



Planning Department

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MEMORANDUM

To: Planning Board

Date: January 26, 2010
Rev. March 12, 2010

From: Roland Bartl, AICP, Planning Director *R. B.*
Kristin Alexander, AICP, Assistant Town Planner *KKA*

Subject: **Application for Personal Wireless Facility (PWF) Special Permit
SBA Towers II, LLC**

The applicant has provided additional materials for the 5-7 Craig Road personal wireless facility special permit application based on issues raised at the last hearing. I have reviewed the information (including the revised site plan dated 3/10/10) and my comments and questions are below. Roland Bartl's original comments are in regular text and my updated comments are in **bold italics**. If you have any questions, please do not hesitate to contact us.

1. ZBL 3.10.4.4 – Is any lighting proposed for the equipment compound? If yes, it must comply with ZBL 10.6 concerning light trespass and glare.

The applicant is proposing a 60 watt incandescent halogen in the equipment compound. This complies with ZBL 10.6.

2. ZBL 3.10.6.3 – The applicant should specify which of the two allowed methods was used for determining the height of the tower.

The applicant specified the height of the tower on the plan using both allowed methods. The maximum tower height proposed is 172'7". This complies with ZBL 3.10.6.3.

3. ZBL 3.10.6.4 – The applicant has requested a waiver from the CAM (concealed antenna monopole) requirement to allow a monopole with externally mounted antennae. This section requires use of CAM in general, but provides for a waiver where aesthetic considerations are less important. This is a judgment call for the Board to make. I recommend not granting the waiver. Although the results of the balloon test are not yet in at the time of this writing, it is fair to say that the location is highly visible from a large area. Acton residents in many public planning sessions over the years have repeatedly identified the open fields and vista in this area of Town as a highly valuable asset. The Craig Road industrial park lies in a low spot and thus has not been a significant detractor. The proposed tower will be a change. Using a CAM would reduce the visual impact.

Staff still recommends not granting the waiver.

Please see comment #11 below.

4. ZBL 3.10.6.5 – The tower is proposed at the maximum allowed height. There are currently two carriers with intent to locate equipment on the tower. The plans show accommodations for three more antenna arrays for a total of five. Why not at least six? How does a change to a CAM affect the tower's co-locator capacity? What is the minimum feasible vertical space needed for an antenna array in a CAM and what is the minimum feasible vertical separation needed to between antenna arrays of different carriers?

This comment has not been addressed to staff's satisfaction. The application should discuss these issues in more detail. Also see comment #12, bullet 2, below.

5. ZBL 3.10.6.9 – In the event of an approval, the Board should consider incorporating in a decision of approval all requirements a) through e) of this section. They are aimed to facilitate maximum use of any tower that is approved consistent with the purposes stated in section 3.10.1.

No applicant response is necessary.

6. ZBL 3.10.6.10 – The plan show adequate fencing. But, I did not see a specific installation to prevent unauthorized climbing as required in this section. The Board should review the proposed landscaping and evaluate if the proposed fence & plantings are sufficient to meet the 3.10.6.10 standard.

I cannot locate the information that discusses preventing unauthorized climbing of the tower in the new application materials received from the applicant. The applicant should provide the Board with this information or identify where it is located in the application materials so staff can review it.

7. ZBL 3.10.6.11 – Provides that the Planning Board may require that all ground equipment be placed inside a building. This does not seem necessary or appropriate here.

No applicant response is necessary.

8. ZBL 3.10.6.12 – I have not received requests for Town owned devices to be placed on this tower. Fire and Police defer to IT. IT comments are outstanding. The applicant has not requested approval for the placement on the proposed tower of any equipment that is not associated with a Personal Wireless Service.

The Town's IT Director, Mark Hald, has requested to place Town owned devices on the top of the tower (see IT memo dated 1/25/10). If the special permit is approved, this should be a condition of the decision.

9. ZBL 3.10.6.13 – If the tower is approved, this section must be incorporated into the decision of approval to ensure proper removal of the tower if and when its use has ended.

No applicant response is necessary.

10. ZBL 3.10.6.14 – Provides that the Planning Board when granting a special permit may require future report filings with the Town certifying continued compliance with zoning and the special permit, and all applicable State and Federal requirements. Given the location, I would not find it necessary or useful to require such reports more frequently than every five years.

No applicant response is necessary.

11. ZBL 3.10.6.16 – A balloon test took place in 1/23/10. The date was announced in the newspaper and on the Town web site. From this test, the applicant will prepare a visibility report as required in this section. At present, this report is still outstanding.

The applicant provided a balloon test report (1/25/10).

In my opinion, the balloon test results show the tower would be highly visible from the following properties: 309 School Street, 311 School Street, 316 School Street, and along Route 2 from all directions. A CAM should be used. An abutter to the project asked if the tower can be designed as a silo structure to fit in with the adjacent farmland setting. This alternative design may reduce visual impact. Has the applicant considered this idea? The applicant should explain the pros and cons of a silo design.

12. ZBL 3.10.6.17 b) through e) – At the hearing the applicant should be prepared to

- explain the rationale and process for selecting this particular site;
- demonstrate that there exists a significant gap for the proposed carriers that this facility can address;

Staff is still unclear whether there exists a significant gap for the proposed carriers. We defer to David Maxson on this issue.

- explain how the proposed facility provides service coverage to the significant gap;

The applicant submitted a letter with supplemental coverage maps for Clearwire Wireless Broadband showing the coverage area with the tower as proposed; without the tower; and with the tower at 160', 135', and 100' high (Ericksen letter, 2/18/10). The applicant also submitted 135' and 100' high tower coverage maps for T-Mobile (Ericksen letter, 3/11/10). The 2/18/10 letter states that an RF Engineer from Clearwire New England will attend the 3/16/10 hearing to discuss the maps in more detail. Staff wants to know at the hearing whether a shorter tower would satisfy the applicant and two carriers' coverage needs. A shorter tower is preferred as long as it can support at least five to six carriers and/or be built to extend to 175' in the future to host additional carriers.

- address the availability/feasibility of co-location on existing towers in Acton or Concord by the proposed carriers;

Did Clearwire New England investigate co-locating on the Knox Trail tower in Acton? Did either carrier investigate co-locating on the Annursnac Hill tower in Concord?

- report on investigations of other potentially suitable sites for this tower; and

It appears the site acquisition specialist for the project identified five potential locations in Acton for the proposed tower (including the proposed site). The other four Acton locations were dismissed for various reasons (see LaMontagne letter, 2/2/10, revised 2/11/10).

- a. Citizens have asked whether the applicant has investigated locating a tower on the Acton Water District land east of School Street (across from Craig Road) and/or the Wetherbee Street land with the existing group of towers (owned by C. Moritz). These sites should be investigated by the applicant.*
- b. Since the proposed site is close to the town line, did the specialist investigate any potential locations in Concord? Locations in Concord should have been considered as well.*

- report on possible other available methods to provide service to the significant gap such as a lower tower, smaller repeater devices, etc., with implications, consequences, and effects for each such alternative.

I defer to the technical review and verbal contribution at the hearing by David Maxson, Broadcast Signal Lab, to assist and advise the Board on evaluating the applicant's statements in these matters.

Further information from the applicant and expertise from David Maxson are still needed on all the issues above. I've elaborated on some of the issues based on the latest information from the applicant.

13. ZBL 3.10.6.17 g) – The plans for the proposed tower specify galvanized steel or other color. The color should be specified; typically a light gray works best. Galvanized steel might too shiny, at least in the beginning.

The applicant should change Structural Note 3 on plan sheet C-3 to state: "The tower will be painted a light gray."

14. ZBL 3.10.6.17 j) –

- The application contains a copy of an FCC website page. I am not clear whether or not it actually represents the FCC license for Clearwire and T-Mobile. The Town's file on this application should have copies of the actual FCC licenses for both carriers as Personal Wireless Services for this region as defined in section 3.10.3.9.
- The applicant should provide evidence that the facility complies with Mass DPH regulations.

I cannot locate this information in the new application materials received from the applicant. The applicant should provide the Board with this information or identify where it is located in the application materials so staff can review it.

15. Other:

- The proposed tower appears to comply with all setback requirements of the bylaw.
No applicant response is necessary.
- While a driveway from Craig Road to the tower and equipment compound is delineated within a specified lease area, it is my understanding that the proposal is to actually use the existing gravel surface on the lot for access without much improvements, if any.
No applicant response is necessary.
- The zoning table on the plan shows open space at +/-81% and impervious cover at +/-68%, this needs correction.

The proposal is nonconforming in regards to the minimum open space, minimum undisturbed open space, and maximum impervious cover requirements of the Light Industrial zoning district and Groundwater Protection District Zone 2. However, these site conditions are preexisting and the project would be adding a little open space with the proposed landscaping.

- Aerial views indicate, and a site drive-by confirms, that the area where the tower and equipment compound are proposed is presently used for truck parking by the property owner, who runs a warehouse/distribution/moving business. The owner should explain how

this proposed change will affect truck operations, and particularly whether or not any changes will cause a spill over into Craig Road, a public way.

This comment still needs to be addressed.

In addition: The Town has no evidence that the current use of the 5 Craig Road (tax map H-4, parcel 45) lot is legal. A site plan was approved for 7 Craig Road (tax map H-4, parcel 13) years ago; however, it did not show parking to be located on 5 Craig Road. The current use of 5 Craig Road needs to cease or somehow become legitimized before a personal wireless facility special permit at 5-7 Craig Road can be issued.

- ZBL Section 10.3, the general section of the zoning bylaw for special permits, provides that the special permit granting authority may require the installation of a sidewalk along the entire frontage. In this case, if the special permit is granted, I recommend that the applicant be given the alternative choice to contribute to the Town of Acton sidewalk fund: \$50/linear foot * 445 feet = \$22,250.

Staff still recommends a sidewalk contribution.

- The site's current build-out is at approximately FAR 0.18. The zoning maximum is FAR 0.20. If the internal floor to ceiling height of the proposed and potential future equipment shelters is more than 6 feet, they will add to the existing floor area on the site, bring the FAR number closer to, but not exceeding, the FAR 0.20 limit.

No applicant response is necessary.

cc: Planning Department
David Maxson
Applicant

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