

AFFIDAVIT
Of
RADIO FREQUENCY EXPERT

The undersigned, hereby states the following in support of the application of New Cingular Wireless PCS, LLC d/b/a AT&T Mobility, LLC (hereinafter referred to as "AT&T") to construct and operate a wireless communications facility proposed at 271 Falmouth Road, Falmouth, Maine (the "Wireless Communications Facility"):

1. I am a Radio Frequency Engineer responsible for radio network design for AT&T in Maine.
2. The list of my qualifications attached to this affidavit is true, accurate, and complete in all material respects.
3. As enabled under its Federal Communications Commission (FCC) license, AT&T seeks to design its wireless network in order to provide reliable wireless services to its customers, whether those customers are on the street, in a vehicle, or in a building. Providing reliable service to its customers in each context is critical for AT&T to provide the quality of wireless service that customers demand, and to meet the objectives of Congress that a robust, competitive and low cost wireless communication capacity be developed to serve the entire nation.
4. I have thoroughly reviewed the radio frequency engineering studies, reports, and computer model prepared by AT&T with respect to the subject wireless communications facility. I used a propagation modeling software *ATOLL* by **Forsk**. This software calculates frequency strength over distance taking into account geographical, and topographical land features and other contributors to signal loss. Finally, the calculation has also been adjusted by empiric data obtained from field measurement.
5. In order to meet its obligations under the radio license, AT&T must have in place a network of base station antenna facilities to serve portable wireless communication devices and mobile telephones. These facilities consist of antennas mounted on a pole, building, or other structures that are connected by cables to a small equipment cabinet located near the antenna. These antennas transmit voice and data to subscribers within a defined area of coverage.
6. Wireless antenna facilities are integral to AT&T's network. Each facility, servicing only a limited area, must be carefully located so that it can properly interact with surrounding facilities. To maintain reliable and uninterrupted service to a wireless telephone user living and/or traveling in a given area serviced by multiple antenna facilities, there must be a continuous interconnected series of facilities, which in-part overlap in a grid or "cellular" pattern.

7. In compliance with its FCC license, AT&T is actively building its AWS (Advance Wireless Services) network to provide service in Maine. In order to meet its goal of providing reliable, seamless and uninterrupted service, AT&T must continue to acquire interest in property for additional facilities, and is applying for and obtaining local governmental approvals to construct the facilities in order to eliminate gaps in reliable service coverage. Any delay at this point in time severely curtails AT&T's ability to achieve a market position that will allow it to compete for customers, which is in the public interest.
8. Using precise computer prediction model and following a thorough review of the RF engineering studies and reports prepared by AT&T, it was determined that a facility in proximity to Falmouth Road in Falmouth is critical to the overall engineering and technical plan for AT&T's network.
9. The subject location has specific characteristics of topography, relationship to existing structures and its location within the narrow search limits specified by the above referenced computer model, makes it uniquely suitable to address AT&T's need for a proposed personal wireless service facility. With the above considerations, the proposed site was determined to be the most appropriate location for a facility to fill the existing "gap" in service coverage within the context of available land parcels provided to me for analysis.
10. Without a personal wireless service facility located at or near this location, a significant area of inadequate, unreliable coverage would remain in AT&T's wireless network. This lack of service area or "gap" in coverage adversely impacts the service AT&T is able to provide for residents and businesses of this area of Falmouth. The result of such a "gap" will be an inability for the AT&T customer to reliably initiate, receive, or maintain voice and data connections, including 911 emergency calls, from the time that subscriber leaves the service area until that subscriber reaches that point where a quality signal is available to reinitiate the communication link.
11. All proposed wireless communications equipment will be installed, erected, maintained and operated in compliance with all applicable Federal, State and local regulations, including, but not limited to: the radio frequency emissions regulations set forth in the 1996 Federal Communications Act, applicable regulations administered by the Federal Aviation Administration (FAA), and Federal Communications Commission (FCC). All equipment proposed is authorized by the FCC Guidelines for Evaluating the Environmental effects of Radio Frequency Emissions. The radio frequency exposure levels generated by the proposed facility are substantially within the maximum allowable health and safety standards established by the FCC. In addition, the proposed equipment and transmission characteristics are in compliance with standards set forth by the American National Standards Institute (ANSI) and the National Council of Radiation Protection (NCRP).

Based upon the best radio frequency technology that is available to AT&T at this time, it is my professional opinion that the proposed project is necessary to ensure adequate AWS service to area residents and businesses in accordance with system specifications.

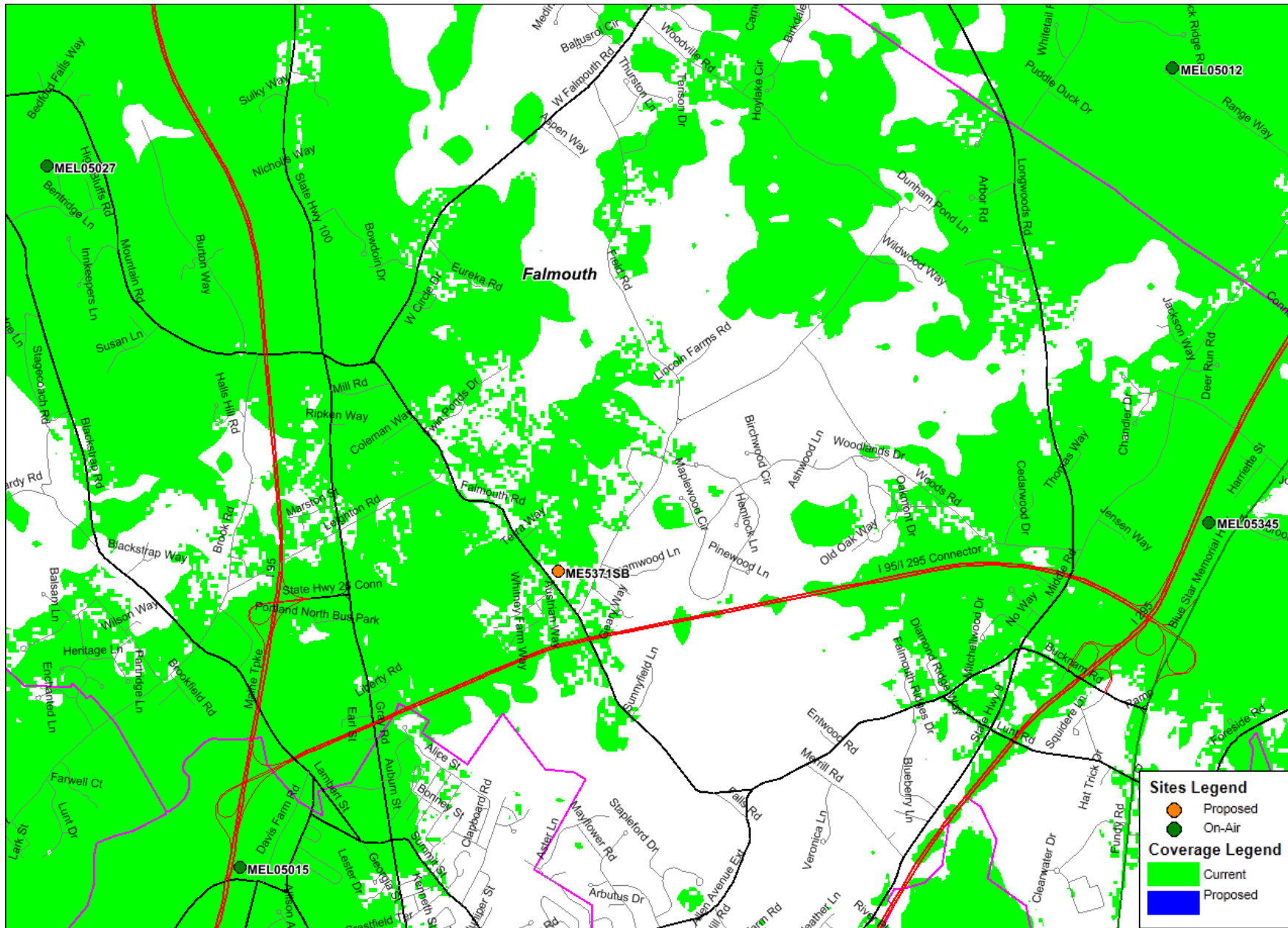
Signed under the penalties of perjury this 13th day of October, 2014.

A handwritten signature in cursive script, appearing to read "Ernesto Chua Jr.", written in black ink.

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Current 1900 LTE Coverage





Current-Proposed 1900 LTE Coverage

