Virginia DeRolf  
Nextel Communications of Mid-Atlantic  
7 Neshaminy Interplex Drive #215  
Trevose, PA  19053  

RE: PLUS review – PLUS 2006-09-07; Nextel Communications  

Dear Ms. DeRolf:  

Thank you for meeting with State agency planners on October 3, 2006 to discuss the proposed plans for a Nextel Communications.  

According to the information received, you are seeking site plan approval through Kent County for a telecommunications tower in a 3,600 sq. ft. compound located on the north side of Sandtown Road between Delaware Route 10 and Jump School House Road. 

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as Kent County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.  

**Executive Summary**  

The following section includes some site specific highlights from the agency comments found in this letter. This summary is provided for your convenience and reference. The full text of this letter represents the official state response to this project. *Our office*
notes that the applicants are responsible for reading and responding to this letter and all comments contained within it in their entirety.

State Strategies/Project Location

- This project represents the construction of a communications tower in an Investment Level 4 area according to the Strategies for State Policies and Spending. This project is also located outside the growth zone according to Kent County’s certified comprehensive plan. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. This project is acceptable within the rural context of this area. The State has no objections to this proposal, provided it is constructed in accordance with all relevant County regulations.

Street Design and Transportation

- Sandtown Road is classified as a local road. DelDOT’s policy is to require dedication of sufficient land to provide a minimum right-of-way width of 30 feet from the centerline on local roads. Therefore they will require right-of-way dedication along the frontage to provide any additional width needed from this project.

- DelDOT will also require a 15-foot wide permanent easement across the frontage of the site for a future shared use path.

Natural and Cultural Resources

- The developer should maintain a 100-foot vegetated buffer from the wetlands. There should not be any buildings or associated infrastructure within the buffer.

- A large part of this parcel is non-forested and DNREC strongly encourages the applicant to pull the tower (and/or associated infrastructure) out of the forest and wetland areas.

The following are a complete list of comments received by State agencies:

Office of State Planning Coordination – Contact: David Edgell 739-3090

This project represents the construction of a communications tower in an Investment Level 4 area according to the Strategies for State Policies and Spending. This project is
also located outside the growth zone according to Kent County’s certified comprehensive plan. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

The State recognizes that this is a very small project which may be pursued under existing County regulations. The State Strategies for Policies and Spending do make allowances for projects relating to essential services, public utilities, and community infrastructure to be located in Investment Level 4. In addition, leasing land for uses such as this tower may provide farmers with additional income generating economic uses in areas where suburban development is discouraged by State policies. It is hoped that the farmer will use this income in support of the continued agricultural use of this property. For these reasons our office has no objections to this application, and note that the tower must comply with all County ordinances and requirements.

**Division of Historical and Cultural Affairs – Contact: Alice Guerrant 739-5685**

Because communication towers require a federal permit, the DHCA will be reviewing this project under Sec. 106 of the National Historic Preservation Act of 1966 (as amended). There is nothing known on this parcel. The nearest National-Register-listed property is Cow Marsh Old School Baptist Church (also known as Mount Moriah; K-272) about one mile away. Potential effects would be based on the tower’s height and visibility from the church. There is some potential for a prehistoric archaeological site here, so some archaeological testing will probably be required.

**Department of Transportation – Contact: Bill Brockenbrough 760-2109**

1) Sandtown Road is classified as a local road. DelDOT’s policy is to require dedication of sufficient land to provide a minimum right-of-way width of 30 feet from the centerline on local roads. Therefore they will require right-of-way dedication along the frontage to provide any additional width needed from this project.

2) DelDOT will also require a 15-foot wide permanent easement across the frontage of the site for a future shared use path.

3) The applicant’s site engineer should contact the project manager for Kent County, Mr. Brad Herb, regarding specific requirements for access. Mr. Herb
may be reached at (302) 266-9600.

**The Department of Natural Resources and Environmental Control – Contact:**

**Kevin Coyle 739-9071**

**Soils**

Based on Kent County soil survey mapping, Woodstown and Fallsington were mapped on subject parcel. Woodstown is a moderately well-drained soil of low-lying upland that has moderate limitations for development. Fallsington is a poorly-drained wetland associated (hydric) soil that has severe limitations for development. Most of the soils mapped on this parcel are Fallsington (approximately 70%). The applicant is advised not to build in areas containing Fallington soils.

**Wetlands**

According to the Statewide Wetland Mapping Project Mapping (SWMP) maps, palustrine forested/scrub shrub and palustrine farmed wetlands were mapped on subject parcel. Some of the palustrine farmed wetlands are mapped in the immediate vicinity of a sensitive headwater stream and/or ditch that directly discharges to the Wildcat Branch and other waters of the greater Choptank watershed. Impacts to Palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. Wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. The developer should maintain a 100-foot vegetated buffer from the wetlands. There should not be any buildings or associated infrastructure within the buffer.

PLUS application materials indicate that wetlands have been delineated (presumably a field delineation). This delineation should be verified by the Army Corps of Engineers through the Jurisdictional Determination process. Please note that impacts to palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In situations where the applicant believes that the delineated wetlands on their parcel are nonjurisdictional isolated wetlands, the Corps must be contacted to make the final jurisdictional assessment. They can be reached by phone at 736-9763.

In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.
To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-9943 to schedule a meeting.

As mentioned previously, this project is located directly adjacent to sensitive headwater stream/wetlands associated with the Wildcat Branch. Headwater streams and their associated wetlands are important for the protection of water quality and the maintenance/integrity of the ecological functions throughout the length of the stream, including the floodplain system downstream. Therefore, in recognition of this concern, the Watershed Assessment Section strongly recommends the applicant maintain at least a 100-foot buffer from the stream and/or ditch. This buffer should consist of native woody and/or herbaceous vegetation.

**TMDLs**

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Broad Creek watershed. A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited water body” can assimilate and still meet water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are required by federal law, states are charged with developing and implementing standards to support these desired use goals. In the greater Choptank watershed, a 40 percent reduction in phosphorus will be required.

**TMDL Compliance through the Pollution Control Strategy (PCS)**

As indicated above, the Total Maximum Daily load (TMDLs) for phosphorus has been proposed for the Choptank watershed. The TMDL calls for a 40% reduction in phosphorus from baseline conditions. A pollution control strategy will be used as a regulatory framework to ensure that these nutrient reduction targets are attained. The Department has developed an assessment tool to evaluate how your proposed development may reduce nutrients to meet the TMDL requirements. Additional nutrient reductions may be possible through the implementation of Best Management Practices such as wider vegetated buffers along watercourses, increasing passive, wooded open space, using enhanced nutrient removal wastewater technologies, and the use of stormwater management treatment trains. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.
Sediment and Erosion Control/Stormwater Management

Since the area of disturbance is less than 5,000 square feet, the project is exempt from the Delaware Sediment and Stormwater Regulations.

Drainage

The proposed tower access lane is within the right-of-way of Prong 2 of the Wildcat Tax Ditch. The proposed tower access lane will need to be outside of the tax ditch right-of-way. Obstructions such as an access lane prevent the spreading of spoil during routine tax ditch maintenance. Any reduction of rights-of-way will require a letter requesting a review to Robert Enright of the Division of Soil & Water Conservation, Drainage Program, Robert.Enright@state.de.us. The review would require a field visit to look at the maintenance needs of the tax ditch before a change in the court order can occur to reduce the right-of-way limits.

Rare Species

DNREC has never surveyed this site, therefore, it is unknown if there are state-rare or federally listed plants, animals or natural communities at this project site. There are several rare species in the adjacent woodlots that could potentially be within the project area as well.

State wetland maps and our GIS database also indicate potential forested wetlands on this parcel, including coastal plain ponds. These wetlands provide breeding habitat for a variety of animals, including amphibians and invertebrates, and often support a unique and rare assemblage of plants. Upland forest buffers around these ponds are also critical, protecting the wetland from excess nutrients and invasion by non-native species. Forest buffers also provide critical habitat for salamanders during most of their annual life cycle. Several studies have shown that salamanders spend most of their lives in forest buffer zones up to 300 meters from wetland edges, using wetlands only during brief breeding periods.

Migratory Birds

There are issues regarding mortality of birds at tall, lighted structures:

Many bird species, particularly small songbirds and shorebirds, migrate at night along weather fronts and with prevailing winds during spring and fall migration (March-May and July-October, respectively). Massive numbers of birds can concentrate along a
weather front; radar has documented the passage of hundreds of thousands to millions of birds within a few miles along a front.

When these migration events clash with inclement local weather conditions (overcast sky, low cloud ceiling, fog, mist, drizzle or rain), birds are forced to fly at lower altitudes, thus increasing the risk of collision with tall structures. Mass mortality of birds, sometimes on a single night, has been extensively documented in the literature for tall structures around the world. Tall structures and guy wires that are invisible in the dark may be struck by large numbers of birds, but just as deadly are lighted structures that effectively attract birds. Birds attracted to lights may become disoriented and reluctant to leave the lighted area, flying around until exhausted. Alternatively, birds attracted to lights mounted on a structure may simply strike the structure itself.

The type of lighting used to illuminate a structure seems to affect the hazard posed to migratory birds. The effect of light-flash duration may be particularly critical, perhaps more important than color. Steady and pulsating lights with short “off” phases seem to be more attractive to birds, and thus more dangerous, than pulsing lights with long “off” phases. Consideration for impacts to migratory birds should be incorporated into the engineering of this project.

Due to the significance of this area for migratory and breeding birds, we strongly recommend that this site be further evaluated according to the U.S. Fish and Wildlife Service (USFWS) guidelines for siting communication towers. These guidelines can be obtained by calling our office (302-653-2883) or at the following web site: http://migratorybirds.fws.gov/issues/towers/towers.htm.

Recommendation:

A large part of this parcel is non-forested and we strongly encourage the applicant to pull the tower (and/or associated infrastructure) out of the forest and wetland areas. Considering the fact that over 20,000 acres of forest have been lost to development, it is important to make efforts to preserve existing forested areas when other options are available such as in this case. Preserving the existing forest will minimize impacts to rare species as well as numerous wildlife species that depend on forest and wetland habitat for breeding.

State Fire Marshal’s Office – Contact: John Rossiter 739-3696

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal’s Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting
the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements:**
   - Since the structures of the complex are proposed to be served by individual on-site wells (No Central or Public Water System within 1000’ of property), set back and separation requirements will apply.

b. **Fire Protection Features:**
   - For commercial buildings greater than 5000 sq.ft., a fire alarm signaling system which is monitored off-site is required
   - For commercial buildings greater than 10,000 sq.ft. Class B (2-hour rated) fire barriers are required to subdivide buildings into areas of 10,000 sq.ft. or less
   - Buildings greater than 10,000 sq.ft., 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements

c. **Accessibility:**
   - All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Sandtown Road must be constructed so fire department apparatus may negotiate it.
   - Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
   - Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
   - The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
   - The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.
d. **Gas Piping and System Information:**
   - Provide type of fuel proposed, and show locations of bulk containers on plan.

e. **Required Notes:**
   - Provide a note on the final plans submitted for review to read “All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
   - Proposed Use
   - Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
   - Square footage of each structure (Total of all Floors)
   - National Fire Protection Association (NFPA) Construction Type
   - Maximum Height of Buildings (including number of stories)
   - Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: [www.delawarestatefiremarshal.com](http://www.delawarestatefiremarshal.com), technical services link, plan review, applications or brochures.

**Department of Agriculture - Contact: Scott Blaier 698-4500**

The Department has no objection to this telecommunications tower project, and recognizes the need for communications infrastructure. Even property owners enrolled in the State’s Agricultural Lands Preservation Program area allowed to erect communications towers on their property to supplement their farm income. The Department does request that the tower be located as unobtrusively as possible, and be designed to minimize its visual impact to the surrounding area.

**Public Service Commission - Contact: Andrea Maucher 739-4247**

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

**Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.**
Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

Constance C. Holland, AICP
Director

CC: Kent County