



Planning Department

**TOWN OF ACTON**  
472 Main Street  
Acton, Massachusetts 01720  
Telephone (978) 929-6631  
Fax (978) 929-6340  
planning@acton-ma.gov

---

**MEMORANDUM**

**To:** Planning Board

**Date:** December 31, 2012

**From:** Kristen Domurad-Guichard, Assistant Planner <sup>KDG</sup>

**Subject:** **Application for Sprint Spectrum L.P. - Wireless Service Facility Modification to Special Permit#98-15 at 533 Main Street AT&T**

---

**Location:** 533 Main Street  
**Owner:** AT&T Tower  
**Applicant:** Sprint Spectrum Realty  
1 International Blvd. Suite 800  
Mahwah, NJ 07495  
**Engineer:** Atlantis Group Inc.  
**Lot size:** 5.31  
**Map/Parcel:** E4-59  
**Zoning:** LI-1  
**Filing Date:** **November 21, 2012**  
**Hearing:** **January 15, 2013**  
**Decision Due Date:** **April 15, 2013**

---

Attached for your review are the plan and application for the proposed modification “AT&T Monopole located at 533 Main Street” wireless service facility, and comments from other Town departments, committees, and agencies. Please review the other department comments. They are not necessarily repeated here.

The application is filed under Section 3 of the Zoning Bylaw – Special Requirements for Personal Wireless Facilities. The Applicant proposes modifications to the original Special Permit Decision #98-15, for a 150’ AT&T Concealed-Antenna Monopole (CAM) located at 533 Main Street. The Applicant is requesting a Special Permit for modifications which deviate from the approved appearance of the tower (Bylaw Section 3.10.5.3) and for reconstruction and replacement of the tower and cabinets at the existing facility (Bylaw Section 3.10.6.1). The Applicant proposes to replace two (2) existing and add one (1) new equipment cabinet on the existing foundation and adding one (1) new distribution box within the existing fenced tower compound. The Applicant also proposed to add a 48” diameter stealth canister “bump-out” on the concealed monopole at the height of 137’ where the pole’s diameter is currently 36”.

The proposed project is located near Post Office Square, within +/- 1500' of the Acton Center Historic District and is adjacent to the Isaac Davis Trail which is listed in the National Register of Historic Places.

### **Zoning Bylaw Definitions under Personal Wireless Facilities**

**3.10.3.3 Concealed-Antenna Monopole (CAM)** – *A Monopole with internally mounted Antennas that are not visible from the outside of the Monopole.*

**3.10.3.7 Flush Mounted Antennas** – *Antennas whose mounting brackets are attached directly on the outside surface of a Monopole that extend typically no more than 18 inches from the Monopole surface.*

**3.10.3.8 Monopole** – *A single self-supporting Tower, tubular in design, enclosing cables invisibly within the tubular structure and designed so it does not require braces or guy wires for support and stability.*

### **Planning Department Comments**

1. The Personal Wireless Facility is allowed in the LI-1 zoning district by special permit.
2. The Applicant has not provided coverage maps for the upgraded equipment or new antennas as required by the Rules. This is a requirement under the Rules for Personal Wireless Facility special permits. Although this is a modification to an existing tower, it may be prudent to have this information moving forward.
3. The Application proposes a modification to the existing CAM that would alter the aesthetics of the existing structure. The proposed structure modification would add a 48" "bump out" stealth canister on the tower.

Zoning Bylaw Section 3.10.6.4 states:

*3.10.6.4 Personal Wireless Towers shall be CAMs. On a case by case basis, generally when aesthetic considerations are less important, the Planning Board may allow Monopoles with external Flush Mounted Antennas, or external standard Antenna mounting frames that extend laterally from the Monopole.*

The stealth canister does not fit the definition of an externally mounted antenna or frame, but also does not clearly fit the definition of a CAM as it is only a small portion of the tower – rather, it seems like a combination of the two. The appearance seems to be much like a tower with a set of Flush Mounted Antennas.

Planning Department staff believes that aesthetic considerations are important given the historic resources located adjacent and within view of the existing tower.

4. A letter from the Massachusetts Historical Commission in response to the Original Special Permit application, dated October 15, 1998 states:

*After review of the materials submitted, I concur to a finding of no adverse effect for this action (36 CFR 800.5(d) and 950 CMR 71.07(2) (b) (2)) **provided that a "stealth" monopole is constructed**, and that a screen of evergreen trees be planted at the edge of the project site that is adjacent to the Isaac Davis Trail, to further lessen the visibility of the monopole when the existing trees lose their leaves. Although the proposed monopole appears not to be visible from*

*the Acton Center Historic District, the MHC requests the opportunity to review the project again for visual impacts if the town and the project proponent decide to raise the height to 175'.*

The MHC made this finding based on the understanding that the structure would be a stealth monopole. The proposed addition of a 48" diameter stealth canister would alter the tower's appearance.

Has the MHC been contacted regarding the proposed modification to the tower?

5. The proposed (2) replacement cabinets and (1) new cabinet are on an existing steel platform. One (1) proposed fiber distribution box is mounted to an existing cable support within the existing fenced tower compound.

The original decision (Section 3.1.3) required the equipment cabinets be painted with a flat finish paint that blends the cabinets with the vegetation.

Staff suggests that any new cabinets or distribution boxes match the color and finish of the existing paint as set forth in the original decision.

## **Other**

There are three additional carriers located on the tower. As technology advances, the remaining two carriers may also request similar modifications to accommodate upgraded services. This could result in a monopole with several "bump-outs."

The Planning Department suggests the Applicant show alternate options for providing the upgraded services within the existing tower or within a replacement tower.

If no alternative methods are available, the Planning Department suggests considering either widening the entire monopole to accommodate a 48" in diameter at the 137' height, (this would remove the "bump out" canister feature and maintain the consistent tubular design), or extend the height of the tower to allow for more space to accommodate the upgraded services in a narrower, more vertically extended space.

The original decision required the tower be built to accommodate future extensions up to 175ft. in height:

*Section 3.2.2 - To the extent technically feasible at the time of construction, the proposed Wireless Facility shall be constructed in such a manner as to allow an extension of the facility to a height of 175 feet and accommodate additional antenna. However, no additional antenna or additional height shall be added without further approval of the Board pursuant to the Bylaw and the Rules.*

We do not know if this was followed.

In general the Planning Department recommends the tower remain a "stealth monopole" or CAM structure without "bumped-out" canisters.