

PLANNING & ZONING STAFF REPORT

PROJECT NAME: Verizon Temporary Telecommunications Tower		Planning Commission Public Hearing Meeting Date: May 22, 2013- Recommendation to Town Council for approval Town Council Public Hearing: June 11, 2013	
Case Number: CUP-13-01		Applicant: Verizon Wireless	
Project Status: <input type="checkbox"/> Rezoning Application <input checked="" type="checkbox"/> Conditional Use		Owner of Property: Tidewater Communications	
		Location: Southeast side of U.S. Route 258 approximately 0.5 miles from U.S. Route 460 and less than 0.25 miles from Bear Trap Road. Proposed temporary monopole tower will be 150 feet from the existing 1,000 foot tall radio tower on the property.	
		Parcel Number: 53-01-092	
		Total Site Area: area for temporary telecommunication tower and 20 ft. easement	
Existing Structures: Raw land/existing 1,000 radio tower.			
Flood Hazard: Zone x (not in floodplain)			
Current Zoning: A-1 Agricultural		CBPA: RMA,	
Action Request: Conditional Use Permit for Height Exception to Exceed 35 feet		Additional Site Data:	
		Staff: Dennis Carney	Date: May 23, 2013

Review Agency/Department Comments Characteristics

Neighborhood

Isle of Wight General Services: See attached.	North: Wooded/low density residential (Zoned R-1 Agricultural)
	South: Wooded/farm/residence (Zoned A-1 Agricultural)
Isle of Wight Planning: No comments as of this writing.	East: Wooded/farm (Zoned A-1 Agricultural)
	West: Low Density Residential (Zoned A-1 Agricultural)
Virginia Department of Transportation: No comments as of this writing.	
	<u>Public Services</u>
	Water: N/A
	Sewer: N/A

ISSUE: The applicant has applied for a Conditional Use Permit (CUP) to construct a 120 foot tall temporary telecommunications tower to exceed the 35 foot height restriction for structures on a 65.95 acre parcel located on the Southeast side of U.S. Route 258 approximately 0.5 miles from U.S. Route 460 and less than 0.25 miles from Bear Trap Road. The property is zoned A-1 Agricultural and is shown as Tax Map Parcel 53-01-092.

FACTS: The applicant would like to construct a 120 foot tall temporary monopole telecommunications tower. The purpose of the tower is to provide immediate 4 G coverage for the Town of Windsor. Verizon is preparing an application for a permanent telecommunications tower on another site within the Town which would improve the temporary tower's service and extend their coverage outside Windsor's Town limits (it has now been received and is being evaluated. The temporary tower would be constructed in such a manner so that it could be sturdy while it needed to be in place and still be able to be readily removed when the permanent tower would be put into operation.

The subject property is located in a forested/farmed area of the Town on a +/- 65.95 acre parcel of land. The tower site which is 150 feet from the existing radio tower would be served by an easement and a chained link fence surrounded compound. The property is owned by Tidewater Communications which is the company that owns the radio tower. The existing radio tower due to its age was not constructed to a level where another antenna or dish could be properly installed. The applicant has indicated that Tidewater Communications is not interested in a second permanent tower on their property. This parcel is primarily wooded and there are no homes on the property or in the immediate vicinity of the proposed tower.

Comprehensive Plan- The 2008 Town of Windsor Comprehensive Plan designates this area as forestry/agriculture. The Comprehensive Plan is silent on the location of telecommunications towers.

Other- Due to the temporary nature of this request and its location behind the much larger existing 1,009 foot tall radio tower, it does not appear that the new tower would have an adverse effect upon adjoining properties or the overall area.

Comments from Other Agencies or the Public- As of this writing Staff has not received any comments from VDOT or Isle of Wight Planning. Isle of Wight Public Works, has advised that if land disturbance exceeds 2,500 square feet that an erosion sediment control plan will be required. Because of the temporary nature of this request, Staff did not believe that any other agencies (fire, rescue, etc.) needed to be contacted. If a permanent tower is applied for, fire and rescue and a consultant that reviews such towers will be contacted for a full review at the applicant's expense. Because the proposed tower would be using an existing entrance with no appreciable long-term traffic, it is

believed that VDOT will not have an adverse comment. There have been no adverse comments from the public on this request.

PLANNING COMMISSION RECOMMENDATION: The Planning Commission voted unanimously to recommend that the Town Council approve the Conditional Use Permit with the attached conditions.

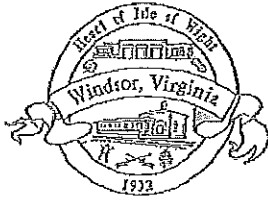
STAFF RECOMMENDATION: Staff recommends that Town Council consider approving the request with the following conditions.

PROPOSED CONDITIONS FOR CUP-13-01 VERIZON WIRELESS/TIDEWATER COMMUNICATIONS

1. The proposed tower shall be of a monopole design and placed on the property as shown on the General Development Plan dated May 2, 2013 drawn by Clark Nexsen Architecture and Engineering that is a part of this application.
2. Wireless telecommunication facilities shall be designed and installed so as not to interfere with the County's public safety/service radio system or public safety/service radio systems operated in other jurisdictions. Any noted interference will be corrected immediately by Verizon Wireless or its assigns upon notification.
3. The temporary telecommunications tower will be removed from the site at the expense of Verizon Wireless within sixty days of Verizon Wireless or its assigns locating and making operational wireless service on another new or existing telecommunications tower within or in close proximity to the Town of Windsor; or; within two (2) years from the date of final approval of this Conditional Use Permit by the Town Council of the Town of Windsor. Any extension of this conditional use permit beyond the two time-frame described above will require a new conditional use permit application.

TOWN OF WINDSOR

Conditional Use Permit



Established 1902

Planning and Zoning
Administrator
(757)242-4288

Property Owner(s) Tidewater Communications Owners Ph.# (313) 886-7070

Owners Mailing Address 73 Kercheval Ave Ste 201, Goss Point Farms, MI 43236

Owners E-Mail gurbiel@sagacom.com

Applicant (if different from Owner) Stuart Squier for Verizon Wireless Ph.# (804) 901-7433

Applicant's Address 3126 W. Cary St, PMB #604, Richmond, VA 23221

E-Mail stuart.squier@gdnsites.com

Agent-Correspondence should be sent to 3126 W Cary St., PMB #604, Richmond, VA 23221

Address/location of Subject Property 24409 Walters Hwy, Windsor, VA 23487

Tax Map Number 53-01-092 Zoning District A-1 Parcel Size 65.95ac Street Frontage 1,175ft

Are there proffered conditions on this property (if so please submit a set of the proffers)?

Yes No

Proposed Conditional Use Permit Temporary 120' tall wireless communication pole

Section of Land Use Ordinance § 160-38 Area and Density Regulations

If more space is needed than provided for Questions 1-10, please write a separate narrative answering the questions and annotate the questions with "See Attached".

1. Describe the effect of this request on adjacent properties, the neighborhood and the Town in general. Include information concerning effects on public schools, traffic, existing and future developments, public utilities, etc. The pole will have no adverse effects on adjacent properties. It will provide 4G LTE wireless data to Windsor residents and businesses.

2. Describe any noise, odor or traffic that the proposed Conditional Use will create or generate and what measures are being taken to mitigate or minimize its adverse effects. The pole will create no noise, odor, or traffic.

3. Describe any existing Zoning Permits, Conditional Use Permits or Variances previously granted for this property.

There is an existing 1,009-foot tall guyed radio tower on the property. This exceeds the A-1 district maximum height allowance of 35 feet. The proposed 120' temporary pole will be located approximately 150' from the center of the base of the existing tower.

4. Is this request in general accord with the current Town of Windsor Comprehensive Plan? Yes _____ If no, is a Comprehensive Plan revision being submitted concurrently with this application? _____

(Please submit a siteplan of the proposed conditional use permit including any new proposed and existing structures, streets, driveways and any other amenities that are present or to be constructed on the property, including structures or streets/driveways to be removed or moved. An application is not considered to be complete without such a siteplan.)

5. If the property is vacant or if new structures are envisioned, what types (and sizes) of structures and how many such structures will be constructed for this Conditional Use Permit (please provide what the proposed structures will look like)? 1 temporary 120' pole will be placed next to the 1,009-foot existing tower

6. Number of Parking Spaces Required and how many are being provided? 0/0 Unmanned facility

7. Are there Chesapeake Bay Resource Protection Areas on the property? No

8. Was a Traffic Impact Analysis (TIA) required for this Request? No If yes, has the Virginia Department of Transportation (VDOT) approved/commented upon it? _____

(If required and VDOT has not approved it, the application cannot proceed until this review is completed) (Please include a copy of the TIA and VDOT's response with this application and provide an explanation of how VDOT's comments are being addressed.)

9. Are there adequate water and sewer facilities to serve the proposed use that would follow this rezoning (if not, how will these facilities be provided)? The facility is unmanned and not for human habitation. Not served by water and sewer facilities.

10. What are the properties zoned, and what is the use of the properties on the land adjacent to the subject property?

NORTH- Zoning R-1 Use(s) Power line right of way

SOUTH- Zoning A-1 Use(s) Undeveloped

EAST- Zoning A-1 Use(s) Undeveloped

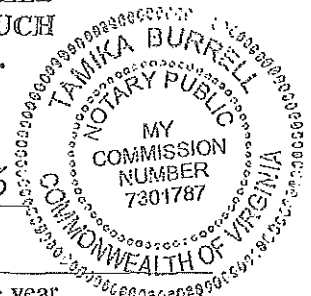
WEST- Zoning A-1 Use(s) Residential community

I/WE HAVE READ THIS COMPLETED APPLICATION, UNDERSTAND ITS INTENT AND FREELY CONSENT TO ITS FILING. THE INFORMATION PROVIDED IS ACCURATE TO THE BEST OF MY/OUR KNOWLEDGE. I UNDERSTAND THAT THE TOWN MAY APPROVE OR DENY THE REQUEST FOR WHICH I AM APPLYING. FURTHERMORE, I GRANT PERMISSION TO THE PERSONNEL OF THE TOWN AND OTHER AGENTS OF THE TOWN OF WINDSOR AND ANY OTHER AUTHORIZED GOVERNMENT AGENCY TO ENTER THE PROPERTY AND MAKE SUCH INVESTIGATIONS AS THEY DEEM NECESSARY TO EVALUATE THE REQUEST.

Name Stuart Squier
(Print)

[Signature]
(Signature (Applicant))

(owner / contract purchaser / authorized agent - please circle one) Date 5/3/2013



NOTARY: COUNTY OF Richmond STATE OF Virginia

Subscribed and sworn to me on the 3rd day of May, of the year

2013. My Commission expires on December 31, 2013 Notary Public Signature:

[Signature] Stamp:

STAFF USE ONLY- DO NOT WRITE IN THIS AREA

Fee Paid _____ Date _____ Accepted by Signature/Title _____

Comments _____

VERIZON WIRELESS APPLICATION FOR CONDITIONAL USE PERMIT
FOR A MOBILE WIRELESS TELECOMMUNICATION TOWER
(WINDSOR SITE)

Project Description:

Cellco Partnership, trading as Verizon Wireless (“Verizon”), respectfully requests approval of a Conditional Use Permit pursuant to Town of Windsor Code §160-8 to allow the installation of a temporary wireless telecommunications facility, including a 120-foot tall retractable monopole in the Town. The proposed facility would be located adjacent to an existing 1,009’ radio tower on property identified as Tax Map number 53-01-092, with current address 24409 Walters Highway, Windsor, VA 23487. The parcel, which contains 65.95 acres, is owned by Tidewater Communications, LLC.

The proposed tower will have a standard, galvanized steel finish and all antennas will be colored to match the tower. Transmitting equipment would be housed within the existing fenced compound area of the radio tower. The temporary facility is proposed in order to provide 4th Generation, Long Term Evolution (4G LTE) wireless communications network coverage because the 1,009’ radio tower with existing Verizon Wireless antenna equipment is at capacity and cannot support the loading of the proposed new 4G LTE equipment. Verizon Wireless is in the process of proposing a new communications tower in Windsor that would permanently carry all of VZW’s wireless technologies, including 4G LTE. The temporary 120’ pole would be deactivated and removed once the permanent tower is operational.

Character of the Area:

The subject property is zoned A-1 Agricultural, and is accessed from US-258 Walters Highway approximately ½ mile south of US-460. Access to the facility will be provided by way of an existing private driveway on the east side of Walters Highway where the leased compound area will be situated within the existing Tidewater Communications compound area.

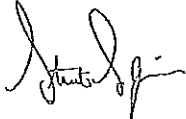
The site of the proposed temporary pole is located at the center of the property, approximately 150' from the center of the base of the existing 1,009' radio tower.

The proposed temporary pole will not be visible from any adjacent properties, as the subject property comprises 65 wooded acres and the pole is more than 900' from any property line. The tower will not be lighted at night. The properties to the east, south, and west are similarly zoned A-1 agricultural districts; the property to the north of the subject parcel is zoned R-1 residential but is used as utility right of way for overhead power lines. A residential community is located approximately 1,000' to the northwest on the opposite side of Walters Highway. Once constructed and operational, the facility will be unmanned and will have no traffic, odor, or noise impact on the area.

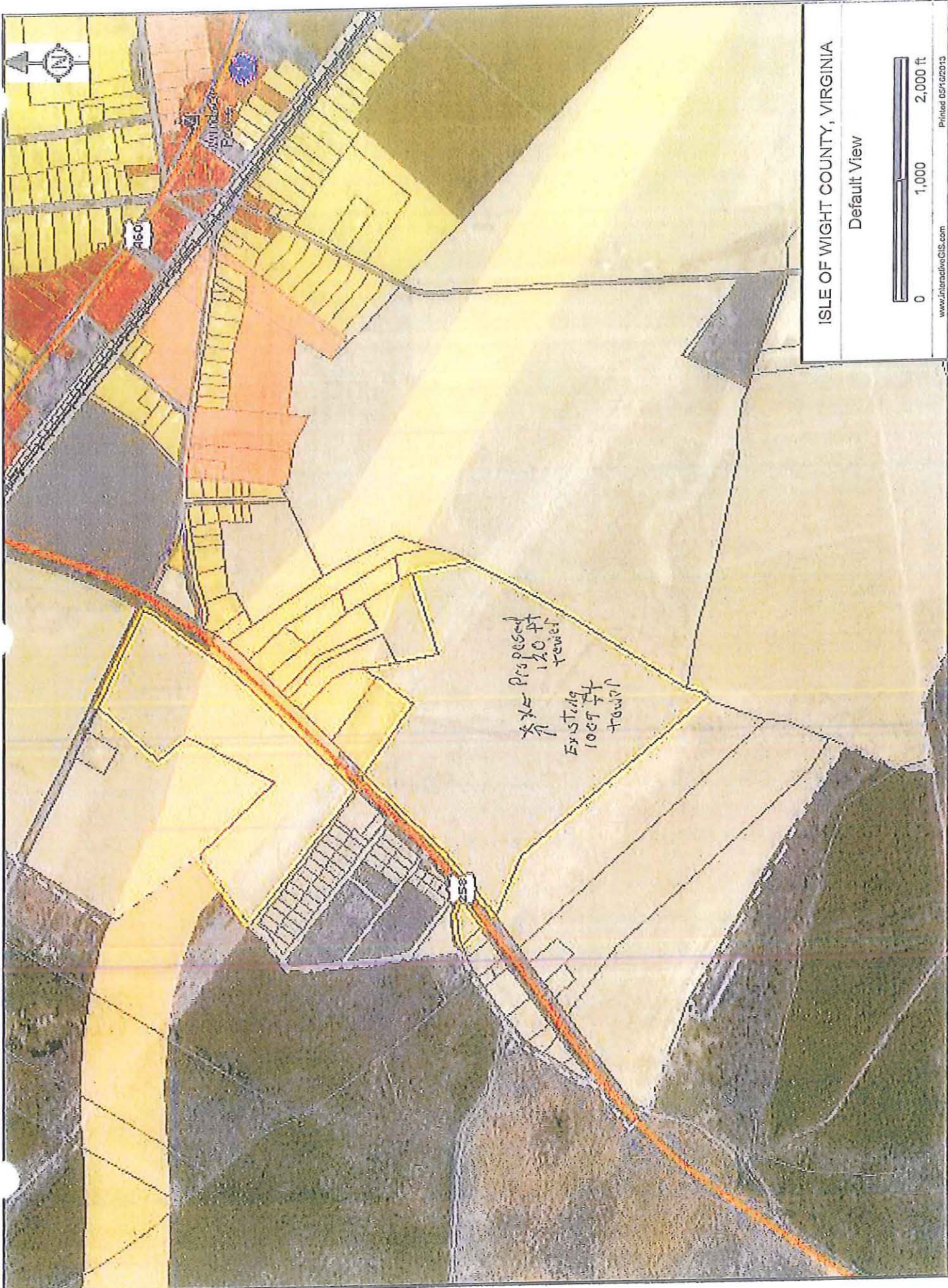
Conclusion:

Verizon Wireless is confident that the proposed wireless communication facility meets the criteria for approval of a conditional use permit and does not conflict with the goals and objectives of the Windsor Comprehensive Plan. This approval of this conditional use permit is requested to allow the deployment of a mobile communications facility that would establish the latest 4G LTE network coverage for the residents and businesses of the Town of Windsor.

Sincerely,



Stuart Squier
Site Development Consultant to Verizon Wireless



ISLE OF WIGHT COUNTY, VIRGINIA

Default View



www.interactiveGIS.com Printed 05/16/2013

MILLENNIUM ENGINEERING, P.C.
508 Ferncastle Drive
Downingtown, Pennsylvania 19335

Cell: 610-220-3820
www.millenniumengineering.net

Fax: 610-458-8612
Email: pauldugan@comcast.net

March 22, 2013

Attn: Catherine M. Faulkner, Manager – Network Real Estate
Verizon Wireless
510 Independence Parkway, Suite 800
Chesapeake, Virginia 23320

Re: Brief Discussion on Electromagnetic Field Safety of Verizon Wireless Telecommunications Facilities

Dear Ms. Faulkner,

I am providing a brief general overview of electromagnetic field safety as it applies to Verizon Wireless telecommunications facilities.

As an independent consulting engineer licensed in the State of Virginia, I often perform evaluations of existing or proposed wireless facilities (for Verizon Wireless and other FCC licensees) to provide an independent determination and certification that the wireless communications facility complies or will comply with Federal Communications Commission (FCC) exposure limits and guidelines for human exposure to radiofrequency electromagnetic fields (Code of Federal Regulation 47 CFR 1.1307 and 1.1310). As a registered professional engineer I am under the jurisdiction of the State Registration Boards in which I am licensed to hold paramount the safety, health, and welfare of the public and to issue all public statements in an objective and truthful manner.

RF compliance certifications come in a variety of formats depending on the structure type, volume and type of radio facilities, and the level of documentation needed to satisfy the licensee, the FCC, or a municipality. My clients typically furnish me the antenna configuration and operating parameters for an existing or proposed wireless facility. I perform calculations of electromagnetic field exposure based on FCC prescribed methodologies (as outlined in FCC Bulletin OET 65). I also routinely perform field measurements to demonstrate that exposure falls within applicable limits and guidelines. I also perform modeling of RF exposure using software tools where appropriate. There are many methods of determining compliance with the applicable exposure limits and guidelines and the appropriate method and level of documentation we use depends on the structure type, the type and volume of licensees, and whether the facilities are existing or proposed.

All Verizon Wireless facilities transmit in one or more of the 700 MHz (LTE), 850 MHz (cellular), 1900 MHz (PCS), and 2100 MHz (AWS) bands. These facilities transmit and receive low power electromagnetic fields (EMF) between base station antennas and handheld portable cell phones. The radiofrequency energy from these facilities and devices is non-ionizing electromagnetic energy. Non-ionizing, unlike X-Rays or other forms of potentially harmful energy in the microwave region, is not cumulative over time nor can the energy change the chemical makeup of atoms (e.g. strip electrons from ions). "Non-ionizing" simply means that the energy is not strong enough to break ionic bonds.

Safe levels of electromagnetic fields were determined by numerous worldwide organizations, such as the International Committee for Non-Ionizing Radiation Protection, a worldwide multi-disciplinary team of researchers and scientists studying the effects of non-ionizing radiofrequency energy such as that emitted by base stations or cell phones. The FCC did not arbitrarily establish their own standards, but adopted the recommendations of leading organizations that set standards and research the subject such as the Institute of Electrical and Electronics Engineers (IEEE), American National Standards Institute (ANSI), and National Council on Radiation Protection and Measurements (NCRP).

We are often requested to perform measurements of composite (sum total) levels of electromagnetic fields around towers and other sources of radio transmitting equipment. What we usually find with our calibrated instruments is that once the measurement is beyond 10 meters (approximately 32.81 feet) the contribution of the nearby antennas to the total composite electromagnetic fields is well below the existing levels in any given area due to the presence of numerous sources of radiofrequency signals in the environment from broadcast radio and television, public safety and public service communications in the community, amateur radio, personal wireless communications and household residential appliances that use various devices to name a few.

In other words, if we were to measure the composite electromagnetic fields before and after the introduction of a new Verizon Wireless antenna support structure such as a self support tower or monopole over 10 meters in height, the difference in composite EMF is generally indistinguishable from our calibrated instruments. The primary reason for the lack of a distinguishable contribution is that no member of the general public can be close to the antennas due to the fact that the antennas are elevated, along with the fact that the antennas are transmitting at low power serving a relatively small area unlike higher power broadcast facilities.

When Verizon Wireless is located on an antenna structure such as a self-supporting lattice type tower, monopole, guyed tower, watertank, etc. the antennas are typically 10 meters or more above ground level (10 meters = 32.81 feet). With the relatively low power and elevated positions of the antennas on the structure with respect to ground level, the maximum ground level exposure can rarely approach 1 % of the applicable FCC exposure limit regardless of how many sets of antennas are collocated on the structure. For this reason, the FCC considers the facilities "categorically excluded" from routine evaluation at antenna heights above 10 meters (or above 32.81 feet). Categorical exclusion exempts a site from routine on-site evaluation. However, the facility is not excluded from compliance with the federal exposure limits and guidelines. The types of facilities used by Verizon Wireless are typically elevated on antenna structures (away from access to close proximity, i.e. greater than 10 meters or 32.81 feet) simply cannot generate ground level exposure levels that approach the limits under any circumstances.

More extensive methods of determining compliance are utilized on rooftop collocations where occupational workers are in much closer proximity to wireless base station antennas. Regardless of the structure type or the particular antenna configuration, Verizon Wireless facilities are always designed to comply with the federal exposure limits and guidelines by a substantial margin. Evaluations (calculations or modeling) of proposed facilities are based on reasonable upper limits parameters for an upper limit determination of compliance. Also we take into account future growth of the facility, usage surges, and ground reflections where appropriate. All evaluations include composite (sum total) exposure from all transmitting antenna systems collocated on a structure or in close proximity.

From a regulatory perspective, the FCC has sole jurisdiction over the regulation of electromagnetic fields from all facilities and devices. The FCC has established guidelines and limits over emissions and exposure to protect the general public. The FCC also has certain criteria that trigger when an environmental evaluation must be performed. The criteria are based on distance from the antennas (accessibility) and transmit power levels.

In cases where such compliance is determined, the subject of electromagnetic field safety is preempted. The Telecommunications Act of 1996 states that: "No state or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the

environmental effects of radio frequency emissions to the extent that such facilities comply with the [FCC's] regulations concerning such emissions." Telecommunications Act of 1996, § 332[c][7][B][iv].

The following links are to helpful web sites that cover the subject of electromagnetic fields from wireless telecommunications facilities and cell phones:

http://www.ctia.org/consumer_info/safety/index.cfm/AID/10371

<http://www.fcc.gov/oet/rfsafety/>

[http://www.fda.gov/Radiation-](http://www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/default.htm)

[EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/default.htm](http://www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/default.htm)

In summary, Verizon Wireless takes appropriate measures to ensure that all telecommunications facilities comply with applicable exposure limits and guidelines adopted by the FCC governing human exposure to radiofrequency electromagnetic fields (FCC Bulletin OET 65). Federal law (FCC Rule Title 47 CFR 1.1307 and 1.1310) sets the national standard for compliance with electromagnetic field safety to ensure the health, safety, and welfare of the public. The FCC exposure limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI). Thus, there is full compliance with the standards of the IRPA, FCC, IEEE, ANSI, and NCRP.

Respectfully,



Paul Dugan, P.E.
Registered Professional Engineer
Virginia License Number 036239

PAUL ALLEN DUGAN, P.E.
508 Ferncastle Drive
Downingtown, Pennsylvania 19335

Cell: 610-220-3820

Fax: 610-458-8612

Email: pauldugan@comcast.net

Web Page: www.millenniumengineering.net

EDUCATION: Widener University, Chester, Pennsylvania
Master of Business Administration, July 1991
Master of Science, Electrical Engineering, December 1988
Bachelor of Science, Electrical Engineering, May 1984

PROFESSIONAL ASSOCIATIONS: Registered Professional Engineer in the following jurisdictions:

Pennsylvania, License Number PE-045711-E
New Jersey, License Number GE41731
Maryland, License Number 24211
Delaware, License Number 11797
Virginia, License Number 36239
Connecticut, License Number 22566
New York, License Number 079144
District of Columbia, License Number PE-900355
Puerto Rico, License Number 18946

Full member of **The Association of Federal Communications Consulting Engineers**
(www.afcce.org) January 1999 to Present
Elected to serve on the Board of Directors for 2006-2007

Full member of **The National Society of Professional Engineers** (www.nspe.org) and the
Pennsylvania Society of Professional Engineers (www.pspe.org) June 2003 to Present
Currently serving as State Director on the Board of Directors of the Valley Forge Chapter and the South
East Region Vice-Chair for the "Professional Engineers in Private Practice" Executive Committee

Actively participate in **Chester County ARES/RACES** (CCAR www.w3eoc.org) which prepares and
provides emergency backup communications for Chester County Department of Emergency Services,
March 2005 to Present

Full member of **The National Council of Examiners for Engineering**
(www.ncees.org) May 2001 to Present

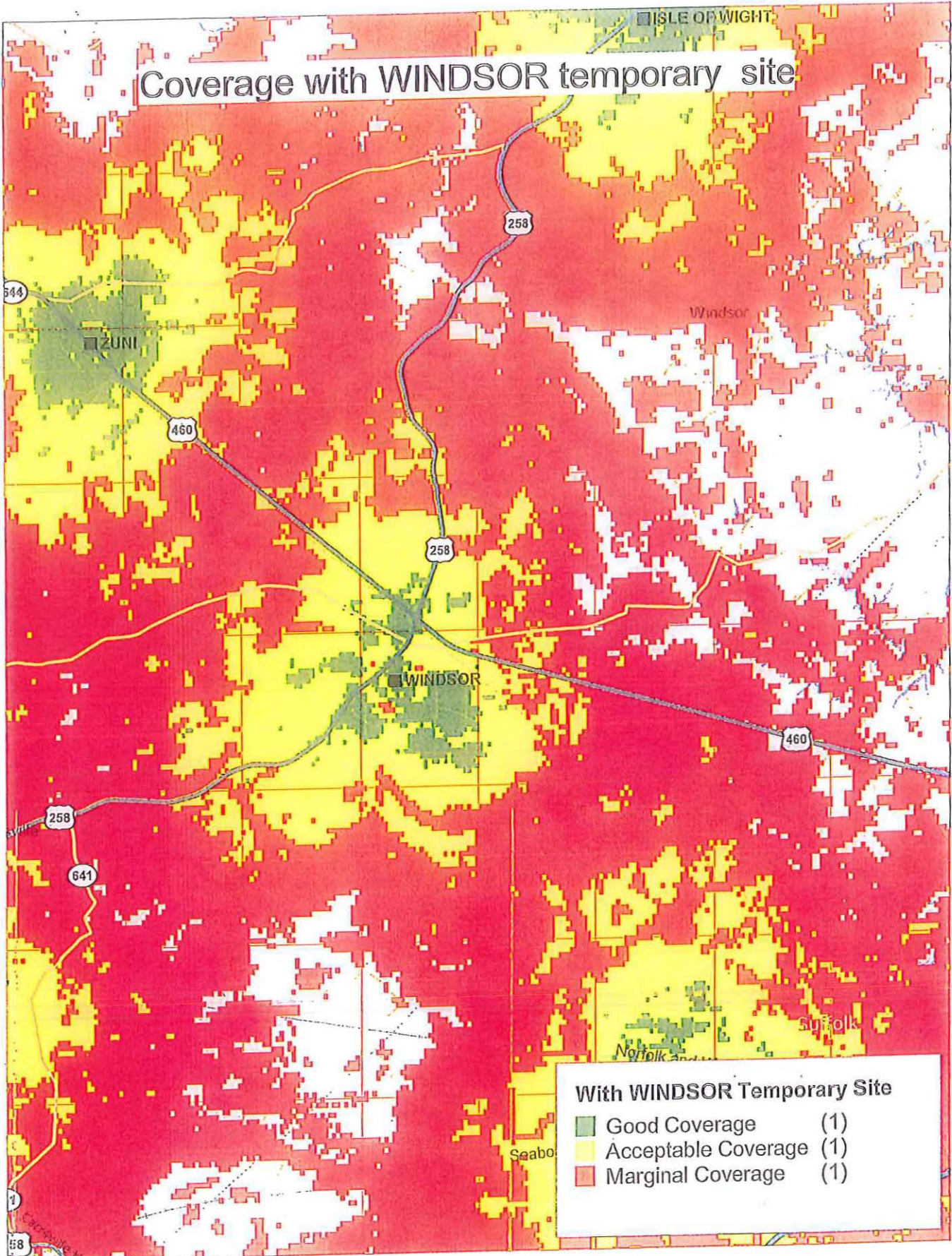
Full Member of **The Radio Club of America**
(www.radio-club-of-america.org) December 2003 to present

PROFESSIONAL EXPERIENCE: Millennium Engineering, P.C., Phoenixville, Pennsylvania
Position: **President**, August 1999 to Present (www.millenniumengineering.net)

Verizon Wireless, Plymouth Meeting, Pennsylvania
Position: **Cellular RF System Design/Performance Engineer**, April 1990 to August 1999

Communications Test Design, Inc., West Chester, Pennsylvania
Position: **Electrical Engineer**, May 1984 to April 1990

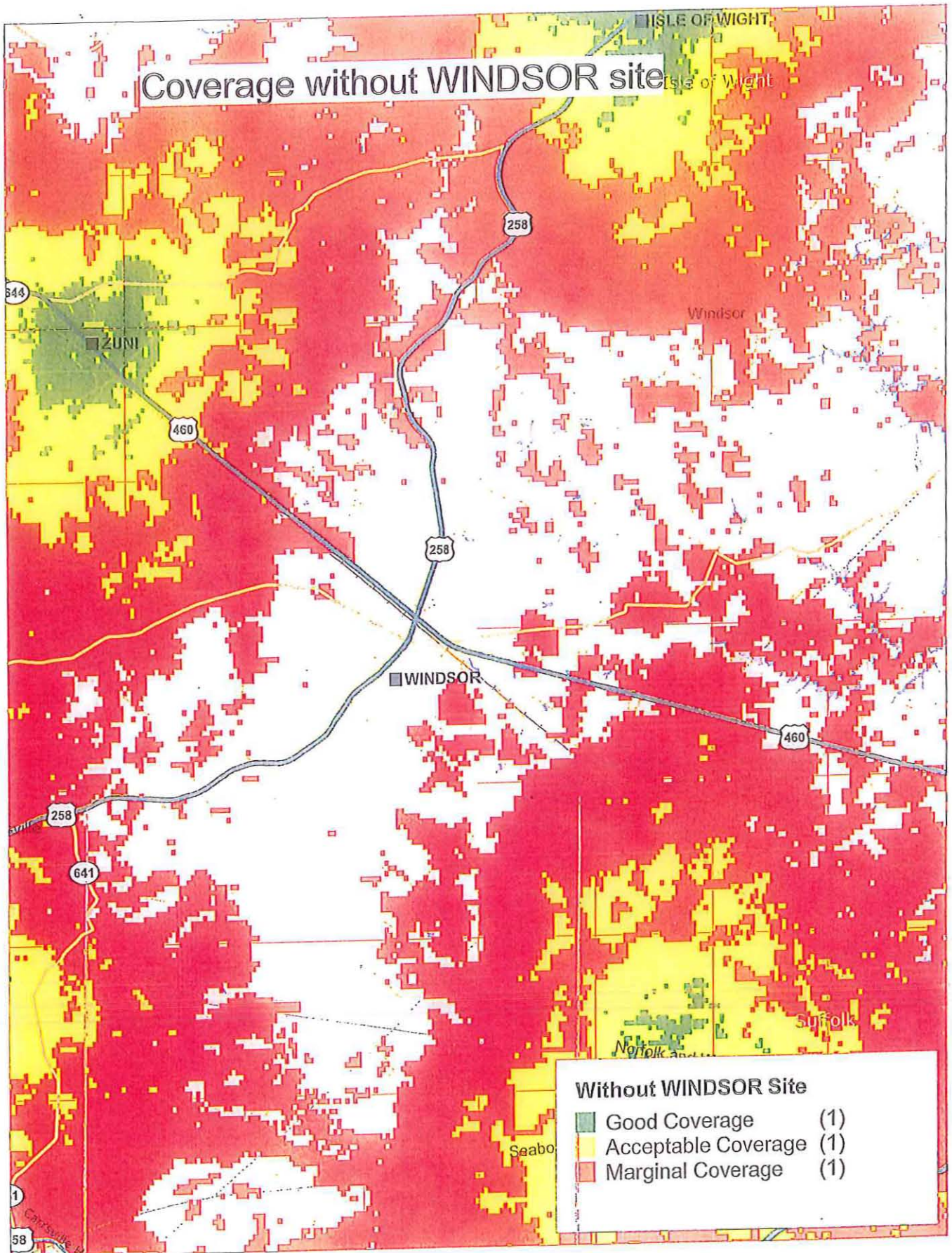
Coverage with WINDSOR temporary site



With WINDSOR Temporary Site

Good Coverage	(1)
Acceptable Coverage	(1)
Marginal Coverage	(1)

Coverage without WINDSOR site





COUNTY of ISLE OF WIGHT

THE COURTHOUSE

Memorandum

TO: DENNIS CARNEY, TOWN OF WINDSOR PLANNING AND ZONING ADMINISTRATOR
FROM: MELISSA A. LINDGREN, P.E., ENGINEERING DIVISION
SUBJECT: VERIZON TEMP LITE TOWER, TAX MAP 53-01-092
REF: CUP APPLICATION
DATE: 05/24/2013

In reference to your request of Engineering's review of the above mentioned project, we offer the following comments:

Erosion and Sediment Control and Stormwater Comments –

- 1) Be advised, for land disturbance within the Chesapeake Bay Watershed of greater than or equal to 2,500 square feet, a Land Disturbance Permit will be required.
- 2) Be advised, an approved Erosion and Sediment Control (ESC) and Stormwater Management Plan in accordance with the Isle of Wight County Code, the Virginia Erosion and Sediment Control Handbook, and the Virginia Stormwater Management Handbook will be required prior to issuance of a land disturbing permit.
- 3) Be advised, for land disturbance within the Chesapeake Bay Watershed of greater than or equal to 2,500 square feet, a VSMP Permit may be required.

Please feel free to contact me if there are any questions or concerns.

Sincerely,

Melissa A. Lindgren, P.E.

County Engineer

Isle of Wight County General Services