

## DEVELOPMENT CONDITIONS

SEA 89-S-072

March 5, 2008

If it is the intent of the Board of Supervisors to approve SEA 89-S-072 located at 12700 Popes Head Road (Tax Map 66-4((3)) 1) previously approved pursuant to SE 89-S-072 for an electric substation pursuant to Sect. 3-C04 of the Fairfax County Zoning Ordinance to permit the addition of a telecommunications facility (tree monopole and related equipment compound area) pursuant to Sect. 3-C05 of the Fairfax County Zoning Ordinance, the staff recommends that the Board condition the approval by requiring conformance with the following development conditions, which supersede all previous conditions (those conditions carried forward from previous approval are marked with an asterisk\*).

1. This Special Exception Amendment is granted for and runs with the land indicated in this application and is not transferable to other land.\*
2. This Special Exception Amendment is granted only for the purpose(s), structure(s) and/or use(s) indicated on the special exception amendment plat approved with the application, as qualified by these development conditions.\*
3. This Special Exception Amendment is subject to the provisions of Article 11, Site Plans. Any plan submitted pursuant to the special exception amendment shall be in substantial conformance with the approved Special Exception Amendment (SEA) Plat entitled "T-Mobile Northeast LLC, NOVEC WAC142F", prepared by Entrex Communications Services, Inc, dated October 3, 2006, as revised through January 25, 2008, and these conditions. Minor modifications to the approved special exception may be permitted pursuant to Par. 4 of Sect. 9-004 of the Zoning Ordinance.
4. Right-of-way to 30 feet from the centerline of Popes Head Road necessary for future improvements shall be dedicated for public street purposes and shall be conveyed to the Board of Supervisors in fee simple at the time of site plan approval or within sixty (60) days upon demand by the Virginia Department of Transportation (VDOT) or the Department of Public Works and Environmental Services (DPWES). All ancillary easements necessary for the construction of future road improvements to Popes Head Road shall be conveyed to the Board of Supervisors upon demand by DPWES.\*

5. A spill containment plan which conforms with the Rural Electrification Administration's guidelines and current Environmental Protection Agency specifications shall be provided to DPWES and implemented prior to site plan approval.\*
6. An infiltration trench or other on-site stormwater management measure shall be provided that achieves Best Management Practices (BMP) criteria to reduce surface erosion on site, as determined by DPWES at site plan.\*
7. The project shall conform to National Electric and Safety Code Standards and the regulations of the Federal Communications Commission with respect to electromagnetic radiation. The applicant shall provide to DPWES the electric and magnetic field measurements at the property lines prior to and following construction of the substation for public information.\*
8. Lightning mast concrete support poles shall be dark brown in color as determined by DPWES.\*
9. All electric lines on site shall be buried.\*
10. The substation shall conform to the Fairfax County Noise Ordinance as determined by DPWES and the Zoning Administrator.\*
11. All transformers on site shall be enclosed by a noise attenuation wall to mitigate adverse noise impacts on the surrounding residential community. The design, height and color of the walls shall be subject to review and approval by DPWES prior to site plan approval.\*
12. The telecommunications tower shall be designed as a tree-pole in substantial conformance with the elevation shown on Sheet Z-5 of the SEA Plat. The maximum height of the telecommunications tower shall not exceed 140 feet inclusive of all antennas and other appurtenances.
13. The total number of antennae panels, omni-directional or whip antennae and microwave dishes shall be limited to a maximum of fifty-four (54) as shown on Sheet Z-5 of the SEA Plat. The size, location and configuration of the antennas and microwave dishes shall be in substantial conformance with the elevation depicted on the SEA Plat. Minor modifications to the antennas and microwave dishes may be permitted pursuant to Par. 4 of Sect. 9-004 of the Zoning Ordinance. The types of antennas may be substituted provided that any substitute antenna does not exceed the maximum height and maximum number limitations of these conditions.

14. The equipment compound area may include equipment shelters, cabinets, electrical panels, telephone panels and other improvements necessary and/or required for the operation of the telecommunications facility. Equipment shelters/cabinets shall have a maximum height of ten (10) feet and shall be located within a 1,750 square-foot telecommunications compound area as shown on the SEA Plat.
15. All associated equipment shelters/cabinets for the telecommunication facility shall be enclosed by a ten (10) foot tall chain link fence as shown on the SEA Plat.
16. The tree monopole shall not be lighted or illuminated unless required by the Federal Aviation Administration (FAA), the Federal Communications Commission (FCC), or the County. A steady marker light shall be installed and operated at all times, unless the Zoning Administrator waives the red marker light requirement upon a determination by the Police Department that such marker light is not necessary for the flight safety of police and emergency helicopters.
17. There shall be no outdoor storage of materials, equipment, or vehicles within the wireless compound for the telecommunications facility.
18. No signs shall be permitted on the subject property for the advertisement of the users of the telecommunications facility.
19. Should the need arise to alter the telecommunication tree-pole from that shown on the SEA Plat, the applicant shall submit engineering and structural data to DPWES affirming that said alterations conform to structural wind load and all other requirements of the Virginia Uniform Statewide Building Code.
20. Any component(s) of the telecommunications facility shall be removed within one hundred and twenty (120) days after such component(s) are no longer in use.
21. A landscape plan shall be submitted concurrent with site plan review and shall be subject to the review and approval of the Urban Forest Management Department (UFMD), DPWES. The existing and supplemental trees and landscaping shall be provided and maintained along all lots lines as shown on the SEA Plat, subject to the review and approval of UFMD, DPWES. Any dead or dying plantings shall be replaced as approved by UFMD, DPWES.
22. Tree Preservation: The applicant shall submit a Tree Preservation plan as part of the first and all subsequent site plan submissions. The preservation plan shall be prepared by a professional with experience in the preparation of tree preservation plans, such as a certified arborist or landscape architect, and shall be subject to the review and approval of

the Urban Forest Management Division, DPWES. The tree preservation plan shall consist of tree survey that includes the location, species, size, crown spread and condition rating percentage of all trees 8 inches in diameter and greater, and 25 feet to either side of the limits of clearing and grading as shown on the SEA Plat for the entire site. The tree preservation plan shall provide for the preservation of those areas shown for tree preservation, those areas outside of the limits of clearing and grading shown on the SEA Plat and those additional areas in which trees can be preserved as a result of final engineering. The condition analysis ratings shall be prepared using methods outlined in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture. Specific tree preservation activities that will maximize the survivability of any tree identified to be preserved, such as: crown pruning, root pruning, mulching, fertilization, and others as necessary, shall be included in the plan.” The applicant shall also submit concurrently a monetary value for each tree surveyed that is to be preserved. The monetary values shall be determined using the Trunk Formula Method contained in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture, and shall be subject to review and approval by UFMD. The Location Factor of the Trunk Formula Method shall be based on projected post-development Contribution and Placements ratings. The Site rating component shall be equal to at least 80%. The combined total of monetary values identified in the approved Tree Preservation Plan for trees designated to be preserved shall serve as a baseline sum in determining the amount of the Tree Bond.

23. Tree Bond: A letter of credit, or a cash contribution equal to one half (50%) of the total monetary value of trees to be designated to be preserved as identified above shall be placed with the County. The Tree Bond letter of credit shall be prepared in a manner acceptable to the County Attorney naming the County as beneficiary to ensure the preservation, conservation, replacement, removal and/or treatment of the trees identified in the Tree Preservation Plan, and to ensure the undisturbed areas identified on the approved SEA Plat. The cash or Tree Bond shall be held by the County as a cash reserve that can be used by the County to ensure the preservation, conservation, replacement, removal and/or treatment of the trees identified in the Tree Preservation Plan and as approved on the subdivision plan, and for work relating to the protection and management of undisturbed areas identified on the approved SEA Plat. If the applicant fails to complete any work identified in the approved site plan, then the County may use cash or money from the Tree Bond to accomplish the required work. If the County must use all or part of the cash or Tree Bond to accomplish the outstanding work, then the applicant will replenish the cash or Tree Bond to its full amount. If the applicant fails to replenish the cash or Tree Bond to its full amount, then the cash or Tree Bond may be used

by the County to replenish the Tree Preservation Deposit to its full amount. The cash/Tree Bond may be used by the County as described in the Tree Preservation condition, above. Any cash or funds remaining in the Tree Bond shall be released along with the project's final bond-release, or sooner, if approved in writing by UFMD, DPWES.

24. **Tree Preservation Walk-Through:** The Applicant shall retain the services of a certified arborist or landscape architect, and shall have the limits of clearing and grading marked with a continuous line of flagging prior to the walk-through meeting. During the tree-preservation walk-through meeting, the Applicant's certified arborist or landscape architect shall walk the limits of clearing and grading with an UFMD, DPWES, representative to determine where adjustments to the clearing limits can be made to increase the area of tree preservation and/or to increase the survivability of trees at the edge of the limits of clearing and grading, and such adjustment shall be implemented. Trees that are identified as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chainsaw and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understory vegetation. If a stump must be removed, this shall be done using a stump-grinding machine in a manner causing as little disturbance as possible to adjacent trees and associated understory vegetation and soil conditions.
25. **Limits of Clearing and Grading:** The Applicant shall conform strictly to the limits of clearing and grading as shown on the SEA Plat, subject to allowances specified in these conditions and for the installation of utilities and/or trails as determined necessary by the Director of DPWES, as described herein. If it is determined necessary to install utilities and/or trails in areas protected by the limits of clearing and grading as shown on the SEA Plat, they shall be located in the least disruptive manner necessary as determined by UFMD, DPWES. A replanting plan shall be developed and implemented, subject to approval by UFMD, DPWES, for any areas protected by the limits of clearing and grading that must be disturbed for such trails or utilities.
26. **Tree Preservation Fencing:** All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fence. Tree protection fencing in the form of four (4) foot high, fourteen (14) gauge welded wire attached to six (6) foot steel posts driven eighteen (18) inches into the ground and placed no further than ten (10) feet apart or, super silt fence to the extent that required trenching for super silt fence does not sever or wound compression roots which can lead to structural failure and/or uprooting of trees shall be erected at the limits of clearing and grading as shown on the demolition, and phase I & II erosion and sediment control sheets, as may be modified by the "Root Pruning" proffer below. All tree protection fencing shall be installed after the tree

preservation walk-through meeting but prior to any clearing and grading activities, including the demolition of any existing structures. The installation of all tree protection fencing shall be performed under the supervision of a certified arborist, and accomplished in a manner that does not harm existing vegetation that is to be preserved. Three (3) days prior to the commencement of any clearing, grading or demolition activities, but subsequent to the installation of the tree protection devices, the UFMD, DPWES, shall be notified and given the opportunity to inspect the site to ensure that all tree protection devices have been correctly installed. If it is determined that the fencing has not been installed correctly, no grading or construction activities shall occur until the fencing is installed correctly, as determined by UFMD, DPWES.

27. **Root Pruning and Mulching:** The Applicant shall root prune and mulch, as needed to comply with the tree preservation requirements of these conditions. All treatments shall be clearly identified, labeled, and detailed on the erosion and sediment control sheets of the site plan submission. The details for these treatments shall be reviewed and approved by UFMD, DPWES, accomplished in a manner that protects affected and adjacent vegetation to be preserved, and may include, but not be limited to the following:
- Root pruning shall be done with a trencher or vibratory plow to a depth of 18 inches.
  - Root pruning shall take place prior to any clearing and grading, or demolition of structures.
  - Root pruning shall be conducted with the supervision of a certified arborist.
  - Immediately after the phase II E&S activities are complete, mulch shall be applied at a depth of 3 inches within designated areas without the use of motorized equipment.
  - Mulch shall consist of wood chips, shredded hardwood and/or pine bark mulch. Hay or straw mulch shall not be used within tree preservation areas.
  - An UFMD, DPWES, representative shall be informed when all root pruning and tree protection fence installation is complete.
28. **Site Monitoring.** During any clearing or tree/vegetation/structure removal on the Applicant Property, a representative of the Applicant shall be present to monitor the process and ensure that the activities are conducted in conformance with these conditions and as approved by UFMD. The Applicant shall retain the services of a certified arborist or landscape architect to monitor all construction and demolition work and

tree preservation efforts in order to ensure conformance with all tree preservation proffers, and UFMD approvals. The monitoring schedule shall include once weekly inspections during phase I activities and once monthly inspections during phase II activities. This schedule shall be described and detailed in the Landscaping and Tree Preservation Plan, and reviewed and approved by UFMD, DPWES.

29. Available space on the telecom tree-pole and within the equipment compound area shall be made available for lease for telecommunications purposes to other telecommunications operators, including but not limited to Fairfax County, subject to reasonable industry-standard lease terms and fair market rent.
30. In order to ensure conformance with applicable safety standards, the Fairfax County Department of Information Technology (DIT) shall have the option to conduct monitoring of radiation emissions as deemed necessary. In the event that the monitoring indicates that the radiation levels exceed the amounts deemed appropriate by the applicable standards, any and all necessary actions determined necessary and approved by DIT shall be taken immediately to comply with accepted standards and agreements and to reduce radiation emissions to the applicable standards.
31. The electric power substation equipment located inside the 10 foot high chain link fence shown on Sheet Z-1 of the SEA Plat may be reconfigured without a SEA application provided that all screening, landscaping, noise attenuation levels and safety measures are maintained.
32. Only motion sensitive lighting that is in conformance with Part 9 of Article 14 of the Zoning Ordinance shall be permitted.

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

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

Pursuant to Section 9-015 of the Zoning Ordinance, this special exception shall automatically expire, without notice, thirty (30) months after the date of approval unless, at a minimum, the use has been established or construction has commenced and been diligently prosecuted. The Board of

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