TOWN OF LEWISBORO Antenna Advisory Board PO Box 500 South Salem, NY 10590



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Minutes of the AAB Meeting

September 2, 2020

Meeting was held via Zoom videoconference and called to order by Joseph Neu at 6:31pm

- Present: Joseph Neu (Chair), Peter Parsons (Town Supervisor), Tony Gonçalves (Councilman/Town Board Liaison), Rob Cummings, Jim Moreo, Brian Porco
- Absent: Neil Berman, Chris Nelson (KLSD Liaison)
- Guests: Manny Vicente (Founder and President) and Ray Vergati (Regional Manager) from Homeland Towers.

Introductions

 Happy Birthday wishes were bestowed to Tony Gonçalves. AAB welcomed Brian Porco as its newest member. Ray Vergati from Homeland Towers was introduced and provided his role and background. Manny Vicente from Homeland Towers joined later.

Approval of Minutes

 Chair moved to approve the minutes from the August 26 meeting. Minutes were approved without objection.

New Business

- Chair asked Homeland Towers to confirm that the discussion of current proposed cell tower sites should be focused on the Salt Dome proposal (which Ray Vergati confirmed) and recapped the agenda as addressing three buckets of related issues:
 - 1. Getting a better understanding of the Salt Dome tower location proposal, in the broader context.
 - 2. Zooming out from the Salt Dome location, to address what other locations have been considered in the past or should we be considering to address the larger picture of wireless cellular coverage gaps in Lewisboro.
 - 3. How we can work with Homeland Towers as part of our larger goal of the AAB in trying to improve wireless and wired connectivity for the town; we also want to shed more light on the services Homeland Tower's website indicates it offers municipalities and the assistance that Manny Vicente, as a town resident, has provided the town.
- Ray Vergati provided background on Homeland Towers (HT), describing it as a tower developer that "strictly builds the infrastructure for the carriers."

- HT looks to identify an area that is underserved with either coverage gaps or capacity issues and work very closely with the carriers (e.g., Verizon, AT&T, T-Mobile). The carriers rely on HT to build infrastructure. In other words, HT puts steel into the air and brings utilities to the site, including leasing it, zoning it, building it, "then we make it available for our tenants."
- Tower sites are very expensive to develop and there is a long process to go through, so the carriers would rather to invest in their network itself and rely on developers like HT to build the infrastructure.
- Mr. Vergati described the work to date on the Salt Dome site that has been shared with the Town Board, including the site plan depicting the tower location on the property, walking the site with various town officials, and presenting coverage plots/propagation maps at both 700MHz and 2100MHz for the site at the three heights of a 146ft RAD center (antenna centerline), 126ft and 106ft.
 - In response to public comments and the Town Board, HT went back for a second site visit led by Manny Vicente with town officials and identified two alternate locations for a tower on the property.
 - The original location on the back right of the Salt Dome is currently used as Echo Farm pastureland. It is town property with no title restrictions on building a tower (building a habitable house is the only restriction).
 - This back right location is still the preferred location of Peter Ripperger, Highway Superintendent for the town highway department since it minimizes access interference to the Salt Dome.
 - The preferred alternate option (for HT) is directly behind the Salt Dome, which gets it off the pastureland. This has a lower elevation of about 15 feet and HT wants to first confirm with Verizon that the loss of 15ft in elevation on the proposed 130ft tower still meets their goals with the signal from a propagation standpoint. It may mean they need to go to a higher tower of 145ft, but that is something that the Verizon engineer will dictate.
 - $\circ~$ The second, or B, location is in an asphalt covered area on the left of the entry driveway.
 - Both are in the process of being evaluated by the town engineer. There are some challenges with slopes and the wetland buffer with both alternate locations, but it is not insurmountable.
 - Later in the meeting, Mr. Vicente responded to Councilman Gonçalves' second look at the alternate sites at the Salt Dome using the revised site proposal (see NY155 South Salem – HOMELAND Lease Exhibit- SALT DOME 6-17-2020 RMV edits 8-14-2020.pdf).
 - In response to comments about trees screening some of the alternate sites, Mr. Vicente noted that some of the best screening could come from offsite landscaping, maybe a crest of a hill that has a view on Echo Farm, for example.
- On the need for this area: Mr. Vergati said he worked this area for Spring/Nextel back in 2004. Verizon has been trying to get to this area for years. The need has not gone away.
 - The closest site built is in the Town Park is too far away at 1.7 miles to provide adequate coverage to the hamlet of South Salem and the lake community that the carriers are trying to cover.
 - It is not so much providing coverage on the major routes 35, 138, 121, 116 exclusively as it is also providing coverage into the residential areas.

- Site selection is a balancing act between a site that is going to have the least visual impact to the community, that is leasable, zonable, contractable and that has to work for the carriers, in this case Verizon as the anchor tenant.
- HT has looked for years and sent out proposals to private properties and no one has come forward with interest. This is why they keep ending up at the Salt Dome.
- \circ The Salt Dome sits strategically on a bend in Route 35.
- It also site close to equidistant between the Town Park tower (1.5-1.7mi) and the Bell tower at Leon Levy Preserve (almost 2 mi).
- Later in the meeting, Manny Vicente from HT clarified that Verizon has dictated to HT where their next need was for a site in town. So even though we are looking for areas that need coverage, many times we are told by the carrier where exactly to look. "This is what happened in this case: Verizon is asking us specifically to be in this area. They have determined in their network design that this is the next spot that is needed to further enhance their network and coverage." In their conversations with AT&T, this would make sense for their next design site as well.
 - Over the past two decades, per Mr. Vicente, Echo Farm, Farvue Farm and the town have been receiving proposals from different entities. Manny sent them proposals 15 years ago when he was at Nextel.
 - $\circ~$ He also clarified that if you look at the 2100MHz maps, you get a clearer picture of the gap.
- HT is prepared to do a drive test (aka a CW test), which provides real time data. They
 will put up a test antenna on a crane that Verizon uses and have engineers drive all
 the road in the area that Verizon is trying to cover and antenna picks up the signal in
 the car that is being driven around.
 - This test will provide real data to assuage people who question the plots that Mr. Vergati says a pretty accurate and if anything, conservative.
 - HT will probably run this test in the next month or month and a half.
 - Putting up a live test antenna up (RSSI measurement, every 3 seconds in the car) will allow HT to see how well the signal covers the area, especially to the North and the lake communities. HT will use the signal data from that test to map out the coverage. HTwould also try to count the homes served the best we can.
 - An AAB member asked what area around the tower site will be tested: HT would map this out with the engineers, but obviously route 35 and all the roads to the north, around the lake areas, be included. If the area is already covered by another tower or too far way, then it probably does not make sense to drive test there.
 - AAB and residents could offer up suggestions for the areas to test. HT offered to submit that test map prior to the test.
- An AAB member asked HT to share what they have given other boards to advocate for the tower to present to the community.
 - o Is it households, 80 households will get 4 bars or what have you?
 - Is the drive test just showing coverage on the roads? The strength of the signal can give an indication if it will penetrate nearby homes.
 - o Every community has different goals per Mr. Vergati:
 - cover a road with a lot of accidents,

- a community is begging for better signal in their residential homes, now working from home.
- Or coverage at a library or school for public safety, in addition to roads, gathering places, outdoor arenas and homes.
- o Carriers will look at number of subscribers living in the vicinity and road traffic.
- The AAB discussion also turned to lessons from the recent storm outage when a lot of people were using their cell phones and cellular hot spots. This discussion included a recap of a call that the AAB chair, Supervisor Parsons, Councilman Gonçalves ad the AAB chair had with AT&T on August 24 for HT's comment.
 - Capacity in storm spiked 3x. AT&T said.
 - Town likely needs an additional 2-3 towers.
 - Additional towers will improve storm coverage, especially if there is an outage and given the track record with Optimum, where more people have to resort to a cellular hotspot to access the internet in a work from home or learn from home situation.
 - AT&T identified the need for a tower along 121, near the junction with 138.
 - AT&T has put their equipment on the town park tower, or the Cross River tower (in the coverage maps), and now they are going to go on the LVAC tower per HT.
 - Chair noted that AT&T made him aware that the Waccabuc tower (so labeled on the coverage map) in Goldens Bridge is on private property and the landowner/lessee was not receptive to equipment upgrades. He asked if HT could shed light on this and if there is something that could be done to upgrade equipment on the tower?
 - HT's Ray Vergati responded that it should make no difference whether a site is on municipal or private property as far as them upgrading equipment. It may be an issue with lease entitlement or structural issues, but HT is not aware of any issue on that tower. AT&T said they would investigate it further (and would be willing upgrade equipment if able to) and HT said they would investigate this as well.
- An AAB member asked for clarification as to why HT is not responsible for power back-ups on the towers instead of the carriers themselves.
 - Mr. Vincente noted that the carriers want to maintain their own back up power following their own back-up protocols rather than have the tower contractor provide backup for all equipment on the tower. This is a controversial issue nationwide.
 - However, it does provides redundancy and generally carriers have both a battery backup and fuel-powered generators on site for their equipment.
 - Cost-cutting in a low funding cycle might cause a carrier to rely on a battery backup and with a plan to deliver a fuel-powered generator on-site.
 - HT has less leverage than the town and Mr. Vincente suggested the town explore zoning language to require adequate back-up power to have carrier's tower proposals approved.
 - Mr. Vincente said he was aware of just one issue with the Leon Levy tower during the recent storm, where fuel for the generators could not be delivered to the site due to fallen trees. Other site issues were more likely the result of the 3-4x spike in usage during the outage: as towers reach their capacity then coverage starts to shrink and people who normally get a good signal will then

fail to get a signal decent enough to hold a call.

- An AAB member asked HT about Distributed Antenna System (DAS) equipment as a solution to aid town coverage, including insight buildings, as well as small cell equipment on utility poles or roofs etc. Is that something HT installs and can provide insight on, especially for denser populated areas of town that are terrain limited for building a monopole tower (e.g., Twin Lakes), what are the applications for them here?
 - Mr. Vergati noted that DAS is meant for discreate coverage gaps, citing as an example on the Merritt Parkway, right where Connecticut and New York meet, there is a bend that runs about a half mile, where they have placed three poles that have shared DAS antenna on them to fill a very small coverage hole (actually less than a half mile). They must be served by fiber and they don't really work well in rural areas.
 - HT hears this a lot when residents who oppose towers ask why you cannot just put DAS in: it's because they don't cover a large enough footprint for varied terrain. You can obviously build them, you can engineer anything, but it is just not feasible or appropriate to do DAS or even small cells in rural areas without the population density. These solutions are mean for urban areas or other places with highly trafficked areas such as concourses, ball parks and things of that nature.
 - Another way to look at DAS or small cell installations, is as a complement to towers, where, once you have built out the towers, you can identify where discrete coverage gaps still exist and that might be the opportunity for DAS or small cells in the future.
 - You would have to put them up on every other pole and then they are supported with just 4-hour battery backup in an outage.
- Mr. Vicente from HT confirmed that there is fiber serving all the HT towers in town; fiber running down 35 would be used for the Salt Dome site.
- The discussion turned back to alternatives to the Salt Dome to fill the South Salem coverage gaps.
 - Supervisor Parsons asked about Farvue Farm, which residents have noted that they see as a good site (from location and elevation perspective)
 - Supervisor noted that HT has said they were turned down when they approached Farvue about locating a tower on the property, yet people on the property say that they have not been approached, which is an unhelpful contradiction.
 - The Chair noted he has reached out to Maureen Koehl, town historian, for her Farvue Farm contact and will seek to clarify their willingness to consider a tower site proposal.
 - Mr. Vergati said he believes HT reached out to them as they have some antenna on the water tower on property.
 - Mr. Vicente said that this site has been desired for two decades and that Farvue Farms, Echo Farms and other sites have been investigated and approached over that period.
 - It can be difficult to find properties, Mr. Vicente said, that are technically viable, secondly, available, and thirdly appropriate (in terms of distance from homes). That is why the Salt Dome is such a great location for us, because there is not a lot of real estate to choose from.
 - HT is not determining the technical location, that is done by the carriers, in this case Verizon, who has decided to fund the location, the need and the

placement.

- Mr. Vicente emphasized that when you look at a map of this area and think about how close you could be to residences and number of residences, this is probably one of the few areas where you are not close to a large number of residences.
- Chair asked Manny to clarify the area that would be deemed suitable by Verizon, for example, is Farvue Farm outside of that area?
 - Mr. Vicente said that Farvue Farm is within the area, as is Echo Farm and the town property in the center of South Salem.
 - There is a geographic circle there that is attractive.
 - It is not an accident that it is right in between the tower at the town park and the Leon Levy preserve, they want to be in between those two sites to help with penetration in building, better quality of signal, capacity, and the 2100MHz really indicates that better than the 700MHz. There is a science behind it.
- Chair asked if the South Salem Firehouse was outside the circle because that also gets mentioned by residents as a potential site?
 - Mr. Vicente indicated that it is getting too close to the town park site. You want to be as close to equidistant as possible. "The more you move closer to the existing sites, the more you get redundant vs. complementary coverage. "
- An AAB member sought to pick the brain of HT further on other areas in town that the carriers are interested in?
 - HT said it is difficult because the carriers oversee their design.
 - Based on Mr. Vicente's knowledge of the town, there is probably a site needed around the intersection of 121 and 138 (HT is currently working on a site at the Hammond Museum in North Salem "that we hope will improve coverage to that area, but I am not positive that it will.")
 - There is also an area along 138, the Goldens Bridge firehouse would probably be a logical place for an improvement, and it would not be a tall macro tower, but something shorter, smaller.
 - The other area is outside Lewisboro along Route 35 between the nursery and Four Winds and the downslope to 684.
 - Unfortunately, for the lake areas to the North, "the Salt Dome is likely to be our best shot, because we don't really see any good macro site alternative spot that is going to provide coverage. That is why we want to do the drive test, because we are hoping that the Salt Dome covers that area as well."
 - HT is just getting an application in with AT&T on the LVAC tower and then is focused on the next site is this South Salem site. From there it can work on the other three areas described, 138/firehouse (likely a smaller installation), 121/138 junction and Bedford section of route 35. After that, the remaining problems may be smaller and there may therefore be other alternatives than macro cell towers.
 - In response to further questions in the chat, the Chair noted AAB discussion at their prior meeting about Mountain Lakes and the surrounding elevations. Looking at a topographical map these are the highest elevations in town and if there are tower sites to be found there, they might cover quite a bit of area.
 - HT said they were going to look at that (more to satisfy curiosity than anything else) with that caveat that it might not be available period, per

Mr. Vicente, and one of the concerns HT has is that "between the Mountain Lakes tower that exists today there is actually an increase in elevation that then drops, so that area is going to be shadowed regardless".

- Chair asked if AT&T is planning on going on the Salt Dome tower if it goes through?
 - o Mr. Vicente indicated that they have just begun discussions on that.
 - AT&T is coming out of a very bad funding cycle, spent a lot of money buying companies etc., and they have not had a lot of money to develop their infrastructure.
 - "We know that it is a need that they have, but we don't know when they would be able to fund it."
- The AAB addressed a question from the public on emergency services communications on these towers: is the town getting a spot at the top of the tower for such antenna? Yes, that is correct. Generally, HT makes the top of its towers available for local public safety use.
- The Chair asked about any other concealment options besides the Monopine at the Salt Dome site or otherwise?
 - Mr. Vicente noted that once towers get to a certain height, you are very limited to what options you have for disguise. "Once you are above 100-110ft, it is very difficult to go to any other option than the traditional tower, monopole or monopine."
 - What about a farm silo? HT has looked at farm silos in the past, per Mr.
 Vicente, and once they go above 80ft, they don't look like silos anymore. "Over a certain height it does not look right, and they get pretty wide."
- There was a question from the floor about the South Salem Presbyterian Church steeple being used as a site?
 - HT met with the pastor a while ago and presented it to Verizon a while ago and it is not going to work: it is not tall enough to give them the coverage that they need and it is not structurally feasible in our opinion. And we were concerned about some state historical preservation issues.
 - Further, even if it worked for Verizon, you would not be able to put 2-3 carriers (need 10ft vertical for each carrier and horizontal space as well) on it.
- In closing, the Chair noted that
 - He hoped this is a start of a dialogue rather than a one-off opportunity to speak with HT.
 - Asked HT to provide clarification on the area around that Salt Dome that might be acceptable to Verizon.
 - Confirmed that the next milestone is to be the crane/drive test.
 - Asked on behalf of Callie Bauer and Echo Farm that HT be mindful of debris left behind out of concern for the safety of the horses and that they be notified of the timing.
- Chair proceeded to poll the rest of the board:
 - Councilman Gonçalves asked if there would still be a balloon test as well at both alternate locations?
 - Mr. Vicente said that they hoped they could use the crane as the reference point for one site and the balloon for the other.
 - The data from the drive test is the most important thing at this point.

- $\circ~$ Mr. Porco noted he had wondered about the South Salem firehouse location, which was addressed.
- Chair noted that the chat from the meeting, including the questions, would be saved for reference.
- The AAB email is set up but the forwarding is not yet working.
- Chair thanked all those attending, including the public attendees.
- The meeting was adjourned at 8:01pm.