



ARLINGTON COUNTY, VIRGINIA

**County Board Agenda Item
Meeting of April 24, 2010**

DATE: April 7, 2010

SUBJECT: SP #80 SITE PLAN AMENDMENT for public utility/telecommunications located at 5055 South Chesterfield Road (RPC #28-018-001).

Applicant:

Clearwire Wireless Broadband

By:

Adam Knubel
Zoning Project Manager
7380 Coca Cola Drive, Suite 106
Hanover, Maryland 21076

C.M. RECOMMENDATION:

Approve the site plan amendment for the installation of a new telecommunications facility subject to the conditions of the staff report.

ISSUES: The applicant is requesting a use permit to install a new telecommunications facility on the roof of a multifamily building and no issues have been identified.

SUMMARY: The applicant, Clearwire Wireless Broadband, is requesting a use permit for the installation of a new telecommunications facility on the roof of a multifamily building in the Claremont neighborhood. The proposed antennas would be mounted lower than the height of existing antennas on the building, and will not create additional visual impact. The proposal is consistent with the *Interim Guidelines for Telecommunications Facilities on County-Owned Property* (Telecommunications Guidelines), which also applies to private properties, and which encourages the placement of antennas on existing structures. The president of the Claremont Civic Association has commented to staff that there are no concerns anticipated with the applicant's proposal. Therefore, staff recommends that the use permit be approved subject to the conditions of the staff report.

BACKGROUND: The applicant is proposing to install a new telecommunications facility on the roof of a multifamily building at 5055 South Chesterfield Road. The site is described as follows:

County Manager: BMD/GA

Staff: Matthew Pfeiffer, DCPHD, Planning Division

PLA-5537

1.

Site: The site is bound on the east by South Chesterfield Road, on the north by single-family dwellings, on the south by commercial development and King Street, and on the west by the City of Alexandria. The site consists of a residential multifamily building.

Zoning: The site is zoned “C-O” Commercial Office Building., Hotel, Multiple-Family Dwelling Districts, “R-6” One-Family Dwelling Districts, and “RA-18” Apartment Dwelling Districts.

Land Use: The site is designated on the General Land Use Plan (GLUP) as “Low-Medium” Residential (16-36 units/acre).

Neighborhood: The site is located within the Claremont Civic Association.

DISCUSSION: The applicant, Clearwire Wireless Broadband, is requesting a use permit for the installation of a new telecommunications facility on the roof of the Chesterfield House apartment building. The roof of the subject building contains an existing telecommunications facility consisting of a T-Mobile equipment cabinet and platform, and a number of panel, microwave dish, and GPS antennas and fixtures. The applicant’s proposal includes the installation of three (3) new panel antennas, two (2) new dish antennas, and one (1) GPS antenna on the building’s penthouse roof. The panel antennas measure approximately 42 inches in height; and the dish antennas measure approximately 12 inches and 24 inches in diameter, respectively. Additionally, a new unmanned equipment cabinet would be installed in an existing storage area in the interior of the building.

The *Interim Guidelines for Placement of Telecommunications Facilities on County-Owned Property* (Telecommunications Guidelines), were used to evaluate the application. The Telecommunication Guidelines offer direction in the way of design, visual impact, and compliance with Federal Communications Commission (FCC) regulations, among other things. The Telecommunication Guidelines can be applied to telecommunication facilities on privately owned as well as County-owned property. The Telecommunications Guidelines encourage the location of new antennas on existing structures, as opposed to constructing a new pole. The proposed facility meets these criteria. Attached are plans depicting the location and appearance of the proposed antennas.

The proposal will not have a visual impact on the surrounding area. The site is bounded by commercial properties to the south and only a small number of single-family residences to the north and east. All antennas would be mounted on the penthouse roof; the panel antennas at a height of 79 feet and the dish and GPS antennas at a height of 75 feet. None of the antennas would exceed the height of existing antennas on the roof. Moreover, the applicant indicates that the antennas will be painted according to the existing color schematics of the building, and all cables will be shrouded. The facility will continue to be unmanned, and no ground space will be used in association with this proposal.

CONCLUSION: Staff supports the applicant’s proposal because it is consistent with the Telecommunications Guidelines and it will not create an additional visual impact. The

Claremont Civic Association has expressed to staff that they have no issues with the applicant's proposal. Therefore, staff recommends that the use permit for Clearwire Wireless Broadband for the installation of a new telecommunications facility at 5055 South Chesterfield Road be approved subject to the following conditions.

Conditions:

1. The applicant agrees that the two (2) Clearwire dish antennas on the existing building at 5055 South Chesterfield Road will be installed as shown on plans dated February 3, 2010. Any additional antennas on the site will require a use permit amendment.
2. The applicant shall identify a community liaison who shall be available to address any concerns regarding the facility operation. The name and telephone number of the liaison shall be provided to the Claremont Civic Association and the Zoning Administrator.
3. The applicant agrees that the antennas shall be removed within ninety (90) days after any cessation of use.

PREVIOUS COUNTY BOARD ACTIONS:

There are no previous County Board actions on this property.

clearwre WITNESS SIGNATURES 593 HERNDON PLAZA HERNDON, VA 20170 FAX: (703) 541-3400		Fullerton Engineering Consultants, Inc. 5600 W. BURN MAUR AVE. SUITE 1200 ROSEBROOK, TLL, NOVA 20098 TEL: 847-731-0700 FAX: 847-731-0706		<small>THIS DRAWING IS THE PROPERTY OF FULTON ENGINEERING CONSULTANTS, INC. IT IS TO BE USED ONLY FOR THE PROJECT FOR WHICH IT WAS ISSUED, AND IS NOT TO BE COPIED OR USED FOR ANY OTHER PROJECT. ANY USE OF THIS DRAWING WHICH HAS BEEN MADE WITHOUT THE EXPRESS WRITTEN CONSENT OF FULTON ENGINEERING CONSULTANTS, INC., IS PROHIBITED.</small>		CHECKED BY: FD APPROVED BY: TB DATE: 1/11/01 DESCRIPTION: REV. 1A 2/3/01 ISSUED FOR REVIEW/A		SITE NAME: SPECTRUM SITE NUMBER: V/A-LUSHI382-A SITE ADDRESS: 505 CHESTERFIELD ROAD ALEXANDRIA, VA 22300		SHEET NAME: SITE PLAN SHEET NUMBER: C-1	
<p style="text-align: right;">OVERALL SITE PLAN SCALE: 1" = 60'-0"</p>											

ABBREVIATIONS	
4G	4TH GENERATION
AFF	ABOVE FLOOR
AGL	ABOVE GROUND LEVEL
AN	ANTENNA
APC	APERTURE
APPROX	APPROXIMATE
AWG	AMERICAN WIRE GAUGE
BACHMANN	
BLDG	BUILDING
BTS	BASE TRANSMISSION STATION
CAB	CABINET
COLL	COLUMN
CONC	CONCRETE
CD	CHIMNEY DRAINS
DIGS	DRILLING
FT	FOOT(FEET)
ELEC	ELECTRICAL EQUIPMENT
EGS	EQUIPMENT GROUND BAR
EL	ELEVATION
EV	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
ED	EXISTING
EMI	EMI INTERFERENCE
ENCL	ENCLOSURE
ENCL	ENCLOSURE
GPS	GLOBAL POSITIONING SYSTEM
GRD	GROUND
HARD	HARDWARE
HMAX	HIGH MAXIMUM
HPR	HORIZONTAL PLANE
TCB	MASTER GROUND BAR
TMN	TRANSFORMER
NO	NOT
NC	NEUTRAL
NEC	NEUTRAL EARTH CODE
NS	NOT TO SCALE
OVERHEAD	OVERHEAD ELECTRIC/TELCO
PC	PERSONAL COMPUTERS
POSITION	POSITION
POS	POSITION
RES	RIGID GALVANIZED STEEL INCHES)
LSI	SCREW(S), STEEL FOOT
STL	STEEL
TYP	TYPICAL
UNDERGROUND	UNDERGROUND ELECTRIC/TELCO
UNL	UNLESS NOTED OTHERWISE
VERIFY	VERIFY IN FIELD
WHR	WITH TRANSFORMER
WHL	WITHOUT LINE
PLATE	PLATE

SYMBOLS	
	UTILITY POLE
	WORK POINT
	REVISION
	MASONRY
	BRICK
	CONCRETE
	EARTH
	STEEL
	GRAVEL
	CENTER LINE
	PROPERTY LINE
	LEASE LINE
	EASEMENT LINE
	X
	CHAIN LINK FENCE
	WOOD FENCE
	BELOW GRADE ELECTRIC
	BELOW GRADE TELEPHONE
	OVERHEAD ELECTRIC/TELEPHONE
	SECTION REFERENCE

ROOF COVERAGE CALC.

EXISTING ROOF AREA: 19,734 SQ. FT.
 EXISTING ROOF COVERED: 5,295 SQ. FT. • 16.7%
 PROPOSED TRIPOD COVERED: 165 SQ. FT. • 0.8%
 PROPOSED CLEARANCE EQUIPMENT: 48 SQ. FT. • 0.2%

TOTAL ROOF COVERAGE: 5,453 SQ. FT. • 17.8%
 OF ROOF COVERED

CHECKED BY: FD
 APPROVED BY: PD
 DATE: 2/24/00
 DESCRIPTION: 1A
 BASED FOR REVIEW

Fullerton
Engineering
Consultants, Inc.
SUITE 100
100 S. GREEN MAYER AVE.
ROCHESTER, ILLINOIS 60606
TEL: 847-751-20100
FAX: 847-751-0706

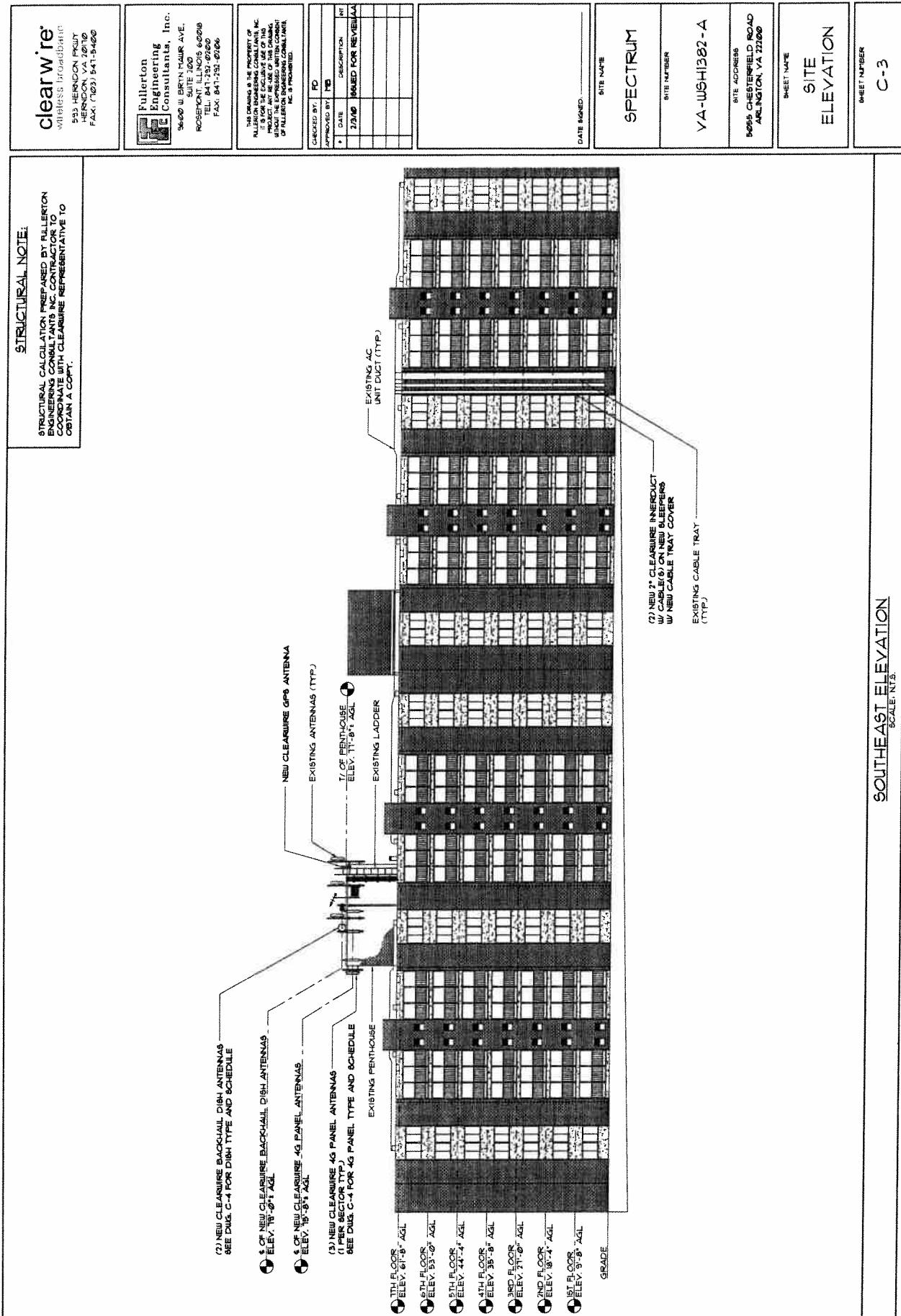
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WHEN NO LONGER NEEDED.
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EXISTING PENTHOUSE
 EXISTING ANTENNAS
 SECTOR-1
 SECTOR-2
 SECTOR-3
 EXISTING CABLE TRAY
 EXISTING STEALTH WALL
 EXISTING AC DUCT (TYP)
 EXISTING GPS ANTENNA
 SEE DUG. C-6 FOR DETAILS
 NEW CLEARWIRE BACKHAUL DISH ANTENNAS
 SEE DUG. C-4 FOR DETAILS
 (3) NEW CLEARWIRE 4G PANEL ANTENNAS
 (1 PER SECTOR TYPE)
 SEE DUG. C-4 FOR DETAILS
 (2) NEW CLEARWIRE INDUCTIVE
 W CABLE (8' ON NEW SLEEFERS)
 SEE DUG. C-6 FOR DETAILS
 NEW CLEARWIRE DAP CABINET INSIDE
 STORAGE ROOM LOCATED • FIRST FLOOR
 SEE DUG. C-2 FOR ENLARGED SITE PLAN
 NEW CLEARWIRE DAP CABINET INSIDE
 STORAGE ROOM LOCATED • FIRST FLOOR
 SEE DUG. C-2 FOR ENLARGED SITE PLAN
 EXISTING VENT (TYP)
 EXISTING CABLE TRAY (TYP)

DATE ISSUED: _____
 SITE NAME: VA-WASH1382-A
 SITE NUMBER: _____
 SITE ADDRESS: 505 CHESTERFIELD ROAD
ALEXANDRIA, VA 22306
 SHEET NAME: SITE PLAN
 SHEET NUMBER: C-1A

SITE PLAN
 SCALE: 1'-0"

<p>clearw re wireless engineering 933 HERNDON PLAZA HERNDON, VA 20170 FAX: (703) 541-1340</p>	<p>Fullerton Engineering Consultants, Inc. 3600 WISCONSIN AVE. SUITE 1200 ROSEBURN, ILLINOIS 60206 TELE: 847-752-0700 FAX: 847-752-0706</p>	<p>This drawing is the property of Fullerton Engineering Consultants, Inc. It is for the exclusive use of the client and may not be copied or reproduced without written consent of Fullerton Engineering Consultants, Inc. All rights reserved.</p>	<p>CHECKED BY: FD APPROVED BY: PB DATE: 1/10/04 DESCRIPTION: NF ISSUED FOR REVIEW: 1/10/04 DATE SIGNED:</p>	<p>SPECTRUM SITE NAME: SITE NUMBER: V-A-WISH1382-A SITE ADDRESS: 5025 CHESTERFIELD ROAD ARLINGTON, VA 22206</p>	<p>ENLARGED SITE PLAN SHEET NAME: C-2 SHEET NUMBER:</p>
<p>EXISTING CABLE COVER (TYP.)</p> <p>NEW CABLE COVER TO MATCH EXISTING SEE DUG. C-6 FOR DETAIL 6</p> <p>EXISTING TENANT STORAGE ROOM</p> <p>NEW CLEARWIRE DAP CABINET ON EXISTING CONCRETE FLOOR SEE DUG. C-6 FOR DETAIL 6</p> <p>EXISTING MAIN ELECTRICAL PANEL</p> <p>EXISTING MECHANICAL ROOM</p> <p>(2) NEW 2" CLEARWIRE INNERDUCT W/ CABLE(S) ROUTED BELOW CEILING SEE DUG. C-6 FOR DETAIL 6</p> <p>EXISTING STORAGE ROOM</p> <p>EXISTING SERVER ROOM</p> <p>NEW WALL PENETRATION 4 PIPE STOPPING (TYP.) SEE DUG. C-6 FOR DETAIL 6</p> <p>EXISTING STORAGE ROOM</p> <p>NEW "T" LEASE AREA</p> <p>7'-0" 11'-0" 2'-0" 2'-0" 2'-0" 2'-0" 2'-0" 2'-0" 2'-0" 2'-0" 2'-0"</p>					
<p>ENLARGED SITE PLAN </p> <p>SCALE: 1/8" = 1'-0"</p>					



ANTENNA TYPE		4G PANEL ANTENNA & CABLE SCHEDULE SCALE: N.I.S.									
(N) 4G	N BH	SEC (FT)	AZ (DEG)	ANTENNA MFR/ MODEL	ELEC DT.	MECH DT.	COAXIAL LENGTH (FT)	TABLE IND	COLOR CODE	TRUNK ANTENNA CODE	
1	18°-0"	15	ARGUS	-2	0	244	12	PURPLE	TB	TB	
2	18°-0"	140	ARGUS	-2	0	244	12	ORANGE	TB	TB	
3	18°-0"	295	ARGUS	-2	0	264	12	DOUBLE PURPLE	TB	TB	
						264	12	DOUBLE ORANGE	TB	TB	
						TRIPLE	12	PURPLE	TB	TB	
						TRIPLE	12	ORANGE	TB	TB	
DRP		PRIMARY					162	12	TRIPLE	YTB	
										YTB	

4G PANEL ANTENNA & CABLE SCHEDULE
SCALE: N.I.S.

DISH ID	MODEL NO.	DISH TYPE	DISH DIAM (FT)	AZIMUTH (DEGREES)	FREQUENCY (GHz)	DISH S GRY.	CABLE GRAY	CABLE SIZE	CABLE LENGTH (FT)	RADIO TYPE	COLOR CODE
DISH #1	ANDREW VHP216	HIGH PERFORMANCE	2	9.116	.19	19	2	LTR-400	12"	HD	GRAY
DISH #2	ANDREW VHP213	HIGH PERFORMANCE	1	285.2143	.23	19	2	LTR-400	12"	HD	GRAY

BACKHAUL DISH ANTENNA & CABLE SCHEDULE
SCALE: N.I.S.

12" DISH	IN	4	B	C	D	E
	15.3	14.1	2.8	5.6	8.1	

24" DISH	IN	4	B	C	D	E
	26.1	14.1	2.8	5.6	13.2	

NEW CLEARANCE
GPS ANTENNA
(TYP.)

EXISTING COAX CABLES (TYP.)

EXISTING ANTENNA (TYP.)

EXISTING TV ANTENNA (TYP.)

EXISTING DOOR

EXISTING PENTHOUSE ROOF

SECTOR-1

SECTOR-2

SECTOR-3

(1) NEW CLEARANCE
4G PANEL ANTENNAS
(1 PER SECTOR)

(2) NEW CLEARANCE
BACKHAUL DISH ANTENNAS
(TYP.)

EXISTING DISH ANTENNA

EXISTING ANTENNA

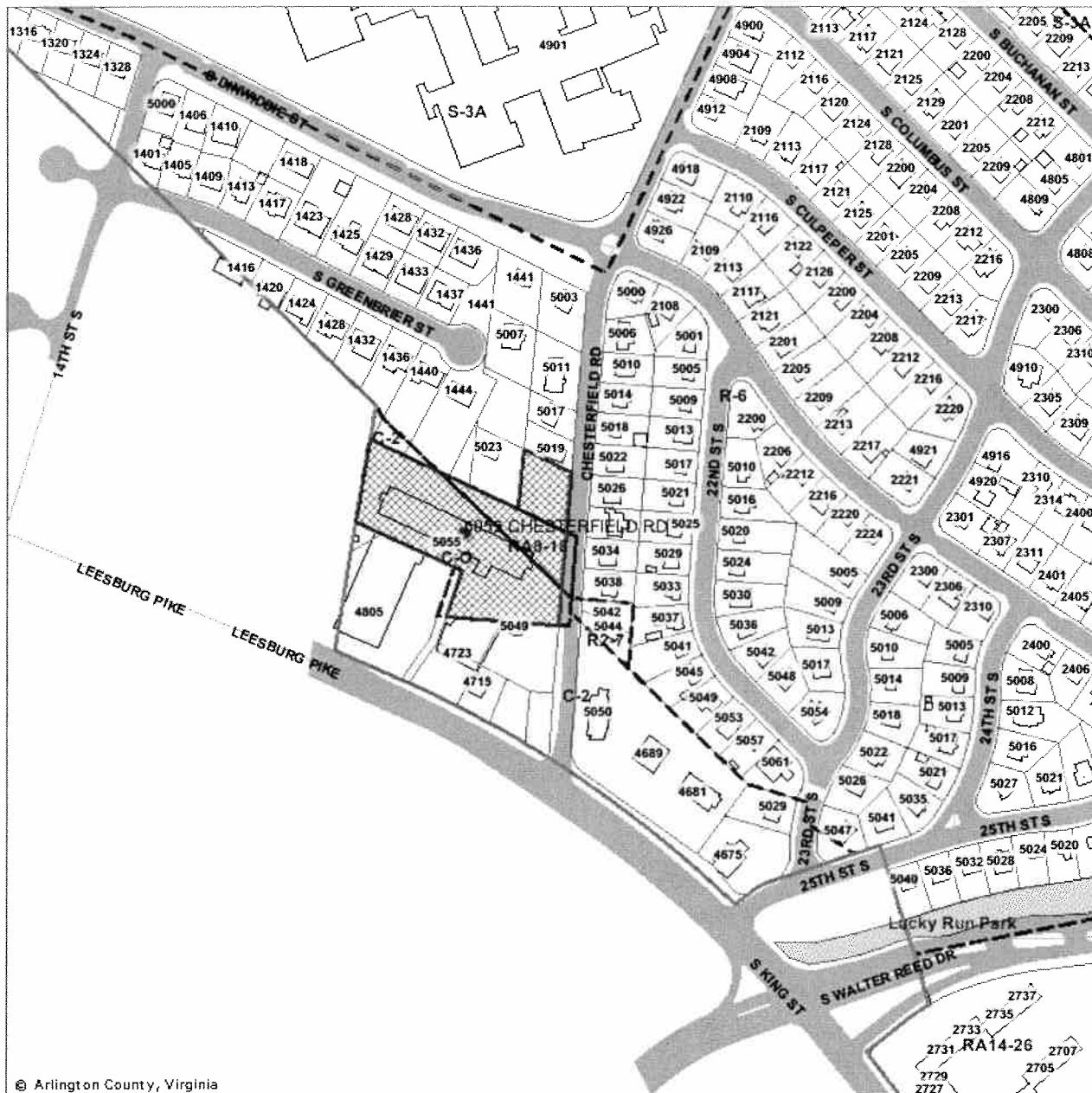
4G/BACKHAUL DISH ANTENNA DETAILS
SCALE: N.I.S.

clearwire
wireless broadband
5201 LEEDON ROAD
HERNDON, VA 20170
FAX: (703) 541-5400

Fullerton Engineering Consultants, Inc.
3400 W. BRYN MAIR AVE.
SUITE 200
ROSEVILLE, ILLINOIS 60016
TEL: 847-527-0200
FAX: 847-527-0206

SPECIUM
SITE NAME: V/A-USHI382-A
SITE NUMBER: 5025 CHESTERFIELD ROAD
ARLINGTON, VA 22206
SHEET NAME: ANTENNA DETAILS
SHEET NUMBER: C-4

<p>Clearwire Wireless broadband 559 HERNDON PKWY HERNDON, VA 20170 FAX: (703) 541-5400</p> <p>Fullerton Engineering Consultants, Inc. 3600 W. BRIN THUR AVE. ROSEWOOD, NC 27571-5000 TELE: 919-753-0700 FAX: 919-753-0706</p> <p>THE DRAWING IS THE PROPERTY OF FULLERTON ENGINEERING CONSULTANTS, INC. AND IS FOR THE EXCLUSIVE USE OF THE CONTRACTOR. IT IS NOT TO BE COPIED OR USED BY ANYONE ELSE WITHOUT THE EXPRESSED WRITTEN CONSENT OF FULLERTON ENGINEERING CONSULTANTS, INC. AS PREPARED.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>CHECKED BY:</td><td>FD</td></tr> <tr><td>APPROVED BY:</td><td>MB</td></tr> <tr><td>DATE:</td><td>11/20/01</td></tr> <tr><td>DESCRIPTION:</td><td>N/A</td></tr> <tr><td colspan="2">2/3/02 SIGNED FOR REVISUALA</td></tr> </table>	CHECKED BY:	FD	APPROVED BY:	MB	DATE:	11/20/01	DESCRIPTION:	N/A	2/3/02 SIGNED FOR REVISUALA		<p>DATE SIGNED: _____</p> <p>SPECTRUM</p> <p>SITE NAME: VA WASH1382-A</p> <p>SITE NUMBER:</p>	<p>SHEET ADDRESS: 3605 CHESTERFIELD ROAD ARLINGTON, VA 22202</p> <p>SHEET NAME: CABINET 4 PLATFORM DETAILS</p> <p>SHEET NUMBER: C-5</p>
CHECKED BY:	FD												
APPROVED BY:	MB												
DATE:	11/20/01												
DESCRIPTION:	N/A												
2/3/02 SIGNED FOR REVISUALA													
<p>SCALE: 1/2" • 1'-0"</p>													
<p>SCALE: 1/2" • 1'-0"</p>													
<p>CABINET ELEVATION DETAILS</p> <p>1/2" GALVANIZED BOLTS HARDWARE FOR CABINET ANCHORAGE TO PLATFORM - PLANTED WITH CABLES (2 TOTAL PER SIDE, 4 TOTAL)</p> <p>SCALE: 1/2" • 1'-0"</p>													
<p>CABINET DETAILS</p> <p>SCALE: 1/2" • 1'-0"</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>2</td><td>NOT USED</td></tr> </table>				2	NOT USED								
2	NOT USED												



**SP# 80
5055 Chesterfield Road,
RPC #28-018-001**



Note: These maps are for property location assistance only.
They may not represent the latest survey and other information.

