



# County of Fairfax, Virginia

## MEMORANDUM

DATE: February 22, 2010

**TO:** David Marshall, Chief  
Facilities Planning Branch, Planning Division, DPZ

**FROM:** Kevin Guinaw, Chief *K. Guinaw*  
Special Projects/Applications Management Branch, Zoning Evaluation Division, DPZ

**SUBJECT:** Proposed Clearwire Telecommunications Facility at 8501 Arlington Boulevard;  
Tax Map 49-3 ((1)) 101E; 2232 Application FS-P09-203

This is in response to a request for a determination as to whether the telecommunications facility proposed by Clearwire at 8501 Arlington Boulevard would be in substantial conformance with the proffers accepted by the Board of Supervisors with approval of Proffered Condition Amendment PCA 74-7-057. As described in the 2232 application dated December 17, 2009, from Jack Andrews, three (3) panel antennas (42 inches high x 11.8 inches wide x 4.5 inches deep) and one (1) microwave dish antenna (26.1 inches in diameter) are proposed to be mounted on the existing screen wall on the rooftop of the 68-foot tall office building. In addition, one (1) equipment cabinet (54.25 inches high x 25.5 inches wide x 25.25 inches deep) is proposed to be installed within the screened rooftop equipment area. A copy of the 2232 application with illustrations of the proposed locations of the telecommunications equipment is attached.

The Zoning Administration Division has determined that a telecommunications facility as described above is a permitted use pursuant to the provisions of Sect. 2-514 of the Zoning Ordinance provided that it is determined to be in substantial conformance with any applicable rezoning. It is my determination that the proposed telecommunications facility described would be in substantial conformance with the above-referenced applications. Please note that this proposal is subject to 2232 review requirements and that the applicant's ability to proceed is dependent upon approval of the pending 2232 application by the Fairfax County Planning Commission. This determination has been made in my capacity as the duly authorized agent of the Zoning Administrator. If you have any questions regarding this memorandum, please call Carrie Lee at (703) 324-1290.

KG/CDL/O:\clee01\ActionAssignments\Antennas\8501 Arlington Blvd\_rooftop\8501 Arlington Blvd\_Clearwire.doc

Attachments: A/S

cc: Linda Q. Smyth, Supervisor, Providence District  
Kenneth Lawrence, Planning Commissioner, Providence District  
Regina C. Coyle, Director, Zoning Evaluation Division, DPZ  
Diane Johnson-Quinn, Deputy Zoning Administrator, Zoning Permit Review, ZAD, DPZ  
Jack Andrews, Site Link Wireless, 7130 Minstrel Way, Suite 215, Columbia, MD 21045  
File: PCA 74-7-057, ANT 1001 007, Imaging, Reading File



# County of Fairfax, Virginia

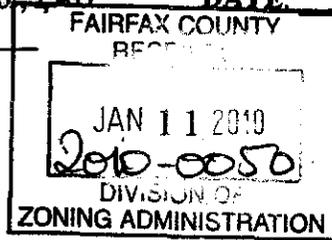
## MEMORANDUM

TO: Lorrie Kirst, Deputy Zoning Administrator, ZAD DATE: 1-8-10  
 Other: \_\_\_\_\_

FROM: David B. Marshall, Chief  
 Facilities Planning Branch, DPZ

SUBJECT: Request for Review: 2232 Application

RE: Application Number: FS-P09-203 Tax Map: 49-3 (11) 101E



Attached for your review and comment is a 2232 Review application:

RECEIVED FROM: Clearwire  
 PROPOSED USE: Telecom: Rooftop Collocation  
 LOCATION OF USE: 8501 Arlington Blvd  
 ADDITIONAL COMMENTS: \_\_\_\_\_

Please send your comments to David Marshall by: 1/26/10  
 Staff Coordinator: Connie Mmier Phone: 324-1263 Email: Connie.Mmier@FairfaxCounty.gov

### \*\*ZAD COMMENTS:

Property is zoned \_\_\_\_\_  
 \_\_\_\_\_ Proposed use is permitted by Zoning Ordinance and meets all zoning requirements.  
 \_\_\_\_\_ Proposed use does not meet all Zoning requirements as follows:  
see attached

Referred to ZED for the following: Must be in substantial conformance  
 ZAD comments prepared by: B Parsons Date: 1-13-10 with proffered

### \*\*ZED COMMENTS:

\_\_\_\_\_ Proposed use is in substantial conformance with all development conditions and/or proffers.  
 \_\_\_\_\_ Proposed use is not in substantial accord with all development conditions and proffers.

\*\*ZED comments prepared by: \_\_\_\_\_ Date: \_\_\_\_\_

RECEIVED  
 Department of Planning & Zoning  
 JAN 13 2010  
 Zoning Evaluation Division

Department of Planning and Zoning  
 Planning Division  
 12055 Government Center Parkway, Suite 730  
 Fairfax, Virginia 22035-5509  
 Phone 703-324-1380  
 Fax 703-324-3056  
 www.fairfaxcounty.gov/dpz/



**Kirst, Lorrie**

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**To:** Maier, Constance A.  
**Cc:** Parsons, Brian S.  
**Subject:** FW: FS-P09-203, 8501 Arlington Blvd., Clearwire

RE: FS-P09-203

8501 Arlington Blvd.

49-3 ((1)) 101E

Clearwire: Collocation on an office building rooftop

Zoned: C-3

The proposed use meets all requirements of Par. 1 of Sect. 2-514 of the Zoning Ordinance.

Note to ZED: Must be in substantial conformance with the proffered conditions associated with Proffered Condition Amendment PCA 74-7-057.

Prepared by: Brian Parsons 1/12/10

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Bivd.

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ELKS LODGE

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A-431 C-3

4-7-057\*

PARKING GARAGE

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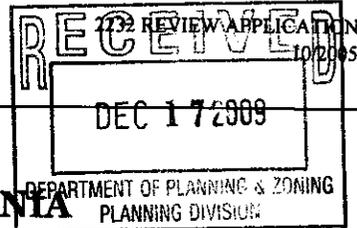
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04-PI

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1



**COUNTY OF FAIRFAX, VIRGINIA**

**APPLICATION FOR DETERMINATION  
PURSUANT TO  
SECTION 15.2-2232 OF THE CODE OF VIRGINIA**

Application Number: FS-009-203  
(assigned by staff)

*The application contains three parts: I. Application Summary; II. Statement of Justification; and I Telecommunication Proposal Details. Please do not staple, bind or hole-punch this application. Please provide at least one copy of all pages, including maps and drawings, on 8.5 x 11 inch paper.*

*(Please Type or Print All Requested Information)*

**PART I: APPLICATION SUMMARY**

**ADDRESS OF PROPOSED USE**

Street Address 8501 Arlington Blvd.  
 City/Town Fairfax Zip Code 22031

**APPLICANT(S)**

Name of Applicant Clearwire  
 Street Address 593 Herndon Parkway  
 City/Town Herndon State VA Zip Code 20170  
 Telephone Number: Work (443) 677-0144 Fax (240) 334-3875  
 E-mail Address jandrews@sitelinkwireless.com  
 Name of Applicant's Agent/Contact (if applicable) Jack Andrews  
 Agent's Street Address 7130 Minstrel Way, Suite 215  
 City/Town Columbia State MD Zip Code 21045  
 Telephone: Work (443) 677-0144 Fax (24) 334-3875

**PROPOSED USE**

Street Address 8501 Arlington Blvd.

Fairfax Co. Tax Map and Parcel Number(s) 0493 01 0101E

Brief Description of Proposed Use \_\_\_\_\_

Clearwire proposes to install three (3) Argus LLP X31OR panel antennas (42"T x 11.8"W x 4.5"D), and one Andrew VHLP2-23 microwave dish antenna to be flush-mounted on the existing penthouse screen wall, and install one 54.25"T x 25.5" W x 25.25"D equipment cabinet on a proposed 3' x 6' platform on the rooftop and enclosed with the existing rooftop mechanical equipment screen wall

Total Area of Subject Parcel(s) 84,346 square feet (acres or square feet)

Portion of Site Occupied by Proposed Use N/A (acres or square feet)

Fairfax County Supervisor District PROVIDENCE TRANSPORTATION

Planned Use of Subject Property (according to Fairfax County Comprehensive Plan)  
Office

Zoning of Subject Property C-3 (Office)

List all applicable Proffer Conditions, Development Plans, Special Exceptions, Special Permits or Variances previously approved and related to this site

**PROPERTY OWNER(S) OF RECORD**

Owner WRIT 8501 8503 LLC

Street Address 6110 EXECUTIVE BLVD. STE 800

City/Town ROCKVILLE State MD Zip Code 20852

**PART II**, entitled "Statement of Justification," pages 4 through 6, shall be completed by all applicants and included as part of the application. **PART III**, entitled "Telecommunication Proposal Details," pages 7 through 9, also shall be completed and included for all proposed telecommunication uses.

Name of Applicant or Agent Jack Andrews

Signature of Applicant or Agent 

Date 12/15/09

\*\*\*\*\*

*Please do not staple, bind or hole-punch this application. Please provide at least one copy of all pages, including maps and drawings, on 8.5 x 11 inch paper.*

**Submit completed application to:**

**Fairfax County  
Department of Planning and Zoning, Planning Division  
Herrity Building  
12055 Government Center Parkway, Suite 730  
Fairfax, Virginia 22035**

\*\*\*\*\*

<p><b>FOR STAFF USE ONLY</b></p> <p>Date application received: <u>12/17/09</u></p> <p>By: <u></u></p> <p>Additional information requested to complete application:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Date application accepted: <u>  /  /  </u></p> <p>By: _____</p>
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### **PART III: TELECOMMUNICATION PROPOSAL DETAILS**

*Please complete and provide all requested information. If question is not applicable to the proposed use, please indicate with N/A.*

#### **PROPOSED TELECOMMUNICATION USE**

Use is (check one):

- New structure (monopole, tower or camouflaged facility)
- Replacement of existing pole or tower at same location with another pole or tower
- Antenna placement on building or penthouse facade
- Antenna placement on building or penthouse rooftop
- Collocation on other existing telecommunications structure (monopole or tower)
- Collocation on other non-telecommunications structure (such as an electric transmission tower/pole, utility pole, water tower, etc.)
- Modification to telecommunications facility previously approved for same applicant:  
Prior 2232 Review application number: \_\_\_\_\_  
Date of Planning Commission approval: \_\_\_\_\_

#### **PROJECT DETAILS**

##### **1. ANTENNA**

Number and Type: 3 Argus panel antennas & 1 - 26.1" diameter dish antenna  
Dimensions: height 42" width 11.8" depth 4.5" diameter 26.1"  
Location / Placement: flush-mounted on existing 115' tower mount rooftop screen wall  
Wattage: 100 watts  
Material and Color: polymer painted to match  
Material and Color of the Antenna Mounting: polymer painted to match  
Height Above Ground: Panels: 79' 9" & Dish: 75' RAD AGL

##### **2. EQUIPMENT**

Number and Type of Cabinets or Structures: one R7-54DXCW  
Cabinet / Structure Dimensions: height 54.25" width 25.5" depth 25.25"  
Height of equipment platforms, if any: Between 15" to 21"  
Material and Color: Grey Steel  
Location: on rooftop  
Method of Screening: existing mechanical equipment screen

##### **3. STRUCTURE ON WHICH ANTENNAS WILL BE MOUNTED**

Maximum Height: 82' AGL  
Material: penthouse mechanical screen is steel  
Color: tan  
If structure is within a utility right-of-way, state right-of-way width:  
N/A

Fairfax County  
Department of Planning and Zoning  
12055 Government Center Parkway, Suite 730  
Fairfax, VA 22035

Attn: James P. Zook, Director

RE: **Statement of Justification** for determination of conformance with Fairfax County Comprehensive Plan pursuant to Section 15.2-2232 of the Code of Virginia for a telecommunications facility proposed: **To flush-mount three (3) panel antennas and one (1) dish antenna on the sides of a rooftop penthouse and to situate a related equipment cabinet on a new platform on the roof inside of a mechanical screen wall on a privately owned property located at 8501 Arlington Boulevard, Fairfax, VA 22031**

**APPLICANT:**

Clearwire US, LLC  
593 Herndon Parkway  
Herndon, VA 20170

**SITE LOCATION:**

Clearwire Site # VA-WSH1349  
8501 Arlington Blvd, Fairfax, VA 22031  
Tax ID #: 0493 01 0101E  
Zoning District: C-3 (Office)

Dear Mr. Zook:

Pursuant to Section 15.2-2232 of the Code of Virginia, Clearwire US, LLC, ("Clearwire") hereby requests a determination that the proposed wireless telecommunication collocation application described herein is in substantial accord with the Fairfax County Comprehensive Plan.

Description of Proposed Use:

The proposed facility will function as a base transmission station for Clearwire's wireless telecommunication network. Clearwire proposes to install three (3) panel antennas, each forty two (42) inches tall by eleven point eight (11.8) inches wide by four point five (4.5) inches deep, all with a RAD center elevation of seventy nine feet nine inches (79'9"), and one twenty six point one (26.1) inch diameter microwave dish antenna with a RAD center of seventy five (75) feet on an existing eighty two foot (82) foot tall office building on the above referenced property. The antennas will be flush mounted onto the sides of an existing penthouse screen wall and will not extend above the height of the existing penthouse roof. A single fifty four point two five inch (54.25") tall by twenty five point five inch (25.5") wide by twenty five point two five inch (25.25") deep equipment cabinet is proposed to be located upon a three (3) foot by six (6) foot proposed platform on the roof and screened within the existing mechanical equipment screen wall on the roof.

Attached are photo simulations that show the proposed facility.

The subject property is currently improved by a five (5) story, sixty eight (68) foot tall office building used as medical offices, topped with a penthouse-type roof structure enclosed within a mechanical equipment screen wall, which brings the total height of the building to eighty two (82) feet.

Clearwire proposes to flush-mount a single panel antenna ("alpha") on the north side of the equipment screen wall, another panel antenna ("gamma") flush mounted at the middle of the western side screen wall and a third panel antenna ("beta") flush-mounted to the southern screen wall. All of the three (3) proposed panel antennas will have a RAD center of seventy nine feet nine inches (79' 9") and will not extend above the top of the penthouse. The proposed dish antenna will be flush-mounted below the beta antenna and have a RAD center of seventy five (75) feet.

The proposal is for an unmanned facility which will be operational 24 hours per day, 7 days per week throughout the year. Once completed, the site will normally be visited during regular business hours by a technician on a schedule yet to be determined.

This site is necessary to provide wireless internet coverage to the surrounding area. The proposed site will provide enhanced high speed 4G internet coverage and obviate the need for an additional site nearby. PC cards are hardware devices similar in size to a candy bar and are used to provide laptop computer user's access to the Internet on a mobile basis. Current pc cards utilizing cellular networks to deliver data do not operate at true broadband speeds. Clearwire offers the only pc card that delivers full broadband access to the Internet anywhere within Clearwire's coverage area. With more spectrum devoted solely to data services in the markets in which they operate than any other carrier in the country, Clearwire is able to provide a unique user experience.

#### Requirements for Proposed Use:

This site was selected because the existing rooftop provides sufficient space for antennas which will provide coverage to users within the area. The proposed site was selected because it is improved with an existing structure able to accommodate the equipment, and would be the least disruptive to the community, in accordance with the Fairfax County Comprehensive Plan.

#### Anticipated Impacts on Adjoining Properties:

As this is an unmanned facility, the site will not generate excessive traffic; will not cause any noise, air, light or water pollution. No noise, lights, dust or vibrations will be generated. There will be no environmental concerns as the radio frequency emissions will be within applicable Federal Communications Commission (FCC) guidelines. No lighting is proposed.

The visual impact to adjoining properties will not be significantly altered by the addition of antennas on the tower currently on the subject property.

#### **RELATIONSHIP OF THE PROPOSAL TO THE COMPREHENSIVE PLAN**

The proposed facility is consistent with and furthers the transcendent goals of the Fairfax County Comprehensive Land Use Plan ("Plan") as well as the applicable objectives.

The location, character and extent of the application should be found to be in substantial accord with the Comprehensive Plan. In terms of location, the use of existing structures is encouraged by the plan for new site development.

Regarding the character of the proposal, the location of telecommunication antennas on an existing penthouse wall is an attempt to optimize the use on an existing structure already present on the subject parcel. The extent of the proposed facility should be found to be in substantial accord with the plan as well. The proposed facility poses no encroachment on any existing easements or services.

The instant application is also consistent with the objectives found under the Policy Plan of the Comprehensive Plan concerning "Mobile and Land-Based Telecommunication Services."

Under the "Public Facilities" section and the "Utilities and Services" subsection, it states:

***Objective 42: In order to provide for the multiple and land-based telecommunication network for wireless telecommunication systems licensed by the Federal Communications Commission, and in order to achieve opportunities for the collocation of related facilities and the reduction of their visual impact, locate the network's necessary support facilities which include antennas, monopoles, lattice towers and equipment building in accordance with the following policies:***

***Policy a. Avoid construction of new structures by locating mobile and land-based telecommunication facilities on available existing structures such as building rooftops, telecommunication broadcast poles and towers, electrical utility poles and towers, and water storage facilities when the telecommunication facilities can be placed inconspicuously to blend with existing structures.***

Clearwire submits that making use of the existing penthouse as a location for a new telecommunications facility effectively avoids the need to construct a new tower. The enclosed photo-simulations demonstrate the circumstances of this particular site.

***Policy h. Design, site and/or landscape mobile and land-based telecommunication facilities to minimize impacts on the character of the property and surrounding areas. Demonstrate the appropriateness of the design through facility schematics and plans which detail the type, location, height, and material of the proposed structures and their relationship to other structures on the property and surrounding areas.***

The proposed antennas are to be flush mounted upon an existing mechanical equipment screen wall and will not exceed the height of the wall. Installing the proposed antennas will have minimal additional visual impact on the surrounding area. To demonstrate this conclusion, please reference the photo simulation and drawings. These materials effectively demonstrate the minimal visual impact on adjoining properties and the surrounding community.

***Policy k. Locate telecommunication facilities to ensure the protection of historically significant landscapes. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.***

The site is located outside of any County Historic District. The views and vistas from any nearby properties will not significantly altered by the addition of the antennas.

**Policy j.** *Site proposed facilities to avoid areas of environmental sensitivity.*

The site is currently used as medical offices, and is not environmentally sensitive.

Furthermore, Clearwire concludes that the proposed facility should be found to be a feature shown of the Comprehensive Plan by demonstrating compliance with the "Feature Shown Guidelines" of the Comprehensive Plan, which provides:

**Objective 44:** *With Planning Commission approval, consider mobile and land-based telecommunication facilities to be located on existing or replacement structures a "feature shown" of the Comprehensive Plan to be processed without a public hearing when placed in conformance with the following policies:*

**Policy a.** *Locate telecommunication facilities on existing buildings and structures at the following properties:*

- *commercial and industrial zoned property and in the commercial areas of PDH, PDC, PRM and PRC zoning districts*

The subject property is zoned C-3 (Office).

**Policy c.:** *In determining that the proposed telecommunication facilities are a feature shown of the Comprehensive Plan, ensure that the following general factors are met:*

- *the proposed installation has no material adverse impact on the visual quality or character of the general area in which it is to be placed including any surrounding residential properties;*

Clearwire submits that the proposed antenna arrays on this building will have little to no material adverse impact on the visual quality or character of the general area.

- *the proposed installation is located and designed to blend with the structure on which it is placed such as flush-mounting antennas or screening the antennas and equipment as appropriate to the site;*

Clearwire submits that the proposed antennas will be flush-mounted and will not extend above the height of the existing penthouse enclosure walls.

- *related equipment cabinets or shelters located on the ground or on a rooftop should be appropriately screened or placed to obscure their visibility from surrounding properties;*

The equipment cabinet will be screened by the existing mechanical equipment screen wall.

- *building rooftop antennas should be either flush mounted to surface walls, screened or placed to not be visible from the surrounding area.*

Clearwire submits that the proposed antennas will be flush-mounted and will not extend above the height of the existing penthouse enclosure walls.

#### **ALTERNATIVE SITES CONSIDERED FOR THIS PROPOSAL**

As Clearwire is making use of an existing structure on commercial property in lieu of building a new telecommunication tower, and does not believe that it was necessary to eliminate other existing structures.

Based upon the foregoing recitation, the applicant, Clearwire, respectfully submits to the Planning Commission that the proposed facility is consistent with the Comprehensive Plan as to character, location and extent, and requests that the Planning Commission determine that the facility is a feature shown of the Comprehensive Plan.

If you have any further questions or comments concerning this application, please feel free to contact me at 443-677-1044, or via email at: [jandrews@sitelinkwireless.com](mailto:jandrews@sitelinkwireless.com). I thank you in advance for your kind courtesies and attention with respect to this application.

Respectfully Submitted,

Jack Andrews  
Zoning Manager  
Site Link Wireless  
Obo Clearwire US, LLC

Enclosures



**MAP #: 0493 01 0101E  
WRIT 8501 8503 LLC**

**8501 ARLINGTON BV**

**Owner**

Name WRIT 8501 8503 LLC,  
Mailing Address 6110 EXECUTIVE BV STE 800 ROCKVILLE MD  
20852  
Book 15258  
Page 1400

**Parcel**

Property Location 8501 ARLINGTON BV  
Map # 0493 01 0101E  
Tax District 7T000  
District Name PROVIDENCE TRANSPORTATION  
Land Use Code Med/dental med/hi rise(= > 5 stories)  
Land Area (acreage)  
Land Area (SQFT) 84,346  
Zoning Description C-3(Office)  
Utilities WATER CONNECTED  
SEWER CONNECTED  
GAS CONNECTED  
County Historic Overlay District NO  
For further information about Historic Overlay Districts, Click here

Street/Road PAVED  
Site Description

**Legal Description**

Legal Description PROP OF PROSPERTY  
PROF CENTER LLC  
PCL A-3

**Sales History**

Date	Amount	Seller	Buyer
10/10/2003	\$55,000,000	8501 8503 ARLINGTON BOULEVARD LLC	WRIT 8501 8503 LLC
04/09/2003	\$0		

**Sales**

1 of 2

Date 10/10/2003  
Amount \$55,000,000  
Seller 8501 8503 ARLINGTON BOULEVARD LLC  
Buyer WRIT 8501 8503 LLC  
Notes Valid and verified multi-parcel sale  
Deed Book and Page 15258-1400

This property was part of a multi-parcel transaction.  
For further information contact DTA by phone at (703) 222-8234 or CLICK HERE

**Values**

Current Land \$1,775,850  
Current Building \$27,574,970  
Current Assessed Total \$29,350,820  
Tax Exempt NO  
Note

**Values History**

Tax Year	Land	Building	Assessed Total	Tax Exempt
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2009	\$1,775,850	\$27,574,970	\$29,350,820	NO
2008	\$1,775,850	\$28,030,990	\$29,806,840	NO
2007	\$1,136,540	\$28,856,700	\$29,993,240	NO
2006	\$1,118,790	\$25,890,850	\$27,009,640	NO
2005	\$1,119,000	\$24,650,540	\$25,769,540	NO
2004	\$1,111,680	\$22,627,825	\$23,739,505	NO

**Structure**

Property Name	PROSPERITY CENTER 1
Land Use Code	Med/dental med/hi rise(= > 5 stories)
Year Built	2000
Gross Floor Area	99,292
Units (if applicable)	
Stories	5
Construction Type	Metal/Steel Frame
Exterior Walls	Brick/Insulite
Floor	Concrete
Roof	Rubber Membrane
Elevator	3
Element #	E03236002
Note	THIS COMMERCIAL PROPERTY MAY BE COMPRISED OF MORE THAN ONE TAX MAP PARCEL. IF SO, THE ADDITIONAL TAX MAP PARCEL(S) WILL BE LISTED BELOW.
Associated Parcels	0493 01 0101F

**Structure Summary**

Property Name	Land Use Code	Year Built	GFA	Units
PROSPERITY CENTER 1	Med/dental med/hi rise(= > 5 stories)	2000	99,292	

**Structure Size**

Above Grade Living Area Total  
Sq. Ft  
Basement Garage # Cars

**General Information****Need Help?**

For questions and requests for information about the Real Estate site, call 703-222-8234 or [CLICK HERE](#)

**Disclaimer**

Under Virginia State law these records are public information. Display of this information on the Internet is specifically authorized by Va. Code 58.1-3122.2 (1998). See the Virginia State Code to read the pertinent enabling statute.

If you believe any data provided is inaccurate or if you have any comments about this site, we would like to hear from you. Owner names will be withheld from the Internet record upon request. Comments or requests may be made via e-mail to the Real Estate Division at Real Estate Division or by phone at (703) 222-8234.

While Fairfax County has attempted to ensure that the data contained in this file is accurate and reflects the property's characteristics, Fairfax County makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. Fairfax County does not assume any liability associated with the use or misuse of this data.

**Last Refresh Date**

Data last refreshed: 10-DEC-09

**2300-2700MHz Remote Tilt Panel Antenna**

**Electrical Specifications**

Frequency Range	2300 - 2700 MHz / 2300 - 2700 MHz
Gain	17.3 dBi 2.4 GHz 18 dBi 2.6 GHz
Return Loss	> 15 dB
Polarization	Dual Slant $\pm 45^\circ$
Horizontal Beamwidth	65°
Vertical Beamwidth	6.5° with nullfill
Electrical Downtilt	0° - 10° independently continuously adjustable
Upper Sidelobe Level	< -18 dB
Front to Back Ratio	> 30 dB
Isolation Between Ports	> 30 dB
Power Rating	250W
Impedance	50 ohm
Lightning Protection	DC grounded
Connector Type	N-Type female or 4.1-9.5 DIN
RET Type	Internal motor & manual override
RET Interface	AISG1 Remotely upgradeable
RET Connector	Single AISG1 8 pin male



**Mechanical Specifications**

Antenna Dimensions	1070x300x115 mm
Packed Dimensions	1200x330x200 mm
Antenna Weight	13 kg
Radome Material	Polyester Fibreglass pultrusion

**Maximum Environmental Ratings**

Humidity	95% RH @ +30°C
Lateral Loading (Front)	0.45 kN @ 160 km/h
Lateral Loading (Rear)	0.48 kN @ 160 km/h
Rain	140mm per hour
Rated Wind Velocity	200 km/h
Temperature	-40°C to +70°C

**Mounting Options**

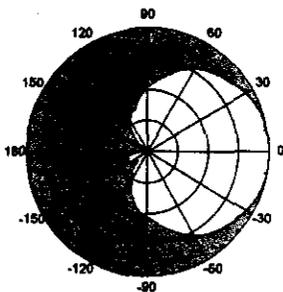
F-042-GL-E  
T-045-GL-E

Fixed Clamps  
Adjustable Clamps

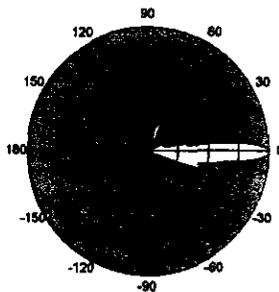
**Product Options**

LLPX310R  
LLPX310R-D

N-Type female  
4.1-9.5 DIN



Azimuth

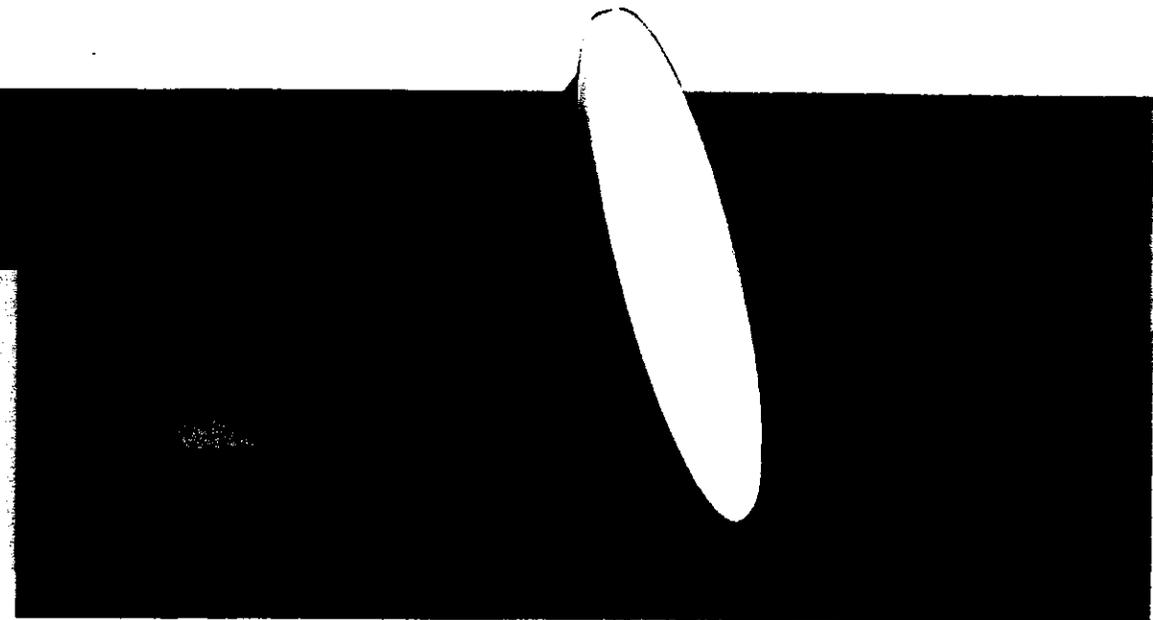


Elevation

Last Updated: 09-12-2008



**PRODUCT  
SPECIFICATION**



# ValuLine® III Next Generation Antennas VHLP2

**SPECIFICATIONS**

	VHLP2-7W	VHLP2-10W	VHLP2-11	VHLP2-13	VHLP2-15	VHLP2-18	VHLP2-23	VHLP2-26	VHLP2-28	VHLP2-32	VHLP2-38
Frequency Band, GHz	7.125–8.5	10.55–10.68	10.7–11.7	12.70–13.25	14.25–15.35	17.7–19.7	21.2–23.6	24.25–26.5	27.5–29.5	31.8–33.4	37.0–40.0
Bottom Band Gain, dBi	29.5	33.7	34.0	35.6	36.5	38.3	39.8	40.8	41.8	43.4	44.6
Mid Band Gain, dBi	30.7	33.8	34.4	35.8	36.8	38.7	40.4	41.2	42.2	43.7	45.2
Top Band Gain, dBi	31.9	34.3	35.0	36.0	37.2	39.1	41.0	41.8	42.7	44.0	45.8
Beamwidth, degrees	4.7	3.7	3.3	2.7	2.5	2.1	1.7	1.5	1.3	1.0	0.9
Front/Back, dB	57	56	60	62	65	67	66	68	68	61	66
XPD, dB	32	30	30	30	30	30	30	30	30	30	30
Return Loss, dB	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7
Regulatory Compliance											
ETSI Class	R1 C3	R1 C2	R1 C3	R1 C3	R2 C3	R2 C3	R3 C3	R4 C3	R4 C3	R5 C3B	R5 C3B
FCC Part 101	N/A	CAT A*	CAT B	N/A	N/A	CAT A	CAT A	CAT A	N/A	N/A	CAT A
Brazil Anatel	N/A	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2
Canada SRSP	N/A	310.5	N/A	312.7B	314.5A	Note 1	Note 2	N/A	N/A	N/A	338.6A
Andrew RPE Number	7075A	7083B, 7086B*	7083A	7004	7008	7012A	7016A	7020A	7024A	7028	7032A

Note 1: Meets Canada SRSP 317.8A, 318.5, 318.8

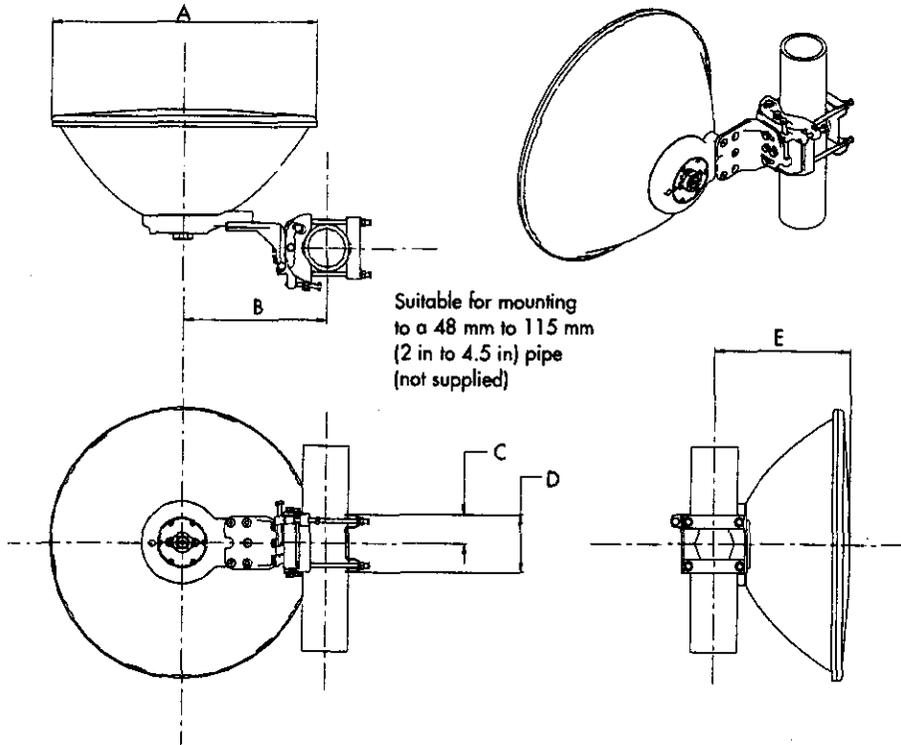
Note 2: Meets Canada SRSP 312.2A, 321.8B

\* Use for FCC band (10.5–10.7 GHz)

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**SPECIFICATIONS**

**ValuLine® III Next Generation Antennas—VHLP2**



**Antenna Dimensions, mm (in)**

A	663 (26.1)
B	358 (14.1)
C	72 (2.8)
D	143 (5.6)
E	335 (13.2)

**Antenna Fine Adjustment**

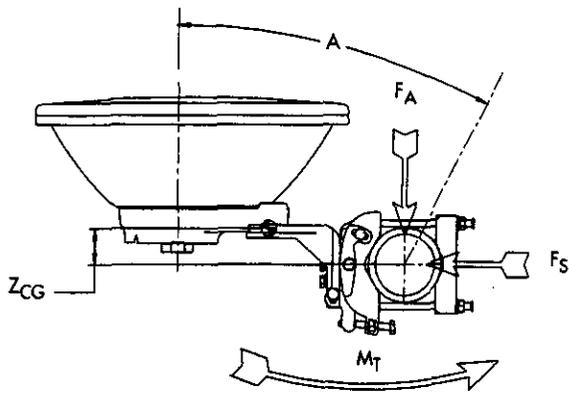
Fine Aximuth	$\pm 10^\circ$
Fine Elevation	$\pm 25^\circ$

**SPECIFICATIONS**

**ValuLine® III Next Generation Antennas—VHLP2**

**Wind Loading**

The axial, side, and twisting moment forces stated below are the maximum loads applied to the tower by the antenna at a survival windspeed of 250 km/h (155 mph). They are the result of wind from the most critical direction for each parameter. The individual maximums may not occur simultaneously. All forces are referenced to the antenna mounting pipe.



Axial force	$F_A$	1066 N (240 lb)
Side force	$F_S$	496 N (111 lb)
Moment	$M_T$	382 N-m (282 lb-ft)
Angle A for $M_T$ maximum		0°
$Z_{CG}$ * without ice, mm (in)		125 (4.9)
$X_{CG}$ with 12 mm (1/2 in) radial ice, mm (in)		188 (7.4)

\* $Z_{CG}$  is the axial distance from the center of gravity to the mounting pipe.

**Antenna Weights Including Mount**

Antenna without ice, kg (lb)	12.28 (27)
Antenna with 12 mm (1/2 in) radial ice, kg (lb)	24.7 (54)

**Antenna Packed Weights (Gross)**

Weight, kg (lb)	19.42 (43)
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**Packed Antenna Dimensions (Single Unit Pack)**

Dimensions, cm (in)	70 x 70 x 56 (27.5 x 27.5 x 22.0)
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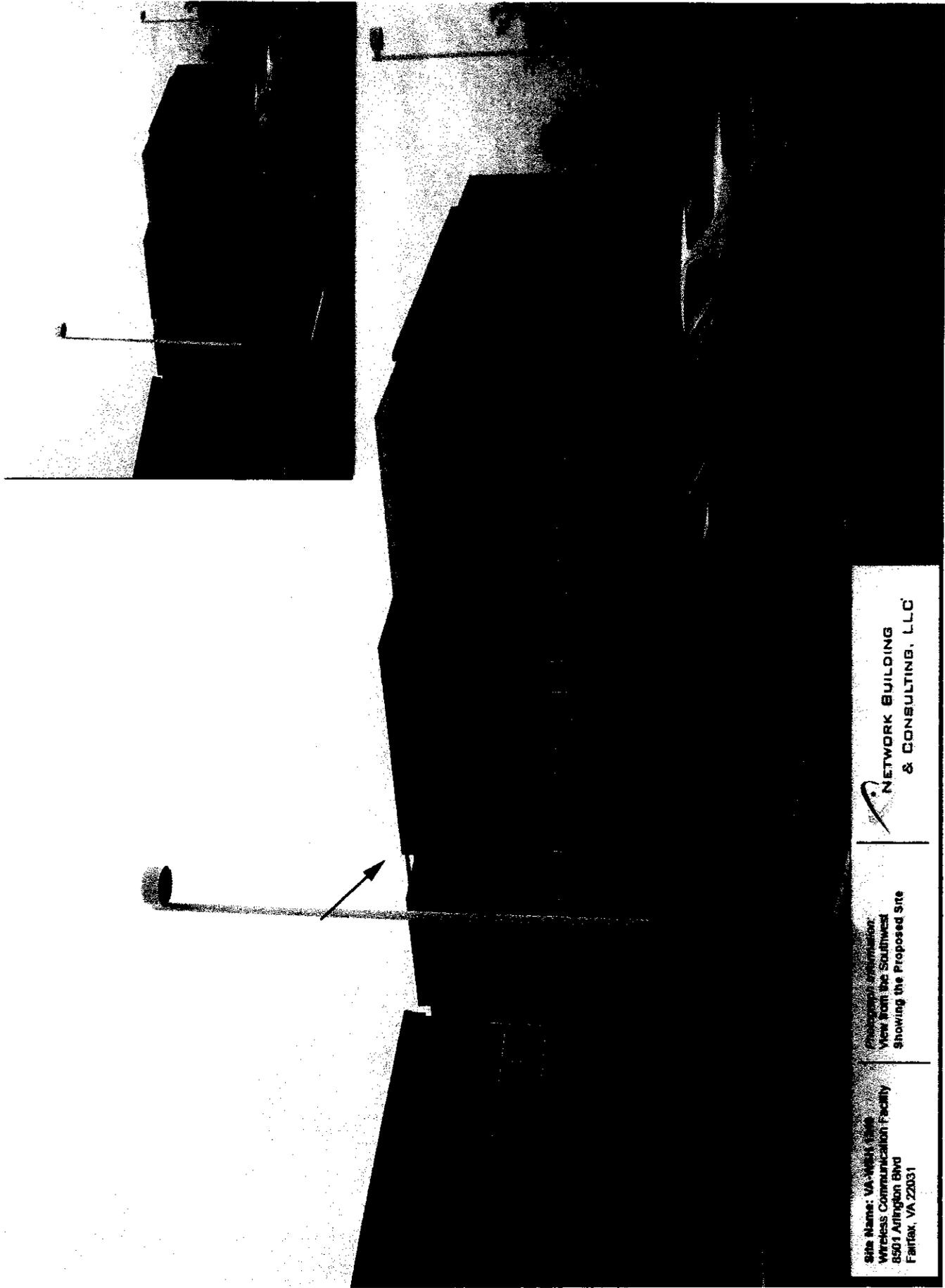
Andrew Corporation  
3 Westbrook Corporate Center  
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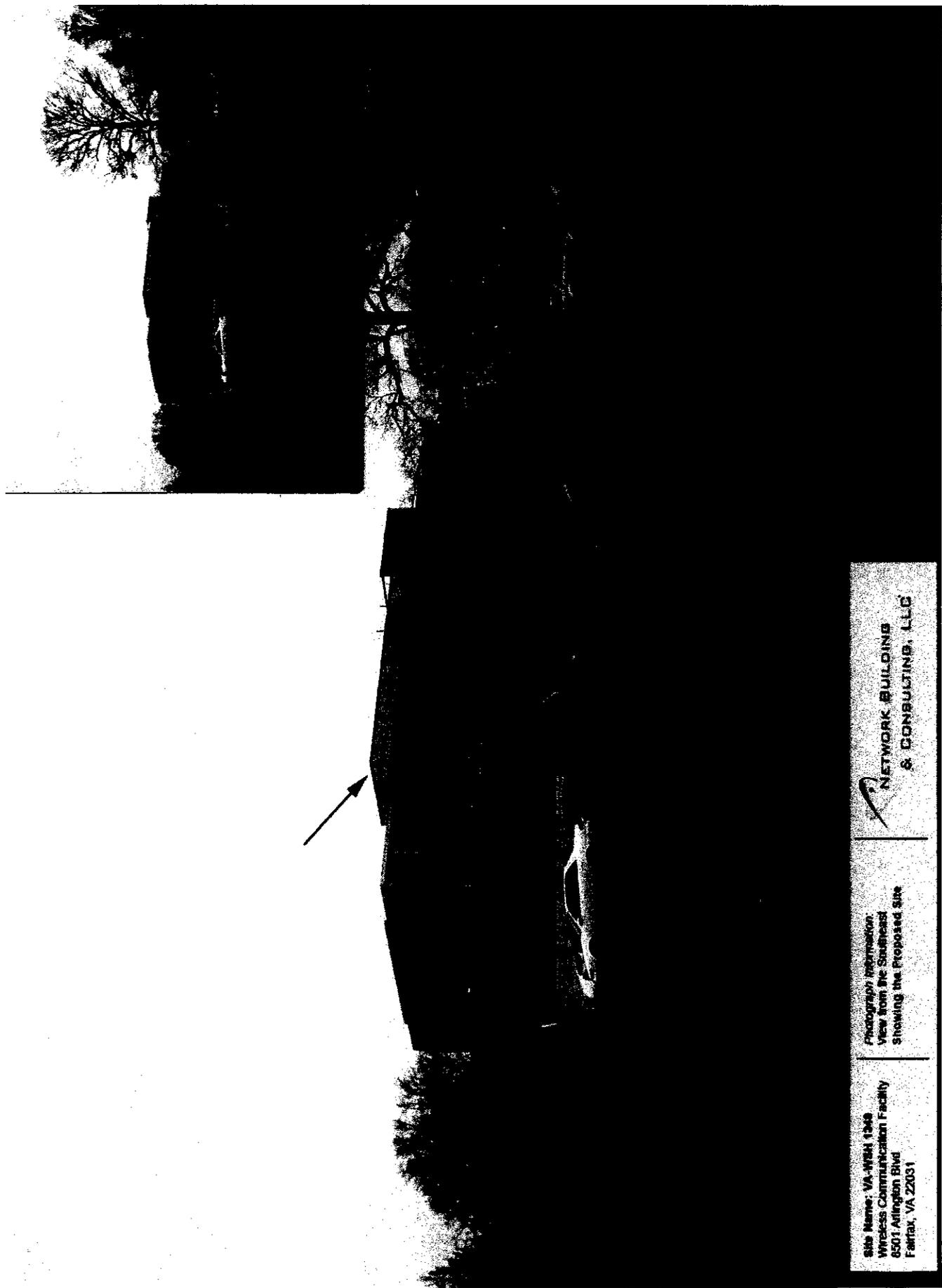
Bulletin PA-101028.5-EN (10/07)  
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Site Name: VA-4451 (09)  
Wireless Communication Facility  
6501 Arlington Blvd  
Fairfax, VA 22031

Proposed Installation:  
New 4000 sq. Footwest  
Showing the Proposed Site

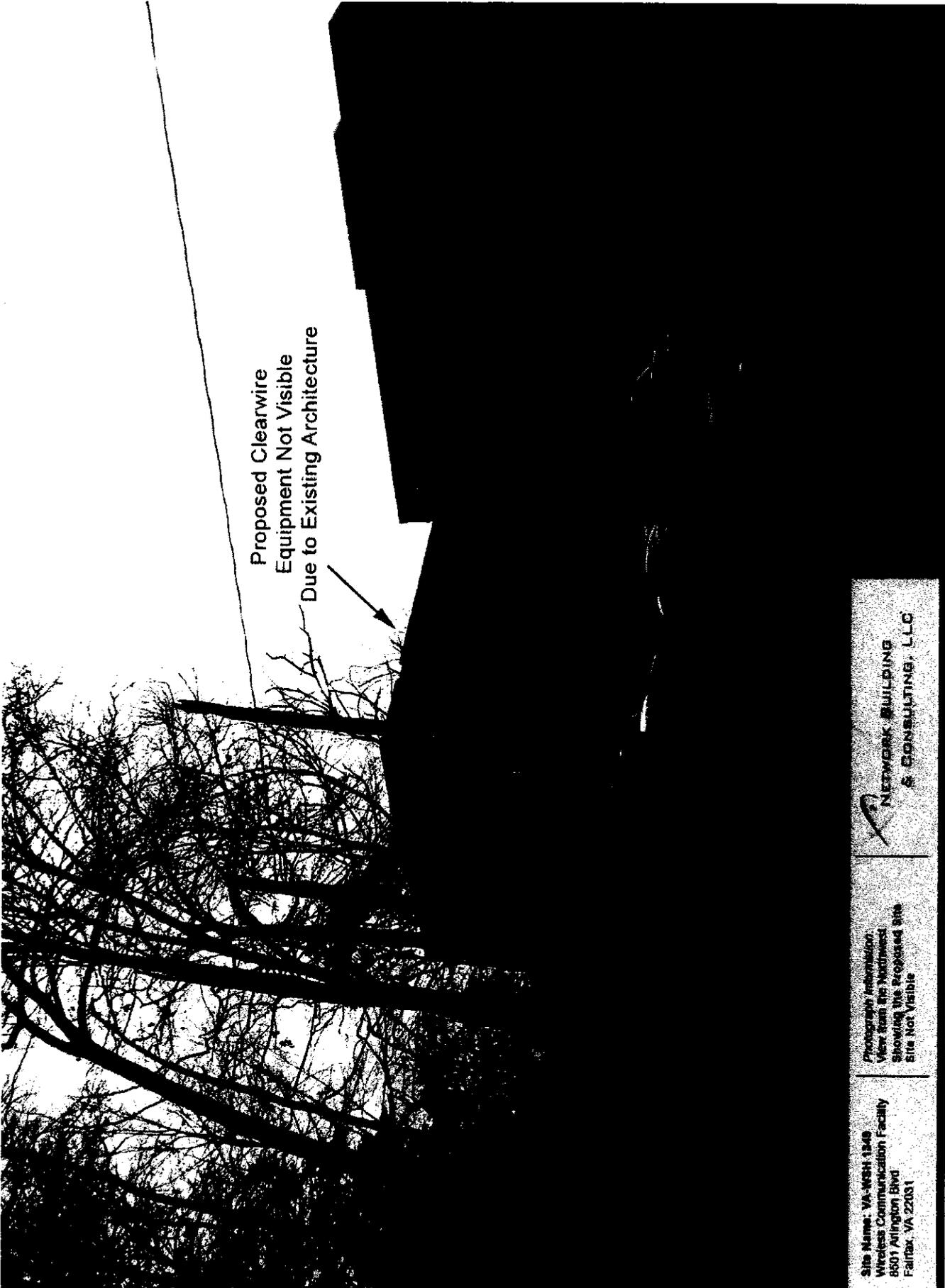
  
NETWORK BUILDING  
& CONSULTING, LLC



Site Name: VA-WSH 1349  
Wireless Communication Facility  
8501 Atlington Blvd  
Fairfax, VA 22031

Photograph Information:  
View from the Southeast  
Showing the Proposed Site

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& CONSULTING, LLC

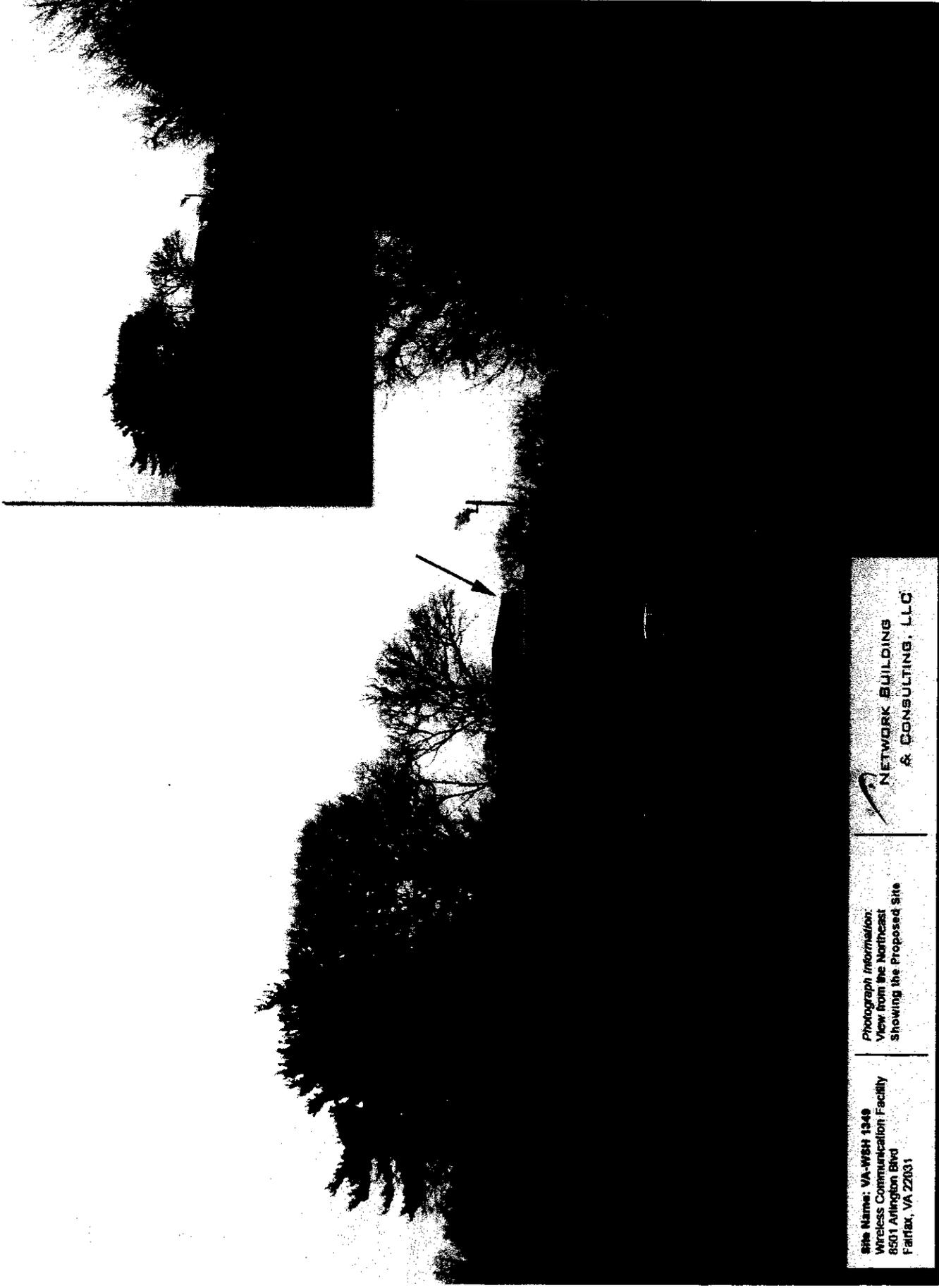


Proposed Clearwire  
Equipment Not Visible  
Due to Existing Architecture

Site Name: VA-WSH-1348  
Wireless Communication Facility  
8501 Arlington Blvd  
Fairfax, VA 22031

Photograph Information:  
View from the Northwest  
Showing the Proposed Site  
Site Not Visible

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& CONSULTING, LLC



<p><b>Site Name: VA-WSH 1349</b>          Wireless Communication Facility          8501 Arlington Blvd          Fairfax, VA 22031</p>	<p><i>Photograph Information:</i>          View from the Northeast          Showing the Proposed Site</p>	 <p><b>NETWORK BUILDING &amp; CONSULTING, LLC</b></p>
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