

Kim Gorman

From: Kristin Alexander
Sent: Wednesday, June 23, 2010 7:48 AM
To: Roland Bartl; 'David Maxson'
Cc: Planning Board
Subject: RE: tower height tension
Attachments: tower elevations.doc

Hi Roland and Dave,

FYI

The 5-7 Craig Road plan contains the following note: "the tower height shall be based on the greater of the following two measurements... ground elevation at the base of the tower is 140'-0" ...average ground elevation within a 500' radius of the tower is 140'+/-AMSL. The tower height from this location is 142'-7"." Below that note, the plan states: "existing grade, elev: +0'-0"AGL, +142.55' NGVD 1929". I've attached a snap shot of that part of the plan.

I hope this information is helpful.

Take care.

Kristin

From: Roland Bartl
Sent: Tuesday, June 22, 2010 4:22 PM
To: 'David Maxson'
Cc: Planning Board
Subject: RE: tower height tension

Dave -

Good points you make. Thank you. Sorry it took so long to respopnd. I will share this with the Planning Board members for their's to mull over.

PS: I have not seen a clarification from the applicant as to how the height of the tower is calculated.

We did receive confirmation from the attorney that Clearwire has firmed up its presence in surrounding locationds - see attached e-mail.

Regards -

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6/25/2010

From: David Maxson [mailto:david@broadcastsignallab.com]
Sent: Wednesday, May 26, 2010 6:03 PM
To: Roland Bartl
Subject: RE: tower height tension

Roland,

Thanks for pointing out 3.10.6.5. I missed that criterion. Fortunately it says "extendable". Presumably the board has discretion with each application whether to extend or not.

All in all, I agree that the baseline is that a tower has to be constructed in a way that it can be extended to 175 feet, but it appears the PB has discretion to limit the height it can go before the owner has to get permission to extend more (up to the 175 cap). Also, interestingly, co-location is a goal, but not a requirement under the bylaw.

The co-location criterion 3.10.6.9 is partly obligatory for the structure ("shall be designed to accommodate the maximum number of users...") and partly at the PBs discretion for co-locators... ("may require" minimal spacing, co-locating, rearrangement to maximize, relocation, enforceable deals). I did not see anything that requires an applicant to show it cannot co-locate when applying for a new site.

Co-location criterion 3.10.6.5 is structural, requiring the design to be ready for co-location to the max, presumably at the Board's discretion in 3.10.6.9. No requirement for the PB to exercise full construction to the max, even if previously designed to be extendable.

"Purposes" offer generalized goals: minimize adverse impacts, limit overall number, promote shared use. Here, co-location and minimize adverse impacts have equal billing.

3.10.5.3 anticipates special permits to specify a maximum height in the permit. This maximum height may be different than the 175 foot maximum height, such that no additional approval is required to extend the tower up to the special permit height, and anything above that height must apply for permit under 3.10.6.1 (anything that does not meet 3.10.6.5 criteria must be given its own special permit.) It is just that the tower has to be capable of going to 175 if in any particular case the board deems it appropriate.

As for waiving criteria, 3.10.6.18 allows waiver of requirements for good cause under the TCA. 3.10.6.3 (175 ft max height) is not allowed to be exceeded by waiver. But 3.10.6.5 (new structure must be extendable to the max height of 175) is a waivable criterion. It would be something of a reverse waiver- the relief is to the applicant only in the sense that less up-front investment in the tower is required if it does not have to be extendable to the full 175 foot height in the future because it is never anticipated that the 175 ft height will be needed and/or approved anyway. Alternatively, the relief is to the neighborhood/town in the form of not requiring a massive, short structure to be built in anticipation of being extended all the way to 175 feet later on and avoiding the risk of it being converted later on to a full size 175 footer. But who would ask for such a waiver. Under the TCA, it might be the nondiscrimination clause that the board could invoke to create something of a level playing field antenna-height wise (e.g. two 120 foot facilities in the area instead of one 175 footer.)

On another note, earlier, I raised the question whether the applicant had provided an average ground elevation for the height clause. I do not recall seeing an answer. The clause requires the selection of the lesser of the two calculations.

6/25/2010

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Isotrope has acquired the wireless consulting business of Broadcast Signal Lab.
Broadcast Signal Lab remains in the radio frequency test and measurement business.

From: Roland Bartl [mailto:rbartl@acton-ma.gov]
Sent: Wednesday, May 26, 2010 4:47 PM
To: 'David Maxson'
Subject: tower height tension

Dave:

just to close the loop in our earlier conversation. The Acton ZBL says in section 3.10.6.5:

3.10.6.5 Personal Wireless Towers shall be located, designed, and constructed as Monopoles that are extended to or structurally extendable to the maximum height allowed under Section 3.10.6.3 above, capable of accommodating the maximum number of technically feasible Co-locator Antennas on the portion of the Monopole above the trees as well as an Equipment Compound physically able to, or capable of being enlarged to, fully accommodate the maximum number of Personal Wireless Service Carriers and other equipment necessary for the maximum number of technically feasible Co-locators at the Site.

3.10.6.3 sets the maximum height at 175 feet with two possible calculation methods. I do not think the Planning Board has any room for discretion in this.

Regards -

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