartsell, David L.
Hayden, Patrick L.
Hayes, Dion W.
Heberton, George H.
Horne, Patrick T.
Isaf, Fred T.
Iselin, Benjamin B.
Jackson, J. Brian
Jarashow, Richard L.
Jeffcoath, Brenton D.
Kanazawa, Sidney (nmi)
Katsantonis, Joanne (nmi)
Keenan, Mark L.
King, Sally Doubet
King, Donald E.
Kittrell, Steven D.
Kratz, Timothy H.
Krueger, Kurt J.
La Fratta, Mark J.
Lawrie, Henry deVos, Jr.
Lias-Booker, Ava E.
Lieberman, Richard E.
Little, Nancy R.
Long, William M.
Mack, Curtis, L.
Manning, Amy B.
Marianes, William B.
Marshall, Gary S.
Marsico, Leonard J.
Martin, George Keith
Martinez, Peter W.
Mason, Richard J.
Matthews, Eugene E. III
McArver, R. Dennis
McCallum, Steven C.
McElligott, James P.
McElroy, Robert G.
McFarland, Robert W.
McIntyre, Charles Wm.
McRill, Emery B.
Menges, Charles L.

(check if applicable) [✓] There is more partnership information and Par. 1(c) is continued further on a "Special Exception Attachment to Par. 1(c)" form.

Special Exception Attachment to Par. 1(c)

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

for Application No. (s): SEA 97-D-020-2
(enter County-assigned application number (s))

963686

PARTNERSHIP NAME & ADDRESS: (enter complete name & number, street, city, state & zip code)

McGuireWoods LLP
1750 Tysons Bouelvard, Suite 1800
McLean, VA 22102

(check if applicable) [✓] The above-listed partnership has no limited partners.

NAMES AND TITLES OF THE PARTNERS: (enter first name, middle initial, last name, and title, e.g., **General Partner, Limited Partner, or General and Limited Partner)**

Menson, Richard L.
Michels, John J., Jr.
Milton, Christine R.
Murphy, Sean F.
Newman, William A.
Nunn, Daniel B., Jr.
Oakey, David N.
O'Grady, Clive R. G.
O'Grady, John B.
O'Hare, James P.
Oostdyk, Scott C.
Padgett, John D.
Pankey, David H.
Parker, Brian K.
Pellegrini, John B.
Plotkin, Robert S.
Pristave, Robert J.
Pusateri, David P.
Rak, Jonathan P.
Rappaport, Richard J.
Reid, Joseph K., III
Ricciardi, James P.
Richardson, David L.
Riegle, Gregory A.
Rifken, Lawrence E.
Riley, James B., Jr.
Riopelle, Brian C.
Robertson, David W.
Robinson, Stephen W.
Rogers, Marvin L.
Rohman, Thomas P.
Rosen, Gregg M.
Russell, Deborah M.
Rust, Dana L.
Samuels, Lawrence R.
Satterwhite, Rodney A.
Schewel, Michael J.
Schill, Gilbert E., Jr.
Schmidt, Gordon W.
Sellers, Jane Whitt
Senica, John L.
Shelley, Patrick M.
Sipprelle, Keith A.
Skinner, Halcyon E.
Slone, Daniel K.
Smith, James C., III
Smith, Stuart (nmi)
Spahn, Thomas E.
Spitz, Joel H.
Stallings, Thomas J.
Steen, Bruce M.
Stein, Marta A.
Stone, Jacquelyn E.
Strickland, William J.
Summers, W. Dennis
Suzumoto, Mark L.
Swartz, Charles R.
Tarry, Samuel L., Jr.
Thornhill, James A.
Tirone, Joseph G.
Van der Mersch, Xavier G.
Van Etten, David B.
Vick, Howard C., Jr.
Walker, Howard W.
Walker, John Tracy, IV
Walsh, James H.
Watts, Stephen H., II
Wells, David M.
Werlin, Leslie M.
Westwood, Scott E.
Whittemore, Anne Marie
Williams, Steven R.
Williamson, Mark D.
Wilson, Ernest G.
Wood, R. Craig
Young, Kevin J.
Younger, W. Carter
Zirkle, Warren E.

(check if applicable) [✓] There is more partnership information and Par. 1(c) is continued further on a "Special Exception Attachment to Par. 1(c)" form.

96368v

Special Exception Attachment to Par. 1(c)

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

for Application No. (s): SEA 97-D-020-2
(enter County-assigned application number (s))

PARTNERSHIP NAME & ADDRESS: (enter complete name & number, street, city, state & zip code)

McGuireWoods LLP
1750 Tysons Bouelvard, Suite 1800
McLean, VA 22102

(check if applicable) [✓] The above-listed partnership has no limited partners.

NAMES AND TITLES OF THE PARTNERS: (enter first name, middle initial, last name, and title, e.g., **General Partner, Limited Partner, or General and Limited Partner)**

(Former Equity Partner List)

Aaronson, Russell T.
Adams, Robert T.
Ames, W. Allen, Jr.
Aucutt, Ronald D.
Baran, Barbara (nmi)
Bart, Hollis Gonerka
Blanco, Jim L.
Bolotov, Yuri A.
Bracey, Lucius H. Jr.
Broaddus, William G.
Burke, John W., III
Burkholder, Evan A.
Burrus, Robert L. Jr.
Casey, James J.
Courson, Gardner G.
Cranfill, William T.
Crystal, Jules I.
Deem, William W.
den Hartog, Grace R.
Di Cioccio, Stephen J.
Dudley, Waller T.
Ezell, Sandra Giannone
Flemming, Michael D.
Franklin, Stanley M.
Gillece, James P., Jr.
Gordon, Mark L.
Grimm, William K.
Hampton, Glen W.
Harrington, James T.
Hodes, Scott (nmi)
Howard, Marcia Morales
Johnston, Barbara Christie
Joslin, Rodney D.
Kane, Richard F.
Keefe, Kenneth M., Jr.
Kidder, Jacquelyn F.
King, Michael H.
King, William H., Jr.
Klenk, Timothy C.
Lee, John Y.
Lutter, Paul A.
McGuigan, Philip P.
McGuire, Mark J.
McMenamin, Joseph P.
Melson, David E.
Mulroy, Thomas R.
Nizio, Francis (nmi)
Page, Rosewell II (nmi)
Pelton, Russell M.
Pickens, B. Andrew, Jr.
Price, James H., III
Sable, Robert G.
Schoeneberger, Keith P.
Serritella, William D.
Smith, Stephen R.
Starkman, Gary L.
Sterling, David F.
Stroud, Robert E.
Tetzlaff, Theodore R.
Tashjian-Brown, Eva S.
Valeta, Peter J.
Waddell, William R.
Wanguard, Robert E.
Williams, Stephen E.
Zehill, Louis W.
Yorke, John B.

(check if applicable) [ ] There is more partnership information and Par. 1(c) is continued further on a "Special Exception Attachment to Par. 1(c)" form.

SPECIAL EXCEPTION AFFIDAVIT

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

96368v

for Application No. (s): SEA 97-D-020-2
(enter County-assigned application number(s))

1(d). One of the following boxes **must** be checked:

[ ] In addition to the names listed in Paragraphs 1(a), 1(b), and 1(c) above, the following is a listing of any and all other individuals who own in the aggregate (directly and as a shareholder, partner, and beneficiary of a trust) 10% or more of the **APPLICANT, TITLE OWNER, CONTRACT PURCHASER,** or **LESSEE*** of the land:

[✓] Other than the names listed in Paragraphs 1(a), 1(b), and 1(c) above, no individual owns in the aggregate (directly and as a shareholder, partner, and beneficiary of a trust) 10% or more of the **APPLICANT, TITLE OWNER, CONTRACT PURCHASER,** or **LESSEE*** of the land.

2. That no member of the Fairfax County Board of Supervisors, Planning Commission, or any member of his or her immediate household owns or has any financial interest in the subject land either individually, by ownership of stock in a corporation owning such land, or through an interest in a partnership owning such land.

EXCEPT AS FOLLOWS: (**NOTE**: If answer is none, enter "**NONE**" on the line below.)

NONE

(check if applicable) [ ] There are more interests to be listed and Par. 2 is continued on a "Special Exception Attachment to Par. 2" form.

Application No.(s): SEA 97-D-020-2
(county-assigned application number(s), to be entered by County Staff)

SPECIAL EXCEPTION AFFIDAVIT

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

96368 b

3. That within the twelve-month period prior to the public hearing of this application, no member of the Fairfax County Board of Supervisors, Planning Commission, or any member of his or her immediate household, 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 10% or more of the outstanding bonds or shares of stock of a particular class, 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 more than $100, singularly or in the aggregate, with any of those listed in Par. 1 above.
EXCEPT AS FOLLOWS: (**NOTE**: If answer is none, enter "**NONE**" on line below.)

The law firm of McGuireWoods LLP, listed in Par. 1(a) of the affidavit as the applicant's attorney/agent hosted a fundraising event for the re-election of Gerald Connolly to the Fairfax County Board of Supervisors, the costs of which exceeded $100.00

NOTE: Business or financial relationships of the type described in this paragraph that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings. See Par. 4 below.)

(check if applicable) [✓] There are more disclosures to be listed and Par. 3 is continued on a "Special Exception Attachment to Par. 3" form.

4. **That the information contained in this affidavit is complete, that all partnerships, corporations, and trusts owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land have been listed and broken down, and that prior to each and every public hearing on this matter, I will reexamine this affidavit and provide any changed or supplemental information, including business or financial relationships of the type described in Paragraph 3 above, that arise on or after the date of this application.**

WITNESS the following signature:

(check one) [ ] Applicant [✓] Applicant's Authorized Agent

Sheri L. Hoy, Land Use Planner
(type or print first name, middle initial, last name, and & title of signee)

Subscribed and sworn to before me this 11th day of September 20 07, in the State/Comm. of Virginia, County/City of Fairfax.

Patricia W. Young
Notary Public

My commission expires:

Patricia W. Young
Commonwealth of Virginia
Notary Public
Commission No. : 160928
My Commission Expires 12/31/11

96368b

Special Exception Attachment to Par. 3

DATE: SEP 1 1 2007
(enter date affidavit is notarized)

for Application No. (s): SEA 97-D-020-2
(enter County-assigned application number (s))

James W. Dyke, Jr., Esquire (McGuireWoods LLP) donated in excess of $100 to Connolly for Chairman.

Jonathan P. Rak, Esquire (McGuireWoods LLP) donated in excess of $100 to Connolly for Chairman.

Gregory A. Riegle, Esquire (McGuireWoods LLP) donated in excess of $100 to Connolly for Chairman.

Carson Lee Fifer, Jr., Esquire (McGuireWoods LLP) donated in excess of $100 to Connolly for Chairman.

(check if applicable) [ ] There are more disclosures to the listed for Par. 3, and Par. 3 is continued further on a "Special Exception Attachment to Par. 3" form.

STATEMENT OF JUSTIFICATION

LEWINSVILLE FACILITY AT 1701 CHAIN BRIDGE ROAD
BY VERIZON VIRGINIA INC.
TAX MAP 30-3-((1))-46
June 18, 2007

Verizon Virginia Inc., f/k/a Bell Atlantic-Virginia, Inc., f/k/a The Chesapeake and Potomac Telephone Company of Virginia (the "Applicant"), is hereby requesting approval of a Special Exception amendment and Section 15.2-2232 of the Code of Virginia review to permit the installation of two chilled-water cooling units on the roof of an existing telecommunications Central Office ("switching station") on the property identified as Fairfax County Tax Map Reference 30-3-((1))-46 (the "Property"). The Property is generally located on the south side of Chain Bridge Road, just east of its intersection with Lewinsville Road/Great Falls Street (Route 694), and is zoned R-3. Verizon Virginia Inc. is a public utility that is subject to regulations imposed by the Federal Communications Commission.

The Property is located within the Kirby Planning Sector of the McLean Planning District of Area II. The Comprehensive Plan states generally that this sector is largely developed with stable residential neighborhoods, and as such, infill development should be of a compatible use, type, and intensity in accordance with the Land Use objectives listed in the Policy Plan. Objective 8 and 14 of the Policy Plan elaborate that infill development should be compatible, commercial uses should be local-serving in nature, and the cumulative effect of institutional uses should be considered. The history of the development of this site and the surrounding residential is that this facility pre-dated the residential development. As a result, the Verizon facility is not an "infill" development in any sense.

The telecommunications switching station use was originally approved through a Special Use Permit granted by the Board of Zoning Appeals on May 17, 1956, with additions to the facility being approved on March 27, 1968, and October 31, 1973. The site is currently governed by the approvals and development conditions associated with SE 97-D-020 approved by the Board of Supervisors on June 23, 1997, authorizing a generator building addition.

The Applicant is requesting approval to locate two, chilled-water cooling units on the lower, rear portion of the roof as shown on the submitted Special Exception Plat. The units will be surrounded by an open air, mansard style screen. There are two existing similar chilled-water cooling units on the upper roof already surrounded by a mansard roof design. The proposed equipment and its location is necessary in order to provide proper cooling of the equipment located inside the building immediately below the rooftop location. In addition, the installation of the newer, more updated chilled water cooling units will permit Verizon to remove older equipment that exists inside the building. The height of the mansard screen measures 13 feet, 5 inches tall. Because this equipment will be placed on the lower roof, it will not exceed the height of the upper roof. Further, there is an existing parapet wall around the perimeter of the lower roof which will make the mansard screen appear to be even less. For your reference, a visual simulation and elevation is attached.

Pursuant to Section 10-104(3)(H), the Applicant is also requesting approval for an increase in fence height up to 8 feet. The existing 8 foot fence is in character with the existing site development, is harmonious with the surrounding development, and does not adversely impact the use and/or enjoyment of any nearby property. In fact, this 8 foot fence had been requested by the adjacent homeowner's association for additional screening purposes.

The following information is provided pursuant to Section 9-011 of the Fairfax County Zoning Ordinance:

A. Type of operation: Additional equipment to the existing Lewinsville telecommunications facility.

B. Hours of operation: Twenty-four (24) hours per day, seven (7) days per week.

C. Estimated number of patrons: No patrons will come to the site.

D. Proposed number of employees: The Applicant anticipates up to six (6) employees at any one time.

E. Estimate of traffic impact: There will be no impact upon traffic with the installation of rooftop equipment.

F. Vicinity or general area to be served by the use: The use will continue to serve the McLean/Tysons Corner area of Fairfax County.

G. Architectural compatibility: The mansard screen will be architecturally compatible with the existing building.

H. Hazardous and toxic substances: To the best of the Applicant's knowledge, there are no such materials located on the Property. If any substances are discovered, impacts will be mitigated and/or remediated in accordance with governing County, State, and Federal laws.

I. Statement of conformance: To the best of the Applicant's knowledge, the proposed development will comply with all applicable standards, ordinances, and regulations.

In addition, Section 9-104(3) requires a finding that there is no alternative site available for a telecommunications central office in a C or I district within one (1) mile unless there is a substantial showing that it is impossible for satisfactory service to be rendered from an available location in such C or I district. This telecommunications central office has been located here since 1956 and has tens of thousands of data wires connected to the switching facilities in the building. It would be impractical to relocate these data wires to another site without interrupting data service to thousands of individual homes and businesses.

For all aforementioned reasons, the Applicant respectfully requests the support of the County Staff, the Planning Commission and approval of the proposed Special Exception by the Board of Supervisors.

Respectfully submitted,

By: _____
Carson Lee Fifer Jr., Esquire

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McGuireWoods LLP
1750 Tysons Boulevard
Suite 1800
McLean, VA 22102-4215
Phone: 703.712.5000
Fax: 703.712.5050
www.mcguirewoods.com

Sheri L. Hoy
Direct: 703.712.5483

MCGUIREWOODS

APPENDIX 4

FILE

shoy@mcguirewoods.com
Direct Fax: 703.712.5050

May 31, 2007

RECEIVED
Department of Planning & Zoning

JUL 25 2007

Zoning Evaluation Division

BY COURIER

Mr. Kevin Guinaw
Zoning Evaluation Division
Department of Planning and Zoning
12055 Government Center Parkway, Suite 800
Fairfax, Virginia 22035

Re: Verizon Virginia Inc.
Tax Map No. 30-3-((1))-46
1701 Chain Bridge Road, McLean, Virginia

Dear Kevin:

Pursuant to our discussion, enclosed are copies of correspondence sent to Ann Alexander with the Westberry HOA outlining various issues we have discussed with her community. Please feel free to contact me if you have any questions or require additional information.

Sincerely,

Sheri L. Hoy
Land Use Planner

Enclosures

cc: Barbara Nissel, Verizon Virginia, Inc.
Supervisor Joan DuBois - Dranesville District
Carson Lee Fifer, Esquire, McGuireWoods LLP

\4597979.1

FILE

McGuireWoods LLP
1750 Tysons Boulevard
Suite 1800
McLean, VA 22102-4215
Phone: 703.712.5000
Fax: 703.712.5050
www.mcguirewoods.com

Carson Lee Fifer, Jr., Esquire
Direct: 703.712.5343

McGUIREWOODS

lfifer@mcguirewoods.com
Direct Fax: 703.712.5223

May 9, 2007

Mrs. Ann Alexander, President
Westberry HOA
7255 McLean Commons Lane
McLean, Virginia 22101

Re: Verizon Virginia Inc. ("Verizon")
Tax Map No. 30-3-((1))-46
1701 Chain Bridge Road, McLean, VA

Dear Ann,

As conveyed in our letter of April 30, 2007, enclosed are the following documents:

1. Twelve (12) copies of a revised rendering showing the rooftop screening reduced in size to accommodate two (2) chilled water cooling units.

2. Twelve (12) copies of the original rendering showing the rooftop screening sized to fit three (3) chilled water cooling units. This particular rendering is enclosed for comparison purposes only to show the size of the screening as originally proposed.

3. Twelve (12) copies of the reduced footprint plans of the rooftop screening and units.

If you have any questions or comments regarding the contents of this letter, please contact me or Sheri Hoy in my office.

Sincerely,

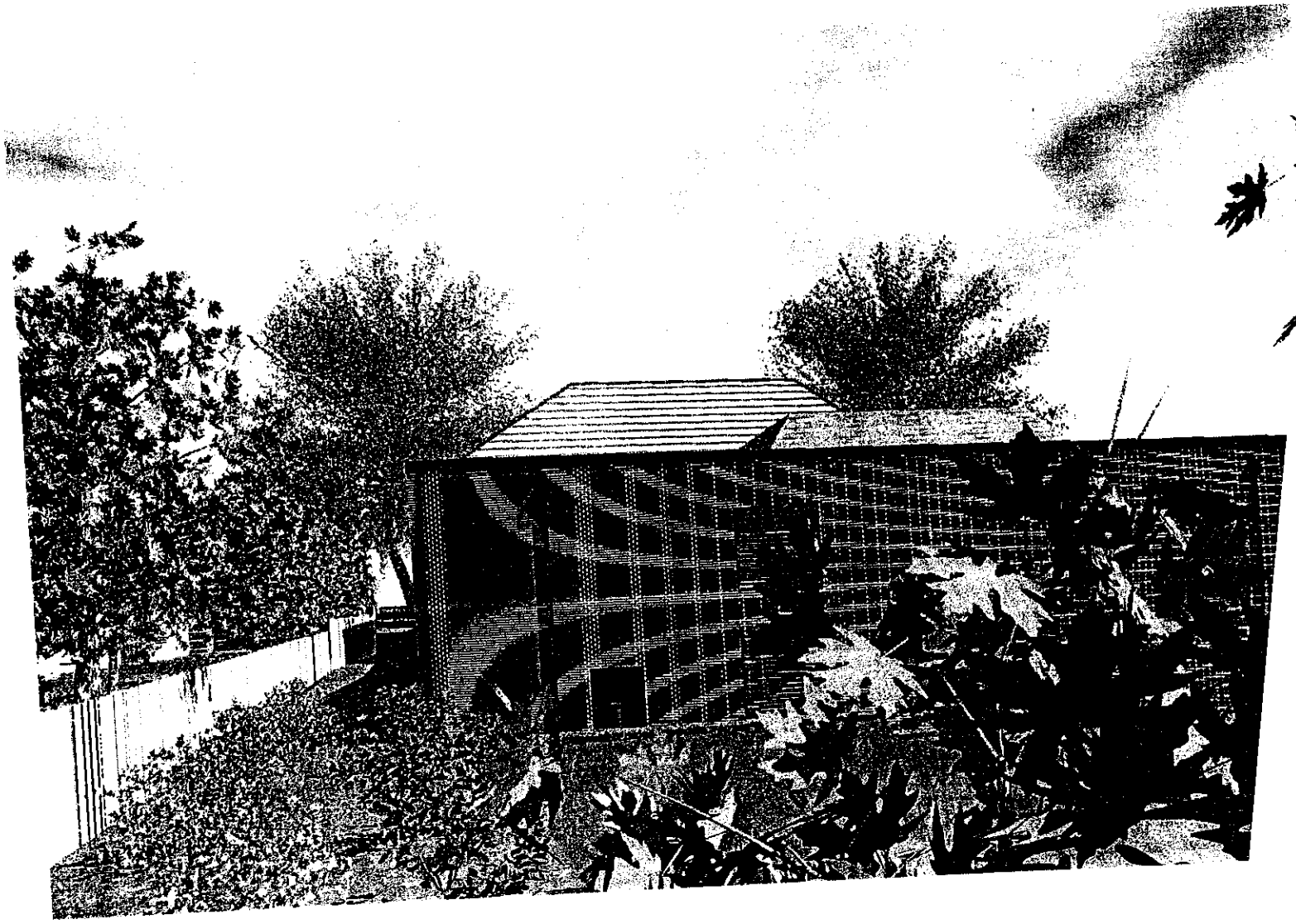
Lee

Carson Lee Fifer Jr.

Enclosures

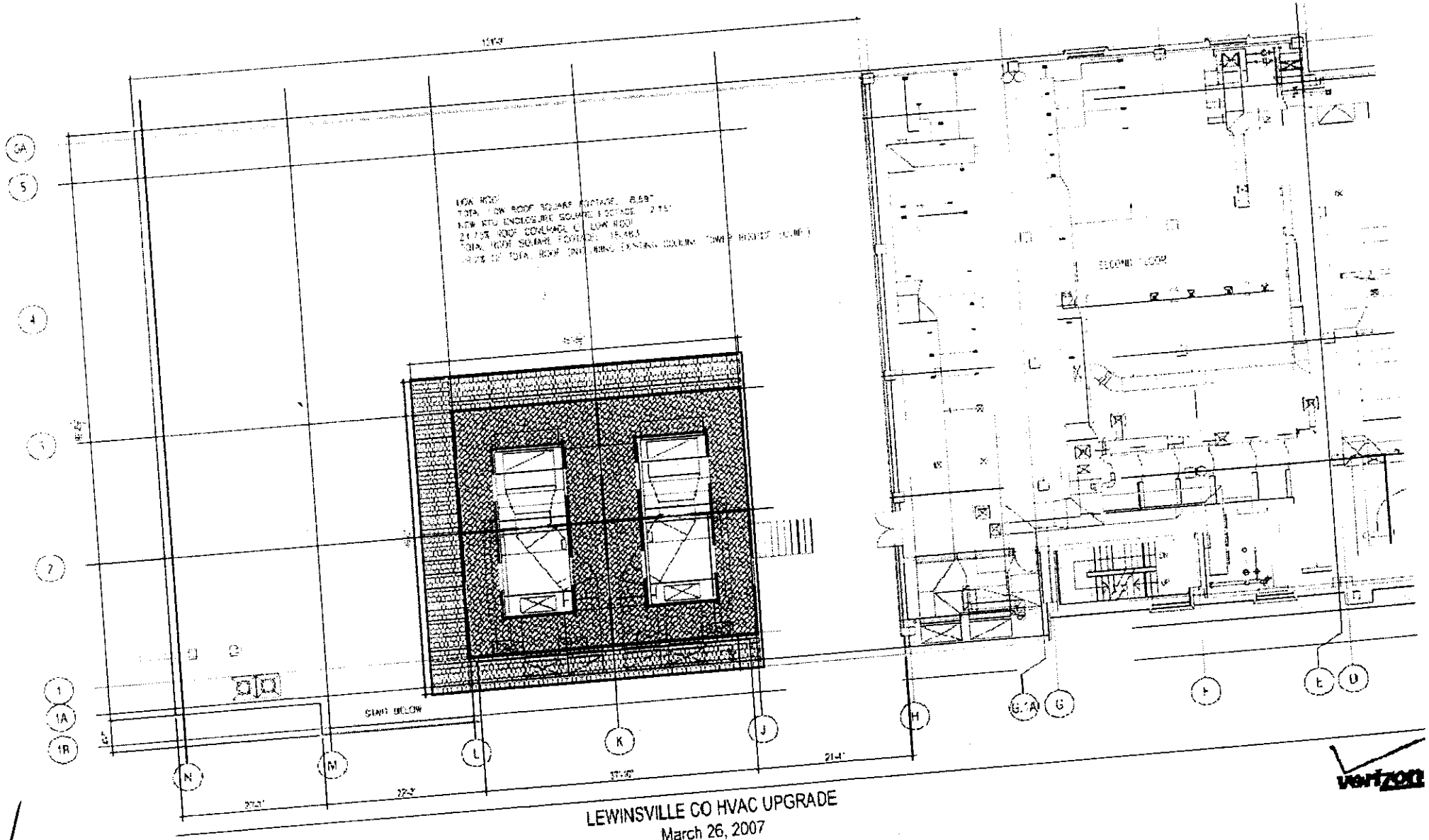
cc: Barbara Nissel, Verizon Virginia, Inc.
Kevin Farquhar, Wisnewski Blair
Supervisor Joan DuBois - Dranesville District

W540839.3



Rendering Showing Size of 2-Unit Proposal

Rendering Showing Size of 3-Unit Proposal



LEWINSVILLE CO HVAC UPGRADE
March 26, 2007

McGuireWoods LLP
1750 Tysons Boulevard
Suite 1800
McLean, VA 22102-4215
Phone: 703.712.5000
Fax: 703.712.5050
www.mcguirewoods.com

Carson Lee Fifer, Jr., Esquire
Direct: 703.712.5343

McGUIREWOODS

FILE

lfifer@mcguirewoods.com
Direct Fax: 703.712.5223

April 30, 2007

Mrs. Ann Alexander, President
Westberry HOA
7255 McLean Commons Lane
McLean, Virginia 22101

Re: Verizon Virginia Inc. ("Verizon")
Tax Map No. 30-3-((1))-46
1701 Chain Bridge Road, McLean, VA

Dear Ann,

Pursuant to our agreement at the site meeting on April 19, 2007, with you, Jill Neugent, Patrick Gorman, Beej Nissel, Rosemary Ryan, Mike Bromley, Sheri Hoy and me, we agreed to send you a punch list ("Punch List") of all remaining issues. As we discussed, for budgetary purposes, Verizon will need to obtain approval of corporate funding for these remaining issues, and it is our hope and expectation that all will be approved in order to move forward addressing these issues, but only after we received affirmation from your HOA.

As such, please review the following:

<u>List of Remaining Site Issues: (Punch List)</u>

1. Verizon will provide a sound baffle for the existing HVAC unit on the ground, adjacent to driveway. This action will be completed as a part of the rooftop HVAC work.

2. Verizon will reduce the rooftop mechanical structure from three (3) units to two (2) chilled-water cooling units with in a mansard screened area to conform to the code restriction of the structure not covering more than 25% of the existing roof. This action will occur as a part of obtaining a revised building permit.

3. Verizon will have Merrifield Garden Center replace any of the seventeen (17) holly trees that have died or are dying. This action will occur soon after agreement as to the Punch List.

4. The existing hemlock located on the southwestern corner near the Verizon fence that was discussed at our meeting will be removed and replaced with one of the 17 holly trees. This action will occur soon after agreement as to the Punch List.

5 Verizon will place an additional five (5) holly trees in the west side buffer yard between the townhomes and the Verizon facility. Two (2) of these hollies will be placed in the buffer yard between the home of Mr. Nassim Saliba and the Verizon facility. The locations for the remaining three (3) trees were flagged by your landscaper and located generally in the southern area of the buffer. By this action, the number of trees to be installed has been increased to a total of twenty-two (22). This action will occur soon after agreement as to the Punch List.

6. Verizon will remove the far west parking lot fixture on the south side of the fence and will replace it with a new fixture that does not extend over the fence nor glare into the adjacent townhomes.

7. Verizon will replace the existing rear door light fixture with a new fixture that is shielded and has a more residential look. This action will be completed as part of the rooftop HVAC work.

8. Tree limbs that currently overhang rear yards and decks of certain townhomes located on the western side of the Verizon fence will be trimmed back by Verizon. As we discussed, this can be done only after Verizon has the written permission of each affected homeowner. It is our understanding you will obtain the permission of those homeowners who wish to have the tree limbs trimmed. Once permission is obtained from all, Verizon will coordinate a date and time to complete this work with you. For your use, a sample release letter is enclosed. This action will occur soon after you obtain all requested letters of permission.

9. McGuireWoods will submit to you twelve (12) copies of a revised visual rendering and footprint plans showing the reduced size of the rooftop screening for distribution within the HOA. This action will occur soon after agreement as to the Punch List.

10. In coordination with Supervisor DuBois's office, Verizon will submit its sound studies to Fairfax County for independent review by County staff. Fairfax County's response will be submitted to your community. This action will occur soon after agreement as to the Punch List.

Verizon understands that when items in 1-10 are agreed to, that the Westberry HOA will support Verizon's plans to locate two (2) chilled water cooling units on the rooftop location.

If your community is in agreement with this Punch List, we would appreciate an affirmative response from you so that Verizon may move forward with seeking County approval and obtaining corporate funding. If you have changes or comments, please reply within 10 days so that we are able to reach a final agreement. Verizon must submit a revised interpretation request to Fairfax County requesting written confirmation from its Zoning Administration Branch that Verizon's proposal is in substantial conformance with the governing special exception approved for the site. The County will review various issues regarding Verizon's proposal such as determining that the screening and units cover less than 25% of the lower rooftop area, that your community is in accordance with the request, as well as any other issues outlined in the Fairfax County Zoning Ordinance. If Fairfax County determines that Verizon's proposal is in substantial conformance, we will receive written confirmation of such, and Verizon will then be able to obtain said funds and seek building permit approval.

If the above is your understanding of what was set out at our meeting as the complete list of outstanding issues, please indicate your agreement by signing below. Again, thank you for your cooperation in this matter. If you have any questions or comments regarding the contents of this letter, please contact me or Sheri Hoy in my office.

Sincerely,

Carson Lee Fifer Jr.

Enclosure

cc: Barbara Nissel, Verizon Virginia, Inc.
Kevin Farquhar, Wisnewski Blair
Supervisor Joan DuBois - Dranesville District

On behalf of Westberry Homeowners Association, the members of the community have agreed to the contents of this letter.

_____
By: Ann B. Alexander, President

Date: _____

\4540839.3

April 24, 2007

Verizon Virginia, Inc.
1701 Chain Bridge Road
McLean, Va 22102
Attn: Barbara J. Nissel

Re: Permission to Enter My Property to Trim Tree Limbs

Dear Ms. Nissel:

We (I) are (am) the owner(s) of _____(address)_____, which property is adjacent to the Verizon Lewinsville Facility. We (I) hereby grant Verizon and its agents permission to enter upon the rear of our (my) property for the purpose of trimming tree limbs and branches that extend over our (my) property.

Except for instances of gross negligence or deliberate maliciousness, we (I) agree to hold Verizon and its agents harmless and to indemnify Verizon against any and all claims arising either directly or indirectly from the tree limb/branch trimming addressed in this letter of permission.

_____
(Owner)

_____
(Owner)

_____
(Address)
McLean, VA _____(zip)

\4544102.1

McGuireWoods LLP
1750 Tysons Boulevard
Suite 1800
McLean, VA 22102-4215
Phone: 703.712.5000
Fax: 703.712.5050
www.mcguirewoods.com

Carson Lee Fifer, Jr., Esquire
Direct: 703.712.5343

McGUIREWOODS

FILE

lfifer@mcguirewoods.com
Direct Fax: 703.712.5223

March 28, 2007

Mrs. Ann Alexander, President
Westberry HOA
7255 McLean Commons Lane
McLean, Virginia 22101

Re: Verizon Virginia Inc. ("Verizon")
Tax Map No. 30-3-((1))-46
1701 Chain Bridge Road, McLean, VA

Dear Ann,

As you know, Verizon has diligently worked on resolving several issues associated with its property adjacent to the Westberry neighborhood. We would like to thank you, Jill Neugent, and Patrick Gorman for conveying the neighbors' concerns to us, and we look forward to a continued working relationship. After discussions with your community, there were several concerns associated with the property that Verizon committed to address. They are outlined as follows:

1. The approved Special Exception Plat dated February 1997, and revised through June 17, 1997, shows sixteen (16) American Arborvitae or Canadian Hemlocks to be planted along the southern property line. After working with you and your landscaper, Verizon hired Chamberlain Construction to install plantings of species more suited for the area and in locations agreeable to your community. At this time seventeen (17) holly trees have been planted as a buffer between your community's property and Verizon's property. As previously discussed, Verizon is committed to installing three (3) additional hollies along the western property line.

2. Verizon contracted with Chamberlain Construction to replace the existing stockade fence located along portions of the western, southern, and eastern sides of the property to a solid board style. Your community requested an 8 foot fence as evidenced by your letter dated February 8, 2007 (copy attached). As we previously conveyed to you, Fairfax County typically requires a maximum fence height of 6 feet, but I understand you were able to enlist help on this issue.

At your request, the 8' fence has been installed. In addition, at your community's request, the portion of the fence along the western property line was moved closer into Verizon's property in order to create more room at the rear of the townhouses and to provide space for additional plantings.

3. You advised that the trees and overall condition of the western side of the Verizon property, adjacent to the townhomes, were in generally poor condition with dead tree limbs, overhanging branches, and unkempt leaves and debris. Pursuant to this concern, Verizon conducted general maintenance and cleaning of this area.

4. Chamberlain Construction will install shields around the existing lights at the rear of the Verizon property to prevent glare onto your community.

5. The portable restroom previously located at the rear of the site was moved to a location out of view from the residents of your community.

6. Verizon investigated measures to reduce the noise impact of the existing air conditioning unit currently located on the ground adjacent to the eastern side of the building. Attached for your review is a report from George Hessler of Hessler Associates, acoustical engineers, that recommends insulation measures to reduce the sound of this unit. Verizon will arrange for installation of the recommended insulation.

At this time, we would like to reiterate Verizon's plans for this site. We previously conveyed Verizon's desire to install three (3) chilled water air cooling units on the lower roof. Verizon is agreeable to reducing the number of proposed units to two (2) and to further reduce the area of the screening to accommodate only two (2) units. It is our understanding that your community would prefer the mansard style screening, and the attached drawing from Wisnewski Blair provides an outline of this revised proposal. In addition, if your community would like to schedule an additional meeting to discuss the sound studies conducted by George Hessler, we would be happy to schedule that at your convenience. However, please reference the attached memo from George Hessler which reiterates his conclusions regarding sound emissions for these units as conveyed in our January 12 meeting.

Again, thank you for your cooperation with this matter. If you have any questions or comments regarding the contents of this letter, please contact me or Sheri Hoy.

Otherwise, if the measures described above are agreeable to your community, please indicate its agreement by signing where indicated below.

Sincerely,

Carson Lee Fifer Jr.

encs.

cc: Barbara Nissel, Verizon Virginia, Inc.
Kevin Farquhar, Wisnewski Blair
Supervisor Joan DuBois - Dranesville District

On behalf of Westberry Homeowners Association, the members of the community have agreed to the contents of this letter.

_____

By: Ann B. Alexander, President

Date: _____

Hessler Associates, Inc.
Consultants in Engineering Acoustics

3862 Clifton Manor Place, Suite B
Haymarket, Virginia 20169 USA
Phone 703-753-1602
Fax 703-753-1622
Website: www.hesslernoise.com

TECHNICAL MEMORANDUM

Title:	**Meeting with Neighbors & Chiller Recommendations**
Project:	**Verizon-Lewinsville HVAC Upgrade**
Location:	Lewinsville Facility
Prepared For:	**Winnewski/Belair**
Prepared By:	**George F. Hessler, P.E.**
Revision:	**0**
Issue Date:	**March 19, 2007**
Reference No:	**TM-031907-1**
Attachments:	

Attn. Kevin Farquhar and Teresa Hueg

Introduction

Meeting

The subject project has created concerns about noise and other issues with the residential neighbors that surround the Verizon project installation. A meeting was held at Mrs. Ann Alexander's home on January 12, 2007, to discuss the noise issue with Mrs. Alexander and other concerned neighbors in attendance. Ms. Sheri Hoy (Land Use Planner with McGuire Woods) and Ms Beej Nissel (Verizon) also attended the meeting.

The three-step study methodology used to ensure no adverse impact from noise from the proposed HVAC upgrade was outlined for the group in general terms. As step 1, noise levels were measured at the facility on the critical property lines near homes to establish existing or baseline conditions. Continuous measurements were recorded for six days and are given in our report TM-122205-1. Step 2 produces a noise model that shows the calculated noise levels at all points from the new rooftop equipment. Step 3 is an impact analysis that compares the new noise emissions with the existing noise conditions. If the new emissions significantly exceed existing conditions, then adverse impact could occur in the form of annoyance. It was pointed out that the emissions from the new rooftop equipment are well *below* the measured existing conditions and no adverse impact is expected. It was also pointed out that new-equipment emissions are also substantially below county noise limits. The methodology is the same used for huge new coal, gas or nuclear powered power plants.

The neighbors pointed out there are present noise issues with the facility. On occasions, the facility emits high pitched tonal noise that is annoying. Verizon and WBA engineers have traced this to an outdoor emergency air-cooled chiller that is being used more frequently to meet demand. This air-cooled chiller is significantly different and louder than the proposed rooftop chilled water air handling units. Air cooled systems have to cool the external supplies of air at the unit and then use that air to cool the interior space. It is important to note that chilled water units use re-circulating water, cooled by another

mechanical system, to produce cooled air which is much more efficient. Hessler Associates stated the noise source of the air cooled chiller could be investigated.

Air Cooled Chiller Investigation
Verizon commissioned a study to measure noise emissions from the emergency air cooled chiller. Measurements were carried out on January 17, 2007 with the help of Mr. David Winters of Verizon.

Chiller Investigation

The sound spectra at the SE corner of the rear parking lot with and without the emergency chiller are shown in **Figure 1** below.

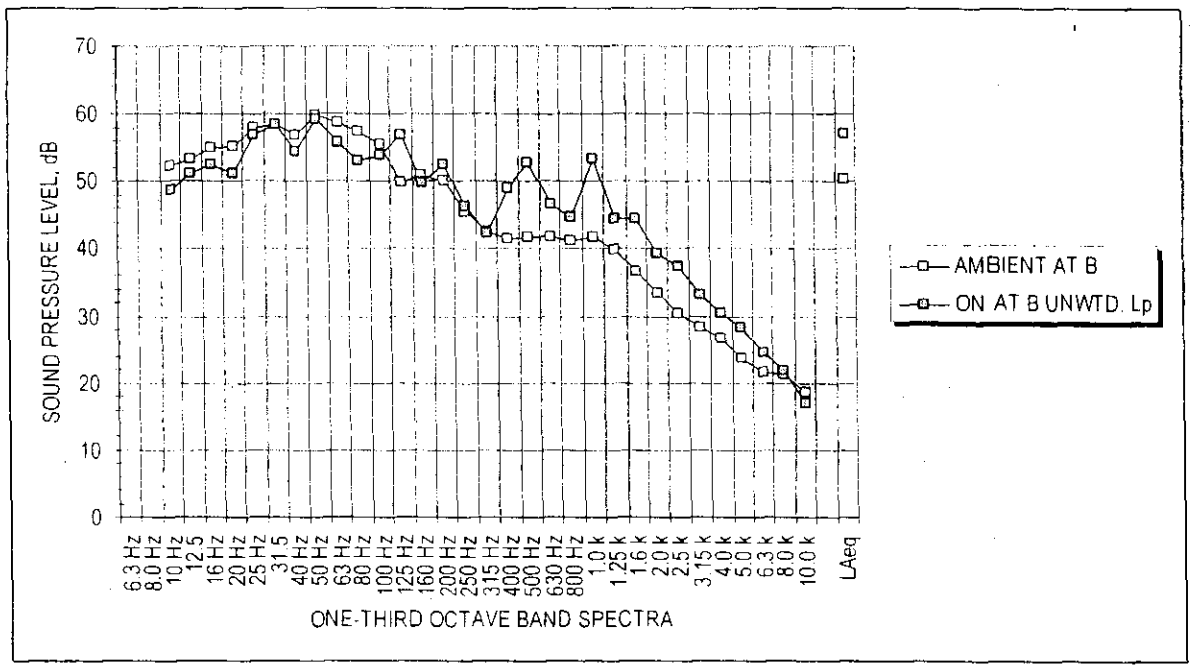


Figure 1

The plot shows there is a 7 dBA increase over existing conditions when the air cooled chiller is turned on at this location. The closest sensitive receptors are the town homes due south at about the same distance. However, the chiller is shielded by the building and we expect the level at the homes to be lower, probably a 3 to 4 dBA increase at the closer units. This is a small increase in sound and would be judged as just perceptible *if* the chiller sound was broadband without any tonal content. However, the spectra peaks at 500 and 1000 Hz indicate that the chiller is an adverse character tonal sound that is readily identified and could be annoying.

One needs to assess the character of the noise spectra in addition to level increase. For example, a swimming pool filter pump, a tonal noise, can be extremely annoying at very low "quiet" levels. The spectrum denoted by the filled symbols in the **Figure 2** below is the actual measured spectra. Our ears detect higher tones easier than lower tones, which is simulated by the A-weighting filter of a sound level meter. The unfilled spectrum plot is the filtered spectra, and we get a better picture of what the chiller sounds like. A listener perceives the peak two tones in the 500 Hz and 1000 Hz bands.

Tonal component noise can be evaluated by how prominent the tones are in the spectrum. The EPA defines a "pure tone" or prominent tone by how much the one-third octave band level containing the tone protrudes above the average level of the two bands on either side of the tonal band. The red line in the plot shows the frequency dependent prominence values that would indicate a tone is present and prominent. At and above this red line, the tone is really prominent or 'stands out' in the spectra, and is very annoying based on our experience. Below the line, the tone may still be readily perceptible and audible, but it is less prominent and less annoying. The calculated prominence values are calculated and shows a single prominent tone at 1000 Hz at the measured fence line location. Again, this would be lower at the homes but it may be concluded that the tone is at least audible and perhaps annoying.

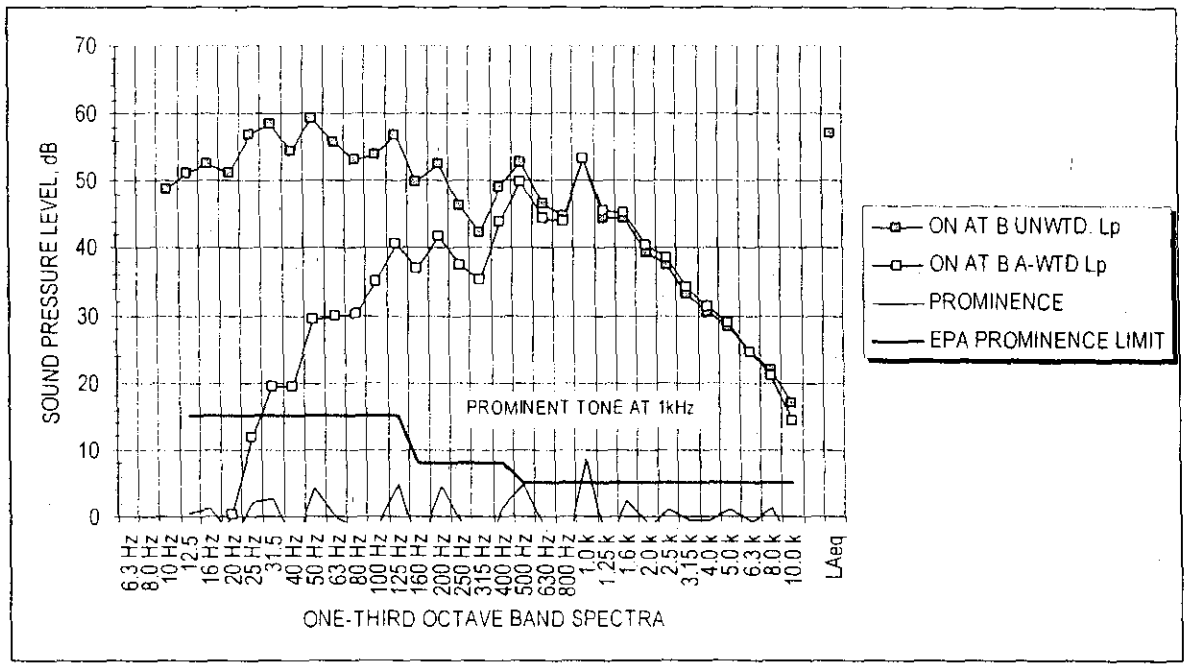


Figure 2

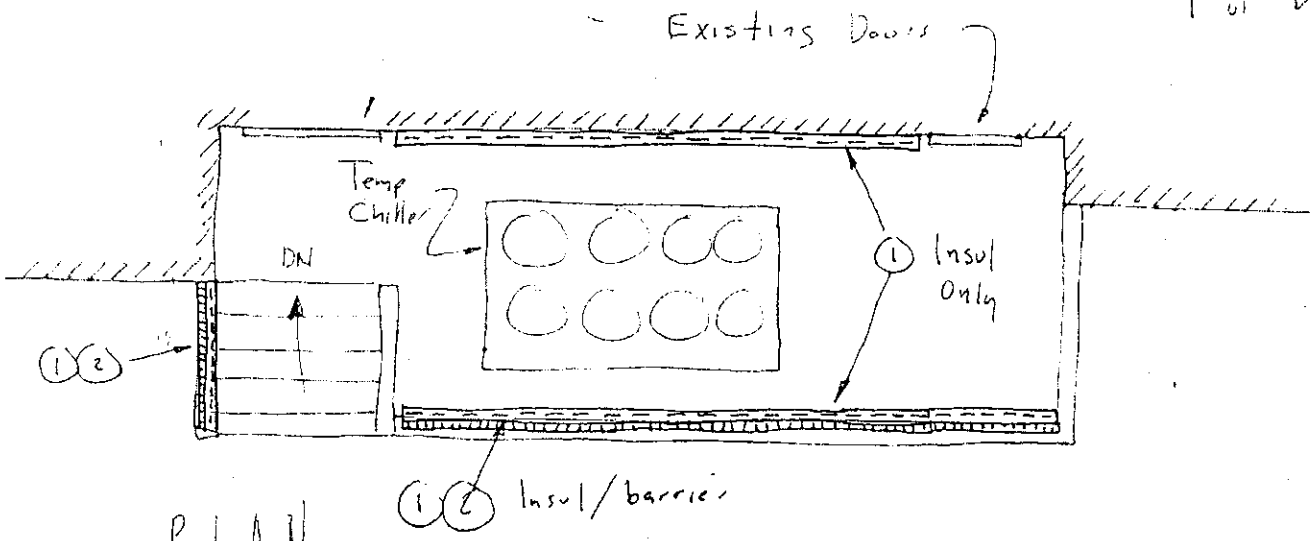
Recommendations

We recommend a moderate amount of noise abatement (3 to 5 dBA) to reduce the air cooled chiller noise. There are maintenance and operational issues that limit just how much abatement can be done. These issues were discussed with Mr. Winters on site.

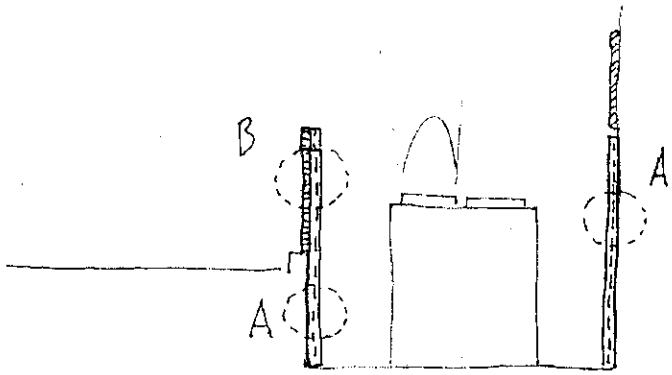
The chiller sits in a concrete well which reflects sound to a large degree in all directions. A noise reduction of 3 to 5 dBA is estimated if sound absorption is strategically located in the well. The attached sketches delineate our recommendations. The barrier wall is only about 4 feet in height and hopefully should not induce any hot air recirculation. The sound absorption on the walls has no adverse effects.

We would be pleased to meet with the neighbors or their architect to discuss this or any other noise issues.

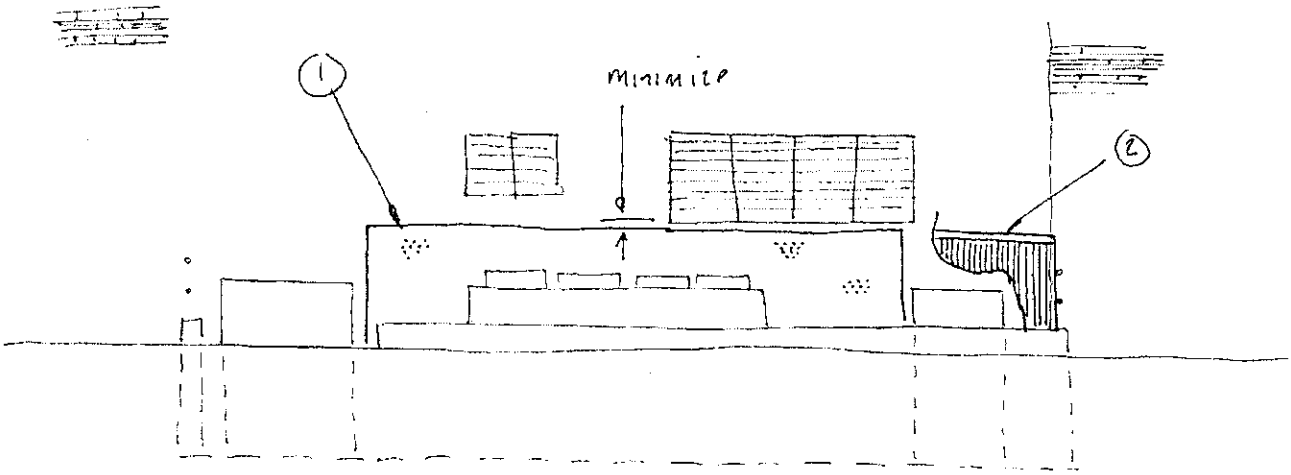
George Hessler



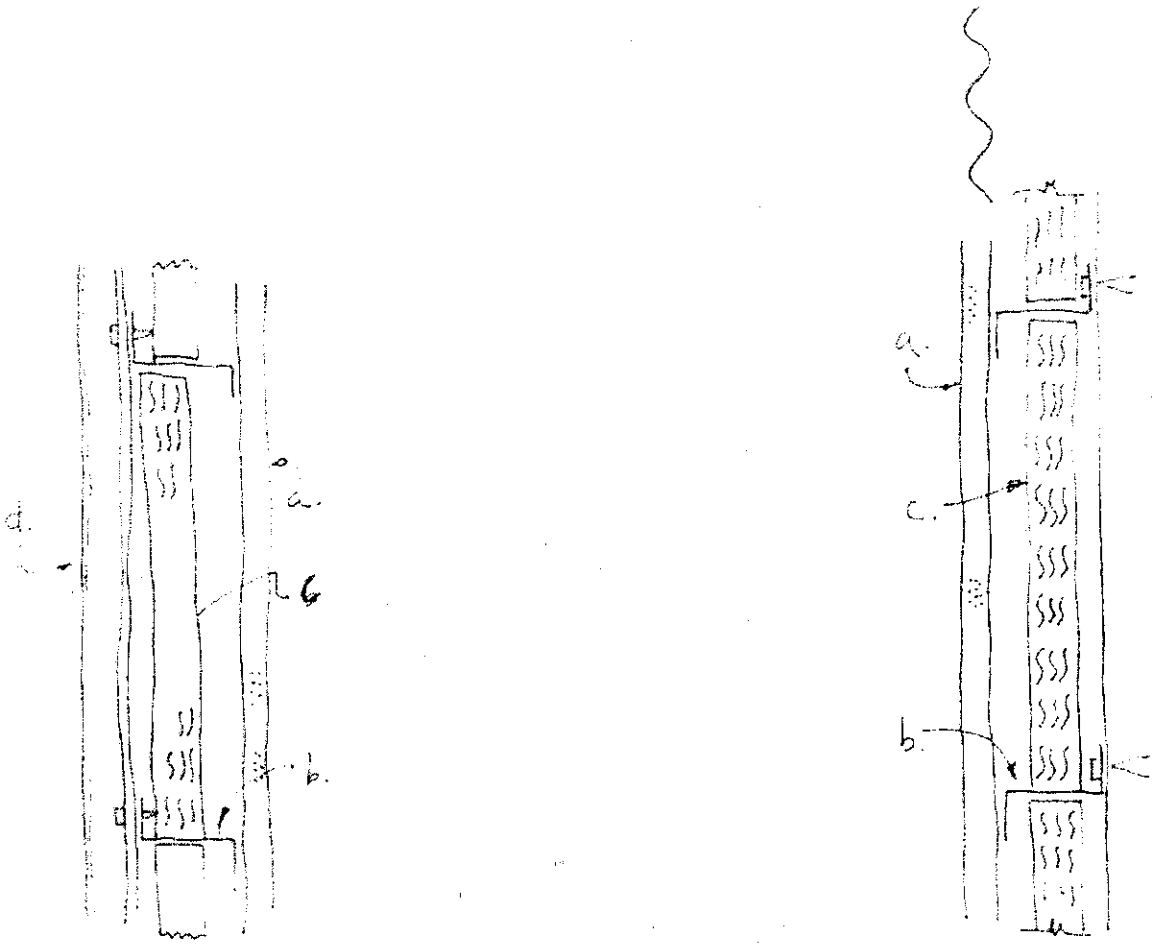
PLAN



SECTION



FRONT



B DETAIL A

a. Alum or Galv. steel unpainted perforated (~25-50% OA) corrugated or formed siding -

b. SM Z sections as req'd

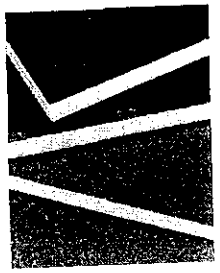
c. Certainteed Acoustic Board Black insulation - 2" thick or any other semi-rigid board with an absorption coefficient of 0.99 or more @ 500 to 1000 Hz

d. Any siding with a minimum weight of 1 psf

CertainTeed

Specification Sheet

AcoustaBoard™ Black Insulation



1. PRODUCT NAME

AcoustaBoard™ Black Insulation

2. MANUFACTURER

CertainTeed Corporation
P.O. Box 860
Valley Forge, PA 19482-0105
Phone: (610) 341-7000
(800) 233-8990
Fax: (610) 341-7571
Fax-On-Demand: (800) 947-0057
Website: www.certainteed.com

3. PRODUCT DESCRIPTION

Basic Use: CertainTeed AcoustaBoard™ Black Insulation is used for sound control in theaters, studios and entertainment facilities. The rigid board has a Class A surface which can be used in exposed applications.

Benefits: This product provides excellent sound absorption which controls room reverberation and echoes plus reduces noise levels. The black surface absorbs light and is ideal for use when an interior needs to be dark.

Composition and Materials: Composed of glass fibers bonded together with a thermoset resin. A durable, black non-woven mat surface is adhered to the glass fiber base board.

Limitations: Insulation should be kept dry at all times.

Sizes: Available as shown in the table to the right. Contact CertainTeed for other sizes and minimum order quantities.

4. TECHNICAL DATA

Applicable Standards

- Model Building Codes
  - (BOCA, ICBO, SBCCI, CABO, ICC)
- Material Standards
  - (ASTM C 612)
  Type 225, Type 1A;
  Type 300, Type 1A & 1B
  - California Quality Standards
  Reg. No. CA-T024 (PA)
  - City of Los Angeles, RR 8148

Fire Resistance

- Surface Burning Characteristics
  - (ASTM E 84, UL 723, NFPA 255)
  Max. Flame Spread Index: 25
  Max. Smoke Dev. Index: 50
- Limited Combustible
  - (NFPA 259)
  ≤ 3,500 Btu/lb.

Physical/Chemical Properties

- Acoustical Performance:
  - (ASTM C 423)
  See table on back page.
- Thermal Performance:
  - (ASTM C 177 or ASTM C 518)
  See table below.
- Maximum Use Temperature
  - Temperature: (ASTM C 411)
  Max. 250°F (121°C)
- Water Vapor Sorption:
  - (ASTM C 1104)
  < 3% by Weight
- Corrosiveness:
  - (ASTM C 665) Pass
- Fungi Resistance:
  - (ASTM C 1338) Pass
- Odor Emission:
  - (ASTM C 1304) Pass

Quality Assurance: CertainTeed was the first fiber glass insulation manufacturer to have its manufacturing plants, R&D center and corporate headquarters registered to ISO 9001-2000 standards.

5. INSTALLATION

AcoustaBoard Black Insulation can be installed rapidly and is easily cut to fit around obstructions and structural members. The black-faced side of the board should be installed toward the interior side of the structure. The product is applied to spandrel, pre-cast concrete panels and to gypsum board surfaces with adhesives or mechanical fasteners. Boards may also be installed using hat channels or Z studs. These installation recommendations are general in nature. Other methods are acceptable. Please consult your contractor for recommendations best suited to the application.

AVAILABLE SIZES

Type	Thickness in.	Thickness mm	Dimensions in	Dimensions mm	Density lb/ft³	Density kg/m³	R-Values R	RSI
225	1	25	24 x 48 and 48 x 96	610 x 1219 and 1219 x 2438	7.75	36	3.3	0.58
	1½	38			7.75	36	4.5	0.79
	2	51			7.75	36	6.7	1.18
300	1	25			9.00	40	4.3	0.76
	1½	38			9.00	40	6.3	1.12
	2	51			9.00	40	8.2	1.43

6. AVAILABILITY AND COST

Manufactured and sold throughout the United States. For availability and cost, contact your local contractor, distributor, or call CertainTeed Sales Support Group in Valley Forge, PA, at (800) 233-8990.

7. WARRANTY

Inasmuch as CertainTeed has no control over the installation design, installation workmanship, accessory materials, or conditions of application, CertainTeed does not warrant the performance or results of any installation containing its products.

8. MAINTENANCE

No maintenance required.

9. TECHNICAL SERVICES

Technical assistance can be obtained either from the local CertainTeed sales representative, or by calling CertainTeed Sales Support Group in Valley Forge, PA, at (800) 233-8990.

10. FILING SYSTEMS

- CertainTeed Pub. No. 30-36-004
- Additional product information available upon request.

ACOUSTICAL PERFORMANCE

Product Type	Thickness in.	Thickness mm	Absorption Coefficients @ Octave Band Frequencies (Hz) 125	250	500	1000	2000	4000	NRC
225	1	25	0.06	0.10	0.58	0.85	0.69	0.91	0.65
	1½	38	0.12	0.46	0.83	0.90	0.90	0.85	0.80
	2	51	0.22	0.22	1.00	1.04	1.14	0.90	0.94
300	1	25	0.06	0.26	0.69	0.89	0.93	0.66	0.76
	1½	38	0.15	0.31	0.85	0.93	0.99	0.93	0.86
	2	51	0.17	0.76	1.00	1.05	0.94	0.96	0.94

Sound absorption tested in accordance with ASTM C 423 Using Type A mounting per ASTM E 795

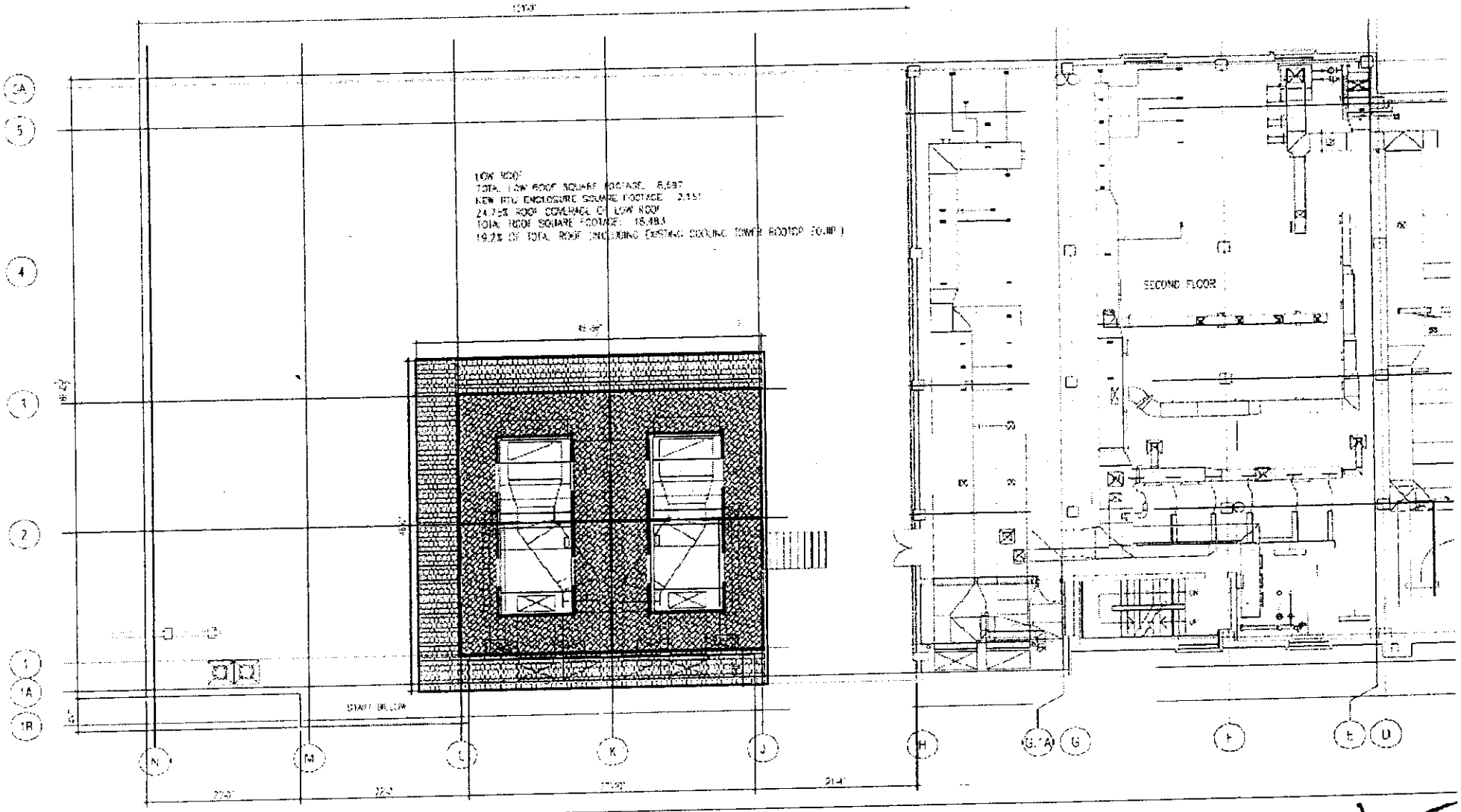
NAIMA

Code: 30-36-001 AcoustaBoard™ Black

CertainTeed
A Saint-Gobain Company
INSULATION

ENERGY STAR HOME SEALING

© 2003 CertainTeed Corporation 6/03



LEWINSVILLE CO HVAC UPGRADE
March 26, 2007

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1750 Tysons Boulevard
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www.mcguirewoods.com

Carson Lee Fifer, Jr., Esquire
Direct: 703.712.5343

FILE

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lfifer@mcguirewoods.com
Direct Fax: 703.712.5223

December 11, 2006

Mrs. Ann Alexander, President
Westberry HOA
7255 McLean Commons Lane
McLean, Virginia 22101

Re: Verizon Virginia Inc. ("Verizon")
Tax Map No. 30-3-((1))-46
1701 Chain Bridge Road, McLean, VA

Dear Ann,

On behalf of Verizon, we would like to thank you, Jill Neugent, and Patrick Gorman for meeting with us earlier this week to discuss the Verizon property and its proposal to install chilled water cooling units on its lower roof. During the course of our discussion, you identified five issues associated with Verizon's property that your HOA association hopes to resolve. As discussed, Verizon is in accordance with the following action items to be addressed at the Verizon site:

1. The Special Exception Plat dated February 1997, and revised through June17, 1997, shows sixteen (16) American Arborvitae or Canadian Hemlocks to be planted along the southern property line. Verizon has hired Chamberlain Construction to work with the County Arborist and an appropriate landscaping company to install better suited plantings for the location as soon as reasonably possible to ensure their survivability. Verzion hopes to have these planted by the first quarter of 2007 pending County approval.

2. Verizon has also contracted with Chamberlain Construction to replace the existing stockade fence located along portions of the western, southern, and eastern sides of the property to a board-on-board style including a gate on the southern boundary in order to have access to the new plantings. This work will be done under the existing general permit.

3. Chamberlain Construction will have an electrical contractor work with Wisnewski Blair to see how the existing lights at the rear of the Verizon property can be shielded or replaced to prevent glare onto your properties.

4. The portable restroom currently located at the rear of the site will be moved to a location out of view from the residents of your community.

5. Verizon agrees to investigate measures to reduce the noise impact of the older air conditioning unit currently located on the ground adjacent to the eastern side of the building. If a feasible solution can be developed that does not interfere with the County's existing approval of the overall site and is economical, Verizon will review the methods of doing so, and will advise your Association of an appropriate solution when determined.

As we also discussed at Wednesday's meeting, it is our understanding you have agreed to present Verizon's proposal to install air-cooling units on its lower roof to members of your community. Verizon appreciates your consideration of this request. As you know, Verizon's central office is a public utility that serves the McLean area. The purpose of this equipment is to provide a means for Verizon to continue to provide valuable and updated services to the community.

For your use, I have attached a decibel chart outlining everyday noises and their average decibel readings. If you have any questions regarding this chart, please feel free to contact me. In addition, you asked Verizon to represent what the expected sound may be that is generated by the proposed units. As you know, the sound study given to you at the meeting sets this out. Based on the attached decibel chart, at its most pronounced, it will be less than normal conversation, but more than rainfall. The average sound level will be in the range of a quiet living room.

Again, thank you for your cooperation with this matter. If you have any questions or comments regarding the contents of this letter, please feel free to contact me.

Sincerely,

Carson Lee Fifer Jr.

enc.

cc: Barbara Nissel, Verizon Virginia, Inc.
Kevin Farquhar, Wisnewski Blair
Supervisor Joan DuBois - Dranesville District

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NOISE ACTION WEEK

How Loud is Noise?

*

This table shows the relative decibel levels of some common noises. These are not absolute levels, but give an indication of the relative ranking of everyday sounds. Noise is measured in decibels (dBA), which is logarithmic. This system is used because it behaves in a similar way to human hearing.

150 balloon pop / gunshot / artillery fire

140 plane take off / fireworks

130 pneumatic drill / percussion section of orchestra / stock car racing

120 thunder / loud stereo / nightclub / chainsaw noise / hammer on nail / emergency siren / rock concert

110 football crowd / personal stereo / action film / car horn / symphony concert / baby crying

100 exercise class / video arcade / electric drill / bass drum

90 shouting / food processor / violin

85 handsaw / heavy traffic
at this level hearing protection must be worn in the workplace

80 ringing phone / vacuum cleaner / hairdryer / doorbell
at this level hearing protection must be available in the workplace. Prolonged exposure above 80dBA can damage hearing

70 washing machine / dishwasher / television / alarm clock / piano practice

60 normal conversation / sewing machine

50 rainfall / busy office

40 refrigerator / quiet living room / library

30 bedroom at night

20 broadcasting studio

10 breathing / leaves rustling

threshold of hearing

McGuireWoods LLP
1750 Tysons Boulevard
Suite 1800
McLean, VA 22102-4215
Phone: 703.712.5000
Fax: 703.712.5050
www.mcguirewoods.com

Sheri L. Hoy
Direct: 703.712.5483

APPENDIX 5

McGUIREWOODS

shoy@mcguirewoods.com
Direct Fax: 703.712.5050

July 25, 2007

RECEIVED
Department of Planning & Zoning
JUL 25 2007
Zoning Evaluation Division

BY HAND

Mr. Peter Braham
County of Fairfax
Zoning Evaluation Division
Suite 801
12055 Government Center Parkway
Fairfax, Virginia 22035

Re: Verizon Virginia Inc., Application for SEA
1401 Chain Bridge Road, McLean, Virginia
SEA 97-D-020-02

Dear Peter:

Pursuant to your request, I have enclosed several background items related to Verizon's discussions with the Westberry HOA. Please find the following:

1. Elevation Drawing.
2. Ambient Noise Study prepared by Hessler Associates, Inc., dated December 22, 2005 (this study reviewed background noise at site).
3. Noise Assessment prepared by Hessler Associates, Inc., dated December 29, 2005 (this study projected noise levels for the new cooling equipment).
4. Chiller Investigation Study prepared by Hessler Associates, Inc., dated January 17, 2007, regarding the HVAC unit currently on the ground adjacent to the driveway and suggests certain noise abatement measures pursuant to neighbor's comments.
5. Letter dated February 8, 2007, from Westberry HOA supporting the new eight foot fence.
6. Simulations of the original (3-unit) and current (2-unit) proposal.
7. Various pictures of existing roof area, landscaping, and fence.

Thank you for your assistance with this matter. Should you have any questions

or require any additional information, please contact me at the number listed above.

Sincerely,

Sheri L. Hoy
Land Use Planner

cc: Supervisor Joan DuBois, Dranesville District
Planning Commissioner Nancy Hopkins, Dranesville District
Barbara J. Nissel, Verizon Virginia, Inc.
Carson Lee Fifer, Esquire, McGuireWoods

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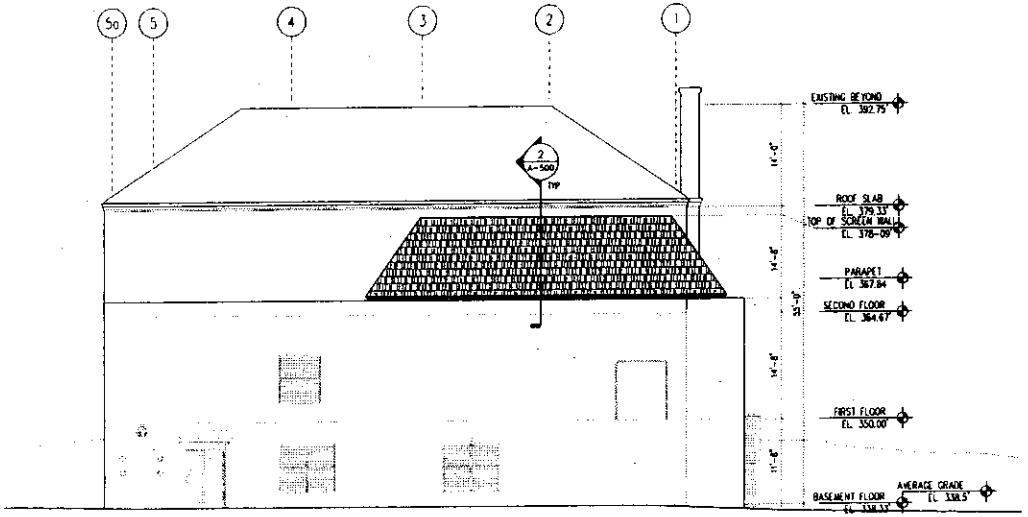

2 SOUTH ELEVATION
A201 1/8" = 1'-0"

For elevation purposes only

Hessler Associates, Inc.
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Suite 240
Gainesville, Virginia 20155 USA
Phone: 703-753-1602
Fax: 703-753-1522
Website: www.hesslernoise.com

TECHNICAL MEMORANDUM

Title: **AMBIENT NOISE LEVEL SURVEY- VERIZON LEWINSVILLE SITE**

Project: **Lewinsville HVAC Upgrade**
Location:
Prepared For: **WBA, Attn. Ms. Teresa Hueg**
Prepared By: **George F. Hessler, P.E.**
Revision: **0**
Issue Date: **Dec. 22, 2005**
Reference No: **TM-122205-1**
Attachments:

Attn. Ms. Teresa Hueg

Introduction

At your request, three continuous noise level monitors were set-up at the subject site to operate from Wednesday Dec. 14, 2006 to Wednesday Dec. 21, 2006. The monitors measure daytime and nighttime sound levels at hourly intervals to document existing levels at the site to establish a baseline.

Baseline information is necessary to assess any noise impact that might occur from the installation of new HVAC equipment at the site. New levels for such equipment are developed via computer modeling to superimpose onto existing levels. Noise impact can occur if the new HVAC levels exceed the existing levels by significant amounts. The purpose of this report is to document current existing measured levels.

The monitors, labeled N, S and W, were installed approximately 5 feet above grade at the three locations shown on the **Site Aerial Photo** on page 5. Location N was selected to illustrate the impact on the adjacent residential community and the temporal pattern of road traffic noise from Chain Bridge Road. Location S and W Location W is on the west property line at the closest residence to the proposed rooftop HVAC equipment installation.

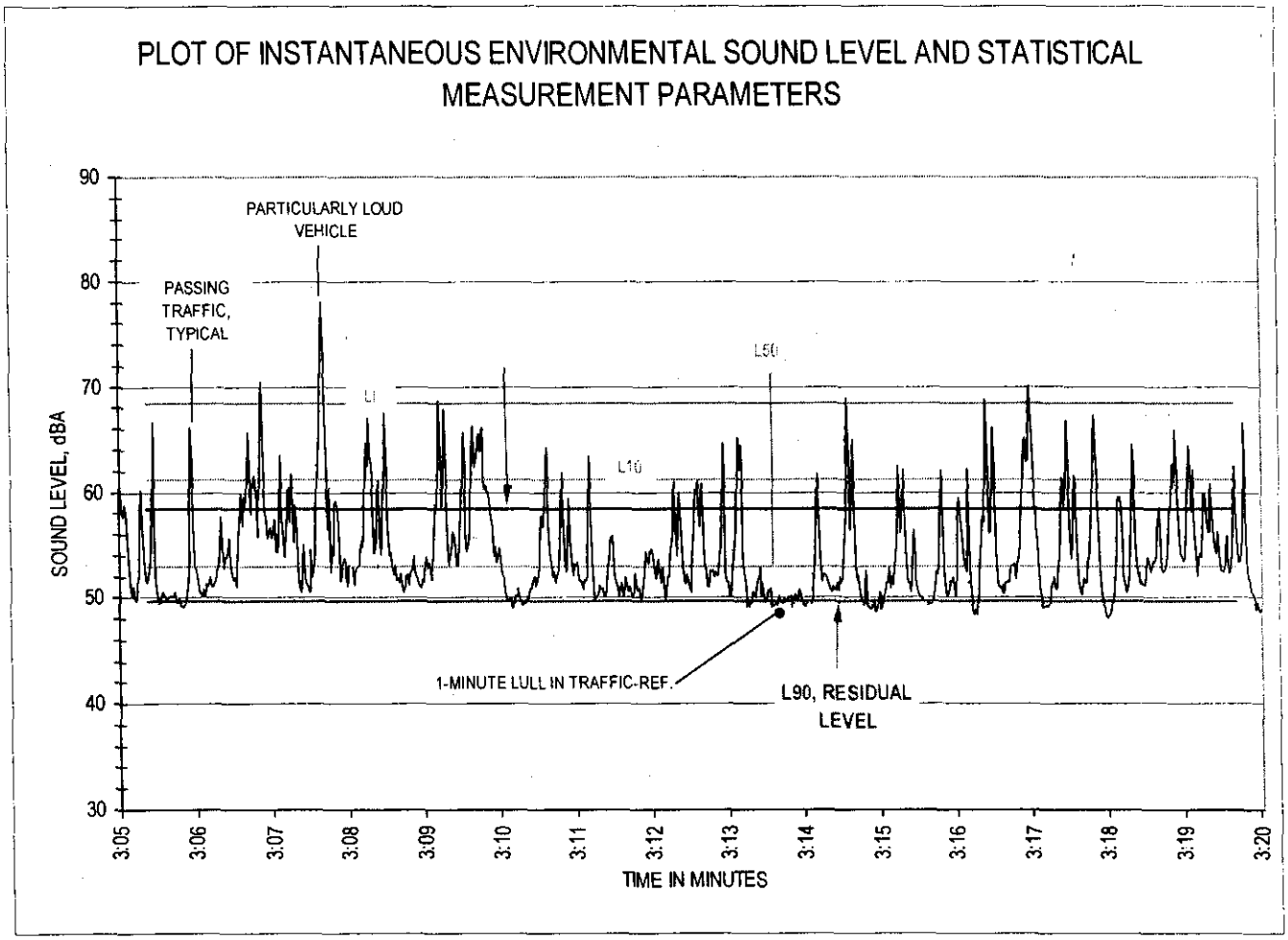
Location W is shielded from all potential noise emission sources from the facility. Conversely, location S has a direct line of site to all potential noise sources from the facility. A comparison of levels recorded with and without facility sources in view would provide information on the present levels of emissions from the facility.

Background Information

Units and Levels

The universal measure of noise in decibels used throughout the world is the A-weighted sound level, abbreviated dB(A) or dBA. The overall sound level is defined as the summed level in decibels over the entire audible frequency range (for young adults) of approximately 20 to 20,000 cycles/second or Hertz. It is a single number to quantify the entire spectrum of sound.

A weighting is an electronic filter applied to the spectrum that approximately simulates human hearing perception. Lower frequency sound is subtracted since humans perceive higher frequencies easier than lower notes. The altered or weighted new spectrum is summed over the same audible frequency span and is called the overall A-weighted level. Thus, the A-weighted sound level is an excellent single number descriptor for audible sounds.



The graphic above illustrates the *instantaneous* sound level over a 15-minute interval in a typical urban residential community with fairly heavy traffic. Each rise in level to a peak and then a decline is a passing local road source. Note the level changes constantly over the 15-minute sample. This is true for essentially all community noise except for very special circumstances.

To condense this data to a more usable form, standard measurement metrics are defined. The average is designated Leq and is the equivalent steady sound level that has the same acoustic energy as the actual time varying signal over the interval. It can be thought of as the true energy average over the measurement interval. Since it averages all of the sounds recorded during the interval, the Leq level will *contain local traffic noise sources* from Chain Bridge Road.

Percentile levels or exceedence levels, designated L1, L10, L50 and L90 are the statistically derived units over the sampling period. They are the levels exceeded for 1, 10, 50 and 90% of the sampling time. Of these, L50 and L90 are the most useful for evaluating community noise. L50 is the mean, meaning it is louder for ½ and quieter for ½ of the time sample.

The L90 percentile level is the most useful for evaluating community noise and is called the "residual" sound level. The residual level is the quasi-steady level that occurs in the *absence* of all identifiable sporadic sound level sources occurring over the interval. Note on the upper graphic there was a 1-minute lull in traffic for the sampled period and the level measured over this period was the residual level or that which is left after all identifiable sources. The vast majority of all residual sound levels found in communities come from very far-away unidentifiable steady levels from traffic and/or industrial sources. Thus in this case L90 will *exclude local traffic noise* from Chain Bridge Road to the extent possible.

Typical residual daytime levels found throughout the U.S. are shown below:

Typical Residential Area Sound Levels

Daytime Residual Level, dBA, Level Exceeded 90% of the Time, L90

Description	Typical Range	Average
Very Quiet Rural or Remote Area	26 to 30 inclusive	28 (New, HAI Study)
Very Quiet Suburban or Rural Area	31 to 35 inclusive	33 (ANSI B133.8)
Quiet Suburban Residential	36 to 40 inclusive	38
Normal Suburban Residential	41 to 45 inclusive	43
Urban Residential	46 to 50 inclusive	48
Noisy Urban Residential	51 to 55 inclusive	53
Very Noisy Urban Residential	56 to 60 Inclusive	58

Source: (Average 38 – 58 dBA) U.S. EPA Community Noise Study, 1971

Results and Conclusions

The measured daytime residual sound level over the seven-day interval at the Lewinsville site at monitors S and W was 48 dBA for input into the above table of typical levels. The result at monitor N was higher due to the relative closeness to Chain Bridge Road. The table below summarizes the measured residual levels over the three important daily time periods.

DATE	NORTH MONITOR			SOUTH MONITOR			WEST MONITOR		
	DAY 7 AM-7 PM	EVENING 7 PM - 10 PM	NIGHT 10 PM-7 AM	DAY 7 AM-7 PM	EVENING 7 PM - 10 PM	NIGHT 10 PM-7 AM	DAY 7 AM-7 PM	EVENING 7 PM - 10 PM	NIGHT 10 PM-7 AM
14-Dec		54	48		43	40		43	39
15-Dec	58	56	53	48	50	48	49	54	51
16-Dec	58	56	51	49	48	44	50	49	45
17-Dec	57	54	49	49	47	41	48	46	42
18-Dec	54	53	50	45	46	44	46	46	45
19-Dec	58	54	49	49			49	48	41
20-Dec	56	54	51				46	45	41
AVERAGE	57	54	50	48	47	43	48	47	43
STD DEV	1.6	1.1	1.7	1.7	2.6	3.1	1.7	3.5	4.0

NOTES: SHADED VALUES REPRESENT RESIDUAL SOUND LEVELS FOR RESIDENCES CLOSE TO AND ADJACENT TO HVAC PROJECT
NORTH MONITOR RESULTS REPRESENT RESIDUAL LEVELS AT RESIDENCES CLOSE TO CHAIN BRIDGE ROAD

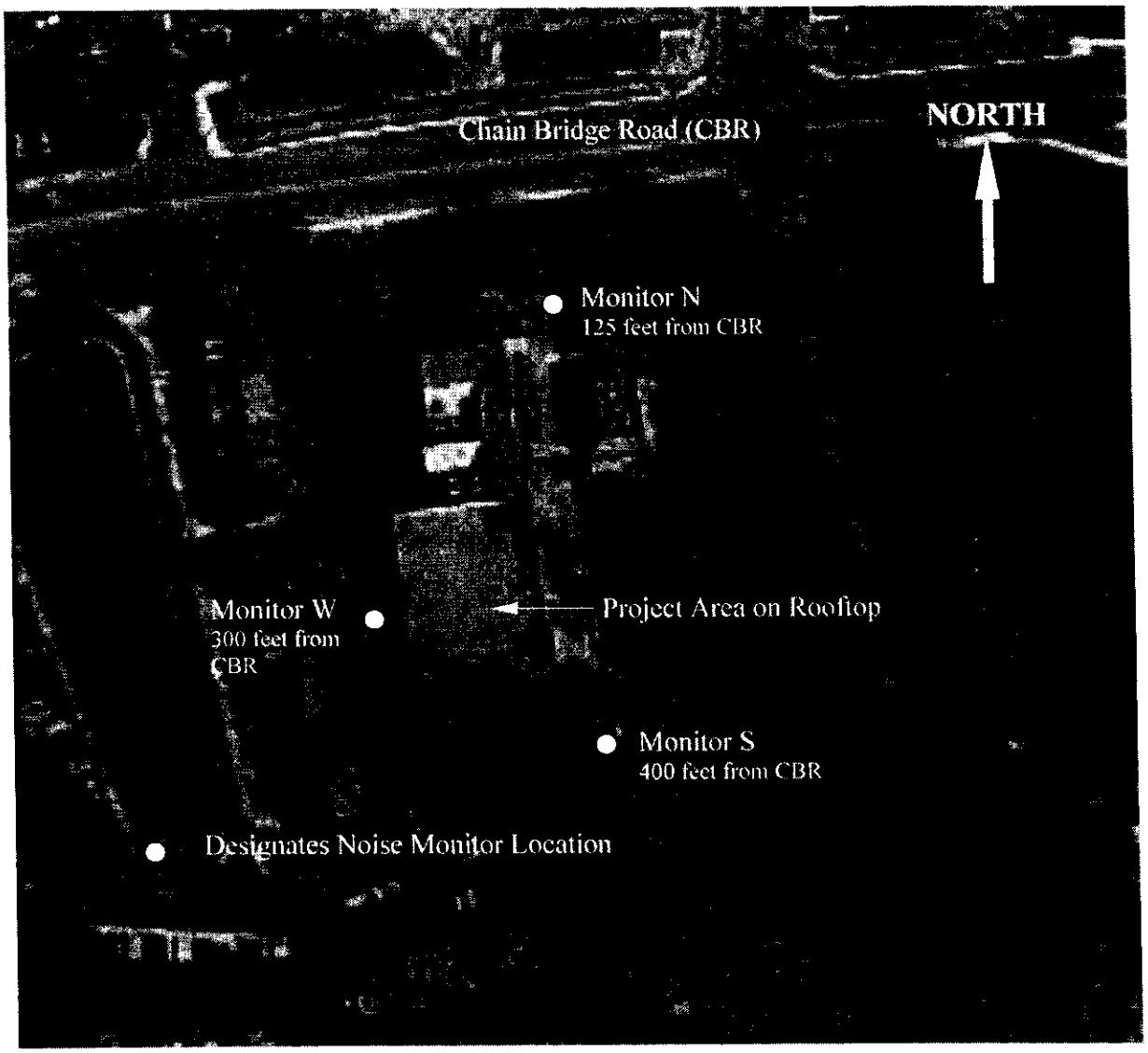
The hourly results are plotted on Figures 1 and 2 that follow the text of this memo. Figure 1 plots the results at the north and south monitor. A clear pattern emerges from these graphics. Levels rise in the early morning due to traffic increase on Chain Bridge Road and the surrounding road network, remain fairly constant all day and then decline as traffic declines to a minimum in the very early morning hours. The pattern is clearer on Figure 2 that plots only the residual and average levels for all three monitors.

Such a pattern only occurs at sites dominated by traffic noise in urbanized communities. In suburban and rural sites, minimum levels may occur at any time of day, and nighttime levels are usually somewhat higher in the summer due to insect activity.

Also note on Figure 2 that the sound levels track one another at locations S and W, but are parallel to the north monitor that is obviously dominated by traffic noise. Recall that monitor S has a sight line to all potential facility sources, whereas location W is completely blocked by the building structure. This indicates that sound emissions from the Verizon facility are minimal at best. Subjectively, one observes *only* vehicle traffic on Chain Bridge Road and occasional over flights from National Airport at all of the positions.

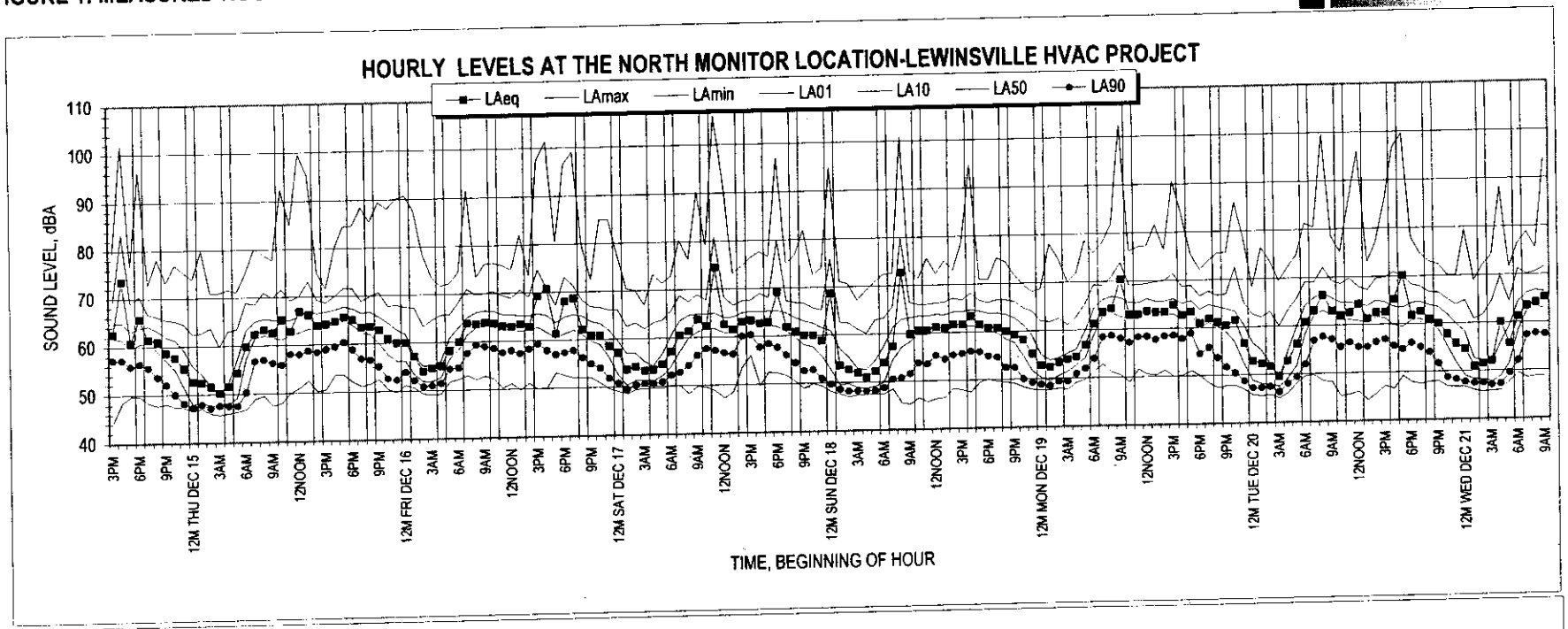
We can conclude from the monitor survey that residual noise levels are controlled by traffic noise alone at the property lines and at the closest adjacent residences. Furthermore, representative baseline residual sound levels of 48, 47 and 43 dBA are established for day, evening and nighttime periods, respectively at the closest residences to the south and west of the proposed project area.

End of Text



Site Aerial Photo

FIGURE 1: MEASURED HOURLY SOUND LEVELS AT THE LEWINSVILLE SITE OVER A 7-DAY SAMPLING PERIOD



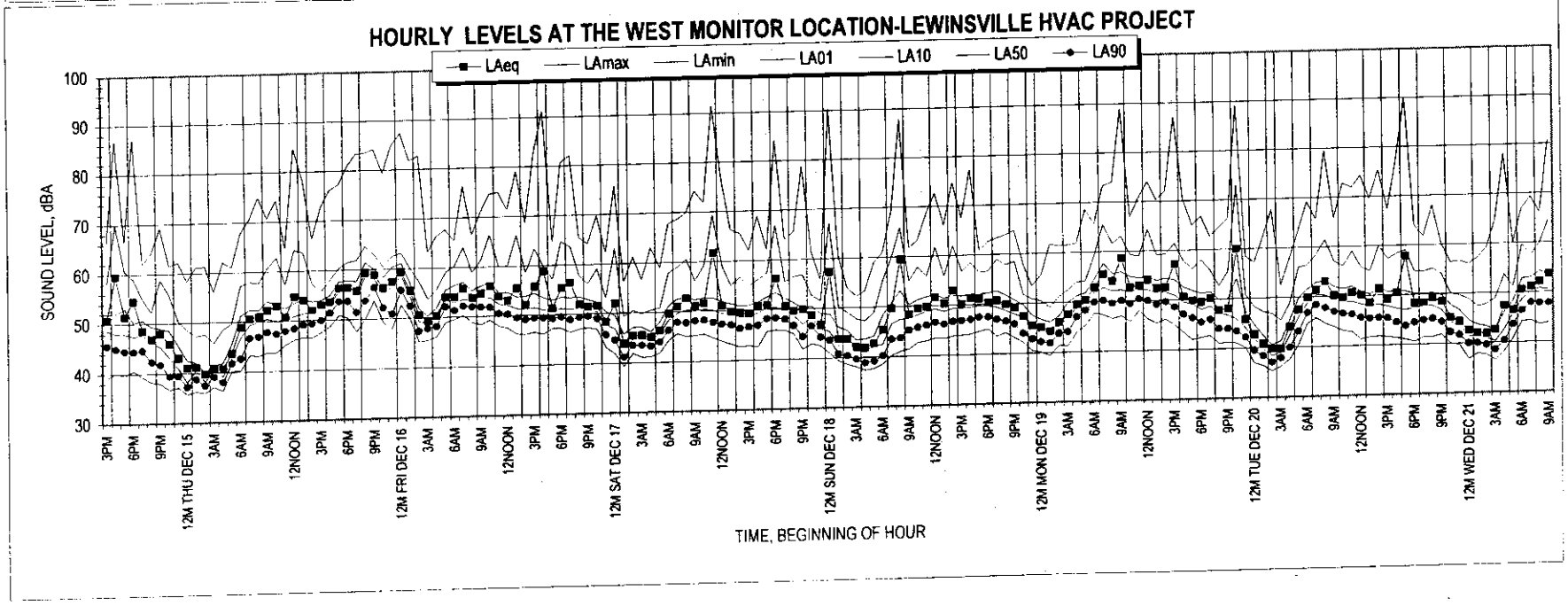
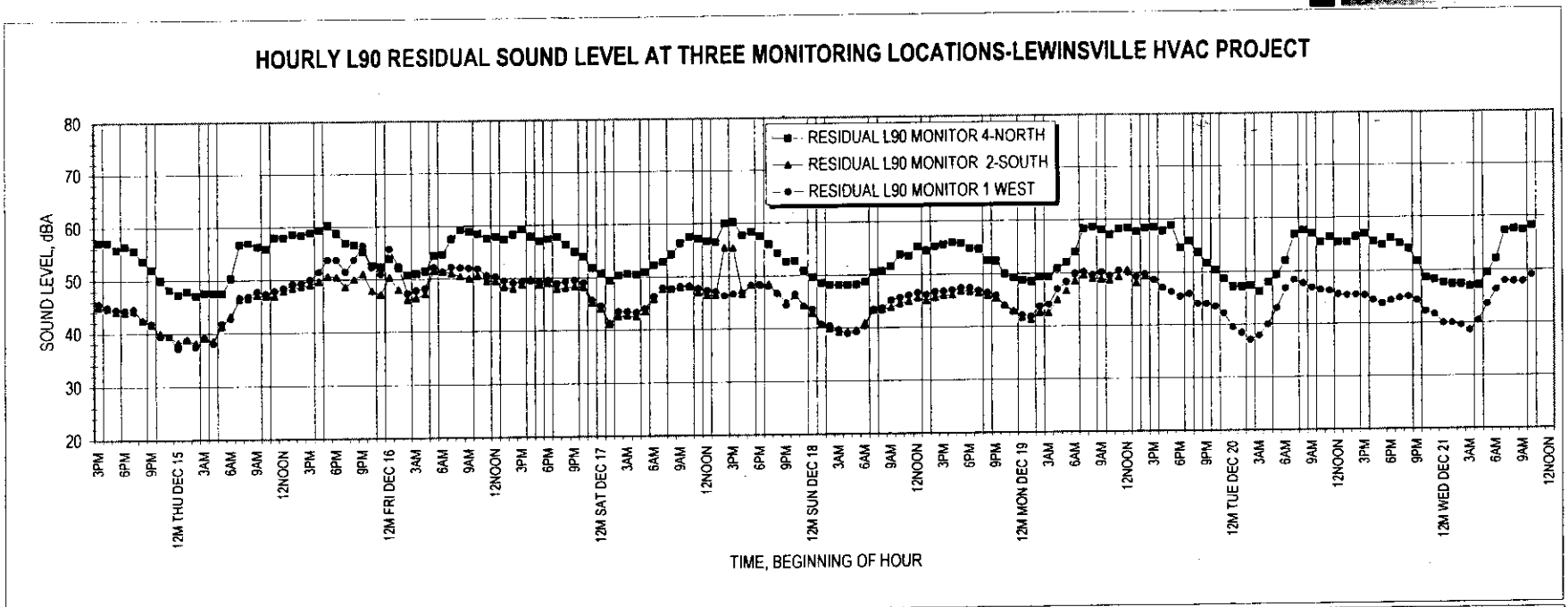
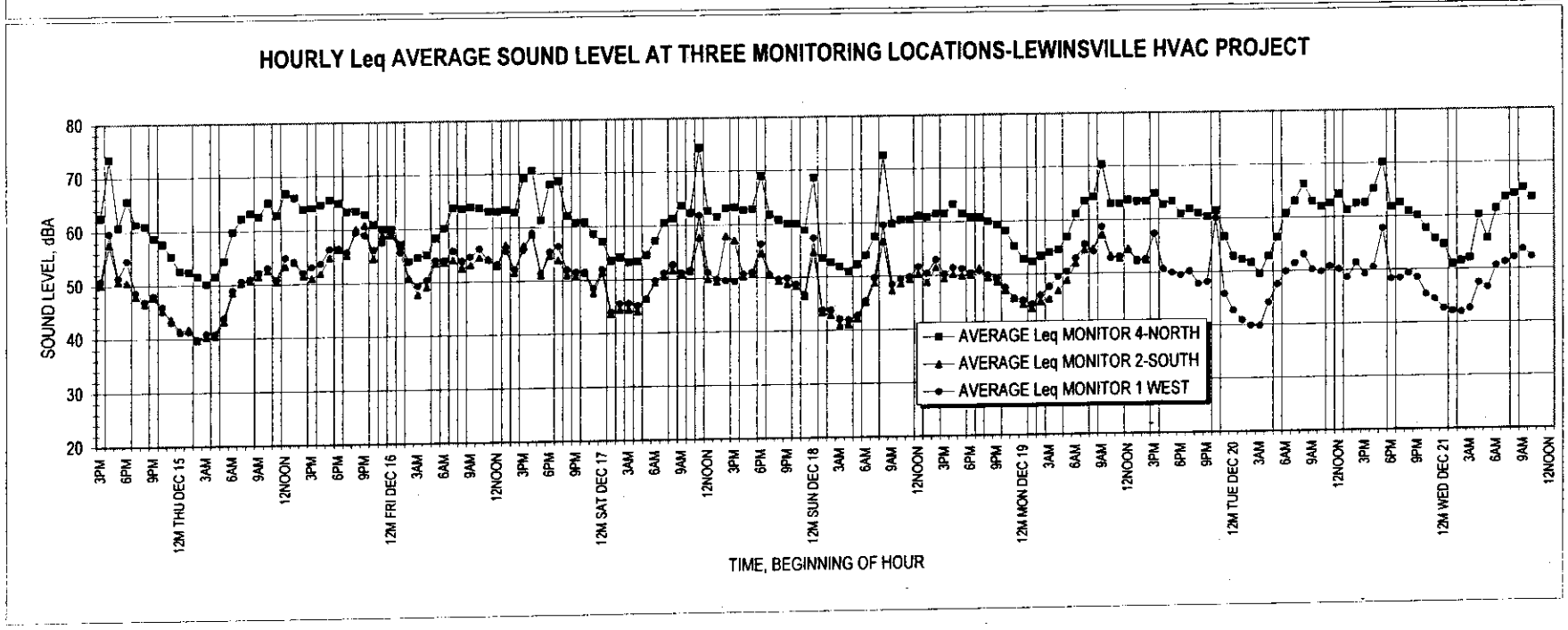


FIGURE 2: MEASURED HOURLY SOUND LEVELS AT THE LEWINSVILLE VERIZON SITE OVER A 7-DAY SAMPLING PERIOD





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Website: www.hesslernoise.com

TECHNICAL MEMORANDUM

Title: **ASSESSMENT OF NEW HVAC EMISSIONS-LEWINSVILLE SITE**

Project: **Lewinsville HVAC Upgrade**
Location:
Prepared For: **WBA, Attn. Ms. Teresa Hueg**
Prepared By: **George F. Hessler, P.E.**
Revision: **0**
Issue Date: **Dec. 29, 2005**
Reference No: **TM-122905-1**
Attachments:

Attn. Ms. Teresa Hueg

Introduction

This report estimates the sound emissions from the proposed new HVAC equipment and compares the results to the existing acoustic environment. The difference in levels is used to assess any potential noise impact.

The existing environment was measured over a weeklong period and results are reported in Tech Memo TM-122205-1. The new HVAC equipment with potential noise emissions consists of three new rooftop Carrier AHU units (2 present –1 later) and one RF fan discharge on the east wall. All of the equipment is visually screened from view from any adjacent residence by a combination visual screen and acoustic barrier.

No significant impact occurs if the new emission levels are equal to or less than existing levels during sensitive time periods at potentially sensitive receptor locations. Adverse impact could occur if the new levels significantly exceed the existing environment.

It is necessary to consider sound emissions at two heights and distances from the proposed equipment to evaluate or access any potential impact on the adjacent residences. The photos on the next page were taken from the rooftop looking towards the adjacent residences to the west and south. It is shown that the upper floor windows are partially exposed to any roof top noise source. Thus, sound contours will be calculated for this distance and elevation approximately ½ meter above the existing building roof parapet. The other elevation of concern is 1.5 meters above grade at the property lines where compliance with the Fairfax County noise code must be demonstrated. The two elevations will be labeled for modeling as *9 m Above Grade (Res)* and *1.5 m above Grade (PL).*

Site Photographs from project area on roof: Upper photo looking west, Lower photo looking south.

Predicted noise emissions from new HVAC equipment

The sound level at all points and elevations of interest emitted from the new rooftop HVAC equipment can be calculated to generate noise contours. This task is accomplished with the aid of a computer-modeling program expressly written for such applications. The program used is Version 3.0 of "CadNA"; an acronym for computer aided design for noise abatement, published by DataKustik, Ltd., Munich, Germany. All calculations are carried out in accordance with ISO 9613. The U.S. standards organizations are about to approve ISO 9613 for outdoor sound propagation modeling.

Essentially, a scaled three-dimensional drawing of the rooftop and environs is created, and appropriate sound generation sources are applied for all sound radiating surfaces and openings. The sources may be a point, line or planar surface. The sound power level in dB (re.1 pW) for each major noise source is quantified in octave bands for input into the site noise model. The source data, wherever possible, is derived from measured near-field data. For this case, the radiated sound power is conservatively estimated from the supplier's internal fan sound data. The calculated sound power for each unit is 86 dB(A) re. 1 pW, and the equivalent sound pressure at 50 feet away in a free field over a hard ground plane is 68 dBA. The supplier should verify these results.

All models will be deemphasized at the 43 dBA contour, which is the audible threshold for a new sound in this nighttime environment (Residual L90 = 43 dBA at night). This means a very careful and attentive observer could not detect any broadband sound from the plant at 43 dBA or less during the nighttime. During the louder daytime, the audible threshold would be 48 dBA.

Modeling Results

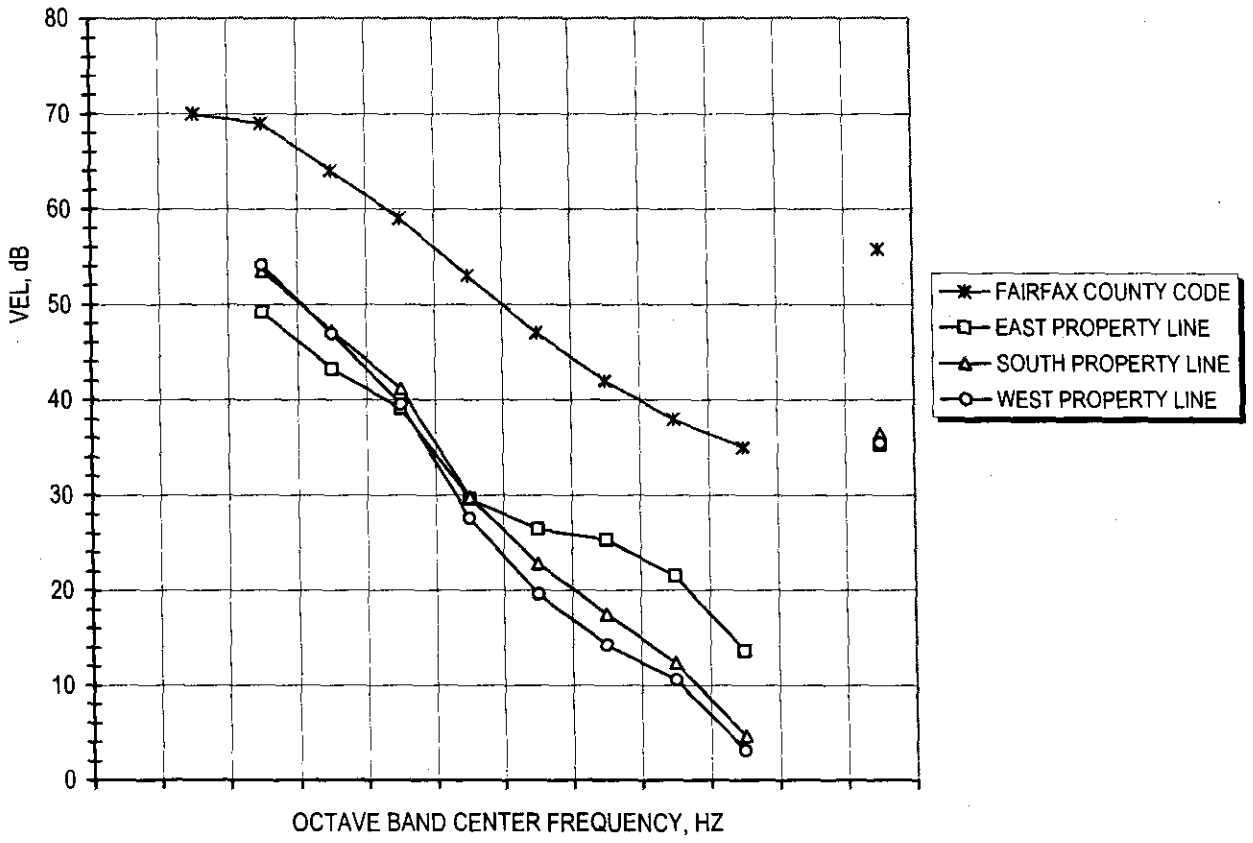
Two computer models were completed and are presented on **Graphics A** and **B** that follow the text.

In addition to the sound level contours there are six discreet points shown on the graphics (two each for the east, west and south directions) and labeled "Prop" for property line and "Res" for incident sound at the closest residence. The points labeled Prop for property line are at an elevation of 1.5 meters above grade and the points labeled Res are at the closest residences at an elevation typical of high upper floor window heights at 9 m (30 feet).

The octave band frequency sound spectra (covers the audible frequency range for young adults) are calculated for these points and are tabulated and plotted on the next page for comparison to the Fairfax County noise code. The plot shows that the expected sound emissions from the new HVAC equipment are nearly 20 dB below the Fairfax County Code in all directions. The north direction, not modeled, would be even less than the presented results. It can be concluded with certainty that all applicable County noise codes will be met.

	OCTAVE BAND CENTER FREQUENCY, HZ									
	31	63	125	250	500	1000	2000	4000	8000	dB(A)
EAST PROPERTY LINE		49	43	39	30	26	25	22	14	**35**
CLOSEST EAST RES.-9M ELEV		48	42	40	31	25	23	19	9	**35**
SOUTH PROPERTY LINE		54	47	41	30	23	18	12	5	**36**
CLOSEST SOUTH RES.-9M ELEV		52	46	43	32	24	19	12	2	**37**
WEST PROPERTY LINE		54	47	40	28	20	14	11	3	**35**
CLOSEST WEST RES.-9M ELEV		56	51	47	36	28	21	14	3	**41**
FAIRFAX COUNTY CODE	70	69	64	59	53	47	42	38	35	**56**

PREDICTED SOUND LEVEL SPECTRA AT PROPERTY LINES COMPARED TO FAIRFAX COUNTY NOISE LIMIT CODE



Graphic A shows the sound emission contours at 1.5 m above grade. Since the building acts as a large sound barrier, the emitted sound levels from the new HVAC equipment at ground level are quite low (35 dBA at west PL), and in fact would not be perceptible at any property line. This is true for the west property line that is only about 20 meters from the building, because in essence, the new equipment noise does not "spill over" the building edge.

On the other hand as noted above, there is a direct line of sight to the equipment to the upper floor windows of the adjacent residences and higher sound levels would be expected. This is confirmed and illustrated on **Graphic B** that shows the sound emission contours at an elevation just above the building edge. The sound level at this elevation is 41 dBA at the closest residence compared to 35 dBA at the PL that is closer to the building.

It is accepted in the scientific community that the smallest increase in sound level that can be readily detected is a 3 dBA increase or decrease. A 5 dBA increase or decrease is more easily detected and a 10 dBA increase or decrease is perceived as a doubling or halving of the sound. If a new source of 43 dBA were introduced to an environment of 43 dBA, the additive increase would be 3 dBA, i.e. the total new level would be 46 dBA (added on an energy basis). Both graphics show that the sound emissions would be imperceptible at any property line and at any residence since the expected level is well below the existing level. This is true during any daily time period including the quietest nighttime period when the ambient baseline sound level is 43 dBA. The threshold of audibility would be 48 and 47 dBA during the daytime (7 am – 7 pm) and evening (7 pm – 10 pm) based on the existing levels at this site.

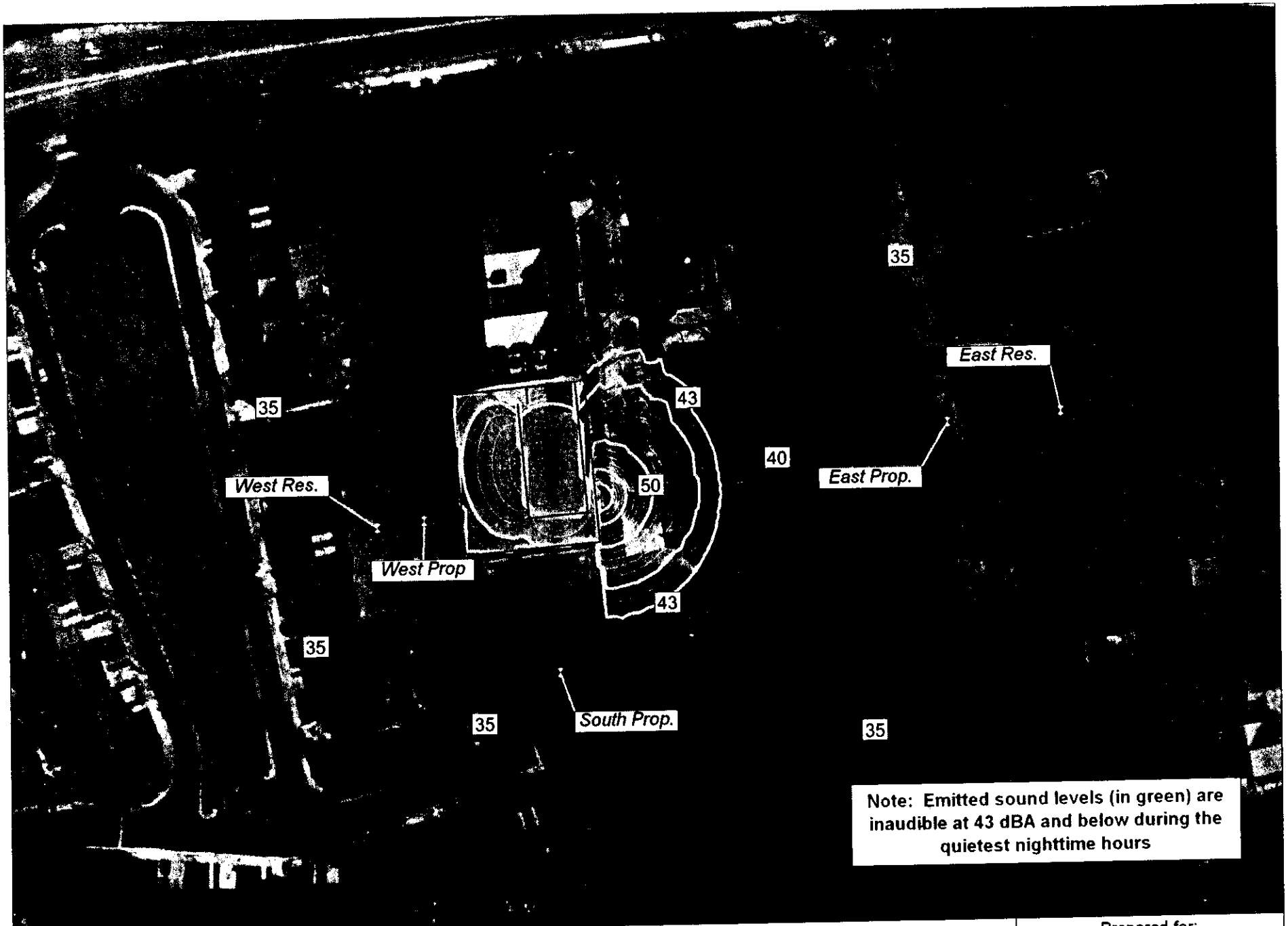
Conclusions

It has been demonstrated that all Fairfax County Code requirements will be met with a very large degree of safety. Furthermore, it has been demonstrated that expected sound emissions from the proposed new HVAC equipment would be quite low and inaudible at the closest residences to the facility in all directions. Based on this analysis it is concluded that the proposed equipment installation will have no noise impact on the surrounding community.

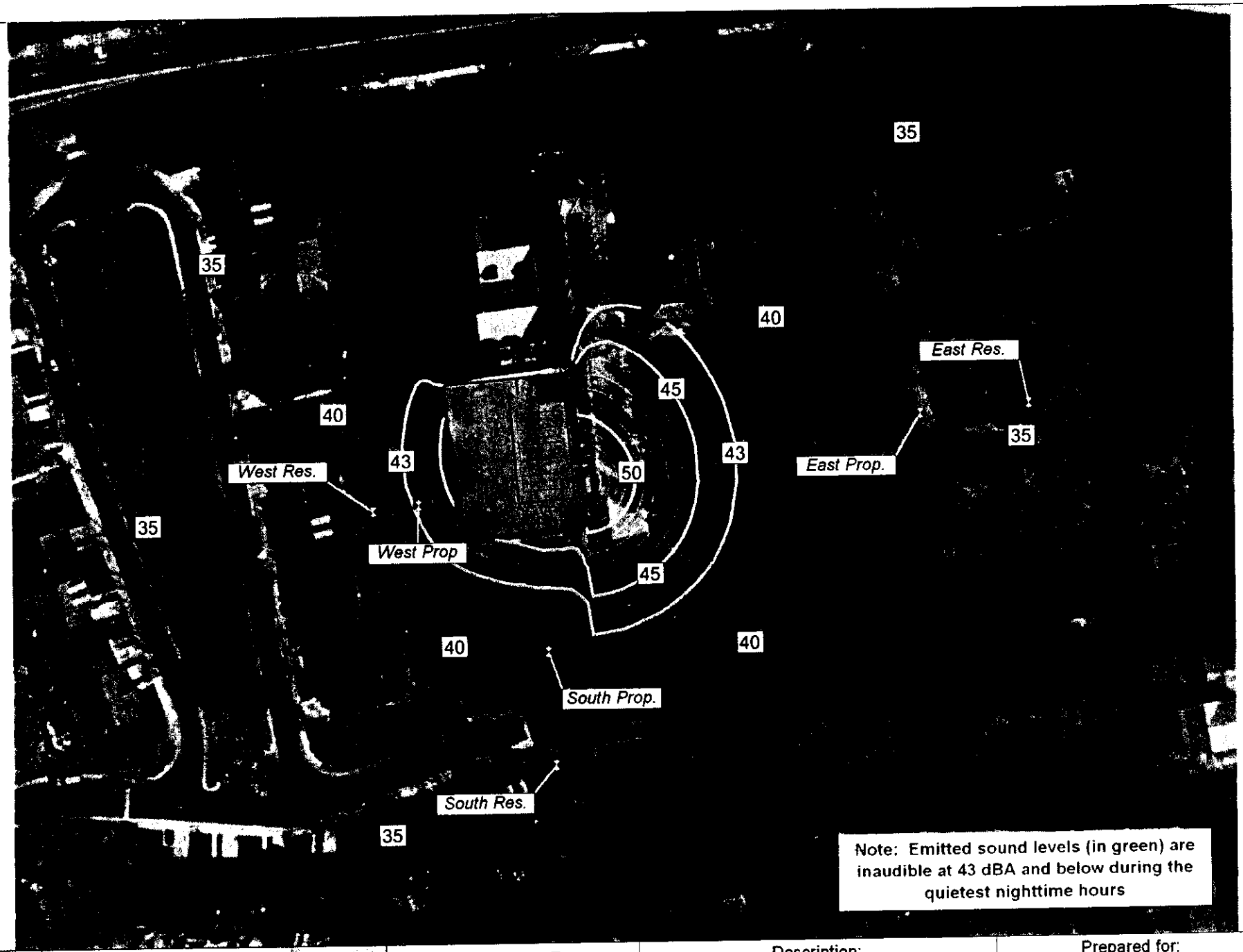
Action Required

As the new equipment is custom designed it is not possible to measure a similar unit for source input into the computer model. The source input has been conservatively calculated based on scaling equations for fans and transmission losses for the fan housings. The equipment supplier should be consulted to verify the model input levels noted above.

End of Text



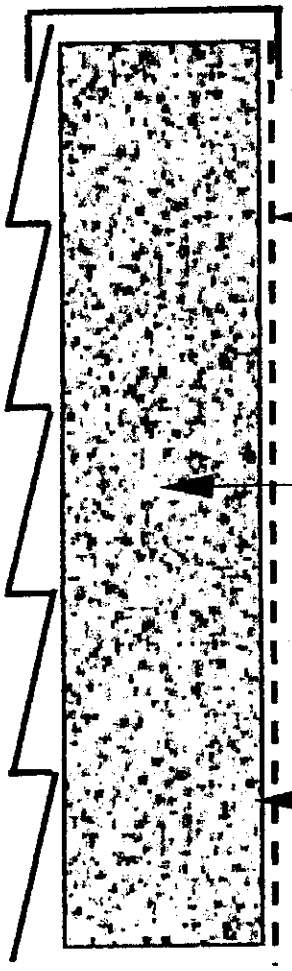
N	Hessler Associates, Inc.	Graphic A Lewinsville CO HVAC Upgrade	Description: Predicted Sound Contours (dBA) 1.5 Meters Above Grade	Prepared for: Verizon
	Drawing #: Mc-Rev-A-122305-1-1			Date: December 28, 2005



N	Hessler Associates, Inc.	Graphic B Lewinsville CO HVAC Upgrade	Description: Predicted Sound Contours (dBA) 9 Meters Above Grade
	Drawing #: Mc-Rev-A-122305-1-2		Prepared for: Verizon Date: December 28, 2005

N

Hessler Associates, Inc.	Graphic A Lewinsville CO HVAC Upgrade	Description: Predicted Sound Contours (dBA) 1.5 Meters Above Grade	Prepared for: Verizon Date: December 28, 2005



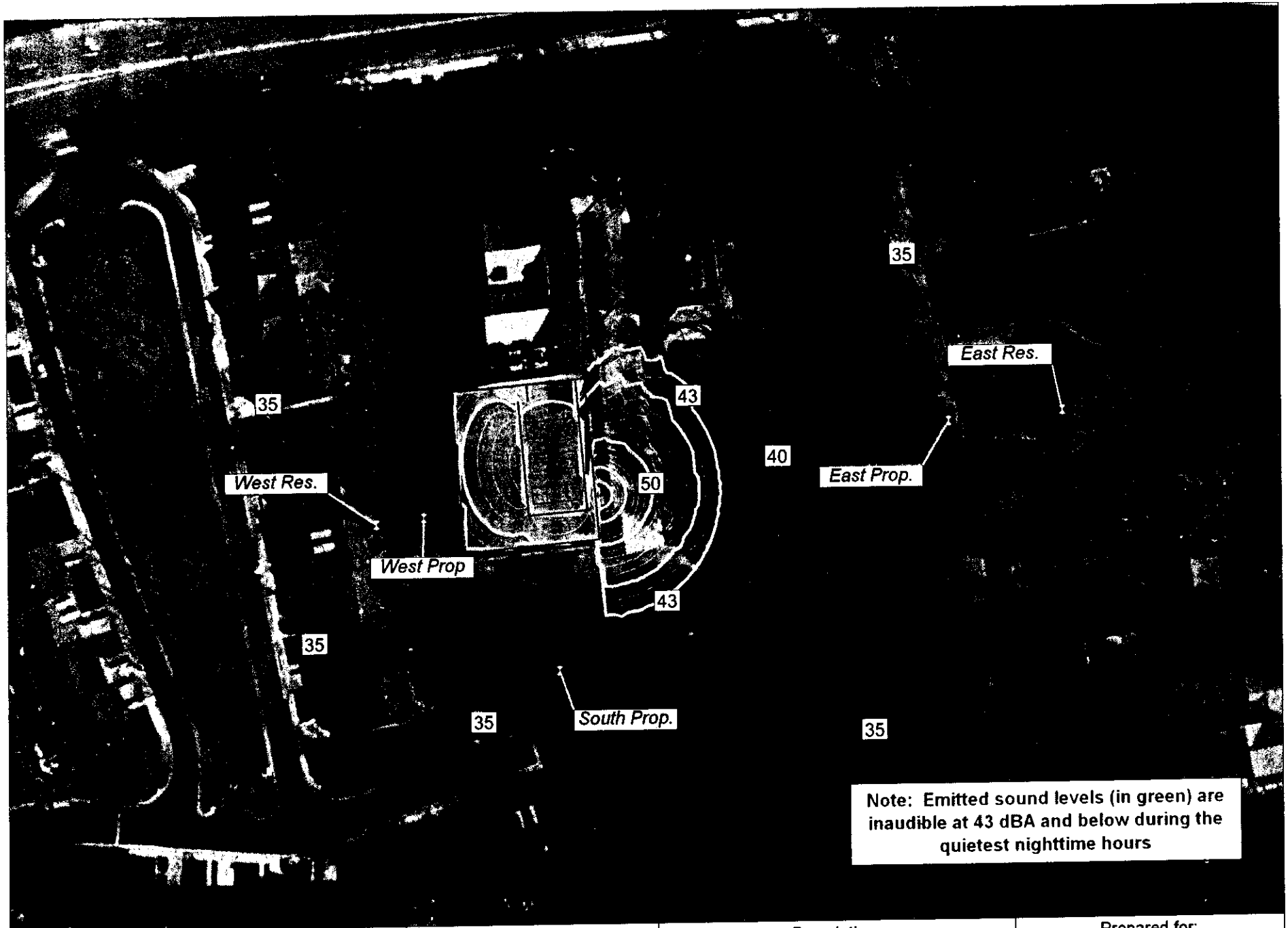
NOISE SOURCE SIDE

PERFORATED OR EXPANDED SHEET METAL
20% MINIMUM 40% MAXIMUM OPEN AREA

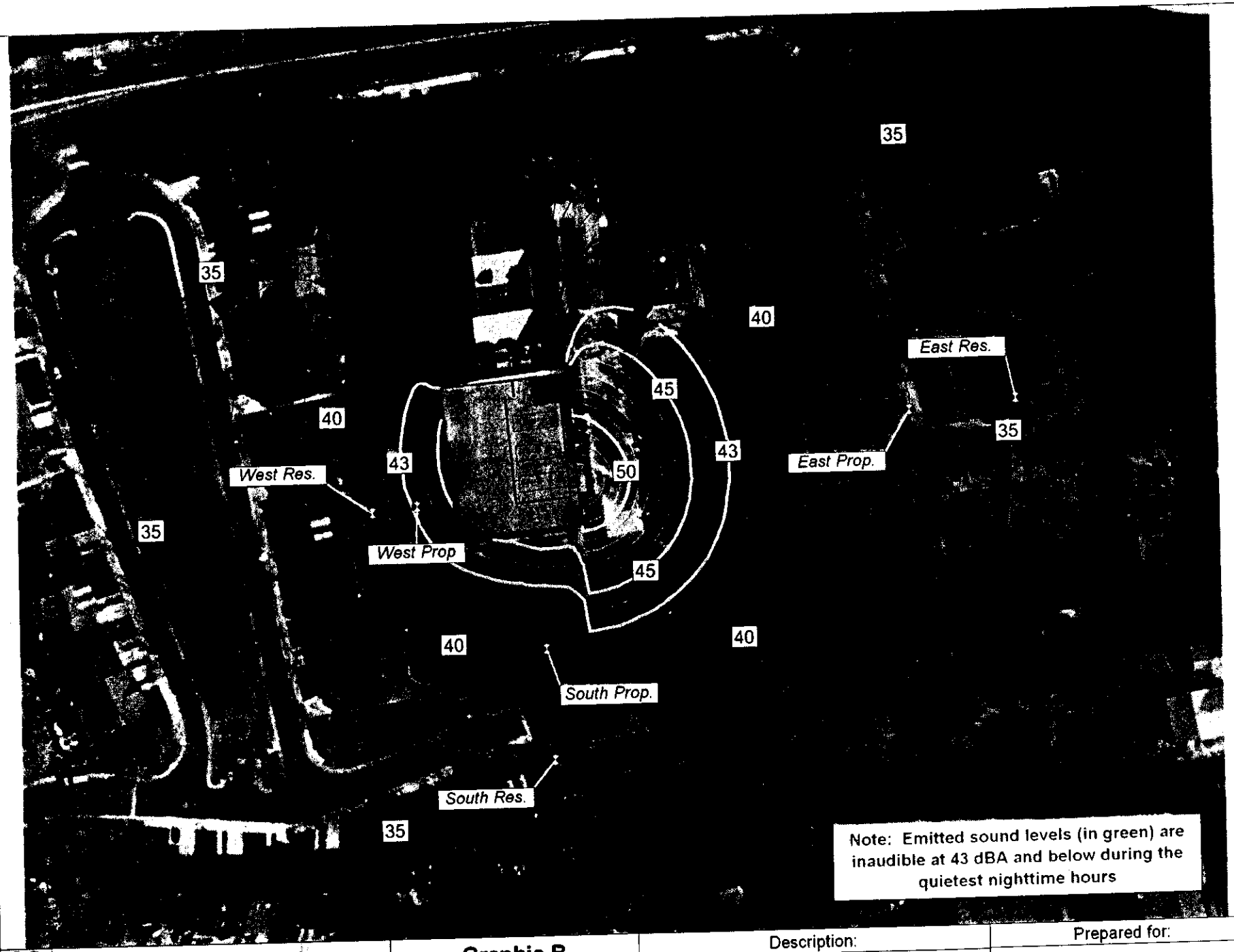
FIBERGLASS OR MINERAL WOOL
SOUND ABSORBING INSULATION
MINIMUM 4" THICKNESS, 3 POUND/CU FT DENSITY
NOISE REDUCTION COEFFICIENT, NRC = > 0.95
(NOTE: 2" MIN THK FOR RF FAN HOOD)

WEATHER PROTECTION
1 MIL MAXIMUM THICKNESS POLYETHYLENE
PLASTIC SHEET WRAPPING (LAUNDRY BAG-REF)

SLOPED FACIA, SOUND BARRIER AND RF FAN HOOD ACOUSITCAL LINING



N	Hessler Associates, Inc.	Graphic A	Description:	Prepared for:
		Lewinsville CO HVAC Upgrade	Predicted Sound Contours (dBA) 1.5 Meters Above Grade	Verizon
	Drawing #: Mc-Rev-A-122305-1-1			Date: December 28, 2005



N	Hessler Associates, Inc.	Graphic B Lewinsville CO HVAC Upgrade	Description: Predicted Sound Contours (dBA) 9 Meters Above Grade	Prepared for: Verizon
	Drawing #: Mc-Rev-A-122305-1-2			Date: December 28, 2005

Hessler Associates, Inc.
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Website: www.hesslernoise.com

TECHNICAL MEMORANDUM

Title:	**Temp Chiller Investigation**
Project:	**Verizon-Lewinsville HVAC Upgrade**
Location:	Lewinsville Facility
Prepared For:	**Winnewski/Belair**
Prepared By:	**George F. Hessler, P.E.**
Revision:	**0**
Issue Date:	**January 17, 2007**
Reference No:	**TM-011707-2**
Attachments:	

Attn. Kevin Farquhar and Teresa Hueg

Introduction

I measured the temporary chiller at Lewinsville today as agreed on yesterday's conference call. The sound spectra at the SE corner of the rear parking lot with and without the chiller are shown below.

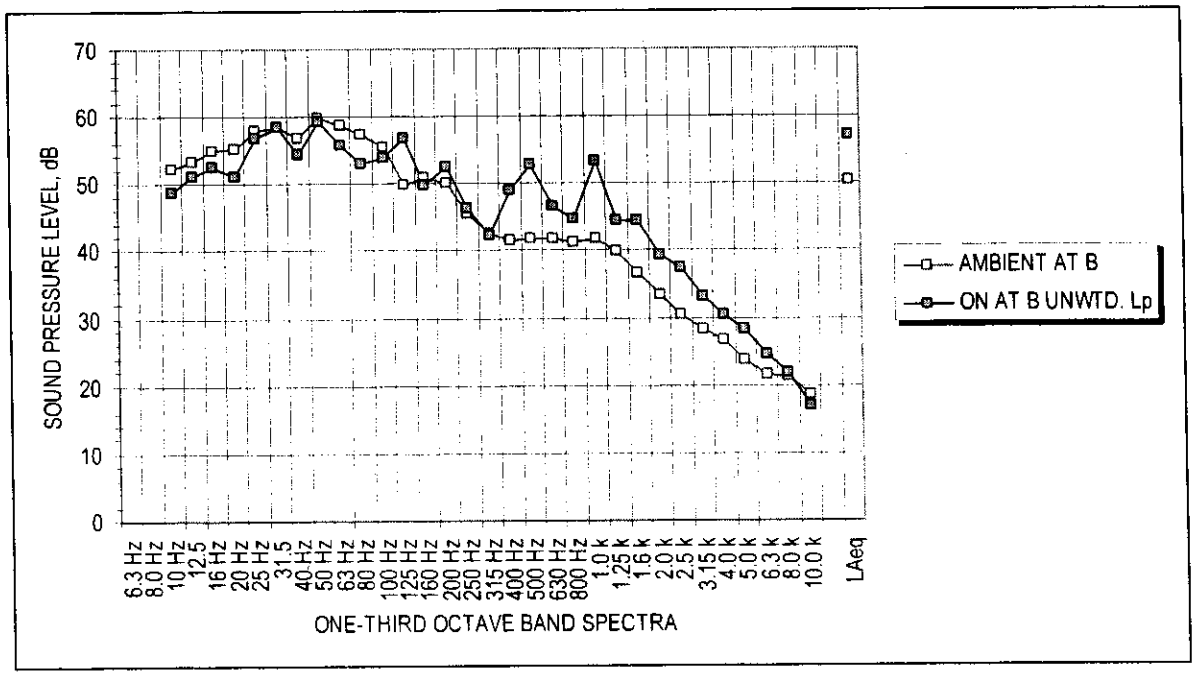


Figure 1

The plot shows there is a 7 dBA increase when the chiller is turned on at this location. The closest sensitive receptors are the town homes due south at about the same distance. However, the chiller is shielded by the building and we expect the level at the homes to be lower, probably a 3 to 4 dBA increase at the closer units. This is a small increase in sound and would be judged as just perceptible if the chiller sound was broadband without any tonal content. The spectra peaks at 500 and 1000 Hz indicate that the chiller is an adverse character sound that is readily identified and could be annoying.

One should assess the character of the noise spectra in addition to level. For example, a swimming pool filter pump can be extremely annoying at very "quiet" levels. The spectrum denoted by the filled symbols in the plot is the actual measured spectra. Our ears detect higher tones easier than lower tones, which is simulated by the A-weighting filter of a sound level meter. The unfilled spectrum plot is the filtered spectra, and we get a better picture of what the chiller sounds like. A listener perceives the peak two tones in the 500 Hz and 1000 Hz bands.

Tonal component noise can be evaluated by how prominent the tones are in the spectrum. The EPA defines a "pure tone" or prominent tone by how much the one-third octave band level containing the tone protrudes above the average level of the two bands on either side of the tonal band. The red line in the plot shows the frequency dependent prominence values that would indicate a tone is present and prominent. At and above this line, the tone is really prominent or 'stands out' in the spectra, and is very annoying based on our experience. Below the line, the tone may still be readily perceptible and audible, but it is less prominent and annoying. The calculated prominence values are calculated and shows a single prominent tone at 1000 Hz at the measured fence line location. Again, this would be lower at the homes but it may be concluded that the tone is at least audible and perhaps annoying.

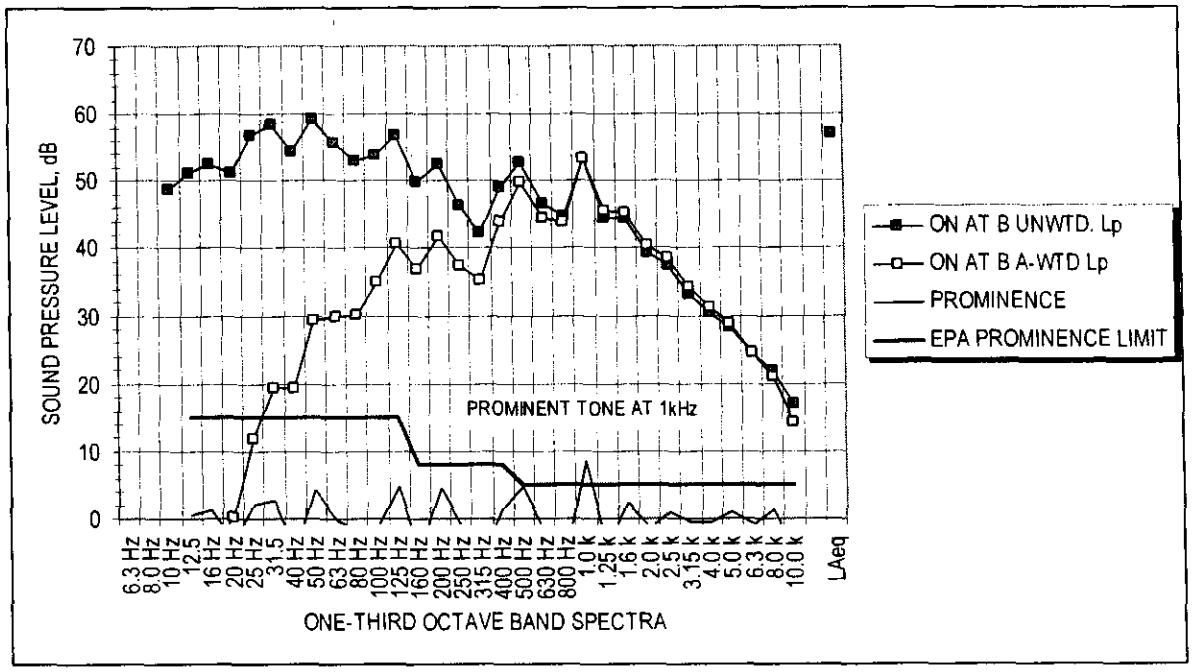


Figure 2

Recommendations

We recommend a moderate amount of noise abatement (3 to 5 dBA) to reduce the chiller noise. There are maintenance and operational issues that limit just how much abatement can be done. These issues were discussed with David Winters on site.

The chiller sits in a concrete well which reflects sound to a large degree in all directions. A noise reduction of 3 to 5 dBA is estimated if sound absorption is strategically located in the well. The attached sketches delineate our recommendations. The barrier wall is only about 4 feet in height and hopefully should not induce any hot air recirculation. The sound absorption on the walls has no adverse effects.

We would be pleased to meet with the neighbors or their architect to discuss this or any other noise issues.

George Hessler

Westberry Homeowners Association

PO Box 983, McLean, VA 22101

8 February 2007

Ms. Barbara J. Nissel
Verizon
319 E. Market Street, 2nd Floor
Leesburg, VA 20176

Dear Beej:

This letter is in response to our discussions regarding the fence at the rear of the Verizon facility on Chain Bridge Road in McLean, VA. On behalf of the Westberry Homeowners Association (WHOA), our Board of Directors requests that Verizon replace its existing six foot fence with an eight foot fence. We strongly believe that a taller fence will better screen Westberry homeowners from Verizon's vehicle and equipment noise.

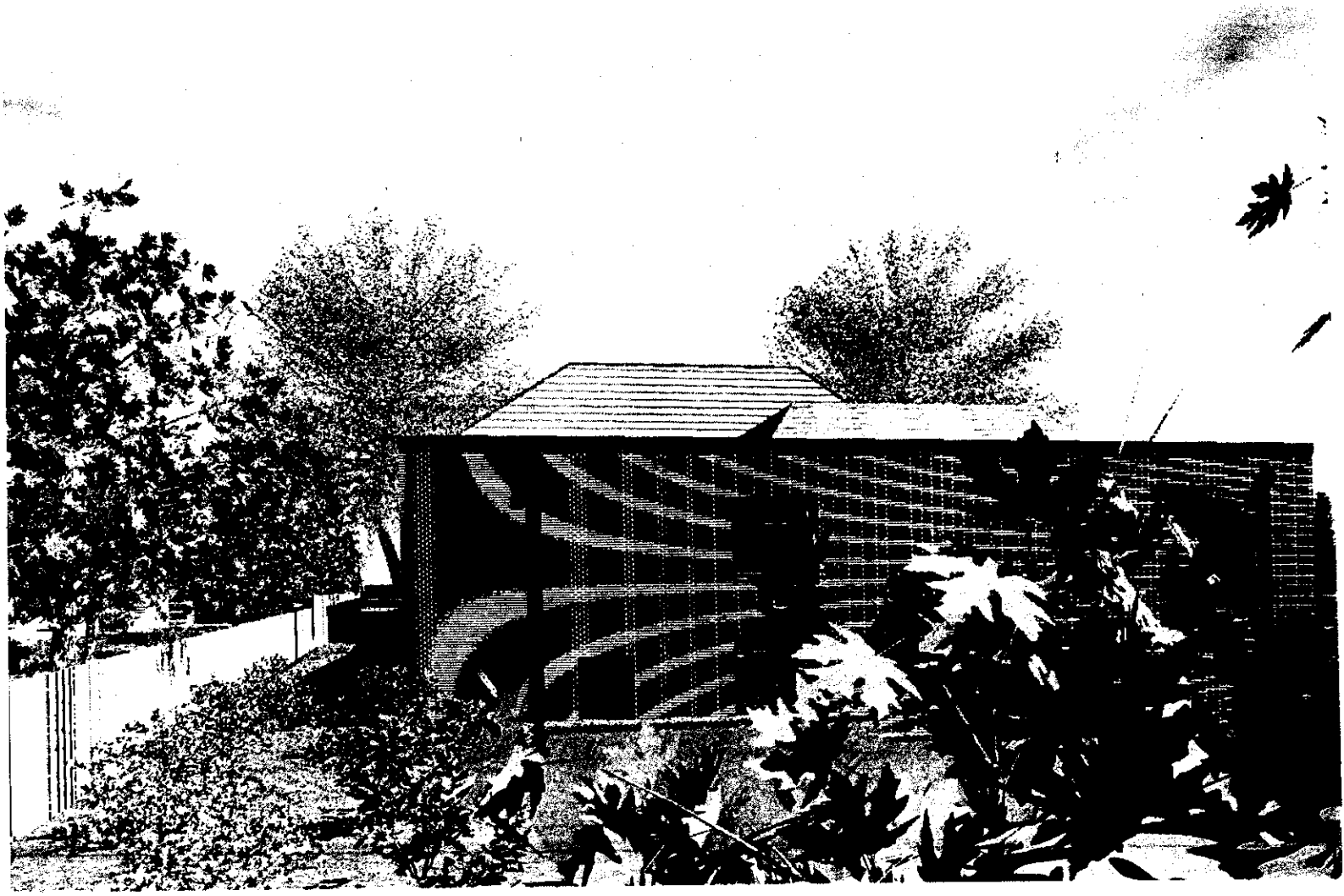
Our Board of Directors also requests that Verizon install the new eight-foot fence straight back from the western edge of their main office building. We strongly believe that widening the space between Westberry's property and Verizon's fence will create an open area that could be made more attractive with additional tree plantings.

Thank you for your courtesy and consideration in this matter. We are sure that your positive response to these two requests will be viewed by our WHOA as a major step forward in our working relationship with Verizon.

Yours truly,

Ann B. Alexander

Ann B. Alexander
President, Westberry Homeowners Association



Current 2-unit proposal

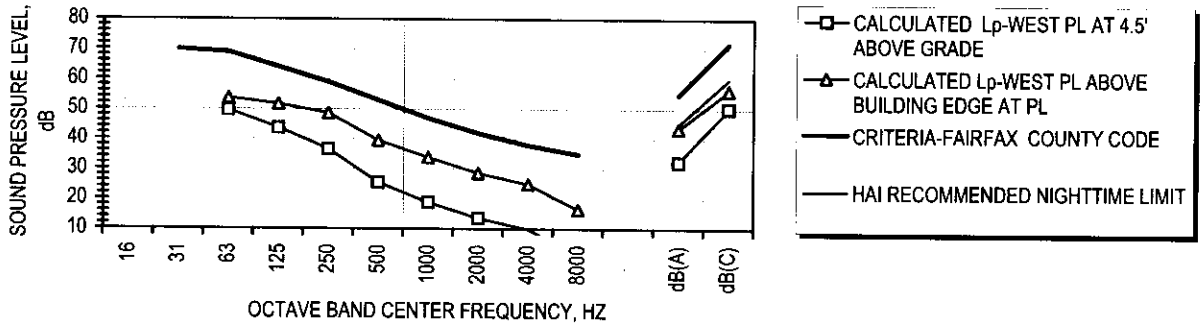
Original 3-unit proposal

TABLE: 1
CLIENT/PROJECT: WBA/LEWINSVILLE AIR HANDLERS
CALCULATION: FIRST APPROXIMATION
DATE / REVISED: 12/15/05

Hessler Associates, Inc.
Consultants in Engineering Acoustics

		OCTAVE BAND CENTER FREQUENCY, HZ												
		16	31	63	125	250	500	1000	2000	4000	8000	dB(A)	dB(C)	dB(AP)
A: ANALYZE TO WEST PL AT AN ELEV OF 4.5' ABOVE GRADE														
CARRIER 39M AIR HANDLER UNIT, Lw INLET				88	86	83	74	69	64	61	55	78.1	90.8	
PATH ATTENUATION:														
HEMISPHERICAL SPREADING, R,feet=	120			-39	-39	-39	-39	-39	-39	-39	-39			
DIRECTIVITY, 0-110 DEG.(HAI), ANGLE=	NONE			0	0	0	0	0	0	0	0			
AIR ABSORPTION,59F(15C)70%RH (EEI), R=	120			0	0	0	0	0	0	-1	-3			
ANOMALOUS EXCESS ATTN. (EEI), R=	120			0	0	0	0	0	0	0	0			
NUMBER OF IDENTICAL SOURCES=	3			5	5	5	5	5	5	5	5			
MISCELLANEOUS	0			0	0	0	0	0	0	0	0			
EST. BARRIER ATTENUATION				-4	-8	-12	-14	-15	-15	-15	-15			
SUM OF PATH ATTENUATION:				-39	-43	-47	-49	-50	-50	-51	-53			
CALCULATED Lp-WEST PL AT 4.5' ABOVE GRADE				50	44	37	25	19	14	10	1	**32.3**	50.2	
CRITERIA-FAIRFAX COUNTY CODE			70	69	64	59	53	47	42	38	35	55.0	71.8	
B: ANALYZE TO WEST PL AT AN ELEV ABOVE MAIN BUILDING EDGE														
CARRIER 39M AIR HANDLER UNIT, Lw INLET				88	86	83	74	69	64	61	55	78.1	90.8	
PATH ATTENUATION:														
HEMISPHERICAL SPREADING, R,feet=	120			-39	-39	-39	-39	-39	-39	-39	-39			
DIRECTIVITY, 0-110 DEG.(HAI), ANGLE=	NONE			0	0	0	0	0	0	0	0			
AIR ABSORPTION,59F(15C)70%RH (EEI), R=	120			0	0	0	0	0	0	-1	-3			
ANOMALOUS EXCESS ATTN. (EEI), R=	120			0	0	0	0	0	0	0	0			
NUMBER OF IDENTICAL SOURCES=	3			5	5	5	5	5	5	5	5			
MISCELLANEOUS	0			0	0	0	0	0	0	0	0			
EST. BARRIER ATTENUATION				0	0	0	0	0	0	0	0			
SUM OF PATH ATTENUATION:				-35	-35	-35	-35	-35	-35	-36	-38			
CALCULATED Lp-WEST PL ABOVE BUILDING EDGE AT PL				54	52	49	39	34	29	25	16	**43.4**	56.2	
CRITERIA-FAIRFAX COUNTY CODE			70	69	64	59	53	47	42	38	35	55.0	71.8	
HAI RECOMMENDED NIGHTTIME LIMIT												45.0	60.0	

EST. LEVEL FROM AHU UNITS AT WEST PL



APPENDIX 7

FAIRFAX COUNTY
VIRGINIA

OFFICE OF THE CLERK
BOARD OF SUPERVISOR
12000 Government Center Parkway, Suite 53
Fairfax, Virginia 22035-007

Telephone: 703-324-315
FAX: 703-324-392
TDD: 703-324-390

June 30, 1997

Carson Lee Fifer, Jr. Esquire
McGuire, Woods, Battle and Boothe, L.L.P.
8280 Greensboro Drive - Suite 900
McLean, Virginia 22102-3892

RE: Special Exception
Number SE 97-D-020

Dear Mr. Fifer:

At a regular meeting of the Board of Supervisors held on June 23, 1997, the Board approved Special Exception Number SE 97-D-020 in the name of Bell Atlantic Corporation, formerly known as Chesapeake and Potomac Telephone Company of Virginia, located at Tax Map 30-3 ((1)) 46, for use as a telecommunications facility pursuant to Section 3-104 of the Fairfax County Zoning Ordinance, by requiring conformance with the following development conditions:

1. This Special Exception is granted for and runs with the land indicated in this application and is not transferable to other land.

2. This Special Exception is granted only for the purpose(s), structure(s) and/or use(s) indicated on the Special Exception Plat approved with the application, as qualified by these development conditions.

3. This Special Exception is subject to the provisions of Article 17, Site Plans, as may be determined by the Department of Environmental Management (DEM). Any plan submitted pursuant to this Special Exception shall be in conformance with the approved Special Exception Plat entitled Special Exception, Lewinsville Communications Center and prepared by BC Consultants which is dated February, 1997, revised through June 17, 1997 and these conditions.

4. Transitional screening shall be provided along the northern lot line and along the southern lot line as shown on the Special Exception Plat, subject to the review and approval of the Urban Forestry Branch, DEM. The barrier requirement shall be waived along the northern, eastern, and western and southeastern lot lines. A tree preservation/landscape plan showing the location, size and type of plantings along the northern lot line adjacent to the proposed building and adjacent to the transformer, and south section of the western lot line, adjacent to the existing parking lot on the outside of the existing fence, but contingent upon homeowner consent, shall be submitted to the County Urban Forestry Branch and to homeowner representatives from the Westbury Homeowners Association at the time of site plan review. Final review and approval shall rest with the Urban Forestry Branch.

5. If the requested stormwater management waiver is granted, the area shown on the plat as a stormwater management area shall remain undisturbed. If the requested stormwater management waiver is not granted, transitional screening as determined by the County Urban Forester and a six foot high board-on-board fence shall be provided adjacent to the stormwater management area.

6. The testing of the generators shall be limited to one 30-minute test per month between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday.

7. The proposed generator facility shall be architecturally similar to the existing building and residential in appearance. The four sided building shall be all brick with mutton windows matching the existing building, and the roof shall be slate or appear to look like slate to match the existing building.

8. No additional lights shall be added on site, other than a building mounted security light over the entrance to the proposed structure.

This approval, contingent on the above noted conditions, shall not relieve the applicant from compliance with the provisions of any applicable ordinances, regulations, or adopted standards. The applicant shall be himself responsible for obtaining the required Non-Residential Use Permit through established procedures, and this Special Exception shall not be valid until this has been accomplished.

Pursuant to Section 9-015 of the Zoning Ordinance, this Special Exception shall automatically expire, without notice, thirty (30) months after the date of approval unless the use has been established or construction has commenced and been diligently prosecuted. The Board of Supervisors may grant additional time to establish the use or to commence construction if a written request for additional time is filed with the Zoning Administrator prior to the date of expiration of the Special Exception. The request must specify the amount of additional time requested, the basis for the amount of time requested and an explanation of why additional time is required.

The Board also:

- **Modified the transitional screening requirement and waived the barrier requirement along all lot lines to that shown on the Special Exception Plat;**

- **Modified the trail requirement to allow the existing concrete sidewalk to remain in lieu of construction of a six foot asphalt trail.**

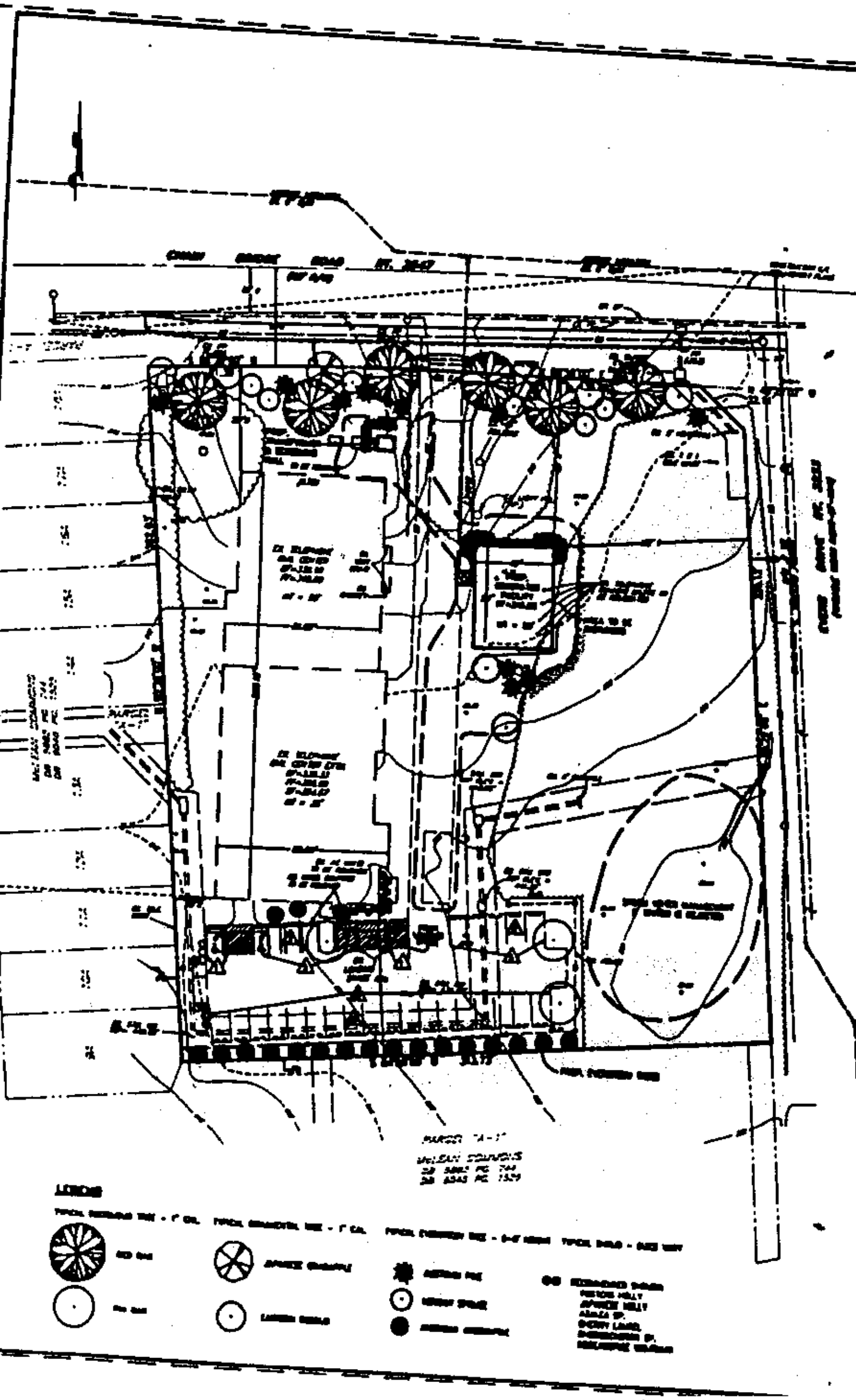
If you have questions regarding the expiration of this Special Exception or filing a request for additional time they should be directed to the Zoning Evaluation Division of the Office of Comprehensive Planning at 703-324-1290. The mailing address for the Zoning Evaluation Division is Suite 801, 12055 Government Center Parkway, Fairfax, Virginia 22035.

Sincerely,

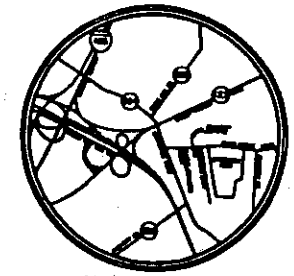
Nancy Vehrs

Nancy Vehrs
Clerk to the Board of Supervisors

NV/ns



NOTES:



VICINITY MAP

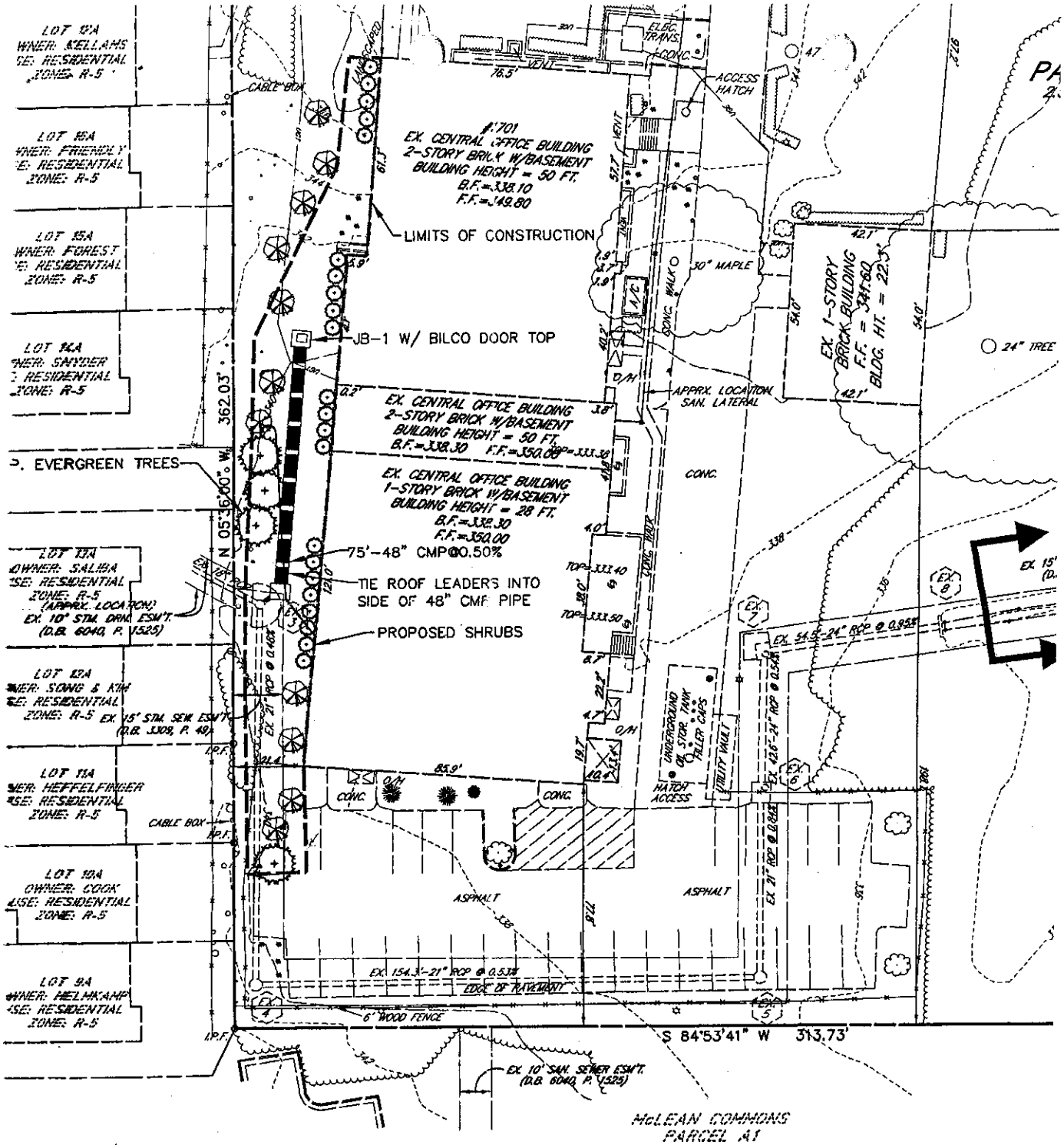
TREE COVER CALCULATION

SITE TABULATIONS

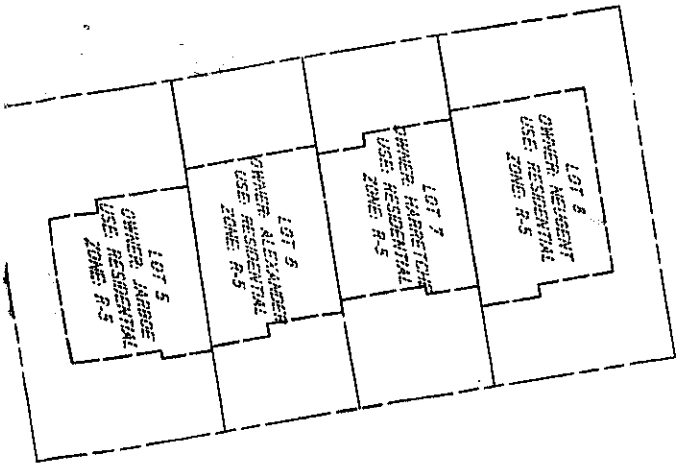
LEWINSVILLE COMMUNICATIONS CENTER

SPECIAL EXCEPTION

BC Consultants



CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHI
C1	95.73'	1567.02'	03°30'01"	47.88'	95.72'	S88'



TREE COVER CALCULATION

TOTAL SITE AREA	110,847	S.F.
DEDUCTIBLE AREA		
PROP. BLDG. SF.	49,641	S.F.
ADJUSTED SITE AREA	61,206	S.F.
TREE COVER REQUIRED (20%)	12,241	S.F.
TREE COVER TO BE PROVIDED BY PLANTING	5,475	S.F.
EXISTING TREE COVER AREA (24,508 SF x 1.25) (TO BE FIELD LOCATED)	30,635	S.F.
TOTAL TREE COVER (59.0%)	39,110	S.F.

SITE TABULATIONS

EXISTING ZONE	R-3
SITE AREA	110,847 S.F. (2.5447 ac.)
EX. GROSS FLOOR AREA	47,373 S.F.
PROP. GROSS FLOOR AREA	2,268 S.F.
EX. FAR	0.36
PROPOSED FAR	.45
PROPOSED TOTAL FLOOR AREA	49,641 S.F.
MAX. ALLOWABLE FAR (NOT APPLICABLE UNDER CATEGORY 1 SE)	.30 PUBLIC USE .25 OTHER USE
PARKING SPACES REQUIRED 1 SPACE/1.5 EMPLOYEES 1 SPACE/COMPANY VEHICLE	21 SPACES
14 EMPLOYEES NO COMPANY VEHICLES	28 SPACES
EX. PARKING SPACES	30 SPACES
EX. LOADING SPACES	1 SPACE
PROPOSED PARKING SPACES 26 REGULAR SPACES 2 HANDICAP SPACES	28 SPACES (TOTAL)
PROPOSED LOADING SPACES 12' LOADING SPACES: 2 15' LOADING SPACES: 1	3 SPACES (TOTAL)
MAX. HEIGHT ALLOWED	60'
MAX. HEIGHT PROPOSED	50'

COMMONWEALTH OF VIRGINIA
LOUIS H. SCALON
No. 016193
3-13-97
PROFESSIONAL ENGINEER

SPECIAL EXCEPTION

LEWINSVILLE COMMUNICATIONS CENTER

DRANESVILLE DISTRICT
FAIRFAX COUNTY, VIRGINIA

BC REVISIONS
REVISED 03/13/97

OWNER
TELEPHONE CO OF VA
CHESAPEAKE AND POTOMAC
DIST MGMT REAL ESTATE
930 H STREET NW
WASHINGTON, DC 20001

PUBLIC FACILITIES

APPENDIX 8

INTRODUCTION

Public facilities are those facilities required to support the services and functions provided by the County government or public utility companies. Such facilities are essential to support the community and its development and to enhance the overall quality of life. Public facilities include such necessities as water and sewer lines and police and fire protection, as well as educational and cultural services. In addition, they also include human service providers and parks and recreation, although these facilities and services are discussed in separate sections of the Comprehensive Plan.

The vigorous growth of Fairfax County has been paralleled by demands for public services and facilities. The County's present system of public facilities demonstrates a high commitment to service provision and the community's expectations. However, as the infrastructure in currently developed portions of the County ages, there will be increased competition between newer and older areas for facility dollars. Therefore, it will become increasingly important to cause future development to occur in concert with adequate public facilities, if the existing level of service is to be maintained in a fiscally sound manner.

The Public Facilities Element of the Comprehensive Plan recognizes that the level of public services enjoyed by County residents is a significant local attribute and its continuation requires sound and supportable planning guidelines. These must not only ensure that there is a balance between the County's future land use intensity and facility quantity, but that new facilities are located to maximize accessibility while minimizing neighborhood impact. Therefore, it is the purpose of this Plan element to provide specific guidance on the following:

- the appropriate general location of new facilities;
- appropriate specific locational criteria, such as site size, access, and screening for different facility types;
- service level standards which indicate the number of new facilities;
- methods for determining the specific need and appropriate timing of facilities;
- the acceptable character and extent of facilities and measures for attaining them.

The primary mechanisms for applying this guidance and ensuring a well balanced and adequate public facility system, is through both the Capital Improvement Program and 2232 Review processes. These mechanisms are important tools for implementing the County's public facilities plan. They will be guided by the standards and guidelines identified in the Public Facilities Element of the Comprehensive Plan.

The County's Capital Improvement Program guides the development of public facilities over a five year period. It shows the arrangement of projects in a sequential order based on a schedule of priorities and assigns an estimated cost and anticipated method of funding each project. The Capital Improvement Program provides the financial foundation necessary to implement plans.

The County's 2232 Review process is a mechanism for reviewing the compatibility of proposed public facilities with the locational guidelines established in the Comprehensive Plan. Specifically, this process is used to determine if the general or approximate location, character and extent of a proposed facility are in substantial accord with the Plan.

BOARD OF SUPERVISORS GOALS

There are six Board adopted goals which relate directly to public facilities: Growth and Adequate Public Facilities, Adequate Public Services, Education, Culture and Recreation, Land Use, and Financial Planning and Management. These goals establish the basis for public facilities planning in Fairfax County as articulated by the objectives and policies in this element of the Comprehensive Plan. Overall, these goals emphasize the following:

- that the County is committed to a high level and quality of public services;
- that growth and new development should be held to a level consistent with the adequacy and accessibility of existing facilities and phased in accordance with the County's ability to provide new ones;
- that the County should ensure a quality education system by providing comprehensive education, training programs and facilities;
- that the County should provide a local system of libraries and cultural programs and facilities; and,
- that the County should support an equitable system of taxation and user charges to provide quality services and facilities to residents.

These goals also underscore the idea that public facilities, and the County's ability to provide them, is essential to maintaining the quality of life in the County and that a careful balance between land use decisions should be made only after public facility service implications are fully addressed.

COUNTYWIDE OBJECTIVES AND POLICIES

The overall Public Facilities element of the Comprehensive Plan is based on general objectives which apply to the County's public facility planning effort as a whole and specific functional program areas in particular. These objectives therefore should be viewed as the key principles for establishing a facility network which is responsive to the County's ability to pay, community expectations, the public health, safety and general welfare, and neighborhood and land use impacts.

Objective 1: **Locate new facilities to provide convenient service to the greatest number of people or service consumers and users.**

Policy a. Site facilities appropriately to the area they are intended to serve.

Policy b. Reduce service area overlap between like facilities, unless overlap is necessary to correct service deficiencies.

Policy c. Site facilities in accordance with locational standards that maintain accepted levels of service while reducing duplication or underutilization.

Policy d. Ensure that minimum populations or service thresholds are projected to be met before facility construction is undertaken.

Objective 2: **Construct and maintain facilities in accord with expected levels of service objectives and fiscal limitations.**

Policy a. Program the establishment of facilities through the County's Capital Improvement Program. Projects programmed for construction in the CIP should either be 1) identified in the plan text or on the Plan map in accordance with adopted service levels; 2) be demonstrated as particularly urgent to meet public health or safety needs or required service levels; or 3) be supported by a needs analysis reviewed both by the Offices of Comprehensive Planning and Management and Budget and supported by the County Executive's recommendation as evidenced by CIP inclusion.

Policy b. Follow adopted public facility standards to identify facility requirements associated with level of need, appropriate quantity and size, and relationship to population.

Policy c. Ensure adequate maintenance of existing facilities.

Objective 3: **Balance the provision of public facilities with growth and development.**

Policy a. Construct new facilities in size and quantity which is consistent with projected population needs.

Policy b. Ensure that adequate facility space and services are available, programmed in the CIP, or provided by new development, before increasing planned intensities through revision of the Comprehensive Plan.

Policy c. Assess the adequacy and need for public facilities in the rezoning process.

Policy d. Phase increases in development intensity with the establishment of necessary facilities, when rezoning to higher intensities is to occur prior to the establishment or programming of adequate facilities.

Policy e. Designate and reserve future public facility sites that will be required by future growth and development.

Policy f. Ensure that when existing public facility sites are no longer needed for their original use, the land formerly used for that purpose is reserved, to the extent possible and prudent, for other public uses.

Policy g. Acquire, as fiscally possible, sites for public facilities in advance of demand either through purchase or dedication.

Objective 4: **Mitigate the impact of public facilities on adjacent planned and existing land uses.**

Policy a. Locate public facilities in areas of compatible land use, if service efficiency and cost effectiveness can be achieved. Siting facilities in areas of different land uses is acceptable and at times required, to provide centrally located public facilities

which are critical to the public interest as long as the integrity of the Comprehensive Plan is not impinged.

Policy b. Co-locate public facilities whenever appropriate to achieve convenience and economies of scale, as long as the integrity of the Comprehensive Plan is not impinged.

Policy c. Design facilities to promote and enhance the community identity of existing character.

Policy d. Ensure that public facilities are properly screened and buffered in order to mitigate visual impact on adjacent planned development of a different use or nature.

Policy e. Ensure that site size and development conforms to all requirements of the Fairfax County Zoning Ordinance and exceeds site acreage requirements, as possible, to achieve maximum compatibility with surrounding land uses.

Objective 5: Acquire sites which are appropriate for the facility's specific purpose. Apply acceptable criteria when evaluating public facility sites.

Policy a. Consider accessibility in siting facilities. In general, public facilities should have access to primary arterial roadways. Exceptions to this locational principle include facilities with a community pedestrian orientation, such as a neighborhood park or an elementary school.

Policy b. Locate facilities on sites which have adequate acreage for short-term needs, but can also accommodate expansion.

Policy c. Avoid areas of environmental sensitivity except where site acquisition is in support of open space.

Policy d. Evaluate engineering considerations, such as slopes and soils and other factors pertinent to knowing the extent of the site's development cost.

Policy e. Locate, as possible, facilities on sites with public water and sewer.

Policy f. Locate facilities on sites preferably having mature vegetation, capable of providing a natural buffer and enhancing building design.

Policy g. Use the 456 Process to determine the siting suitability and appropriateness of facilities in relation with the Comprehensive Plan.

THE PUBLIC FACILITIES ELEMENT

The Public Facilities Element of the County's Comprehensive Plan is organized in four major sections: Education - Higher Education and Public Schools; Libraries; Public Safety - Police, Fire and Rescue, Sheriff, Courts and Animal Control; and Utilities and Services - Water Supply, Sanitary Sewer, Solid Waste, Drainage Systems and Stormwater Management Facilities, County Vehicle Maintenance Facilities, Gas, Electric, Telephone, and Communication Towers.

For each of these sections findings and issues are discussed and planning guidelines are presented. In most cases these guidelines provide policies and standards for the following factors:

Location - where should facilities be located in order to provide accessibility, support planned land uses, and adequately serve their function.

Character and Extent - the quantity of the facility which should be constructed in relation to the population, the appropriate facility size, and design requirements to achieve neighborhood compatibility.

Other - factors which must be addressed to provide an acceptable level of service or community or user benefit.

EDUCATION

Fairfax County residents are offered a full and varied range of educational opportunities through the County's public school system and the presence of both a community college and a four-year university.

PUBLIC SCHOOLS

INTRODUCTION

Fairfax County Public Schools (FCPS) is the major provider of education in the County. This system, which has been nationally recognized for excellence and is one of the largest school system in the nation, has a wide range of educational facilities that accommodate instructional programs for County students from kindergarten through grade 12. In addition to accommodating educational programs, school facilities are used to meet the recreational and cultural needs of the County through programming by the Department of Recreation and Community Services. Generally, separate facilities are provided to serve three levels of education:

- Elementary _____ kindergarten to grade 6
- Intermediate _____ grades 7 and 8
- High _____ grades 9 through 12

Additionally, FCPS has an extensive adult education program, and many specialized educational programs. Special education programs serve mentally and physically handicapped students, ranging in age from 2 to 22. The Family and Early Childhood Education Program (FECEP), formerly known as Head Start, is a preschool program operated primarily in elementary schools for children ages 4 and 5.

The fundamental element in capital facility planning for public schools is determining future memberships, a complex procedure which continues to be refined. The school system employs a combination of two statistical methodologies, a modified cohort-survival model and the cohort-component model, for projecting student populations. The cohort-survival model is based on expected birth and migration rates and the cohort-component model modifies survival ratio projections to account for special events that effect projections, such as students generated by new housing. The latter model employs housing student-generation yields using a computer-assisted geographic planning model, which aggregates estimates to attendance area level. These estimates are then incorporated into the cohort-survival generated attendance area estimates. These models are

UTILITIES AND SERVICES

The provision of utility infrastructure is essential to development. Homes and businesses cannot function without water, electricity and a system of waste disposal. Other services, such as telephones, communication towers, and cable television, are highly preferable in a region which thrives on the rapid exchange of information. Additionally, the County government constructs drainage systems to correct drainage problems and maintains extensive garage and maintenance facilities for County vehicles.

The following utilities and services are addressed in this section:

- Water Supply
- Sanitary Sewer
- Solid Waste
- Drainage Systems and Improvements
- County Vehicle Maintenance Facilities
- Public Utilities
  - gas
  - electric
  - telephone
- Communication Towers

ELECTRICAL AND LAND-LINE UTILITY SERVICES

INTRODUCTION

Electrical and land-line utility services include electrical, communication and cable facilities, which are provided through a wired infrastructure and viewed, for the most part, as absolute necessities. The need for electrical, communication, and cable facilities accelerates commensurate with development. As the need for sites increases, so does the scarcity of appropriate land for construction of these facilities. The objectives and policies set forth in this section provide guidance on siting and design issues and are to be used in evaluating land use applications. They should not be interpreted as superseding or amending any requirements of the Zoning Ordinance or other local, state and Federal laws pertaining to these issues.

Objective 40: **Locate electrical and land-line service facilities to provide maximum service levels as unobtrusively as possible. (See Figure 7.)**

Policy a. Avoid areas of environmental sensitivity.

Policy b. Collocate facilities such as distribution and transmission poles, switching and hub centers and electrical substations whenever feasible and appropriate to minimize visual and neighborhood impacts.

Policy c. Plan for existing and future needs of facilities in conjunction with emerging development designs.

Policy d. Provide adequate acreage for expansion of substations, hub centers and equipment areas and maintain levels of screening to accommodate expansion.

Policy e. Locate future switching and hub centers, equipment areas, and electrical substations on sites, which shield nearby residences from noise, while affording privacy and safety.

Policy f. Construct underground transmission and distribution lines, whenever possible, along existing or planned utility or road rights-of-way, preferably on lot lines which will least disturb future development of the site.

Policy g. Locate future above-ground transmission lines along railroad rights-of-way, where possible, and when in keeping with adjacent development. Placement of transmission lines should not compromise the objectives of the Comprehensive Plan. Visual impact should be a key element in the evaluation of proposed transmission line locations.

Policy h. Regulate new development to minimize unnecessary human exposure to unhealthful impacts of low level electromagnetic fields from electrical transmission lines.

Policy i. Utilize existing towers and poles to support electrical and land-line utility services whenever possible, to reduce the need for new towers and poles. However, avoid overloading existing towers and poles with related equipment.

Policy j. Locate new towers required to support electrical and land-line utility services in areas of commercial or industrial land uses. Locate in residential areas only when other, more suitable land uses are not available, and on parcels, which afford natural screening adjacent to nearby structures or planned land uses.

Objective 41: Meet service area requirements with a minimum of facilities and ensure that those facilities are designed to minimize impacts on adjacent properties.

Policy a. Provide justification for the proposed facility's need. Specify alternative actions and justify why the proposed location and type of facility is the least disruptive.

Policy b. Mitigate the visual impact of switching and hub centers, equipment areas and electrical substations from adjacent development. Land with existing mature vegetation is preferable, as are access roads which obscure entrances, berms which provide screening, and slopes that provide localized lower elevations.

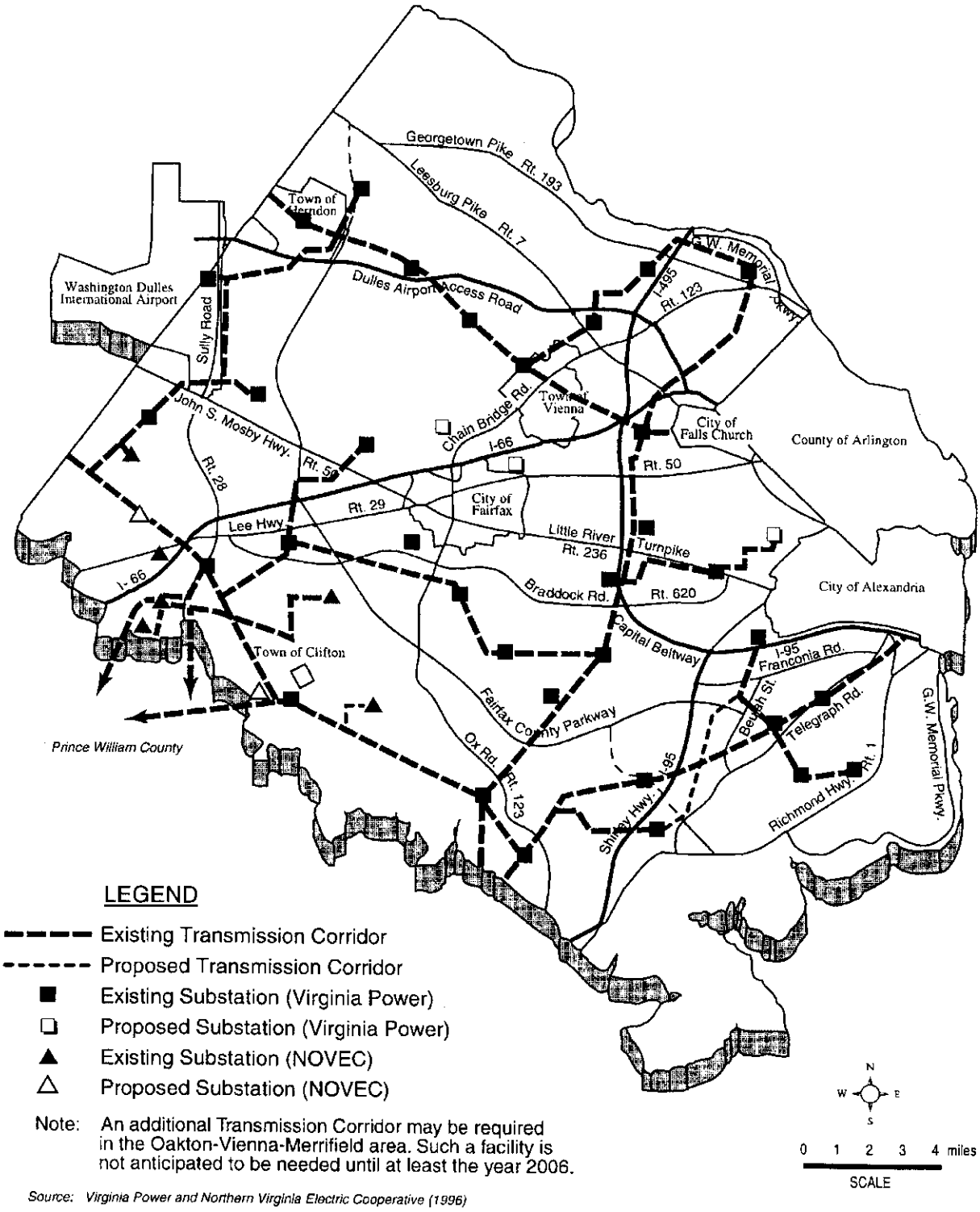
Policy c. Locate transmission and distribution lines underground, whenever possible.

Policy d. Conceal, screen or site ground transformers and distribution boxes to reduce their visual presence and potential for clutter.

Policy e. Provide for the appropriate screening and buffering of proposed facilities.

Policy f. Design and site proposed facilities to preserve areas necessary for future right-of-way dedication and ancillary easements for construction of road improvements.

Policy g. Provide safety measures in design and construction of towers used to support electrical and land-line utility services. Provide a fall radius of at least one third the height of guyed towers.



Source: Virginia Power and Northern Virginia Electric Cooperative (1996)

ELECTRICAL SUPPLY FACILITIES **FIGURE 7**

Policy h. Avoid interference with radio, television, and telecommunications receivers of the public.

Policy i. Assure that radiation levels, individually and cumulatively, will be maintained at acceptable levels.

APPENDIX 9

County of Fairfax, Virginia

MEMORANDUM

DATE: July 27, 2007

TO: Regina Coyle, Director
Zoning Evaluation Division
Department of Planning and Zoning

FROM: Angela Kadar Rodeheaver, Chief
Site Analysis Section
Department of Transportation

FILE: 3-5 (SE 97-D-020)

SUBJECT: Transportation Impact

REFERENCE: SEA 97-D-020-02; Verizon Virginia, Inc. – 1701 Chain Bridge Road
Traffic Zone: 1703
Land Identification Map: 30-3 ((1)) 46

Transmitted herewith are the comments from the Department of Transportation with respect to the referenced application. These comments are based on plats made available to this office dated June 18, 2007. The applicant proposes to install two chilled-water cooling units on the roof of an existing telecommunications Central Office ("switching station") in order to provide proper cooling of the equipment located therein. The applicant also is requesting approval for an increase in fence height up to 8 feet.

This department has no transportation issues with this application.

AKR/LAH/lah
cc: Michelle Brickner, Director, Office of Site Development Services, DPW&ES

Fairfax County Department of Transportation
12055 Government Center Parkway, Suite 1034
Fairfax, VA 22035-5500
Phone: (703) 324-1100 TTY: (703) 324-1102
Fax: (703) 324 1450
www.fairfaxcounty.gov/fcdot

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APPENDIX 10

County of Fairfax, Virginia

MEMORANDUM

DATE: August 16, 2007

TO: Regina Coyle, Director
Zoning Evaluation Division, DPZ

FROM: Pamela G. Nee, Chief
Environment and Development Review Branch, DPZ

SUBJECT: **ENVIRONMENTAL ASSESSMENT** for: SEA 97-D-020-2

Verizon Virginia – 1401 Chain Bridge Road

This memorandum, prepared by John R. Bell, discusses potential impacts that may result from the proposed development as depicted on the special exception amendment plat dated June 18, 2007. Possible solutions to remedy identified impacts are suggested. Other solutions may be acceptable, provided that they achieve the desired degree of mitigation and are also compatible with Plan policies.

ENVIRONMENTAL ANALYSIS:

This section characterizes the environmental concerns raised by an evaluation of this site and the proposed land use. Solutions are suggested to remedy the concerns that have been identified by staff. There may be other acceptable solutions.

Noise

Issue:

Neither the Comprehensive Plan nor the Zoning Ordinance contains explicit standards for mitigation of noise from a stationary noise source. The proposed cooling towers noted with this application are presented as an addition to an existing structure. While there are no explicit standards contained in the Zoning Ordinance or Comprehensive Plan which would typically be applied to such uses, some of the common limitations noted in the Noise Code, such as limiting the hours of operation for such uses and/or the application of structural attenuation measures, may present a logical limitation on the use. The Policy Element of the Comprehensive Plan also recommends that interior noise levels for residential units be limited to no more than 45dBA when impacted by transportation generated noise. However, Chapter

108, of the County Code limits exterior impacts from stationary noise sources according to specific octave bandwidth limitations. In this instance, given the nature of the existing uses at this location and the proposed additions to serve the existing facilities any limit on the hour of operation would be impractical. As such, the only noise mitigation option remaining will be the application of structural noise reduction measures to ensure that the existing and projected noise generated by this facility will remain within the limits set forth in the County Code.

Resolution:

The applicants have submitted a noise study, prepared by Hessler and Associates, which presents existing and projected noise levels at this location. The study notes the standards set forth in the County Code as well as measurements taken from the site. Based on the on-site measurements and proposed structural noise mitigation measures it appears that the applicants will be able to meet the County standards for stationary noise sources. It may also be appropriate to require a development condition which would require the applicants to conduct a noise study at the same locations noted in the current study some time after the new facilities have been completed. In the event the Code requirements are not being met, then the applicants may be required to devise and install additional noise mitigation measures at this location. A development condition requiring future, periodic noise monitoring subject to staff review and evaluation may also be appropriate.

PGN:JRB

APPENDIX 11

CHAPTER 108.1 ;noanchor; Noise.

Article 1. General Provisions.
Sec. 108-1-1. Short title.
Sec. 108-1-2. Declarations of findings and policy.
Sec. 108-1-3. Penalties.
Sec. 108-1-4. Severability.
Sec. 108-1-5. Enforcement.
Article 2. Definitions.
Sec. 108-2-1. Definitions.
Article 3. Administration, Authority and Duties.
Sec. 108-3-1. Administration of the Ordinance.
Sec. 108-3-2. Authority and duties of the Zoning Administrator.
Article 4. Noises Prohibited.
Sec. 108-4-1. Specific prohibitions.
Sec. 108-4-2. Places of public entertainment or assembly.
Sec. 108-4-3. Quiet zone.
Sec. 108-4-4. Maximum permissible sound pressure levels.
Sec. 108-4-5. Permissible motor vehicle sound pressure levels.
Sec. 108-4-6. Civil transport category airplane operations; noise limitations.
Sec. 108-4-7. Landfills; maximum sound pressure levels.
Sec. 108-4-8. Measurement procedures.
Article 5. Nuisance Noise.
Sec. 108-5-1. Loud and unnecessary noise.
Sec. 108-5-2. Specific prohibitions.
Article 6. Variances and Exemptions Permitted.
Sec. 108-6-1. Emergencies.
Sec. 108-6-2. Undue hardship.

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1. This is a new Chapter, effective January 1, 1976, Code of the County of Fairfax replacing Sections 17-4 through 17-5.1, (1961), as amended.

See also, the Zoning Chapter of this Code.

ARTICLE 1. General Provisions.

Section 108-1-1. Short title.

This Chapter may be referred to as the "Noise Ordinance" of the County of Fairfax.

(24-75-16A; 1-1-76)

Section 108-1-2. Declarations of findings and policy.

It is hereby declared to be the public policy of Fairfax County, in cooperation with Federal, State and local governments and regional agencies, to promote an environment for its citizens free from noise that jeopardizes their health or welfare or degrades the quality of life. Nothing contained in this Chapter shall be construed to authorize or direct any action which shall result in any substantial increase in noise levels from any noise source in Fairfax County.

(24-75-16A; 1961 Code, § 16A.1.2.)

Section 108-1-3. Penalties.

Any violation of any provision of this Chapter shall constitute a misdemeanor and any person violating this Chapter shall, upon conviction, be punishable by imprisonment not to exceed thirty (30) days or by a fine not to exceed one thousand dollars ($1,000.00), or both. Each separate act on the part of the person violating the Chapter shall be deemed a separate offense, and each day a violation is permitted to continue unabated shall be deemed to constitute a separate offense.

(24-75-16A; 1961 Code, § 16A.1.3.)

Section 108-1-4. Severability.

If any of the Articles, Sections, Paragraphs, sentences, clauses, or phrases of this Chapter shall be declared unconstitutional or invalid by the valid judgment or decree of a court of competent jurisdiction, such unconstitutionality or invalidity shall not affect the validity of the Chapter in its entirety or any of the remaining Articles, Sections, Paragraphs, sentences, clauses, and phrases.

(24-75-16A; 1961 Code, § 16A.1.4.)

Section 108-1-5. Enforcement.

(a) Whenever the Zoning Administrator has reason to believe that a violation of any provision of this Chapter or a rule or regulation issued pursuant thereto has occurred, he may give notice of such violation to the person failing to comply with this Chapter and order said person to take such corrective measures as are necessary within a reasonable time thereafter.

Such notice and order shall be in writing and shall be served personally upon the person to whom directed, or if he be not found, by mailing a copy thereof by certified mail to his usual place of abode and conspicuously posting a copy at the premises, if any, affected by the notice and order.

If such person fails to comply with the order issued hereunder, the Zoning Administrator may institute such actions as are necessary to terminate the violation, including obtaining criminal warrants, and applying to courts of

competent jurisdiction for injunctive relief.

Failure on the part of such person to take steps to comply with such order within the time provided for therein shall constitute a separate violation of this Chapter. If such person complies with such order promptly, no further action to terminate the violation shall be required, but compliance shall not be deemed to inhibit prosecution of such person for the violation.

(b) If the noise source is a motor vehicle moving on a public right-of-way, violation of this Chapter shall be cause for the Zoning Administrator to obtain a criminal warrant forthwith.

(c) Except as hereinbefore provided in Subparagraph (a) of this Section, a warrant may be obtained for the violation of any provision of Article 5 of this Chapter only upon the sworn complaint of a police officer or two (2) persons who are not members of the same household alleging the specific violation complained of, that either or both of the complainants requested or made reasonable attempt to request abatement of the violation and that the violation continued after such request. Provided, however, that ifthere be no more than one household within one half mile of the noise source, a warrant may be issued upon the sworn complaint of one person making the foregoing allegations.

(d) Section 108-5-2(b) shall also be enforced by the Director of the Department of Animal Control, or his duly authorized agent.

(7-17-68, § 17-5; 24-75-16A; 1961 Code, § 16A.1.5; 3-75-108.)

ARTICLE 2. Definitions.

Section 108-2-1. Definitions.

(a) The following words and phrases, when used in this Chapter, shall for the purposes of this Chapter, have the meanings respectively ascribed to them in this Section, except in those situations where the context clearly indicates a different meaning:

(1) *A-weighted sound pressure level* shall mean the sound pressure level as measured on a sound level meter using the A-weighted network. The level so read shall be postscripted dB(A) or dBA.

(2) *Decibel* shall mean a unit which describes the sound pressure level or intensity of sound. The sound pressure level in decibels is twenty (20) times the logarithm to the base ten (10) of the ratio of the pressure of the sound in microbars to a reference pressure of 0.0002 microbar; abbreviated dB.

(3) *Device* shall mean any mechanism which is intended to, or which actually produces noise when operated or handled.

(4) *Disposal* shall mean the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste into or on any land.

(5) *Emergency work* shall mean work made necessary to restore property to a safe condition following a public calamity, or work required to protect persons or property from immediate exposure to danger, including work performed by public service companies when emergency inspection, repair of facilities, or restoration of services is required for the immediate health, safety, or welfare of the community.

(6) *Equivalent sound level (Leq)* shall mean the constant sound level that, in a given situation and time period, conveys the same sound energy as the actual time-varying A-weighted sound pressure level.

(7) *Landfill* shall mean a site used for the disposal of solid waste.

(8) *Motor vehicle* shall mean any vehicle which is self-propelled or designed for self-propulsion including but not limited to, passenger cars, trucks, truck-trailers, semitrailers, campers, motor boats and racing vehicles; and any motorcycle (including but not limited to motor scooters and mini-bikes) as defined in Paragraph 14 of § 46.1.1. Va. Code Ann.

(9) *Noise* shall mean any sound which may cause or tend to cause an adverse psychological or physiological effect on human beings.

(10) *Noise disturbance* shall mean any unnecessary sound which annoys, disturbs, or perturbs reasonable persons with normal sensitivities; or any unnecessary sound which reasonably may be perceived to injure or endanger the comfort, repose, health, peace or safety of any person.

(11) *Octave band analyzer* shall mean an instrument to measure the octave band composition of a sound by means of a bandpass filter. It shall meet the specifications of the American National Standards Institute publications. S1.4-1961, S1.6-1967, and S1.11-1966, or their successor publications.

(12) *Person* shall mean any individual, corporation, cooperative, partnership, firm, association, trust, estate, private institution, group, agency, or any legal successor, representative, agent, or agency thereof.

(13) *Powered model vehicles* shall mean any mechanically powered vehicle, either airborne, waterborne or landborne, which is not designed to carry persons or property including, but not limited to, model airplanes, boats, cars and rockets.

(14) *Public right-of-way* shall mean any street, avenue, boulevard, highway, alley or public space which is owned or controlled by a public governmental entity.

(15) *Solid waste* shall mean any garbage, trash, refuse, debris, construction rubble and other discarded material.

(16) *Sound* shall mean a temporal and spatial oscillation in pressure, or other physical quantity, in a medium with internal forces that causes compression and rare fraction of that medium, and which propagates at finite speed to distant points.

(17) *Sound level meter* shall mean an instrument to measure sound pressure levels which shall meet or exceed performance standards for a "Type Two" meter as specified by the American National Standards Institute.

(18) *Sound pressure* shall mean the instantaneous difference between the actual pressure and the average or barometric pressure at a given point in space.

(19) *Stationary noise source* shall mean any equipment or facility, fixed or movable, capable of emitting sound beyond the property boundary of the property on which it is used.

(20) *Zoning Administrator* shall mean the Fairfax County Zoning Administrator or his duly authorized agent.

(21) *Zoning district classification:* Refers to the scheme of land use classification contained in the Fairfax County Zoning Ordinance.

(7-17-68, § 17-5.2; 24-75-16A; 1961 Code, § 16A.2.1; 3-79-108; 37-81-108.)

ARTICLE 3. Administration, Authority and Duties.

Section 108-3-1. Administration of the Ordinance.

The provisions of this Chapter shall be administered and enforced by the Zoning Administrator or his duly authorized agent.

(24-75-16A; 1961 Code, § 16A.3.1; 3-79-108.)

Section 108-3-2. Authority and duties of the Zoning Administrator.

In addition to any other authority vested in him by law, Zoning Administrator:

(a) May conduct, or cause to be conducted, studies, research and monitoring related to noise and its prevention, abatement and control.

(b) May conduct programs of public education regarding the causes and effects of noise and the means for its abatement, and encourage the participation of public interest groups in related public information efforts.

(c) May coordinate the noise control activities of all agencies and departments of the Fairfax County government and advise, consult, cooperate and coordinate noise control activities with other local governmental units, state agencies, interstate and interlocal agencies, the Federal government, and with interested persons and groups with respect to the provisions of this Chapter.

(d) Shall issue such orders, rules and regulations and measurement procedures and methodologies as may be necessary to effectuate the provisions of this Chapter and enforce the same by all appropriate administrative and judicial proceedings.

(e) May make recommendations to the Board of Supervisors for changes to this Chapter to make it consistent with all preemptive State and Federal legislation.

(f) May enter and inspect any property, premises or place at any reasonable time for the purpose of ascertaining compliance with any provision of this Chapter when granted permission by the owner, or some person with reasonably apparent authority to act for the owner. When permission is refused or cannot be obtained, a proper search warrant may be obtained from a Court of competent jurisdiction upon showing of probable cause to believe that a violation of this Chapter may exist.

(g) May administer grants or other funds or gifts from public and private agencies, including the State and Federal governments, for the purpose of carrying out any of the provisions of this Chapter.

(h) May secure necessary scientific, technical, administrative and operational services, including laboratory facilities, by contract or otherwise.

(i) May obtain warrants for violations of any of the provisions of this Chapter and apply to any court of competent jurisdiction for such injunctive relief as shall be necessary to terminate continuing violations of this Chapter.

(j) Shall make an annual report to the Board of Supervisors on the status and effectiveness of the Noise Ordinance, including the reasonableness of the noise standards prescribed therein, and shall make recommendations for improvement of this Ordinance.

(k) May perform such other acts as may be necessary to carry out the functions of this Chapter and such other acts as may be specifically enumerated herein. (24-75-16A; 1961 Code, § 16A.3.2; 3-79-108.)

ARTICLE 4. Noises Prohibited.

Section 108-4-1. Specific prohibitions.

The following acts are violations of this Chapter:

(a) Using or operating a loudspeaker or other sound amplification device in a fixed or movable position exterior to any building, or mounted upon any motor vehicle for the purpose of commercial advertising, giving instructions, information, directions, talks, addresses, lectures, or providing entertainment to any persons or assemblage of persons on any private or public property, between the hours of 11 p.m. and 7 a.m. the following day.

(b) Operating or causing to be operated any equipment used in construction, repair, alteration, or demolition work on buildings, structures, streets, alleys, or appurtenances thereto in the outdoors between the hours of 9 p.m. and 7 a.m. the following day, except that no such activity shall commence prior to 9 a.m. on Sundays and Federal holidays.

(c) Repairing, rebuilding, or modifying, any motor vehicle or other mechanical device in the outdoors between the hours of 9 p.m. and 7 a.m. the following day.

(d) Operating or permitting the operation of powered model vehicles in the outdoors between the hours of 9 p.m. and 7 a.m. the following day.

(e) The collection of trash or refuse in residential use districts between the hours of 9 p.m. and 6 a.m. the following day.

(f) Loading or unloading trucks in the outdoors within one hundred (100) yards of a residence between the hours of 9 p.m. and 6 a.m. the following day. (7-17-68, § 17.9; 24-75-16A; 1961 Code, § 16A.4.1; 34-76-108; 24-98-108.)

Section 108-4-2. Places of public entertainment or assembly.

It shall be unlawful after the Zoning Administrator has given appropriate notice requesting abatement, for any person to operate, or permit to be operated, any loudspeaker or other device for the production of sound in any place of public entertainment or other place of public assembly which produces sound pressure levels of 90 dB(A) or greater at any point that is normally occupied by a person, as read with the slow response on a sound level meter, unless a conspicuous and legible sign is located outside such place, near the entrance, stating "WARNING! PROLONGED EXPOSURE TO SOUND ENVIRONMENT WITHIN MAY CAUSE HEARING IMPAIRMENT." (24-75-16A; 1961 Code, § 16A.4.2; 3-79108.)

Section 108-4-3. Quiet zone.

(a) It shall be unlawful for any person to create any noise in excess of that prescribed within any area designated as a "quiet zone" in conformance with the provisions of Sub-paragraph (b) of this Section; provided, conspicuous signs are displayed in adjacent or contiguous streets indicating that said area is a quiet zone.

(b) Whenever the protection of the public health, safety and welfare so require, after a duly advertised public hearing, the Board of Supervisors may designate any geographical area of Fairfax County as a "quiet zone." Such designation shall include a description of the subject area, the reasons for its designation as a quiet zone, and shall prescribe the level of noise which shall be permitted in such quiet zone. (24-75-16A; 1961 Code, § 16A.4.3.)

Section 108-4-4. Maximum permissible sound pressure levels.

(a) It shall be unlawful for any person to operate, or permit to be operated, any stationary noise source in such a manner as to create a sound pressure level which exceeds the limits set forth in the table following titled "Maximum Sound Pressure Levels" when measured at the property boundary of the noise source or at any point within any other property affected by the noise. When a noise source can be identified and its noise measured in more than one zoning district classification, the limits of the most restrictive classification shall apply.

(b) Notwithstanding the provisions of the foregoing Subsection, sound created by the operation of power equipment, such as power lawn mowers and chain saws, between the hours of 7 a.m. and 9 p.m. the same day shall be permitted so long as they do not constitute a noise disturbance. (7-17-68, § 17-4-3; 24-75-16A; 1961 Code, § 16A.4.4.; 34-76-108.)

TABLE INSET:

MAXIMUM SOUND PRESSURE LEVELS				
ZONING DISTRICT CLASSIFICATION	MAXIMUM dBA	OCTAVE BAND LIMIT	CENTER FREQUENCY HERTZ --(HZ)	dB
		31.5	70	
		63	69	
		125	64	
		250	59	
RESIDENTIAL	55	500	53	
		1,000	47	
		2,000	42	
		4,000	38	
		8,000	35	
		31.5	75	
		63	74	
		125	69	
		250	64	
COMMERCIAL	60	500	58	
		1,000	52	
		2,000	47	
		4,000	43	
		8,000	40	
		31.5	85	
		63	84	
		125	79	
		250	74	
INDUSTRIAL	72	500	68	

		1,000	62
		2,000	57
		4,000	53
		8,000	50

Section 108-4-5. Permissible motor vehicle sound pressure levels.

(a) The maximum sound pressure level emitted by motor vehicles not equipped with a muffler conforming to the requirements of §§ 46.1-301 and 46.1-302, Va. Code Ann., operated on a public right-of-way as measured at a point fifty (50) feet from the motor vehicle shall be as provided in the table below titled "Motor Vehicle Noise Limits."

MOTOR VEHICLE NOISE LIMITS

TABLE INSET:

Vehicle Class	Sound Pressure Level, dB(A) Speed limit 35 mph or less	Speed limit above 35 mph
Any motor vehicle with a manufacturers gross vehicle rating of 10,000 pounds or more, and any combination of vehicles towed by such motor vehicle	86	90
Any motorcycle	82	86
Any other motor vehicle and any combination of vehicles towed by such motor vehicle	76	82

(24-75-16A; 1961 Code, § 16A.4.5.)

Section 108-4-6. Civil transport category airplane operations; noise limitations.

(a) No person may operate, to or from an airport wholly or partially located within Fairfax County, Virginia, any civil transport category airplane unless:

(1) That airplane complies with the noise level requirements of the Federal Aviation Administration (14 CFR, Part 36) for subsonic transport category airplanes; or

(2) That airplane had flight time before December 31, 1974.

(b) This amendment shall remain in full force and effect only until such time as its provisions are superseded by FAA standards (established under § 711 of the FAA Act) which can be enforced by any citizen of Fairfax County.

(c) Notwithstanding any other provision of this ordinance, the Zoning Administrator shall enforce the noise limitations for civil transport category airplane operations only in the following manner. He shall serve a notice of violation on any person who violates these provisions, providing a reasonable time for abatement or discontinuance of the violation. Should the person in violation of these provisions fail to take such corrective steps, the Zoning Administrator shall request the County Attorney to seek injunctive relief.

(3-76-108; 21-76-208; 3-79-108.)

Section 108-4-7. Landfills; maximum sound pressure levels.

It shall be unlawful for any person to operate, or permit to be operated, any motor vehicle, stationary noise source or device, or any combination thereof, at a landfill in such a manner as to create noise which:

(a) When measured at any point within any other property affected by the noise, exceeds the following equivalent sound levels (Leq):

(1) Property used for residential--Leq of 55 dB(A).

(2) Property used for commercial--Leq of 60 dB(A).

(3) Property used for industrial--Leq of 72 dB(A).

or

(b) When measured at the property boundary of the landfill or at any point within any other property affected by the noise exceeds an A-weighted sound pressure level of seventy-five (75) dB(A).

For the purpose of this Section, a minimum test period of one (1) hour shall be used for the Leq, and the survey shall be conducted in accordance with the standards and procedures specified in Procedural Memorandum 103.2

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2. Editor's note--This memorandum is not printed herein but is on file with the original ordinance.

(37-81-108.)

Section 108-4-8. Measurement procedures.

(a) Field measurement procedures for the enforcement of the sound pressure levels set forth in this Chapter shall be promulgated by the Zoning Administrator.

(b) Noise shall be measured with a sound level meter and octave band analyzer.

(24-75-16A; 1961 Code, § 16A.4.6; 3-76-108; 3-79-108; 37-81-108.)

ARTICLE 5. Nuisance Noise.

Section 108-5-1. Loud and unnecessary noise.

It shall be unlawful for any person to make, continue to make, or cause to be made or continued, a noise disturbance within the County of Fairfax.

(7-17-68, § 17-4; 24-75-16A; 1961 Code, § 16A.5.1.)

Section 108-5-2. Specific prohibitions.

The following acts, are declared to be noise disturbances in violation of this Chapter, provided that the acts so specified shall not be deemed to be an exclusive enumeration of those acts which may constitute a noise disturbance under Section 108-5-1, and provided that the acts so specified in Subparagraph (a) below may still constitute a noise disturbance under Section 108-5-1 independently of the hours of day said acts take place.

(a) Operating or permitting the use, or operation of any radio receiving set, musical instrument, television, phonograph, or any other device for the production of sound between the hours of 11 p.m. and 7 a.m. the following day in such a manner as to be plainly audible across property boundaries or through partitions common to two persons within a building or plainly audible at fifty (50) feet from such device when operated within a motor vehicle parked on a public right-of-way or in a public place.

(b) Owning, keeping, possessing, or harboring any animal or animals which frequently or habitually howl, bark, meow, squawk or make such other noise as is plainly audible across property boundaries or through partitions common to two (2) persons within a building.

(24-75-16A; 1961 Code, § 16A.5.2; 34-76-108.)

ARTICLE 6. Variances and Exemptions Permitted.

Section 108-6-1. Emergencies.

An exemption from the provisions of this Chapter is granted for noise caused in the performance of emergency work. Nothing in this Section shall be construed to permit law enforcement, ambulance, fire or other emergency personnel to make excessive noise in the performance of their duties when such noise is clearly unnecessary.

(24-75-16A; 1961 Code, § 16A.6.1.)

Section 108-6-2. Undue hardship.

(a) Any person responsible for any noise source may apply to the Zoning Administrator for a variance or partial variance from the provisions of this Chapter. The Zoning Administrator may grant such variance or partial variance if he finds that:

(1) The noise does not endanger the public health, safety or welfare; or

(2) Compliance with the provisions of this Chapter from which variance is sought would produce serious hardship without producing equal or greater benefit to the public.

(b) In determining whether to grant such variance, the Zoning Administrator shall consider the time of day when noise will occur, duration of the noise, its loudness relative to the required limits of this Chapter, whether the noise is intermittent or continuous, its extensiveness, the technical and economic feasibility of bringing the noise into conformance with this Chapter and such other matters as are reasonably related to the impact of the noise on the health, safety and welfare of the community and the degree of hardship which may result from the enforcement of the provisions of this Chapter.

(c) No variance or partial variance issued pursuant to this Section shall be granted for a period to exceed one (1) year, but any such variance or partial variance may be renewed for like periods if the Zoning Administrator shall find that such renewal is justified after again applying the standards set forth in this Section. No renewal shall be granted except upon application therefor.

(d) Any person aggrieved by a decision of the Zoning Administrator made pursuant to Article 6 of this Chapter may obtain review of such decision by the County Executive by delivering a written statement of grievance to the Office of the County Executive within thirty (30) days from the date of the decision.

The County Executive shall review all statements of grievances and shall, within sixty (60) days from the date of the Zoning Administrator's decision, either affirm or set it aside, making such further order as shall be necessary to effectuate the provisions of this Section.

(24-75-16A; 1961 Code, § 16A.6.2; 3-79-108.)

SELECTED EXCERPTS FROM THE ZONING ORDINANCE

ARTICLE 9

SPECIAL EXCEPTIONS

PART 0 9-000 GENERAL PROVISIONS

9-001 Purpose and Intent

There are certain uses, like those regulated by special permit, which by their nature or design can have an undue impact upon or be incompatible with other uses of land. In addition, there are times when standards and regulations specified for certain uses allowed within a given district should be allowed to be modified, within limitations, in the interest of sound development. These uses or modifications as described may be allowed to locate within given designated zoning districts under the controls, limitations, and regulations of a special exception.

The Board of Supervisors may approve a special exception under the provisions of this Article when it is concluded that the proposed use complies with all specified standards and that such use will be compatible with existing or planned development in the general area. In addition, in approving a special exception, the Board may stipulate such conditions and restrictions, including but not limited to those specifically contained herein, to ensure that the use will be compatible with the neighborhood in which it is proposed to be located. Where such cannot be accomplished or it is determined that the use is not in accordance with all applicable standards of this Ordinance, the Board shall deny the special exception.

9-006 General Standards

In addition to the specific standards set forth hereinafter with regard to particular special exception uses, all such uses shall satisfy the following general standards:

1. The proposed use at the specified location shall be in harmony with the adopted comprehensive plan.

2. The proposed use shall be in harmony with the general purpose and intent of the applicable zoning district regulations.

3. The proposed use shall be such that it will be harmonious with and will not adversely affect the use or development of neighboring properties in accordance with the applicable zoning district regulations and the adopted comprehensive plan. The location, size and height of buildings, structures, walls and fences, and the nature and extent of screening, buffering and landscaping shall be such that the use will not hinder or discourage the

appropriate development and use of adjacent or nearby land and/or buildings or impair the value thereof.

4. The proposed use shall be such that pedestrian and vehicular traffic associated with such use will not be hazardous or conflict with the existing and anticipated traffic in the neighborhood.

5. In addition to the standards which may be set forth in this Article for a particular category or use, the Board shall require landscaping and screening in accordance with the provisions of Article 13.

6. Open space shall be provided in an amount equivalent to that specified for the zoning district in which the proposed use is located.

7. Adequate utility, drainage, parking, loading and other necessary facilities to serve the proposed use shall be provided. Parking and loading requirements shall be in accordance with the provisions of Article 11.

8. Signs shall be regulated by the provisions of Article 12; however, the Board may impose more strict requirements for a given use than those set forth in this Ordinance.

9-007 Conditions and Restrictions

In addition to those standards set forth in this Article, the Board, in approving a special exception, may impose such conditions and restrictions upon the proposed use as it may deem necessary in the public interest to secure compliance with the provisions of this Ordinance and to protect the viability of the implementation of the adopted comprehensive plan. Such conditions or restrictions may include but need not be limited to a time limitation on the length of the exception in accordance with the provisions of Sect. 008 below and may require the posting of a guarantee or bond in a reasonable amount by the applicant.

PART 1 9-100 CATEGORY 1 LIGHT PUBLIC UTILITY USES

9-101 Category 1 Special Exception Uses

5. Telecommunication facilities, including central offices and repeat stations, but not including ordinary telephone or telegraph transmission poles and lines located in public rights-of-way or easements of not more than twenty-five (25) feet in width.

9-104 Standards for all Category 1 Uses

In addition to the general standards set forth in Sect. 006 above, all Category 1 special exception uses shall satisfy the following standards:

1. Category 1 special exception uses shall not have to comply with the lot size requirements or the bulk regulations set forth for the zoning district in which located.

2. No land or building in any district other than the I-5 and I-6 District shall be used for the storage of materials or equipment, or for the repair or servicing of vehicles or equipment, or for the parking of vehicles except those needed by employees connected with the operation of the immediate facility.

3. If the proposed location of a Category 1 use is in an R district, there shall be a finding that there is no alternative site available for such use in a C or I district within 500 feet of the proposed location; except that in the case of electric transformer stations and telecommunication central offices, there shall be a finding that there is no alternative site available in a C or I district within a distance of one (1) mile, unless there is a substantial showing that it is impossible for satisfactory service to be rendered from an available location in such C or I district.

4. Before establishment, all uses, including modifications or alterations to existing uses, shall be subject to the provisions of Article 17, Site Plans.

ARTICLE 10

ACCESSORY USES, ACCESSORY SERVICE USES AND HOME OCCUPATIONS

PART 1 10-100 ACCESSORY USES AND STRUCTURES

10-101 Authorization

Accessory uses and structures are permitted in any zoning district, unless qualified below, but only in connection with, incidental to, and on the same lot with a principal use or structure which is permitted within such district.

10-104 Location Regulations

3. Except as may be qualified by Sect. 2-505, a fence or wall may be located as follows. Such regulations shall not be deemed to negate the screening requirements of Article 13.

   C. In any side or rear yard on any lot, a fence or wall not exceeding seven (7) feet in height is permitted. However, a solid wood or masonry fence or wall not exceeding eight (8) feet in height, located flush to the ground, is permitted:

      (1) In any side or rear yard of a reverse frontage lot; or

      (2) For that portion of a side or rear yard of a residential lot where the side or rear lot line is within 150 feet of a major thoroughfare and abuts common or dedicated open space, where such open space is located between the lot line and the major thoroughfare.

H. In addition, the Board may approve in conjunction with a proffered rezoning or a special exception for another use, or the BZA in conjunction with a special permit for another use, an increase in fence and/or wall height and/or modification to the corresponding location regulations set forth above, and/or an increase in gate and/or gate post height and/or modification to the corresponding location regulations set forth in Par. 4 of Sect. 10-104 below in accordance with the following:

(1) In order to show the visual impact of the fence, wall, gate and/or gate post on nearby properties, the height, location, color and materials of the proposed fence, wall, gate and/or gate post and any associated berming or landscaping shall be submitted with the application.

(2) The Board/BZA shall determine that the proposed fence, wall, gate and/or gate post is in character with the existing development on the site, is harmonious with the surrounding development, and will not adversely impact the use and/or enjoyment of any nearby property. The Board/BZA may impose such conditions as it deems necessary to satisfy this criteria.

GLOSSARY

This Glossary is provided to assist the public in understanding
the staff evaluation and analysis of development proposals.
It should not be construed as representing legal definitions.
Refer to the Fairfax County Zoning Ordinance, Comprehensive Plan
or Public Facilities Manual for additional information.

ABANDONMENT: Refers to road or street abandonment, an action taken by the Board of Supervisors, usually through the public hearing process, to abolish the public's right-of-passage over a road or road right-of way. Upon abandonment, the right-of-way automatically reverts to the underlying fee owners. If the fee to the owner is unknown, Virginia law presumes that fee to the roadbed rests with the adjacent property owners if there is no evidence to the contrary.

ACCESSORY DWELLING UNIT (OR APARTMENT): A secondary dwelling unit established in conjunction with and clearly subordinate to a single family detached dwelling unit. An accessory dwelling unit may be allowed if a special permit is granted by the Board of Zoning Appeals (BZA). Refer to Sect. 8-918 of the Zoning Ordinance.

AFFORDABLE DWELLING UNIT (ADU) DEVELOPMENT: Residential development to assist in the provision of affordable housing for persons of low and moderate income in accordance with the affordable dwelling unit program and in accordance with Zoning Ordinance regulations. Residential development which provides affordable dwelling units may result in a density bonus (see below) permitting the construction of additional housing units. See Part 8 of Article 2 of the Zoning Ordinance.

AGRICULTURAL AND FORESTAL DISTRICTS: A land use classification created under Chapter 114 or 115 of the Fairfax County Code for the purpose of qualifying landowners who wish to retain their property for agricultural or forestal use for use/value taxation pursuant to Chapter 58 of the Fairfax County Code.

BARRIER: A wall, fence, earthen berm, or plant materials which may be used to provide a physical separation between land uses. Refer to Article 13 of the Zoning Ordinance for specific barrier requirements.

BEST MANAGEMENT PRACTICES (BMPs): Stormwater management techniques or land use practices that are determined to be the most effective, practicable means of preventing and/or reducing the amount of pollution generated by nonpoint sources in order to improve water quality.

BUFFER: Graduated mix of land uses, building heights or intensities designed to mitigate potential conflicts between different types or intensities of land uses; may also provide for a transition between uses. A landscaped buffer may be an area of open, undeveloped land and may include a combination of fences, walls, berms, open space and/or landscape plantings. A buffer is not necessarily coincident with transitional screening.

CHESAPEAKE BAY PRESERVATION ORDINANCE: Regulations which the State has mandated must be adopted to protect the Chesapeake Bay and its tributaries. These regulations must be incorporated into the comprehensive plans, zoning ordinances and subdivision ordinances of the affected localities. Refer to Chesapeake Bay Preservation Act, Va. Code Section 10.1-2100 et seq and VR 173-02-01, Chesapeake Bay Preservation Area Designation and Management Regulations.

CLUSTER DEVELOPMENT: Residential development in which the lots are clustered on a portion of a site so that significant environmental/historical/cultural resources may be preserved or recreational amenities provided. While smaller lot sizes are permitted in a cluster subdivision to preserve open space, the overall density cannot exceed that permitted by the applicable zoning district. See Sect. 2-421 and Sect. 9-615 of the Zoning Ordinance.

COUNTY 2232 REVIEW PROCESS: A public hearing process pursuant to Sect. 15.2-2232 (Formerly Sect. 15.1-456) of the Virginia Code which is used to determine if a proposed public facility not shown on the adopted Comprehensive Plan is in substantial accord with the plan. Specifically, this process is used to determine if the general or approximate location, character and extent of a proposed facility is in substantial accord with the Plan.

dBA: The momentary magnitude of sound weighted to approximate the sensitivity of the human ear to certain frequencies; the dBA value describes a sound at a given instant, a maximum sound level or a steady state value. See also Ldn.

DENSITY: Number of dwelling units (du) divided by the gross acreage (ac) of a site being developed in residential use; or, the number of dwelling units per acre (du/ac) except in the PRC District when density refers to the number of persons per acre.

DENSITY BONUS: An increase in the density otherwise allowed in a given zoning district which may be granted under specific provisions of the Zoning Ordinance when a developer provides excess open space, recreation facilities, or affordable dwelling units (ADUs), etc.

DEVELOPMENT CONDITIONS: Terms or conditions imposed on a development by the Board of Supervisors (BOS) or the Board of Zoning Appeals (BZA) in connection with approval of a special exception, special permit or variance application or rezoning application in a "P" district. Conditions may be imposed to mitigate adverse impacts associated with a development as well as secure compliance with the Zoning Ordinance and/or conformance with the Comprehensive Plan. For example, development conditions may regulate hours of operation, number of employees, height of buildings, and intensity of development.

DEVELOPMENT PLAN: A graphic representation which depicts the nature and character of the development proposed for a specific land area: information such as topography, location and size of proposed structures, location of streets trails, utilities, and storm drainage are generally included on a development plan. A development plan is s submission requirement for rezoning to the PRC District. A GENERALIZED DEVELOPMENT PLAN (GDP) is a submission requirement for a rezoning application for all conventional zoning districts other than a P District. A development plan submitted in connection with a special exception (SE) or special permit (SP) is generally referred to as an SE or SP plat. A CONCEPTUAL DEVELOPMENT PLAN (CDP) is a submission requirement when filing a rezoning application for a P District other than the PRC District; a CDP characterizes in a general way the planned development of the site. A FINAL DEVELOPMENT PLAN (FDP) is a submission requirement following the approval of a conceptual development plan and rezoning application for a P District other than the PRC District; an FDP further details the planned development of the site. See Article 16 of the Zoning Ordinance.

EASEMENT: A right to or interest in property owned by another for a specific and limited purpose. Examples: access easement, utility easement, construction easement, etc. Easements may be for public or private purposes.

ENVIRONMENTAL QUALITY CORRIDORS (EQCs): An open space system designed to link and preserve natural resource areas, provide passive recreation and protect wildlife habitat. The system includes stream valleys, steep slopes and wetlands. For a complete definition of EQCs, refer to the Environmental section of the Policy Plan for Fairfax County contained in Vol. 1 of the Comprehensive Plan.

ERODIBLE SOILS: Soils that wash away easily, especially under conditions where stormwater runoff is inadequately controlled. Silt and sediment are washed into nearby streams, thereby degrading water quality.

FLOODPLAIN: Those land areas in and adjacent to streams and watercourses subject to periodic flooding; usually associated with environmental quality corridors. The 100 year floodplain drains 70 acres or more of land and has a one percent chance of flood occurrence in any given year.

FLOOR AREA RATIO (FAR): An expression of the amount of development intensity (typically, non-residential uses) on a specific parcel of land. FAR is determined by dividing the total square footage of gross floor area of buildings on a site by the total square footage of the site itself.

FUNCTIONAL CLASSIFICATION: A system for classifying roads in terms of the character of service that individual facilities are providing or are intended to provide, ranging from travel mobility to land access. Roadway system functional classification elements include Freeways or Expressways which are limited access highways, Other Principal (or Major) Arterials, Minor Arterials, Collector Streets, and Local Streets. Principal arterials are designed to accommodate travel; access to adjacent properties is discouraged. Minor arterials are designed to serve both through traffic and local trips. Collector roads and streets link local streets and properties with the arterial network. Local streets provide access to adjacent properties.

GEOTECHNICAL REVIEW: An engineering study of the geology and soils of a site which is submitted to determine the suitability of a site for development and recommends construction techniques designed to overcome development on problem soils, e.g., marine clay soils.

HYDROCARBON RUNOFF: Petroleum products, such as motor oil, gasoline or transmission fluid deposited by motor vehicles which are carried into the local storm sewer system with the stormwater runoff, and ultimately, into receiving streams; a major source of non-point source pollution. An oil-grit separator is a common hydrocarbon runoff reduction method.

IMPERVIOUS SURFACE: Any land area covered by buildings or paved with a hard surface such that water cannot seep through the surface into the ground.

INFILL: Development on vacant or underutilized sites within an area which is already mostly developed in an established development pattern or neighborhood.

INTENSITY: The magnitude of development usually measured in such terms as density, floor area ratio, building height, percentage of impervious surface, traffic generation, etc. Intensity is also based on a comparison of the development proposal against environmental constraints or other conditions which determine the carrying capacity of a specific land area to accommodate development without adverse impacts.

Ldn: Day night average sound level. It is the twenty-four hour average sound level expressed in A-weighted decibels; the measurement assigns a "penalty" to night time noise to account for night time sensitivity. Ldn represents the total noise environment which varies over time and correlates with the effects of noise on the public health, safety and welfare.

LEVEL OF SERVICE (LOS): An estimate of the effectiveness of a roadway to carry traffic, usually under anticipated peak traffic conditions. Level of Service efficiency is generally characterized by the letters A through F, with LOS-A describing free flow traffic conditions and LOS-F describing jammed or grid-lock conditions.

MARINE CLAY SOILS: Soils that occur in widespread areas of the County generally east of Interstate 95. Because of the abundance of shrink-swell clays in these soils, they tend to be highly unstable. Many areas of slope failure are evident on natural slopes. Construction on these soils may initiate or accelerate slope movement or slope failure. The shrink-swell soils can cause movement in structures, even in areas of flat topography, from dry to wet seasons resulting in cracked foundations, etc. Also known as slippage soils.

OPEN SPACE: That portion of a site which generally is not covered by buildings, streets, or parking areas. Open space is intended to provide light and air; open space may be function as a buffer between land uses or for scenic, environmental, or recreational purposes.

OPEN SPACE EASEMENT: An easement usually granted to the Board of Supervisors which preserves a tract of land in open space for some public benefit in perpetuity or for a specified period of time. Open space easements may be accepted by the Board of Supervisors, upon request of the land owner, after evaluation under criteria established by the Board. See Open Space Land Act, Code of Virginia, Sections 10.1-1700, et seq.

P DISTRICT: A "P" district refers to land that is planned and/or developed as a Planned Development Housing (PDH) District, a Planned Development Commercial (PDC) District or a Planned Residential Community (PRC) District. The PDH, PDC and PRC Zoning Districts are established to encourage innovative and creative design for land development; to provide ample and efficient use of open space; to promote a balance in the mix of land uses, housing types, and intensity of development; and to allow maximum flexibility in order to achieve excellence in physical, social and economic planning and development of a site. Refer to Articles 6 and 16 of the Zoning Ordinance.

PROFFER: A written condition, which, when offered voluntarily by a property owner and accepted by the Board of Supervisors in a rezoning action, becomes a legally binding condition which is in addition to the zoning district regulations applicable to a specific property. Proffers are submitted and signed by an owner prior to the Board of Supervisors public hearing on a rezoning application and run with the land. Once accepted by the Board, proffers may be modified only by a proffered condition amendment (PCA) application or other zoning action of the Board and the hearing process required for a rezoning application applies. See Sect. 15.2-2303 (formerly 15.1-491) of the Code of Virginia.

PUBLIC FACILITIES MANUAL (PFM): A technical text approved by the Board of Supervisors containing guidelines and standards which govern the design and construction of site improvements incorporating applicable Federal, State and County Codes, specific standards of the Virginia Department of Transportation and the County's Department of Public Works and Environmental Services.

RESOURCE MANAGEMENT AREA (RMA): That component of the Chesapeake Bay Preservation Area comprised of lands that, if improperly used or developed, have a potential for causing significant water quality degradation or for diminishing the functional value of the Resource Protection Area. See Fairfax County Code, Ch. 118, Chesapeake Bay Preservation Ordinance.

RESOURCE PROTECTION AREA (RPA): That component of the Chesapeake Bay Preservation Area comprised of lands at or near the shoreline or water's edge that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation of the quality of state waters. In their natural condition, these lands provide for the removal, reduction or assimilation of sediments from runoff entering the Bay and its tributaries, and minimize the adverse effects of human activities on state waters and aquatic resources. New development is generally discouraged in an RPA. See Fairfax County Code, Ch. 118, Chesapeake Bay Preservation Ordinance.

SITE PLAN: A detailed engineering plan, to scale, depicting the development of a parcel of land and containing all information required by Article 17 of the Zoning Ordinance. Generally, submission of a site plan to DPWES for review and approval is required for all residential, commercial and industrial development except for development of single family detached dwellings. The site plan is required to assure that development complies with the Zoning Ordinance.

SPECIAL EXCEPTION (SE) / SPECIAL PERMIT (SP): Uses, which by their nature, can have an undue impact upon or can be incompatible with other land uses and therefore need a site specific review. After review, such uses may be allowed to locate within given designated zoning districts if appropriate and only under special controls, limitations, and regulations. A special exception is subject to public hearings by the Planning Commission and Board of Supervisors with approval by the Board of Supervisors; a special permit requires a public hearing and approval by the Board of Zoning Appeals. Unlike proffers which are voluntary, the Board of Supervisors or BZA may impose reasonable conditions to assure, for example, compatibility and safety. See Article 8, Special Permits and Article 9, Special Exceptions, of the Zoning Ordinance.

STORMWATER MANAGEMENT: Engineering practices that are incorporated into the design of a development in order to mitigate or abate adverse water quantity and water quality impacts resulting from development. Stormwater management systems are designed to slow down or retain runoff to re-create, as nearly as possible, the pre-development flow conditions.

SUBDIVISION PLAT: The engineering plan for a subdivision of land submitted to DPWES for review and approved pursuant to Chapter 101 of the County Code.

TRANSPORTATION DEMAND MANAGEMENT (TDM): Actions taken to reduce single occupant vehicle automobile trips or actions taken to manage or reduce overall transportation demand in a particular area.

TRANSPORTATION SYSTEM MANAGEMENT (TSM) PROGRAMS: This term is used to describe a full spectrum of actions that may be applied to improve the overall efficiency of the transportation network. TSM programs usually consist of low-cost alternatives to major capital expenditures, and may include parking management measures, ridesharing programs, flexible or staggared work hours, transit promotion or operational improvements to the existing roadway system. TSM includes Transportation Demand Management (TDM) measures as well as H.O.V. use and other strategies associated with the operation of the street and transit systems.

URBAN DESIGN: An aspect of urban or suburban planning that focuses on creating a desirable environment in which to live, work and play. A well-designed urban or suburban environment demonstrates the four generally accepted principles of design: clearly identifiable function for the area; easily understood order; distinctive identity; and visual appeal.

VACATION: Refers to vacation of street or road as an action taken by the Board of Supervisors in order to abolish the public's right-of-passage over a road or road right-of-way dedicated by a plat of subdivision. Upon vacation, title to the road right-of-way transfers by operation of law to the owner(s) of the adjacent properties within the subdivision from whence the road/road right-of-way originated.

VARIANCE: An application to the Board of Zoning Appeals which seeks relief from a specific zoning regulation such as lot width, building height, or minimum yard requirements, among others. A variance may only be granted by the Board of Zoning Appeals through the public hearing process and upon a finding by the BZA that the variance application meets the required Standards for a Variance set forth in Sect. 18-404 of the Zoning Ordinance.

WETLANDS: Land characterized by wetness for a portion of the growing season. Wetlands are generally delineated on the basis of physical characteristics such as soil properties indicative of wetness, the presence of vegetation with an affinity for water, and the presence or evidence of surface wetness or soil saturation. Wetland environments provide water quality improvement benefits and are ecologically valuable. Development activity in wetlands is subject to permitting processes administered by the U.S. Army Corps of Engineers

TIDAL WETLANDS: Vegetated and nonvegetated wetlands as defined in Chapter 116 Wetlands Ordinance of the Fairfax County Code: includes tidal shores and tidally influenced embayments, creeks, and tributaries to the Occoquan and Potomac Rivers. Development activity in tidal wetlands may require approval from the Fairfax County Wetlands Board.

Abbreviations Commonly Used in Staff Reports

A&F	Agricultural & Forestal District
ADU	Affordable Dwelling Unit
ARB	Architectural Review Board
BMP	Best Management Practices
BOS	Board of Supervisors
BZA	Board of Zoning Appeals
COG	Council of Governments
CBC	Community Business Center
CDP	Conceptual Development Plan
CRD	Commercial Revitalization District
DOT	Department of Transportation
DP	Development Plan
DPWES	Department of Public Works and Environmental Services
DPZ	Department of Planning and Zoning
DU/AC	Dwelling Units Per Acre
EQC	Environmental Quality Corridor
FAR	Floor Area Ratio
FDP	Final Development Plan
GDP	Generalized Development Plan
GFA	Gross Floor Area
HC	Highway Corridor Overlay District
HCD	Housing and Community Development
LOS	Level of Service
Non-RUP	Non-Residential Use Permit
OSDS	Office of Site Development Services, DPWES
PCA	Proffered Condition Amendment
PD	Planning Division
PDC	Planned Development Commercial
PDH	Planned Development Housing
PFM	Public Facilities Manual
PRC	Planned Residential Community
RC	Residential-Conservation
RE	Residential Estate
RMA	Resource Management Area
RPA	Resource Protection Area
RUP	Residential Use Permit
RZ	Rezoning
SE	Special Exception
SEA	Special Exception Amendment
SP	Special Permit
TDM	Transportation Demand Management
TMA	Transportation Management Association
TSA	Transit Station Area
TSM	Transportation System Management
UP & DD	Utilities Planning and Design Division, DPWES
VC	Variance
VDOT	Virginia Dept. of Transportation
VPD	Vehicles Per Day
VPH	Vehicles per Hour
WMATA	Washington Metropolitan Area Transit Authority
WS	Water Supply Protection Overlay District
ZAD	Zoning Administration Division, DPZ
ZED	Zoning Evaluation Division, DPZ
ZPRB	Zoning Permit Review Branch