City of Santa Fe

Agenda

CITY CLERK'S OFFICE
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BOARD OF ADJUSTMENT
Tuesday, May 5, 2015 at 6:00 P.M.
200 Lincoln Ave. Santa Fe NM
City Council Chambers

A. ROLL CALL
B. PLEDGE OF ALLEGIANCE
C. APPROVAL OF AGENDA
D. APPROVAL OF MINUTES: Minutes of September 2, 2014
E. FINDINGS/CONCLUSIONS: None
F. NEW BUSINESS

1. **Case #2015-29.** 1017 Canyon Road Special Use Permit. Lorn Tryk Architects, agent for Barbara Ann Fix, requests approval of a Special Use Permit to use an existing residence as an office within the RAC (Residential Arts and Crafts) zoning district. The property is located at 1017 Canyon Road. (Zach Thomas, Case Manager)

2. **Case # 2013-116 & 2014-82.** Cellular Phone Task Force, Arthur Firstenberg and Fifty-One Citizens from the October 30, 2013 appeal the decision of the Land Use Department to Issue a Building Permit #13-2097 and the Cellular Phone Task Force: Arthur Firstenberg and Twenty-One Citizens appeal the July 15, 2014 Decision of the Land Use Department to Issue a Building Permit #14-813 to John Malone and Verizon Wireless Regarding Replacement of Telecommunications Antennas at 1402 Agua Fria. (Consolidated for appeal, Zachary Shandler)

G. STAFF COMMUNICATIONS
H. MATTERS FROM THE COMMISSION
I. ADJOURNMENT

NOTES:

New Mexico law requires the following administrative procedures be followed by zoning boards conducting "quasi-judicial" hearings. In "quasi-judicial" hearing before zoning boards, all witnesses must be sworn in, under oath, prior to testimony and will be subject to cross-examination. Witnesses have the right to have an attorney present at the hearing. The zoning board will, in its discretion, grant or deny requests to postpone hearings. Persons with disabilities in need of accommodations, contact the City Clerk's office at 955-6520, five (5) working days prior to meeting date.

INDEX – BOARD OF ADJUSTMENT

May 5, 2015

Rachel Winston, Vice Chair, called the meeting of the Board of Adjustment to order at 6:00 pm, 200 Lincoln Avenue, City Council Chambers, Santa Fe, New Mexico. A quorum was declared and reflected in

A. Roll Call

Present:
Rachel Winston, Vice Chair
Coleen Dearing
Douglas Maahs
Donna Reynolds
Daniel H. Werwath

Not Present/Excused:
Gary Friedman, Chair
Patricia Hawkins

Staff Present:
Greg Smith, Planning Director
Daniel Esquibel, Land Use Planner Senior, Current Planning Division
Zach Thomas, Case Manager
Zachary Shandler, Assistant City Attorney

Others Present:
Public Participation reflected below under individual testimony.
Fran Lucero, Stenographer

B. Pledge of Allegiance led by Ms. Coleen Dearing

C. Approval of Agenda

Mr. Werwath moved to approve the agenda as presented, second by Mr. Maahs, motion carried by unanimous voice vote.

D. Approval of Minutes, September 2, 2014
No changes from staff or Board members.

Mr. Werwath moved to approve the minutes of September 2, 2014 as presented, second by Mr. Maahs, motion carried by unanimous voice vote.

E. Findings/Conclusions
None

F. Old Business
None

G. New Business

Case #2015-29. 1017 Canyon Road Special Use Permit. Lorn Tryk Architects, agent for Barbara Ann Fix, requests approval of a Special Use Permit to use an existing residence as an office within the RAC (Residential Arts and Crafts) zoning district. The property is located at 1017 Canyon Road. (Zach Thomas, Case Manager)

Staff Report

The Board members followed packet staff report presented by Mr. Zach Thomas, Senior Planner. The application is for a Special Use Permit to use an existing residence as an office. The property is zoned R-5 (Residential – 5 units per acre). The existing 3,200 square foot lot is currently developed with a 1,040 square foot residence. The proposed office will be used by the Forest Trust, a non-profit operated by a husband and wife. No changes are proposed to the existing building other than those necessary to comply with all building codes (including ADA) associated with commercial structures. Parking for the proposed office would be provided by the two existing off-street parking spaces located with the existing driveway. The size of this office space request would require 3 parking spaces. The Board can approve the number of off street spaces and in this case the board would be approving less spaces; a total of 3. A condition of approval is requested to limit the maximum of employees to 3. The EIN meeting was held on March 18, 2015, two members of the public were in attendance in addition to five people associated with the applicant. There were no objections specifically related to the proposed use of the residence as an office. In conclusion staff recommends approval with adherence to the conditions of approval..

The Vice Chair asked if the decrease in parking was based on use of occupancy.

Mr. Thomas said that is correct, this business would operate 9 am to 5 pm, Monday through Friday.

Lorn Tryk, Lorn Tryk Architects, 206 McKenzie Street, Santa Fe, NEW MEXICO

Mr. Tryk commented that the he felt the staff report is very complete. Mr. Tryk noted that Mr. Harry Carey, from Forest Trust was here and he would be the occupant of the building. Barbara Fix is the land owner of the house and also present for any questions.

Henry Carey, 72B Bauer Road, Santa Fe, NEW MEXICO

Mr. Carey said that the Forest Trust has been in existence since 1984.

Public Comments – Open
None
Public Hearing - Closed.

Ms. Dearing: Asked staff to reconfirm that the request is for 2 spaces.
Staff reconfirmed, yes that is correct.

Mr. Werwath moved to approve Case #2015-29 request for a special use permit including the conditions of approval, "any office located at 1017 Canyon Road shall be limited to a maximum of three employees on the premises at any given time", second by Ms. Dearing, motion carried by unanimous voice vote.

Case #2013-116 & 2014-82. Cellular Phone Task Force, Arthur Firstenberg and Fifty-One Citizens from the October 30, 2013 appeal the decision of the Land Use Department to issue a Building Permit #13-2097 and the Cellular Phone Task Force: Arthur Firstenberg and Twenty-One Citizens appeal the July 15, 2014 Decision of the Land Use Department to Issue a Building Permit #14-813 to John Malone and Verizon Wireless Regarding Replacement of Telecommunications Antennas at 1402 Agua Fria. (Consolidated for appeal, Zachary Shandler)

Mr. Zach Shandler, Assistant City Attorney
This is a Chapter 14 Appeal with decision from the Land Use Director to issue a building permit for the replacement of public communication antennas. Our presentation will not discuss the allegations or effects of telecommunication or cell signals on people because under Federal Law in state court cases we cannot discuss that issue. Courts have uniformly interpreted Section 704 of the Federal Telecommunications Act, according to its plain terms, holding that it expressly preempts state and local government from regulating wireless facilities on the basis of the alleged environmental effects of RF emissions, such as health concerns. There are several court cases that support that proposition. Mr. Shandler hopes that all parties will not discuss allegations of effects. We think this is a case about penalties whether it was a proper penalty for a building permit that was administered. The property is zoned C-2 (General Commercial) and is a one-story structure occupied by a business called "Absolute Flooring and Materials". Verizon rents space on the building roof. The building is near the intersection of Hickox Street and Agua Fria, across the street from the "Critters and Me" pet feed store. In 2005 the City of Santa Fe issued a building permit to Verizon for the construction of electronic equipment shelters located on the building roof. The 2005 Permit stated: "The permit is for the equipment shelter only — the antennas are not approved at this time — Separate permit is required." Verizon constructed the Equipment Shelters, box-like structures that are a few feet high, ½ the size of that podium as a visual reference. Verizon did not receive a separate permit for the installation of the antennas. Nevertheless, Verizon placed six antennas within the two Equipment Shelters.

In 2013, Verizon applied for a building permit to replace the original six antennas and the Land Use Department issue a Building Permit. Shortly thereafter the Citizen Group advised the City that Verizon had not received a building permit for the original 6 antennas. On November, 2013 the Citizen Group filed their first appeal for the 2013 petition, asserting that the installation of the original six antennas was done without a permit and without public notice. The filing of this first appeal in 2013 red tagged the work. Generally we seek compliance rather than punishment for a violation without a permit. Mr. Shandler made reference to page 156 (Exhibit E) in the packet; the city code and table which shows possible penalties for performing with unpermitted work. You will see at the bottom reference to doubling the application fee as a penalty.

City Code establishes three levels of review for a request to install telecommunications antennas. Option #1 is a simple building permit application, Option #2 is an administrative review, which includes written notice to the public and specific submittals; and Option #3 is that Planning Commission or Historic Districts Review Board review, which includes Early Neighborhood Notification meetings and specific submittals.

City Code provides that the "new towers or antennas in C-2, trigger the second administrative review. As noted above, the property is zoned C-2.

In December, 2013 city staff wrote to Verizon stating that they needed to submit a new application for a building permit to take care of the un-permitted installation of the original six antennas and that the new application would be subject to "administrative review". The Land Use Department also required Verizon as a penalty to pay a double application fee. Verizon reapplied and paid the double fee.

In February and March 2014, Verizon provided the staff with the required submittals. Verizon posted a sign at the property and on May 12, 2014, sent certified mail written notice to property owners, tenants and registered neighborhood associations within 200 feet of the property. The notice included a site map. During this time period, citizens were able to call and meet with City staff regarding their comments on the application.

On July 15, 2014 the City issued a Building Permit, 14-813 which incorporated the approvals for the 13-2097 building permit. On July 26, 2014, Verizon posted the building permit on the Property, providing notice to interested parties and on August 8, 2014 the Citizen Group filed their second appeal for the 2014 Petition.

The Citizen Group has made two general claims under the 2013 appeal; 1) the unpermitted activity and 2) lack of public notice. Both these claims, however, were addressed with Verizon, in late 2013 and early 2014 which required the city to obtain a building permit and enter in to the review process. The Citizen Group makes two general claims under the 2014 Petition, 1) a violation of maximum height and 2) again, lack of public notice.

Because the claims involve over lapping facts, we have consolidated for the record the lack of having to make a motion that included both cases for the record.

Regarding height issues; the City Code under the "Maximum Height" subsection provides that "Telecommunication facilities located on existing structures shall not exceed the height of the structure upon which the facility is located." The term "structure" means anything that is considered or erected with a fixed location on the ground or attached to something having a fixed or erected with a fixed location on the ground or attached to something having a fixed location on the ground, including buildings, walls..."

In 2005 when Verizon obtained the building permit for the Equipment Shelters, they put those structures on the bricks and mortar which are similar in appearance to the parapet or screening wall on top of the one story building. These structures, which are similar in appearance to a roof parapet or screening wall, increased the overall height of the building within the limits permitted by the Code. The structures are taller than the antennas within them. The antennas are no taller than the structure and therefore there is no violation. There is no need for a variance because there is not a height problem.

The public notice issue was also raised. The City Code talks about three possibilities and Administrative Review process. It requires certified mail written notice to property owners, tenants and registered neighborhood associations within 200 feet of the proposed project site. It required putting up a sign to generally describe the project site and proposal. In 2014, Verizon completed all these steps.

Administrative Review did not require an Early Neighborhood Notification Meeting. That is only a requirement if you go to step 3 which is going to the Planning Commission.

Penalties, the 2014 petition says this facility has operated illegally for 9 years. The Citizen Group requests removal of illegal structures. First, the equipment shelters were appropriately permitted; we are talking about the antennas behind the equipment shelters. The Land Use Department has a variety of penalties it can impose for non-compliance and the most common is the double fee. Verizon had to pay the double application fee. This is a discretionary decision by the Land Use Department. This is a quick summary, full memo included in meeting packet. (Exhibit A)

Mr. Werwath: Is the maximum height in the C-2 area is 6 stories?

Mr. Esquibel: The maximum height in the C-2 district is 100 feet.

Ms. Reynolds: In 2005 when they issued the original permit for the structure but not for the antenna, what was the rationale for them not getting the permit for the antennas?

Mr. Shandler did not have a response and asked the Verizon representatives if they could answer under their presentation.

Mr. Esquibel: In talking with Greg Smith, Director of the Planning Department, we believe that would have been administrative.

Mr. Werwath, in regards to the last time we had a telecommunications we had a fresh interpretation, we can only hear issues regarding the technicalities on the permit but nothing based on health and safety.

Mr. Shandler: That is correct.

Ms. Reynolds: In looking at some of the ways you can remedy something that has taken place illegally, it looks like you could have done some other things. The common application was to double the fee, but there were other ways you could have addressed the illegal structure.

Mr. Esquibel: It has been a common practice for a long time, this Board has seen many cases where you will see cases that have exceeded the standard after the fact and the double fee has been for many years. In most cases most of the time a variance either smoothes out the infraction of the Code when the Code has not been adhered to or where the application would not comply with the rules and regulations and they comply with the standards and meet the technical requirements of Chapter 14 and then the penalty is imposed for the building permit process.

Ms. Reynolds: But are there other ways?

Mr. Esquibel: In some cases where the applicant has not resolved the issue, it turns in to a violation and through that process it ends up in a court of law where the Judge will determine whether or not they would need to remove it.

Mr. Werwath: It appears in the permit that the cost for construction work was listed at $30,000. Typically that appears to include just the permitting work and not the value of installed equipment, is this correct?

Mr. Esquibel: When a building permit is applied for the contractor will provide the amount and value of the work being done. If the value is not correct and if staff taking the application at the time feels that the cost per square feet is below the average standard, the state has provided some standards by which they would follow in order to meet that demand. Otherwise that valuation is in the computer and the computer issues the permit based on that information. If I knew that my cost was going to be cheaper than contractors cost I would go with the standards practices for the state vs. my value and that is how they do it continually across the board. At the time they applied for the permit back then, I am not sure what the value would have been.

Applicant

Arthur Firstenberg, 247 Barela Street, Santa Fe, NEW MEXICO.

Testimony provided by Mr. Firstenberg: Verbatim – transcript attached as Exhibit B-1. Supporting Documents – ATSI – RADIO Frequency Emissions Analysis Report, Evaluation of Human Exposure Potential to Non-Ionizing Radiation: Exhibit B-2

The Chair provided the protocol that would be followed for the continuation of this hearing:

- Appellee: Verizon
- ***Public Hearing with Swearing In and Identification of Individuals Commenting***

Mark Williams and Lisa Hansen, Verizon – Denver, Colorado

Mark Williams:

We are here to urge you to deny the appeals that have been applied for. Mr. Shandler has analyzed the City Code and the appeals are without merit. We also ask that you find the appeals invalid.

Verizon Wireless has complied with the Code. Mr. Shandler has pointed out in his opening statement and submission that in the original permit a separate permit was needed and I have also investigated the reason, and it may have been an oversight. The fact of the matter is mistaken, Verizon did not do it; when Verizon finds out about a mistake it seeks to correct it. We now have complied with every aspect of the Code.

The site is approved to stay here. If we look at what communications does for the US, New Mexico and the City of Santa Fe it is a very important component. Many of us are getting rid of our LAN lines and the public and society are going strictly to cell phones. It allows for more capacity, it promotes communication for citizens, visitors, it also help first responders. It promotes community, business, cultural events, promotes health and safety to allow first responders to respond. We are in a commercial district, I know you would prefer to have this in a commercial zone which it is in a C-2, the code requested.....what you would like to have is the structure to the extent possible, if you drive by you cannot see the antennas. The height of the facility is consistent with the city height requirements. It is to promote an aesthetic environment; it blends in with the surrounding since it is a commercial zone. It promotes an enduring economy which is 2.07. Mr. Shandler began his ~~resuscitation~~ of the law, I don't want to repeat it here but he is right. There are cases in the state, evidence of health effects cannot be in this discussion. Removal of this facility would also prohibit the being of wireless services. Mr.

Ferstenberg provided you with a report and like you I just got it today. The document speaks for itself, and the person who created the document is not here today. It says "may" it doesn't say "does". The report from Verizon does comply and does conclude that the remissions are within FCC guidelines. The evidence of health effects is not admissible here and we ask that it be stricken. The record supports the denials of this appeal, we have complied, there is no basis for the appeals under the code of Santa Fe and the Federal Law and we ask you to deny the appeals.

Ms. Reynolds: How many similar sites do you have in Santa Fe?

Ms. Hansen could not answer how many sites they have in Santa Fe.

Mr. Esquibel: All of the telecommunication companies are dealing with existing towers but those that do come in like the one on Agua Fria Street. The idea of looking at a tower vs. a stealth site, this is the only site that is enclosed. The balance of their towers is in existing, or they are wall mounted panels and they are somewhat flushes or painted to continue to keep that invisibility to comply with the ordinance. Mr. Esquibel said that there are at least 15-30 within the city. They work to assure that they use the covers to meet the ordinance in the city. Most all other telecommunications

Ms. Reynolds: How many antennas are in the structure, 6 or 9?

Ms. Hansen said she did not know exactly, she would have to say that there are probably 9.

Ms. Reynolds: Is there any other entity trying to relocate in to that structure?

Mr. Esquibel: If they are going to relocate, Chapter 14 requires a letter to meet the application requirement. When they brought in the administrative application, the city forced them to go back and comply.

Ms. Hansen: They are re-locatable.

Ms. Reynolds: What is the cost to remove?

Ms. Hansen: It would be tens of thousands of dollars.

Ms. Reynolds: I would be curious to know what the cost would be.

Mr. Werwath: Does the FCC provide support for situations like this, is there a process that people can go to and be heard at the FCC level?

Mr. Williams: They can communicate with the FCC, I have never personally participated in one of those proceedings. They can write to the FCC and I don't have the document to give you an answer. From Verizon's standpoint the facility does comply within FCC guidelines and Bulletin 65 and there are other bulletins, from our report it complies with the law. We feel that there is not a basis to challenge.

Mr. Werwath: Is there anything in the city that can measure frequency board.

Mr. Esquibel: There is not, they are required to provide a certificate that they are in compliance. FCC has a page where they can submit their complaints. It would be up to FCC to investigate and provide regulation. It is not in city code because it is the right of the FCC to make the decision. Megahertz – AT&T and Verizon - FCC is the only one that can regulate those issues.

The Chair asked staff, "Mr. Firstenberg says that the boxes show the antennas 10 feet tall and the antennas are 7' tall. What are the correct dimensions?"

Mr. Firstenberg: In 2013 all of the antennas were 6' tall, and they were changed out to 7' antenna. If you go by there you can see one antenna. The drawing did not show them sticking up.

Public Record: There is an exception that the antennas can be 100 feet.

Mr. Williams: I dispute Mr. Firstenberg's statement.

Mr. Firstenberg: I want to respond.
(Reference Exhibit G Page 2 & 3 from Mr. Firstenberg's testimony document, Exhibit B-2.)
In Exhibit G, the left side of the page shows the antennas as they existed in early 2013. Instead of four antennas in the western box and two in the eastern box, there were now two antennas in the western box and four in the eastern box. The directions had been changed. They were then aimed at 44 degrees, 189 degrees and 254 degrees. In 2013, Verizon upgraded the facility again, installing new transmitters and three additional antennas. As indicated in Exhibit G there are now three antennas in the western box and six in the eastern box, and they are now aimed at 15 degrees, 135 degrees, and 210 degrees.

Mr. Werwath: Mr. Firstenberg should address his concerns under Public Comments.

Mr. Firstenberg: In 2011, Santa Fe had revised its land development code so that telecommunications facilities are now a permitted use and no longer require a special exception, a public hearing, or early neighborhood notification. Thinking it could now surreptitiously legalize its facility, Verizon quietly applied for a building permit for the antennas. It still did not apply for zoning permission.

Chair Winston: Are you alleging that in 2005 the application was unpermitted.

Mr. Esquibel: I am not sure what the contractor did in 2005, or how they actually installed the equipment. I do know that the way the city operates we can't issue under a previous code. When Mr. Firstenberg filed his appeal, we issued a stop work order, and from that day forward we were in contact with Verizon to comply. The structure itself was previously approved and permitted. That refers to the rooftop, what was not permitted was the antenna placement, the computer placement. We ran them through today's standards and regulations, they were very compliant.

Mr. Maahs: Is there anything that we need to consider?

Mr. Esquibel: We look at that and we permit them as part of the construction point, mounting points and electrical for code compliance. Panels that they have per sector are within the telecommunication purview. When they were placed, they were within a certain service level referred to as 2G, 3G; they were only required to have what went on that mounting. As technology progressed to 3G, 4G it was up

to Verizon to service their customers. *We don't tell them* how to do it; we expect them to abide by the building code.

Mr. Shandler: We can get the code. Staff has been there several times and we do know what we are doing. I would need to see more photographs of this structure and if it is not what we have seen in this due process we can discuss.

Ms. Reynolds: Revisiting Chapter 14 we have followed the current laws as it relates to communications. None of that required any type of public hearing was it administrative process?

Mr. Shandler: It is a multi step process, there was a requirement which they met through certified letters and it gave them the right to come and meet with staff if they had comments, but there is a public process where their input was accepted.

No more questions from the Board

Mr. Werwath addressed the audience: I want to express that no one is trying to suppress your speech, health effects have to do with jurisdiction, and we are here to deal with land use code for the city of Santa Fe.

Public Hearing

Connie Trujillo – 1406, Agua Fria Street, Santa Fe, New Mexico – Has lived there for 14 years.
I am here to speak on removing the towers. I suffer from migraines, I have cancer, I had a pedigree collie that died from cancer but we don't know if they died for that reason. I am tired of being sick, I don't walk there anymore, all I am saying as a human being and citizen that we take responsibility for each of our neighbors. I come here to ask all of you to open your hearts and listen to people to what they have to say. Thank you for listening to us today.

Kelly Schilling – 519 Silva St., Santa Fe, New Mexico
I was one of the individuals who hired the contractor to do the report presented tonight. ATSI is an independent field testing organization specializing in EMI, EMA, HEMP, RF Shielding effectiveness and acoustic testing. MPE Maximum Permissible E limits were provided in report for 1404 and 1406 Agua Fria. I believe that the limits would be a lot lower if they were living there 24-7. If these permits are being approved retroactively, if these towers hadn't been put there, if the neighborhood could have lay in on the decision, they would not have wanted them. I drive there every day and the 7 foot antennas go over the structure box. I don't know why you need towers so close to those houses. Verizon should be able to find another location. I bought my house in 2006 and had I known about the towers and antennas I would not have bought my house. Angles of the antennas, my 11 month old daughter and my dog both had seizures within the same week. Would you feel comfortable living with an antenna at a location so close to your home? Thank you.

Georgette Romero, 1414 ½ Agua Fria St., Santa Fe, New Mexico - Neighbor
I want to pose the same question, if you had the choice to buy a property there today, would you? For those of us who do live there, this is truly an issue, if we wanted to move out we would have to disclose this to people, because if we don't we would be sued. *The question – not the question* – if we have to

suffer final watches and it is going to cost the telecommunications provider tens of thousands of dollars, it is likely . Read letter from another neighbor.

Debbie Vigil, 513 Silva St., Santa Fe, New Mexico
I am shocked at what I have heard here tonight. I know the boxes are there, tonight it was disclosed that many other cell phone companies can put their antennas in those little boxes. My children, my grandson, my husband, we have all been sick, but if we had to ask the questions to staff and to Verizon, do they live in neighborhoods where there are cell phone towers, it is bad. I would hope that you would ask them to remove these towers. It has not been fun living there.

John Miller – 1542, 1538 and 1540 Hickox Street, Santa Fe, New Mexico
I put more value on a human life, Verizon has a lot of money to relocate the towers. I have seen a lot of people suffer from health condition. The peak of the building is 22' with the antennas.....82 ft. away from those antennas. One of those points down Calle Porvenir and they affect anyone in 200 ft. I think they should be removed if they were put there illegally. Would the city be liable if the city allowed these permits or for stopping other permits.

Mary Padilla, 1274 Senda del Valle, Santa Fe, New Mexico
I have family living 2 lots from that structure. Everyone talks about Verizon but no one talks about the building owner, they have profited hand over fist for 10 years, maybe this building owner can find it in their heart to replace the roof for the person who is being affected.

Toni Chavez, 2 Calle Peligroso, Santa Fe, New Mexico - My parents live at 1404 Agua Fria Street.
These Towers point to my parent's home, everyone here has parents and I have a concern for my parents who are elderly and live there and I hope you have enough concern to make the right decision. I have 5-6 brothers and sisters, nieces and nephews, grandkids and we spend a lot of time at their home. Please consider it if you care.

Arthur Baca, 1418 Agua Fria St., Santa Fe, New Mexico (Which is about 5 houses by where the towers are located).
My father and mother built their home in 1949 and I currently live there. I am upset that these towers were put up in our view, we never knew that it was going to be a cell tower. We are told we can't talk about health problems, yet they could operate for 8 years before they speak up. I venture to say these people have made millions of dollars and we have lived there for a long time. If you want to build a shed you have to come to the city for a permit and this company can do what they want. They should have to do more than pay a double price for the application.

Laura Moore, Owner of Critters and More, Agua Fria Street (Across Street from Verizon) - I have been there for 16 years.
I must comment to staff that when I received the letter I called the city and I was told that I had no recourse I had to call FCC. I won't go in to the health issues, I don't think there was rebuttal on Mr. Firstenberg s' comments. I find it strange that Verizon can't answer questions tonight.

Ms. Spring, 3 Montecito, Santa Fe, New Mexico
I am very sensitive – I have moved out of the city. Our bodies just can't tolerate these frequencies. Shocked to find out that FCC is in charge of our lives to this degree, I am surprised that we gave up our

autonomy to this intervention. When we talk about the affects, and many people use these cell phones, I am surprised. I think we need to take our power back as a city and not allow outside influence to run our lives. We need more information on the subject, I know what affects me and many people don't know what affects them, I want us to have power in our community.

Theresa Martinez, 1404 Agua Fria Street, Santa Fe, New Mexico
You saw the pictures here of the 4 windows and the towers. Our bedroom looks at them, we have to cover our windows, it is sad we have to cover our windows. I have asthma; I can't go outside, it is now worse. I have breathing problems to help me breathe. I wish those towers had never been put up there and I think they should be taken off. Thank you.

Jose Martinez, 1404 Agua Fria St., Santa Fe, New Mexico
I never received any certified letter that they were putting those towers up. I built my home in 1960 and I don't think I could even give my home away now with the sight of these towers. I don't think my home is more than 50-60' away from the tower. My grandkids use to come visit all the time but I discourage them now because I don't want anything to happen to them. We don't want the antenna towers to affect them. I hope that you get these things out of there.

Dominic Martinez, 1404 Agua Fria St., Santa Fe, New Mexico
After hearing how much radiation is there, I live with my parents, we never received any certified letter that told us there were going to be cell towers there. The health issues are the big thing but the legal issue is the big thing, there is no reason why they can't remove these towers and put them in a residential area.

Mike Pena, Santa Fe, New Mexico
It is an issue I care about. I was raised there and live in the home. I have not had any health issues. Since the towers have been put in I have health problems, I have an aunt who has health problems and cousins that are also ill. Verizon is a multi-billion company and they say these towers are safe, I don't know how many people have to die to learn from this. I would hate for any of my friends or family to die. Please consider moving the towers and antennas.

Gerald – 1404 Agua Fria St., Santa Fe, New Mexico
To me it isn't about the money Verizon is going to make, or if the codes are rights or wrong, or if the city did the right thing. I did the Pledge of Allegiance with you, America has always done the right thing, and I think in the Eyes of God you will know what to do.

Victoria Martinez, 1404 Agua Fria Street, Santa Fe, New Mexico
I live with my grandparents, they are getting old and I would like for them to see me graduate and due to those towers I am worried that won't happen.

Cesar Martinez – 1404 Agua Fria Street, Santa Fe, New Mexico
I am concerned because my room is the closet to the tower and I sleep in a bunk bed, I have had health issues with my ears. I would like to see my cousins come back.

Virginia Miller
When I learned that these boxes in this building had cell towers and antennas I was deeply disturbed, and people didn't know what they were. Now I know what they are and I strongly urge you to move

these towers, and protect the well-being and health of the people that live and work there. The FCC does not provide ....for cell towers. Please remove the cell towers, and protect the rights of these people. I live across the river and drive by Agua Fria Street. Do the right thing.

Bill Bruno, 2357 Botulph Road, Santa Fe, New Mexico

Back in 1996 when FCC got this power that they have, the Drs. were still telling Drs. to eat margarine instead of butter; no trans-fat. There wasn't research on health effects. There was a study and they found basically in that study that half the headaches were caused by the cell tower. Someone wrote an editorial about health effects.

Stacy Jaramillo

I go to the Jaramillo's house, no one has said how much radiation is in that water and I would like those towers to go down.

Public Hearing Closed

Mr. Werwath:
It seems that there is a natural discrepancy; is there a potential remedy that this board could get a Land Use report to clarify these issues? The staff report says that the antennas are shielded and we have seen evidence that they are not shielded. What source of remedies do we have for that?

Mr. Esquibel: It would take me a couple of days to pull the building permits for this application for the upgrade that would provide me the dimensional data. I will add that within Chapter 14 and the review, it is an extensive process, it is more than administrative. It includes a number of items that Verizon had to comply with. Our code requires that Verizon comply with 6409A, it allows them to relocate, it allows them to extend their antennas up to 20' and they can extend up to 100 feet. We are concerned and interested that they comply with FCC and with Chapter 14. Whether the shroud is there or not there, these antennas would comply with the height, their location and the code.

Mr. Shandler: That argument is on page 7 of the packet.

Mr. Werwath: Is there a way the City can request FCC for a compliance report.

Mr. Esquibel: In the past prior to some of these amendments I tried to contact the FCC. It may have been 2-3 years ago when our code was different and I was in need of asking questions. FCC at that time said that we could request and they would see what they could find and reiterated they are the regulating agency. We could send them a letter of request.

Mr. Werwath: Mr. Williams is it possible for Verizon to provide current FCC compliance for the current installed antennas. The issues I have is that we have heard from Mr. Firstenberg's group; I don't see a date on it but it is in conflict with some of the other information. Can you provide an updated current document that you are in FCC compliance?

Mr. Williams: We believe that the report in your file is accurate. I would have to ask our Verizon Representatives to confirm; we believe the current report is accurate. The report we have today might have different numbers, but we believe that one is current. We have filings with the FCC that are public and we would need to get them and it is something that we could provide.

Ms. Reynolds: The report that Mr. Firstenberg presented shows inconsistencies and it talks about compliance requirements on people, and Mr. Firstenberg also talked about accessibility, I would ask if you are going to address these concerns.

Mr. Williams: The report referenced is included in the packet.

Ms. Reynolds: It talks about inconsistencies, the landlord, training and it mentions you can get access.

Mr. Williams: In terms of accessibility if they are within the limits, the report is in compliance. I see your point, one talks about the landlord with no further comment.

Mr. Esquibel: We could have one of the inspectors go out and assure that they are in place, it was included as part of the review, they did address the issue. When the building permit was issued the signs had to be in place.

Mr. Williams: Verizon met the signage requirements on April 24, 2014. Verizon needed to assure, barriers were there and authorized by Verizon Wireless and that there would be access to the antenna area. Page 4 talks about accessibility by ladder, which is the area where those facilities are and from that standpoint there are no inconsistencies.

Ms. Reynolds: What is an RF Safety Plan?

Mr. Williams: It is the safety requirement plan to assure they are not going around the antennas, restricted to personnel, it has those particular plans and people can't go behind those barriers.

Ms. Reynolds: It says there is no plan in place for accessibility.

Mr. Williams: A plan of access is in place.
Mr. Werwath moved to postpone action on Case No. 2013 until current compliance can be verified from FCC which is dated after todays date, second by Ms. Reynolds, motion carried by unanimous voice vote.

Mr. Werwath moved to postpone action for a date certain of July 7, 2015 so that an updated FCC compliance document could be presented for Board of Adjustment Review, second by Ms. Reynolds, motion carried by unanimous voice vote.

Mr. Esquibel will work with Mr. Williams at Verizon on the 2015 date. The next meeting would be July 7, 2015.

Mr. Smith asked if it would be likely that they could have that report 1 month from today. Once that report is available we would need to send notice to all of the public.

Mr. Shandler: When there is an appeal Mr. Firstenberg would need to send out notices again.

Mr. Williams: We can commit to 60-days.

May 5, 2015

Point of Clarification: With regard to a document that identifies compliance with FCC, the FCC does not issue compliance letters, all we have is a certificate from an Engineer from Verizon that shows that they are in compliance. A date should be set.

Mr. Williams said it could take up to 3 months for them to secure this letter from FCC.

Staff Communications:
Mr. Greg Smith, Planning Director informed the board of his role and offered assistance moving forward if they wanted to communicate at the supervisor level.

There will be a meeting in June to approve the findings for the special use permit and the minutes of this meeting. Board requested a lunch meeting.

Communications from the Board:
None

Adjourn
There was no further business to come before the Board of Adjustment and the meeting was adjourned by the Vice Chair at 8:50 pm.

Rachel Winston, Vice Chair

Fran Lucero, Stenographer

City of Santa Fe, New Mexico

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Joseph M. Maestas, Dist. 2
Carmichael A. Dominguez, Dist. 3
Christopher M. Rivera, Dist. 3
Ronald S. Trujillo, Dist. 4
Bill Dimas, Dist. 4

Memorandum

To: Members of the Board of Adjustment

From: Zachary Shandler ZS
Assistant City Attorney

Re: Appeal by the Cellular Phone Task Force, Arthur Firstenberg and fifty-one citizens from the October 30, 2013 Decision of the Land Use Department to Issue a Building Permit #13-2097 to John Malone and Verizon Wireless regarding replacement of telecommunications antennas at 1402 Agua Fria.
Land Use Case No. 2013-116

Appeal by the Cellular Phone Task Force, Arthur Firstenberg and twenty-one citizens from the July 15, 2014 Decision of the Land Use Department to Issue a Building Permit #14-813 to John Malone and Verizon Wireless regarding replacement of telecommunications antennas at 1402 Agua Fria.
Land Use Case No. 2014-82

Date: April 10, 2015 for the May 5, 2015 Meeting of the Board of Adjustment

The Appeal

On November 14, 2013, the Cellular Phone Task Force (CPTF or Appellant) filed a Verified Appeal Petition (2013 Petition) appealing the October 30, 2013 issuance by the Land Use Department (LUD) of Building Permit No. 13-2097 (BP 13-2097) to Verizon Wireless (Verizon) for the replacement of existing telecommunications antennas (Project) on property owned by John Malone at 1402 Agua Fria (Property). Identical Verified Appeal Petition forms signed

Exhibit-A

Arthur Firstenberg and fifty-one other individuals were submitted with the Petition, but without the required fifty-one separate fees. As a result, these additional submittals do not constitute valid appeals, but instead we consider the signatories as joining in CPTF's appeal. (2013 Petition attached as **Exhibit A**; BP 13-2097 attached as **Exhibit B**). On August 8, 2014, CPFT filed another Verified Appeal Petition (2014 Petition) appealing the July 15, 2014 issuance by the LUD of Building Permit No. 14-0813 (BP 14-0813) to Verizon for the installation of telecommunications antennas at the Property. As with the 2013 Petition, Arthur Firstenburg and twenty-one other individuals joined in the 2014 Petition. (2014 Petition attached as **Exhibit C**; BP 14-0813 attached as **Exhibit D**). On February 11, 2015, the City Attorney's Office asked the City Council to dismiss this matter. It resulted in a 4-4 tie vote. The matter was postponed to the February 25, 2015 and then postponed to the March 11, 2015 meeting. It, again, resulted in a 4-4 tie vote and thus the matter was not dismissed and remains an active appeal and the Board of Adjustment is the body that hears appeals based on decisions from the Land Use Director (Minutes attached as **Exhibit H**).

As the 2013 Petition and the 2014 Petition (collectively, Petitions) address the same subject matter, we consider them together.

The Property

The Property is zoned C-2 (General Commercial) and is improved with a one-story structure (Building) occupied by a business called "Absolute Flooring and Materials". Verizon rents space on the Building roof. The Building is near the intersection of Hickox Street and Agua Fria and is across the street from the "Critters and Me" pet feed store.

History of the Case

In 2005, the City of Santa Fe issued Building Permit No. 05-0553 (2005 BP) to Verizon for the construction of electronic equipment shelters (Equipment Shelters) located on the Building roof. The 2005 Permit stated: "The permit is for the equipment shelter only—the antennas are not approved at this time—Separate permit is required." Verizon constructed the Equipment Shelters, box-like structures that are a few feet high, on the south (rear) portion of the Building roof. Verizon did not apply for or receive a separate permit for the installation of the antennas. Nevertheless, Verizon placed six antennas within the two Equipment Shelters, presumably close to the time the Equipment Shelters were constructed.

In 2013, Verizon applied for a building permit to replace the original six antennas and the LUD issued BP 13-2097. Shortly thereafter CPTF advised the City that Verizon had not applied for or been issued a building permit for the installation of the original six antennas. On November 14, 2013, CPTF filed the 2013 Petition, asserting that the installation of the original six antennas was done without a permit and without notice to the public. The filing of the 2013 Petition stayed the work under BP 13-2097.

Generally, the City seeks through its process to procure compliance with applicable Code, rather than to punish, although it also imposes penalties for violations of Code. Code § 14-11.4

establishes a variety of possible penalties when a party does unpermitted work. (Attached as **Exhibit E**) Typically, the LUD requires people who have performed unpermitted work to apply for and obtain a permit for that work and to pay a double application fee.

City Code (Code) establishes three levels of review for a request to install telecommunications antennas, depending upon a number of factors, such as zoning and facility type and design: (1) a simple building permit application; (2) administrative review, which includes written notice to the public and specific submittals; and (3) Planning Commission or Historic Districts Review Board review, which includes Early Neighborhood Notification meetings and specific submittals.

Code § 14-6.2(E)(3)(iii) provides that that "new towers or antennas in C-2, I-1 and I-2 districts" trigger administrative review. *As noted above, the Property is zoned C-2.*

On December 2, 2013, City staff wrote to Verizon stating that it needed to submit a new application for a building permit to provide for the unpermitted installation of the original six antennas and that the new application was subject to "administrative review." In accordance with standard practice, the LUD required Verizon to pay a double application fee. Verizon re-applied and paid the double fee.

The new application, when submitted was numbered 14-813 and it incorporated the prior application numbered 13-2097 (collectively, the Application).

In February and March 2014, Verizon provided the required submittals to City staff. On March 26, 2014, City staff deemed the submittals to be complete. On April 25, 2014, an application was logged into the system. (Attached as **Exhibit F**) Verizon posted a sign at the property and on May 12, 2014, sent certified mail written notice (Notice) to property owners, tenants and registered neighborhood associations within 200 feet of the Property. The Notice included a site map. (Notice attached as **Exhibit G**). During this time, citizens were able to call and meet with City staff regarding the Application.

On July 15, 2014, the City issued BP 14-813, which incorporated the approvals included under BP 13-2097.

On July 26, 2014, Verizon posted BP 14-813 on the Property, providing notice to interested parties of its issuance. On August 8, 2014, CPTF filed the 2014 Petition.

Basis of Appeal

~~CPTF makes two general claims under the 2013 Petition~~ (numbered LUD Case No. 2013-116): (1) unpermitted activity and (2) lack of public notice. Both these claims, however, were addressed when Verizon, in late 2013, was required by the City to obtain a building permit and provide notice to the public in accordance with Code requirements.

CPTF makes two general claims under the 2014 Petition (numbered LUD Case No. 2014-82): (1) violation of maximum height standards and (2) lack of public notice.

Because the claims under the 2013 Petition have been addressed, this memorandum will focus on the claims made under the 2014 Petition, but the Governing Body should make a motion that includes both LUD cases for the record.

CPTF cites the following specific bases for appeal:

Height Issues:

1A. BP 14-813 for antennas within the electronic equipment shelters was issued in violation of Section 14-6.2(E)(5)(b) (the shelters and antennas exceed the height of the structure) (Claim 1A).

1B. BP 14-813 for antennas within the electronic equipment shelters was issued in violation of Section 14-6.2(E)(8) (failure to have a height waiver) (Claim 1B).

Public Notice Issues:

2A. BP 14-813 for antennas within the electronic equipment shelters was issued in violation of Section 14-6.2(E)(10) (failure to provide notice) (Claim 2A).

2B. BP 14-813 for antennas within the electronic equipment shelters was issued in violation of Section 14-6.2(E)(10)(b) (failure to have an Early Neighborhood Notification meeting) (Claim 2B).

2C. BP 14-813 for antennas within the electronic equipment shelters was issued in violation of Section 14-6.2(E)(4) (failure to have a public hearing before the *Planning Commission*) (Claim 2C).

2D. BP 14-813 for antennas within the electronic equipment shelters was issued in violation of Section 14-11.4(A) (failure to remove illegal structures) (Claim 2D).

Discussion

Code §14-3.17(A)(2) provides that an appeal can only be filed if:

(1) the final action appealed from does not comply with Code Chapter 14 or §§3-21-1 through 3-21-14 NMSA[1] (the Statute);
(2) Code Chapter 14 has not been applied properly; or
(3) the decision appealed from is not supported by substantial evidence.

[1] Section 3-21-8 B. NMSA 1978 provides in pertinent part: "Any aggrieved person...affected by a decision of an administrative...commission or committee in the enforcement of Sections 3-21-1 through 3-21-14 NMSA 1978 or ordinance, resolution, rule or regulation adopted pursuant to these sections may appeal to the zoning authority. ..."

Pursuant to Code §14-3.17(D)(6)(a) the City Attorney's Office (CAO) has reviewed the Petition and for the reasons set forth below concludes that the appeal it does not state a valid basis for reversal of the Director's decision under any of the foregoing provisions.

General Claims. With respect to CPTF's claim on height issues, rules of statutory and ordinance construction explain why placing antennas within the electronic equipment shelters did not violate maximum height requirements. With respect to CPTF's claims on public notice, Verizon provided notice during the 2014 review process and paid a double fee for its prior non-compliance.

With respect to CPTF's claims on public health, case law has instructed that these matters are not subject to review in this type of hearing. Courts have uniformly interpreted Section 704 of the Federal Telecommunications Act (codified at 47 U.S.C. § 332(c)(7)(b)(iv))[2] according to its plain terms, holding that it expressly preempts state and local governments from regulating wireless facilities on the basis of the alleged environmental effects of RF emissions, such as health concerns. *See, e.g., New Par v. City of Saginaw*, 301 F.3d 390, 398 (6th Cir. 2002) ("the Act explicitly prohibits local board decision-making on the basis of the environmental effects of radio frequency emissions"); *Cellular Phone Taskforce v. FCC*, 205 F.3d 82, 88 (2d Cir. 2000) ("the Act preempted state and local governments from regulating the placement, construction or modification of personal wireless service on the basis of the health effects of RF radiation"); *Merrick Gables Association v. Town of Hempstead*, 691 F. Supp. 2d 355, 363 (E.D.N.Y. 2010) ("[t]he [TCA] clearly prohibits Hempstead from preventing the installation of wireless service equipment based on concerns about the health risk associated with the equipment"); *T-Mobile Northeast LLC v. Town of Ramapo*, 701 F. Supp. 2d 446, 460 (S.D.N.Y. 2009) ("environmental effects within the meaning of the provision include health concerns about the biological effects of RF radiation").

As explained below, the LUD's actions have been consistent with Chapter 14 and CPTF's general claims do not fall within any of the three bases for appeal cited above and should be denied.

Claim 1A. *The 2014 building permit for antennas within the electronic equipment shelters was issued in violation of Section 14-6.2(E)(5)(b)*

CPTF asserts that Code under the "Maximum Height" subsection provides that: "Telecommunications facilities located on existing structures shall not exceed the height of the structure upon which the facility is located." SFCC 1987, § 14-6.2(E)(5)(b) The term "telecommunications facilities" is defined as "[t]he plant, equipment and property, including but

[2] 47 U.S.C. § 332(c)(7)(b)(iv) reads: "No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the [FCC's] regulations concerning such emissions."

not limited to, fiber optic lines, cables, wires, conduits, ducts, pedestals, towers, antennas, electronics and other appurtenances used or to be used to transmit, receive, distribute, provide or offer telecommunication services." SFCC 1987, § 14-12.1. The term "structure" means "[a]nything that is considered or erected with a fixed location on the ground or attached to something having a fixed location on the ground, including buildings…walls….." SFCC 1987, § 14-12.1. .

One rule of statutory construction is "[i]n discerning *legislative intent*, we look first to the language used and the **plain meaning** of that language." State v. Trujillo, 2009-NMSC-012, § 11, 146 N.M. 14, 18. The plain language of the definition of "telecommunications facilities" covers things like the technical equipment, the wires, the electronics that are used to transmit and receive the cell phone signals. The plain language of the definition of "structures" covers the classic bricks and mortar of a built item.

In 2005, Verizon obtained the 2005 Permit and constructed two Equipment Shelters on the Building roof. These structures, which are similar in appearance to a roof parapet or screening wall, increased the overall height of the Building within the limits permitted by the Code. Therefore, the plain reading of the Code is that the Equipment Shelters are part of the overall structure. The Equipment Shelters are not part of the "telecommunications facilities" because they are mortar walls and are incapable of transmitting and receiving cell phone signals.

This begs the question: "does City Code allows a cell phone company to build a new 50 foot tower on top of a one-story existing building?" [3] The answer is "yes, if that tower is surrounded by a type of brick and mortar structure and as long as the antennas do not exceed the height of the structure." The concept of screening telecommunication electronics is consistent with the City Code's focus and emphasis on "landscape screening and innovative camouflaging techniques." SFCC 1987, § 14-6.2(E)(1)(d)(iii). This begs another question: "won't a 50 foot brick and mortar screen wall on top of a one-story existing building be an eyesore?" The answer is that the "Aesthetic Requirements" subsection of the Code provides a check and balance on the process. The "Aesthetic Requirements" subsection states "telecommunications facilities shall be designed, installed and maintained in such a manner as to minimize the visual impact upon adjacent lands, public rights of way and residentially zoned property." SFCC 1987, § 14-6.2(E)(5)(c)(ii). This means it is possible that a 50-foot brick and mortar tower could be permitted under the "Maximum Height" subsection, but it is not guaranteed to be approved if it does not comply with the "Aesthetic Requirements" subsection.

In summary, the antennas at 1402 Agua Fria are not taller than the structure. The equipment shelters are "structures" that raise the permissible height of the overall structure. They do not cause a visual impact on the adjacent lands. The telecommunications antennas do not extend above over these shelters. In fact, citizens and city officials have driven past the Building for years unaware of the existence of the antennas.

[3] The "50 foot" number is chosen as a random numeric example, the maximum actual height may also depend on permissible building height based on the commercial zoning requirements.

In addition, another rule of statutory construction is that related items should be read together to ascertain the legislative intent. The State Supreme Court has stated: "In ascertaining legislative intent, the provisions of a statute must be read together with other statutes **in pari materia** under the presumption that the legislature acted with full knowledge of relevant statutory and common law." State ex rel. Quintana v. Schnedar, 1993-NMSC-033, ¶ 4, 115 N.M. 573, 575.

Code reads: "Telecommunications facilities located on existing structures shall not exceed the height of the structure upon which the facility is located *unless otherwise allowed under this section."* SFCC 1987, § 14-6.2(E)(5)(b) (emphasis added). The next sentence of the subsection reads: "Telecommunications facilities located on new structures shall not exceed the maximum height for buildings otherwise allowed as set forth in Chapter 14 with the *exception* that in C-2, I-1 and I-2 districts the height limit of telecommunications facilities shall be one hundred feet." Code § 14-6.2(E)(5)(b) (emphasis added). Reading the two sentences together, the "Exception" language means that towers within the C-2, I-1 and I-2 districts can have a maximum height of 100 feet. One could also read the "Exception" language to mean this tower could be built on a new structure provided in the first sentence or an existing structure provided in the second sentence.

Therefore, CPTF has failed to state a valid basis for appeal under the "Maximum Height" subsection regarding BP 14-813 under Chapter 14.

> Claim 1A does not fall within any of the three bases for appeal cited above and should be denied.

Claim 1B. *The 2014 building permit for antennas within the electronic equipment shelters was issued in violation of Section 14-6.2(E)(8).*

If Claim 1A is denied, then there is no need to analyze whether a variance from the height requirements was required. Therefore, Appellant has failed to state a valid basis for appeal regarding BP 14-813 under Chapter 14.

> Claim 1B does not fall within any of the three bases for appeal cited above and should be denied.

Claim 2A. *The 2014 building permits for antennas within the electronic equipment shelters was issued in violation of Section 14-6.2(E)(10).*

Code § 14-6.2(E)(10) provides the three steps for public notice under the "administrative review" process. It requires certified mail written notice to property owners, tenants and registered neighbor associations within 200 feet of the proposed project site. It requires putting up a sign. It requires the sign to generally describe the project site and proposal. In 2014, Verizon completed all these steps. Therefore, CPTF has failed to state a valid basis for appeal regarding BP 14-813 under Chapter 14.

Claim 2A does not fall within any of the three bases for appeal cited above and should be denied.

Claim 2B. *The 2014 building permits for antennas within the electronic equipment shelters was issued in violation of Section 14-6.2(E)(10)(b).*

Code § 14-6.2(E)(10)(a) provides the three steps for public notice under the "administrative review" process. It does not require an Early Neighborhood Notification ("ENN") meeting. This is only a requirement if the Application had to go the Planning Commission under Code § 14-6.2(E)(10)(b). Therefore, CPTF has failed to state a valid basis for appeal regarding BP 14-813 under Chapter 14.

Claim 2B does not fall within any of the three bases for appeal cited above and should be denied.

Claim 2C. *The 2014 building permits for antennas within the electronic equipment shelters was issued in violation of Section 14-6.2(E)(4).*

Code § 14-6.2(E)(10) provides the three steps for public notice under the "administrative review" process. It does not require a public hearing before the Planning Commission. Therefore, CPTF has failed to state a valid basis for appeal regarding Building Permit #14-813 under Chapter 14.

Claim 2C does not fall within any of the three bases for appeal cited above and should be denied.

Claim 2D. *The 2014 building permit for antennas within the electronic equipment shelters was issued in violation of Section 14-11.4(A).*
The 2014 Petition states: "The facility has operated illegally for nine years." The 2014 Petition requests "requiring the removal of illegal structures." First, the Equipment Shelters were legally permitted structures. The structures should not be removed. Second, the LUD has a variety of penalties it can impose for non-compliance and the most common is a double fee. Verizon had to pay a double application fee. This is a discretionary decision by the LUD. Therefore, CPTF has failed to state a valid basis for appeal regarding BP 14-813 under Chapter 14.

Claim 2D does not fall within any of the three bases for appeal cited above and should be denied.

Conclusion

CPTF has not effectively alleged that the BP 14-813 does not comply with applicable Code or the Statute; that the Code has been improperly applied; or is not supported by substantial evidence. As a result, CPTF appeal should be denied.

Case #2013-116

LUD Use Only

Time Filed: 1:30
Fee paid: $ 100
Receipt attached: ✓

(date stamp)
RECEIVED
NOV 14 2013
LAND USE DEPARTMENT

VERIFIED APPEAL

PETITION

Two originals of this form must be filed with the Land Use Department Director or his designee who will note the date and time of receipt and initial both originals. See Section 14-3.17(B) SFCC 2001 for other procedures and requirements.

Appellant Information

Name: Cellular Phone Task Force
Last First M.I.

Address: P.O. Box 6216
Street Address Suite/Unit #

Santa Fe, NM 87502
City State ZIP Code

Phone: (505) 471-0129 E-mail Address: info@cellphonetaskforce.org

Additional Appellant Names: Arthur Firstenberg, President

Correspondence Directed to: ☒ Appellant ☒ Agent ☒ Both

Agent Authorization (if applicable)

I/We: _____

authorize _____ to act as my/our agent to execute this application.

Signed: _____ Date: _____

Signed: _____ Date: _____

Subject of Appeal

Project Name: **Verizon Wireless – NM4 Silva – AWS Project (addition of antennas to a telecommunications facility)**

Applicant or Owner Name: **Verizon Wireless (applicant); John Malone (owner)**

Location of Subject Site: **1402 Agua Fria Street, Santa Fe, NM 87505**

Case Number: _____ Permit Number (if applicable): **13-2097**

Final Action Appealed:

☒ Issuance of Building Permit

Basis of Standing (see Section 14-3.17(B) SFCC 2001):

Section 14-3.17(B)(3) (organization alleging injury to its economic, environmental and aesthetic interests

Basis for Appeal: ☒ The facts were incorrectly determined ☒ Ordinances/laws were violated and/or misrepresented

Description of the final action appealed from, and date on which final action was taken:

Issuance of a building permit on October 30, 2013

EXHIBIT A

☒ Check here if you have attached a copy of the final action that is being appealed.

1402 Agua Fria Argument

Winston

Chairman Friedman and Members of the Board,

Before I begin I must address two statements in the staff report regarding the validity of these appeals. First, the staff report states that all the appeal forms are identical. They are not. Four different appeal forms were filed by four different classes of appellants. Second, the staff report states that the fifty-two appeals are not valid because fifty-two separate fees were not paid. Let me read from Section 14-3.17(D)(4)(c) of the City Code: "More than one appellant may file an appeal of a final action, and appellants may combine their appeals and share the appeal fee proportionally." All these appeals are independently valid.

most of

Let me begin. I am going to go into the history of this project in some detail, because it is not in the staff report, and because the denial of due process for these neighbors has been eggregious.

Verizon installed this cell tower with six antennas ~~on~~ in April 2005 on top of a one-story building, 19 feet off the ground, in the middle of a residential neighborhood, without applying for zoning permission or a building permit. It concealed the antennas inside two innocent-looking boxes so that none of the surrounding neighbors would know they were there. Nobody knew they were there for the next eight years. Exhibit A in the packet I have given you shows the two boxes on top of the carpeting warehouse across the street from The Critters and Me.

In Exhibit B, you can see that Verizon did apply for a "shelter to house electronic equipment for a wireless cell site." That shelter is on the ground. Verizon never applied for a permit for a telecommunications facility, because under the land development code that was then in effect, Verizon would have had to notify the neighbors, apply for a special exception, and go for a public hearing, and it knew that the antennas would never be approved so close to so many

homes and businesses. So Verizon applied for a permit just for the electronic equipment shelter on the ground. Exhibit C shows the plans that were submitted, indicating a wireless equipment shelter on the ground and antennas on the roof. Bulding Permit number 05-553 is Exhibit D. On the third page, it states, "This permit is for the equipment shelter only – the antennas are not approved at this time." However, even the permit for the equipment shelter is not valid. Section 14-6.1(A)(5) of the Land Development Code that was in effect at that time stated: "Any specific use type not listed or included in the Table of Permitted Uses shall be prohibited unless the Land Use Director determines that it is to be included in an existing use category." If the equipment shelter was considered part of a telecommunications facility, it was erroneously permitted because Verizon did not get zoning permission for a telecommunications facility. If it was not considered part of a telecommunications facility, it was illegal because an equipment shelter, by itself, was not listed in the Table of Permitted Uses and was prohibited.

Exhibit E shows the antennas as installed in the two boxes in 2005. There were four antennas in the western box, and two antennas in the eastern box. Exhibit F shows the enlarged plans for the antennas, four in the western box and two in the eastern box. In the upper right corner of this page, you can see that the three pairs of antennas were aimed at 35 degrees, 180 degrees, and 235 degrees from north. Sometime during the next eight years, Verizon upgraded its facility and reconfigured the antennas concealed within the enclosures, again without any sort of notification, application, zoning approval, or building permit. In Exhibit G, the left side of the page shows the antennas as they existed in early 2013. Instead of four antennas in the western box and two in the eastern box, there were now two antennas in the western box and four in the eastern box. And the directions had been changed. They were then aimed at 44 degrees, 189 degrees, and 254 degrees.

In 2013, Verizon upgraded the facility again, installing new transmitters and three additional antennas. As indicated on the right side of the page in Exhibit G, there are now three antennas in the western box and six in the eastern box, and they are now aimed at 15 degrees, 135 degrees, and 210 degrees. I will explain later why the directions are so important.

In 2011, Santa Fe had revised its land development code so that telecommunications facilities are now a permitted use and no longer require a special exception, a public hearing, or early neighborhood notification. Thinking it could now surreptitiously legalize its facility, Verizon quietly applied for a building permit for the antennas. It still did not apply for zoning permission. However, there is such a thing as the Inspection of Public Records Act. The neighbors found out about the application. The building permit was issued on October 30, 2013. On November 14, 2013, the neighbors appealed.

Under Section 14-3.17(E)(1)(a) of the City Code, an appeal suspends the validity of any permit, and under Section 14-3.17(F)(1), the appeal is required to be heard at the next available meeting of the Board of Adjustment. That did not happen, however. Instead, the City allowed Verizon to apply for zoning permission and a building permit for the original antennas, retroactively after eight years of illegality. Zoning permission was granted administratively. The new building permit was posted on the property on July 25, 2014. On August 8, 2014, the neighbors appealed this building permit as well. There are now sixty-six parties to these appeals. Again, the permit was suspended pending a public hearing. Again, the appeal was required to be heard at the next available board meeting. Again, that did not happen.

In December 2014, more than a year after the first appeals were filed, I made an appointment with the City Attorney, and I demanded due process for these constituents. But instead of granting the neighbors their due process and scheduling a hearing before this Board,

the City Attorney asked the Governing Body to dismiss these appeals without a hearing. Now there is a provision in the 2011 revision of the City Code, Section 3.17(D)(6), that allows the Land Use Director to recommend dismissal of an appeal without a hearing, and for the City Attorney to act on that recommendation. The Land Use Director must make this recommendation promptly. Under Section V(A) of the Procedures for Appeals adopted by the Governing Body in Resolution Number 2011-24, the Land Use Director must make this recommendation within ten days of the filing of the appeal. But there is no record of the Land Use Director recommending dismissal of these appeals in November 2013. The City Attorney acted on her own in January 2015 without legal authority. And on March 11, 2015, the Governing Body rejected her recommendation and voted to send these appeals to this Board for the public hearing to which these neighbors have a right. That is why we are here before you tonight.

There are six reasons why you should grant these appeals and order this telecommunications facility to be removed.

First and most important, Verizon's facility does not comply with FCC regulations regarding human exposure to radio frequency radiation. Exhibit H is a County Assessor's map showing the properties adjacent to 1402 Agua Fria. There is a house with a blue metal roof 50 feet to the south. That's 1404 Agua Fria. There is a house 80 feet to the southwest. That's 1406 Agua Fria. There is an undeveloped lot less than 25 feet to the west. Exhibit I is a report from an independent testing laboratory in Albuquerque called Advanced Testing Services. We received their report this morning. Their calculations are on page 10 and 12, and their conclusions are on page 13. Radiation levels are over the limit on three properties at the height of the antennas. They are up to 346% of the limit at the property line on this property, which is

1404 Agua Fria, 220% of the limit at the roof of 1404 Agua Fria, and 267% at the property line of this undeveloped lot. They are also 267% at the corner of this property, which is 1406 Agua Fria. Those are the numbers in the air at the level of the antennas, Now the levels are lower on the ground. But basically if the owners of this empty lot built a two-story house at its south end, the second floor of that house would be unusable. They can't put a house there. And if the owner of 1404 Agua Fria stands on his own roof, his head is in the main beam from six antennas. He can't repair his roof. He also can't add a second story onto his house. Verizon is violating the air space above these properties. Even in the existing house at 1404 Agua Fria the situation is worse than these numbers indicate because it has a metal roof, which is both a reflector and an antenna. The radiation that hits the top of the roof is reflected off of it. But the radiation that comes in through the walls and windows is reflected off the inside of the roof, bounces back and forth between the earth and the roof and is amplified inside the house. The metal roof also conducts the radiation and re-radiates it like an antenna. You can expect hot spots inside that house where the radiation levels are very high.

Radiation levels are also over the limit for the entire length of the roof at 1402 Agua Fria itself.

Now Verizon has submitted a document to the City titled "Radio Frequency Exposure Post-Installation FCC Compliance Assessment." That's Exhibit J. There are several things wrong with this document. It only calculates exposure levels on the roof of 1402 Agua Fria itself, not at adjacent properties. The radiation measurements on page 6 do not reflect current conditions. There were only six antennas, A, B, C, D, E, and F. The measurements were taken on January 15, 2013, before three more antennas were added.

The calculations on page 7 were supposed to predict what the radiation levels would be after the three antennas were added. But look at the diagram. There are still only six antennas. Look on page 5, in the far right-hand column. These calculations were done for antennas directed at 45 degrees, 190 degrees, and 240 degrees. Now look again at Exhibit G. Today the antennas are pointed at 15 degrees, 135 degrees, and 210 degrees. This makes an enormous difference. The building is oriented almost north-south, actually about 13 degrees west of north. Today, with three antennas pointed 15 degrees east of north, the entire length of the roof is in the main beam of these antennas. Verizon's compliance document, on page 3, used equations for the near field, which only applies close to the antennas, because most of the roof was not previously in the main beam. But now that the entire length of the roof is in the main beam, the equation for the far field on a rooftop has to be used. The entire east side of the roof now exceeds the FCC's exposure limits for the general population, and about half the length of the roof exceeds the occupational limits for workers that have electromagnetic energy awareness training. That roof is presently unsafe for anyone to be on, according to FCC regulations.

Now why should you care if that rooftop is over the limit? You should care because people with no training and who don't even know there are antennas up there have access to that roof. Look at page 4 of Verizon's compliance document, where Verizon states: "Roof access is by extension ladder only. Access is *not* restricted to Electromagnetic Energy Awareness trained personnel and an RF Safety plan is *not* in place." Roofers, contractors, maintenance personnel, firefighters, and others with no electromagnetic energy awareness training have access to this roof. Look at page 1 of Verizon's compliance document, at the bottom under "Additional Compliance Requirements." It says, "Barriers have been constructed with signage placed, but administrative controls are to be employed to ensure compliance. Landlord must ensure that

Verizon Wireless antenna access will be restricted to personnel that have been authorized by Verizon Wireless (Electromagnetic Energy Awareness trained personnel only). This would include all maintenance personnel and contractors accessing the antenna area." Look at page 17, under "Guidelines." It shows a required sign. "Used anytime hazard signage is employed to achieve FCC compliance. This sign will inform visitors of the basic precautions to follow when working around radiofrequency equipment." The first line of the sign says "All personnel should have electromagnetic energy awareness training." On page 4 of this document, Verizon admits that this facility does not comply. And the signs and barriers that Verizon has up there were placed before the directions of the antennas were changed and before the entire roof was out of compliance.

The second reason to grant our appeals is that this cell tower has been operating illegally for ten years. It operated for eight years without a permit, and is still operating without a permit because these appeals suspended the validity of the permits that were issued during the past two years. Under Section 14-11.2(f), one of the available remedies for a violation of chapter 14 is the removal of illegal structures.

The third reason is that the maximum height has been exceeded. The telecommunications facilities ordinance has one height restriction for antennas located on existing structures, and a different height restriction for antennas located on new towers. Each of them is one sentence. I have provided them to you as Exhibit K. I will read them both: "Telecommunications facilities located on existing structures shall not exceed the height of the structure upon which the facility is located unless otherwise allowed under this section. PERIOD. Telecommunications facilities located on new structures shall not exceed the maximum height for buildings otherwise allowed as set forth in Chapter 14 with the exception

that in C-2, I-1 and I-2 districts the height limit of telecommunications facilities shall be one hundred feet. PERIOD." This telecommunications facility is located on an existing structure, and unlawfully exceeds the height of the building that it is on.

Now the staff report asserts the antennas are legal because they don't exceed the height of the two equipment enclosures, which were already there on the roof. That is a false statement. The equipment enclosures that are on the roof and the antennas within them were installed at the same time, illegally, in 2005, without a building permit. The 2005 building permit applied only to a single wireless equipment shelter that is on the ground. And even that building permit was erroneously issued.

The fourth reason to grant the appeals is that Verizon submitted a fraudulent document to the City about co-location. As part of the application process, the City required Verizon to allow co-location of antennas by other providers. Verizon initially said that can't be done, and the City was going to deny the permit on that basis, so on February 20, 2014, Verizon and the owner of this property submitted a notarized, sworn letter saying they would allow co-location of other antennas on this roof. That's Exhibit L. But of course co-location is impossible. The radiation levels are over the limit already. Also, the antennas of different providers would have to be at different heights, otherwise they would interfere with each others' signals. Say AT&T and Sprint wanted to put antennas up there along with Verizon's. There would have to be a vertical separation of up to twenty feet between each antenna array, and you would have to have a 60-foot tower on this roof.

The fifth reason to grant the appeals is that people who bought property next to or across the street from this tower have been damaged. I have spoken with a few of them, and they have told me that they would not have bought a house here had it been disclosed to them that

there was a cell tower next door. One family has been renting out their house until now, and had planned to move into it themselves this year, but will not move into it now that they know what is across the street, and they will have trouble selling it because they will have to disclose to potential buyers that there is a cell tower across the street. They have been damaged because of non-disclosure to them when they bought their house. And the only way to undo the damage and restore their property rights is to remove this facility.

Lastly, a great many of these neighbors are seriously ill, and have been so since 2005. I have already given you five compelling reasons to grant our appeals that have nothing to do with health. The facility has been operating illegally for 10 years. It exceeds the height limitation of the City Code. Co-location is impossible. The entire rooftop and three of the surrounding properties do not comply with the FCC's limits for human exposure to RF radiation. People who bought into this neighborhood have been damaged. That should be enough. But during the public hearing, some of the neighbors may want to talk about how this tower has affected their health. And under the First Amendment, they have every right to do so. For the people who live in 1404 Agua Fria, if they are here tonight, there is no question that they can talk about their health, because the radiation levels on their properties do not even comply with the FCC's limits. But the people who live a few hundred feet away have that right too.

In *Turner Broadcasting System v. FCC*, 512 U.S. 622 (1994), the United States Supreme Court said: "At the heart of the First Amendment lies the principle that each person should decide for himself or herself the ideas and beliefs deserving of expression, consideration, and adherence. Our political system and cultural life rest upon this ideal... Government action that stifles speech on account of its message, or that requires the utterance of a particular message favored by the Government, contravenes this essential right. Laws of this sort pose the inherent

risk that the Government seeks not to advance a legitimate regulatory goal, but to suppress unpopular ideas or information or manipulate the public debate through coercion rather than persuasion. These restrictions 'rais[e] the specter that the Government may effectively drive certain ideas or viewpoints from the marketplace.'... For these reasons, the First Amendment, subject only to narrow and well-understood exceptions, does not countenance governmental control over the content of messages expressed by private individuals."

In another case, *Perry v. Sindermann*, 408 U.S. 593 (1972), the Supreme Court said, "A government may not deny a benefit to a person on a basis that infringes his constitutionally protected interests—especially, his interest in freedom of speech. For if the government could deny a benefit to a person because of his constitutionally protected speech or associations, his exercise of those freedoms would in effect be penalized and inhibited. ***This would allow the government to 'produce a result which (it) could not command directly.'***... Such interference with constitutional rights is impermissible."

Section 704 of the Telecommunications Act is unconstitutional. When an application for a cell tower is on the agenda of a public hearing, the government may not limit the content of a person's speech about that cell tower. But that is exactly what has been happening for almost 20 years all over this country. The government is telling people, if you mention health, we will approve that tower. This is threatening people, and it is silencing people. As in *Perry v. Sindermann*, the exercise of the freedom of speech is penalized and inhibited. As in *Perry v. Sindermann*, such interference with the constitutional right to free speech is impermissible.

Retaliation for speech cannot be tolerated. In *Crawford-El v. Britton*, 523 U.S. 574 (1998), the Supreme Court said: "The reason why such retaliation offends the Constitution is that it threatens to inhibit exercise of the protected right." Section 704 is a law retaliating against

speech. That's all it is. It says that Verizon can sue the city if you board members talk about health and then deny them a permit. That's an infringement on the content of your speech. And then you turn around and tell the public that if we don't want that tower there, we better not talk about health, because if we do, you're going to have to approve that tower. This law is nothing but blackmail. It's a law about the content of speech, ours and yours. It retaliates against citizens for testifying about their health. It says to them, if you tell us this tower is killing you, we're going to approve it. If you keep your mouth shut and don't say anything, we might take it down. That's perverse and unconstitutional.

In *City of Madison, Joint School Dist. No. 8 v. Wisconsin Employment Relations Commission*, 429 U.S. 167 (1976), the Supreme Court said: "[W]hen the board sits in public meetings to conduct public business and hear the views of citizens, it may not be required to discriminate between speakers on the basis of... the content of their speech."

I have the right to talk about these people's health as well. I was so disturbed when I knocked on the doors of the people who live in that block that I want the citizens of Santa Fe to know what is happening there. Nobody is sleeping well. Everybody has headaches. A shocking number of people on that block have cancer. There is cancer in 1406 Agua Fria Street, 1414 Agua Fria Street, 1416 Agua Fria Street, 606 Baca Street, 608 Baca Street, 612 Baca Street. I will let the neighbors speak for themselves, if they want to. There are plenty of other reasons to grant their appeals. And the neighbors also have the right to speak about their own health.

Thank you.

Case # 2013-116 & 2014-82

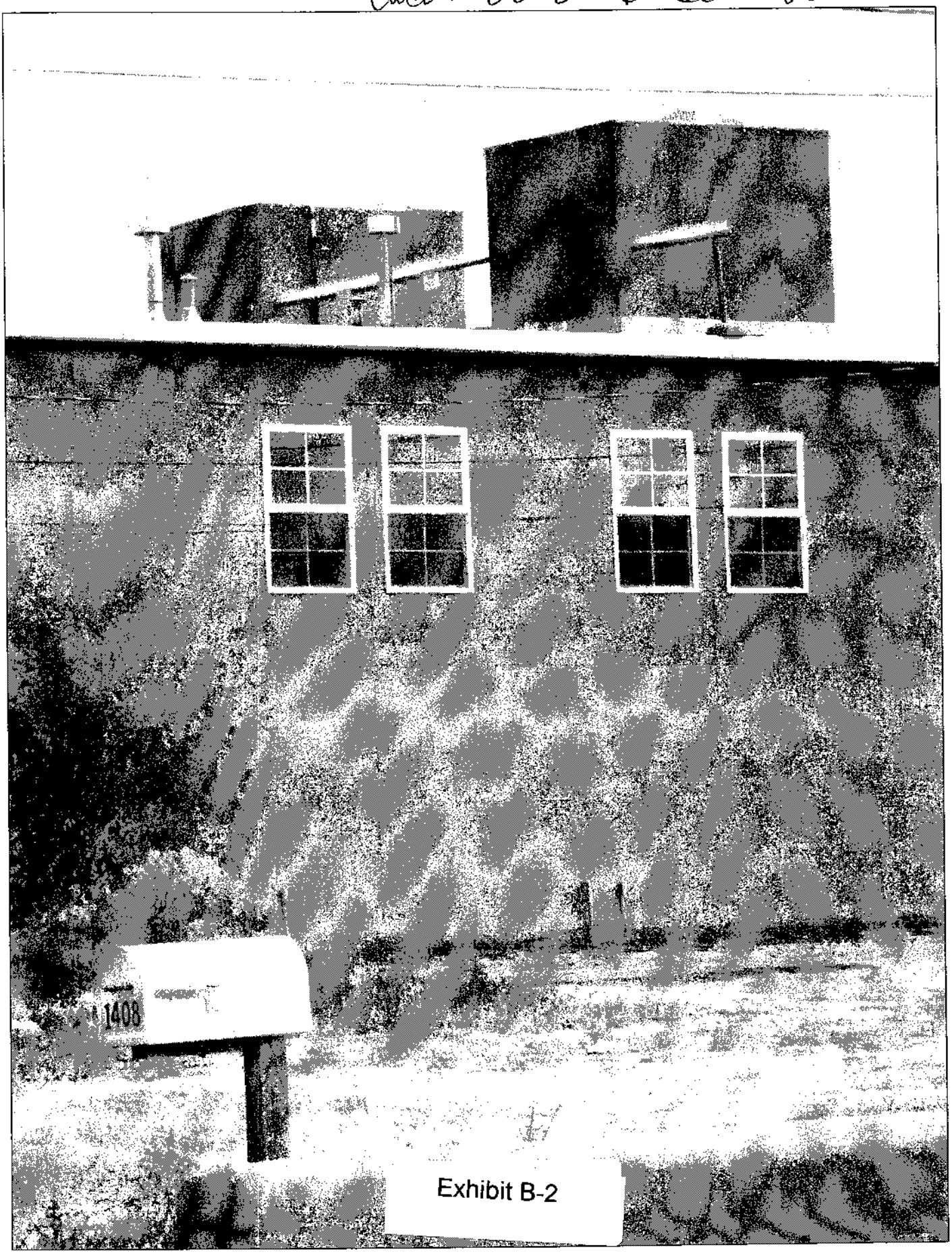


Exhibit B-2

Plan Ck Fee # B00210110506 6 T169

EXHIBIT B

Application Tracking # 05-553

City of Santa Fe

BUILDING PERMIT APPLICATION

PLEASE USE A BALL POINT PEN (PRESS FIRMLY)

↓ FOR OFFICE USE ONLY ↓

Type [illegible] Class [illegible] Accepted by [illegible] Date Accepted [illegible]

Amount Paid: Plan Check Fee $ 700.69 Water Budget Fee $ [illegible] Balance Due Permit Fee $ [illegible]

Type of Construction: [illegible] Occupancy Group: [illegible] Division: [illegible]

I II III IV V FR 1hr HT N A B E F H R I M R S U

Zone District [illegible] Occupant Load [illegible]

↓ TO BE COMPLETED BY APPLICANT ↓

SITE ADDRESS 1402 AGUA FRIA ~~Suite or Space #~~ Tract A

Subdivision ——— Lot ——— Block ———

Lot Square Footage Total .446 AC. ±

PROPOSED WORK: (Check all that apply)

- ☐ New Construction
- ☐ Additions
- ☐ Exterior Alterations/Repairs
- ☐ Interior Remodel
- ☐ Walls/Fences
- ☐ Grading/Utilities/Landscaping
- ☒ ~~Pools, Sheds~~ SHELTER FOR EQUIPMENT
- ☐ Other
- ☐ Signs: N/A
- ☐ Free Standing ☐ Wall Mounted
- Existing # ______ sq. ft. ______
- Proposed # ______ sq. ft. ______
- Total ______

DESCRIPTION OF WORK: i.e. Bathroom addition, new 4 room residential addition, new 8 room residence, new commercial building, etc. (Note: Work listed herein must be depicted on accompanying plans and/or information if consideration of review requested)

SHELTER TO HOUSE ELECTRONIC EQUIPMENT FOR A WIRELESS CELL SITE

PROPOSED USE: i.e. residential, commercial, industrial, time share, retail, etc. COMMERCIAL

Construction Valuation
$ [illegible] 15,000

SQUARE FOOTAGE

	Existing	Proposed	Total
Heated	—	—	—
Garage	—	—	—
~~Patio/Porch~~ SHELTER	—	312	312
Total Roofed	—	312	312
Total Square Footage	—	312	312

Number of Plumbing Fixtures Proposed

Sinks — Showers — Tubs — Toilets — Urinals — Water Fountains — Other —

Type of Sewage Disposal N/A

☐ Public Sewer ☐ Private System

No. of buildings ______ No. of stories ______

Will the proposed construction result in an increase in the number of residential units?

☐ Yes ☐ No How many? ______

Will the proposed construction result in an increase in water use? ☐ Yes ☐ No

Property Owner JOHN MALONE - ACTUAL PROPERTY OWNER
LEASED BY: VERIZON WIRELESS

Mailing Address 4821 EUBANK NE
ALB, NM 87111

OWNER/BUILDER ☐ CONTRACTOR ☒

Daytime Telephone # ______

Contractor OUT TO BID

Mailing Address ______

State License # ______ City License # ______

Daytime Telephone # ______

I hereby certify that I am the duly appointed agent authorized to act on behalf of the property owner. I also certify that the information provided in this application is true and correct and it represents the current and proposed status of the subject property; that the plans submitted with this application are complete and in compliance with the building standards set forth in the Santa Fe City Code; and that the plans illustrate all public and private easements located on the property. I also certify that plans and submittals have been prepared in accordance with the submittal checklist. I further understand that failure to follow submittal checklist will result in the delay or rejection of my application.

Contact Name PATRICK GOODMAN TOWERCOM TECHNOLOGIES Address 4520 MONTGOMERY NE SUITE 5 ALB, NM 87109

Daytime Telephone 505 362 1999 / 505 [illegible] Signature Applicant/Agent [signature] Date MARCH 8, 2005

Distribution: White - A, Canary - B, Pink - C, Goldenrod - D

BI014A.pmd - REV 9/04

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT

EVALUATION OF HUMAN EXPOSURE POTENTIAL TO

NON-IONIZING RADIATION

MPE Analysis
1402 Agua Fria St.
Santa Fe, NM

May 4, 2015

EXHIBIT B-2

Limited Warranty

ATSI warrants that this evaluation was performed substantially using methods that are referenced and described in this report by using the information on the subject antenna site provided to ATSI. ATSI disclaims all warranties of merchantability and fitness for a particular purpose. This limited warranty provides for specific legal rights which vary from state to state.

ATSI entire liability and exclusive remedy shall be the refund of the price paid to ATSI for the analysis. In no event will ATSI be responsible for damages, including any loss of profits, lost savings, or other incidental or consequential damages arising out of your use or inability to use the analysis. Because some states do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitation may not apply to you.

1.0 Site Parameters

The communication systems located at this site are described in this section as well as the configuration of the antenna systems.

The site parameters are:

Site Name: NM4 Silva
Owner: Verizon
Site Description: Building Rooftop
Address: 1402 Agua Fria St. Santa Fe, NM
Latitude: 35° 40' 46.336"N
Longitude: 105° 57' 56.085" W
Elevation: 22' 6" from ground level
Notes:

2.0 Communications Systems

The Table below presents a list of the communications systems at the site.

System	Provider	Azimuth	Frequency
1	Verizon Wireless	15°	752MHz, 875 MHz, 885MHz
2	Verizon Wireless	135°	752MHz, 875 MHz, 885MHz
3	Verizon Wireless	210°	752MHz, 875 MHz, 885MHz

3.0 Antenna Systems

The Table below presents a list of the antenna systems at the site.

ID	Name	(MHz) Freq	Input Power	Calc Power	Mfg	Model	(ft) X	(ft) Y	(ft) Z	Type	(ft) Aper	dBd Gain	BWdth Pt Dir
A	Verizon	875.00000		80.0	Antel	BXA-70080/6CF	32.0	19.0	1.0	TX	6.0		80;45
a	Verizon	752.00000		80.0	Antel	BXA-70080/6CF	32.0	19.0	1.0	TX	6.0		80;45
B	Verizon	885.00000		160.0	Antel	QXA-806080120	34.0	17.0	1.0	TX	6.0		80;45
C	Verizon	875.00000		80.0	Antel	BXA-70080/6CF	34.0	13.0	1.0	TX	6.0		80;190
c	Verizon	752.00000		80.0	Antel	BXA-70080/6CF	34.0	13.0	1.0	TX	6.0		80;190
D	Verizon	885.00000		160.0	Antel	QXA-806080120	30.0	13.0	1.0	TX	6.0		80;190
E	Verizon	875.00000		80.0	Antel	BXA-70080/6CF	9.0	13.0	1.0	TX	6.0		80;240
e	Verizon	752.00000		80.0	Antel	BXA-70080/6CF	9.0	13.0	1.0	TX	6.0		80;240
F	Verizon	885.00000		160.0	Antel	QXA-806080120	6.0	17.0	2.0	TX	6.0		80;240

Note: QXA-806080120 has been replaced with QXW-806080120

4.0 Maximum Permissible Emission Analysis

The MPE analysis consists of evaluating the RF transmitter power being emitted from each active antenna at the communications site. Power density calculations are performed based on the maximum exposure location directly in the main beam of the antenna and at off angles from the antenna at distances from the antenna to the property lines of adjacent homes and lots. The power density values are then converted to MPE percentages and each antenna's MPE percentages are summed together to provide a composite MPE percentage for each location. There are 6 main paths shown in Figure 2 which can contribute to the MPE around this site.

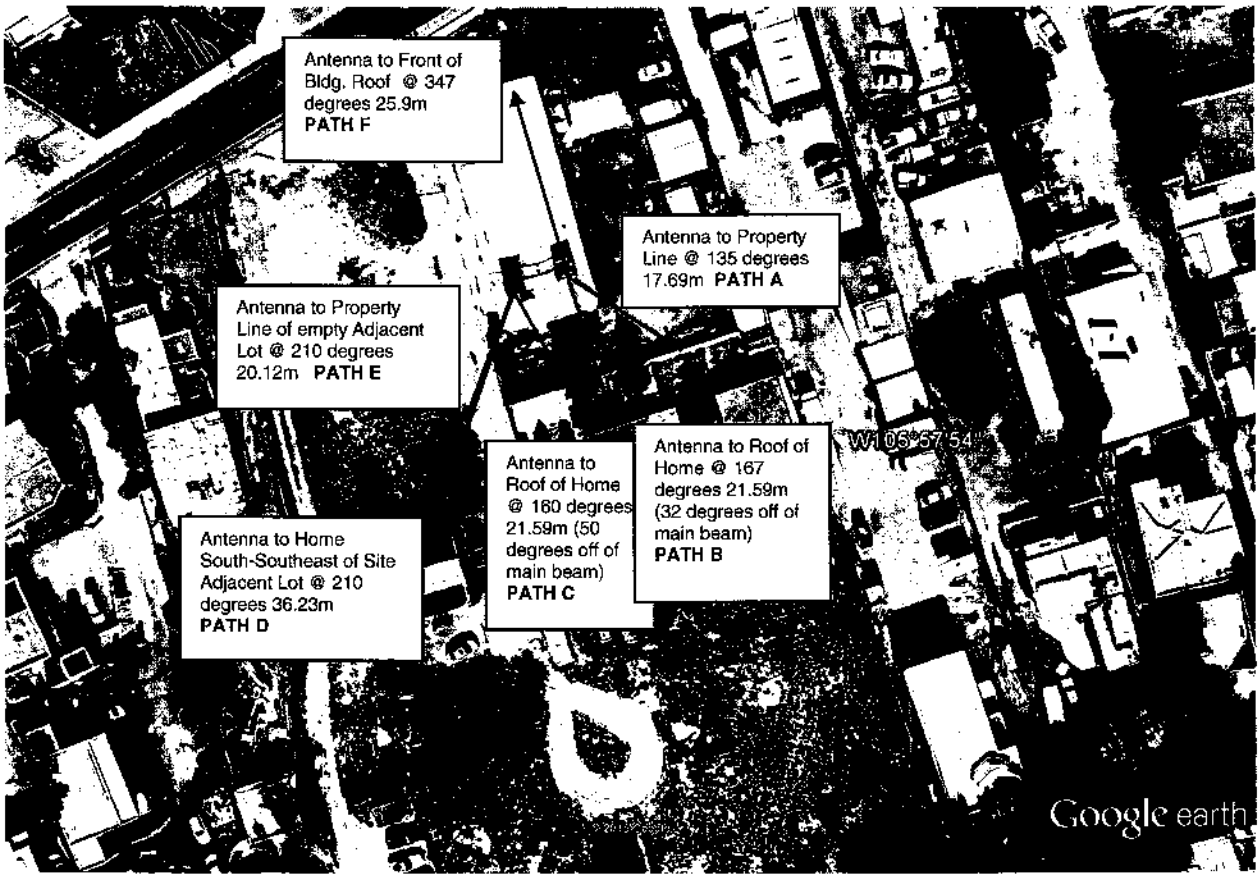


Figure 2 – Roof Top Antenna Locations
1402 Agua Fria Street
Santa Fe, NM

Path A *is a direct line from the BETA antenna set to the adjacent property line to the South-Southeast of the site. (1404 Agua Fria)*
Path B *is a direct line from the BETA antenna set to the Roof of the Home almost directly South of the site. (1404 Agua Fria) It is at 167 degrees (32 degrees off the main beam of the BETA antennas).*
Path C *is a direct line from the GAMMA antenna set to the Roof of the Home almost directly South of the site. (1404 Agua Fria) It is at 160 degrees (50 degrees off the main beam of the GAMMA antennas).*
These two paths are combined into one MPE percentage for the Roof of the Home at 1404 Agua Fria.
Path D *is a direct line from the GAMMA antenna set to the Roof of a second home directly in the main beam to the South-Southwest of the site.*
Path E *is a direct line from the GAMMA antenna set to the property line of the adjacent empty lot, directly in the main beam. (1406 Agua Fria)*
Path F *is a direct line to the front of the Roof of the Building on which the site is located from the ALPHA antenna set. It is 28 degrees off the main beam.*

Below are the limits as set forth by FCC OET Bulletin 65.

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)**
0.3 - 1.34	614	1.63	100*	30
1.34 - 30	824/f	2.19/f	$180/F^2$	30
30 -300	27.5	0.073	0.2	30
300 -1500	--	--	f/1500	30
1500 -100,000	--	--	1.0	30

f = frequency
** = Plane-wave equivalent power density*

General population/uncontrolled exposures apply in situations in which the general public may be exposed or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

It is important to understand that these limits apply cumulatively to all sources of RF emissions affecting a given area. For example, if several different communications system antennas occupy a shared facility such as a tower or rooftop, then the total exposure from all systems at the facility must be within compliance of the FCC guidelines.

The field strength emanating from an antenna can be estimated based on the characteristics of an antenna radiating in free space. There are basically two field areas associated with a radiating antenna. When close to the antenna, the region is known as the Near Field. Within this region, the characteristics of the RF fields are very complex and the wave front is very curved. As you move further from the antenna, the wave front has less curvature and becomes planner. The wave front still has a curvature but it appears to occupy a flat plane in space (plane-wave radiation). This region is known as the Far Field. This analysis is done for the Far Field condition.

Figure 3A shows the antenna locations, Figure 3B shows the azimuth of each set on the rooftop at the Agua Fria site.

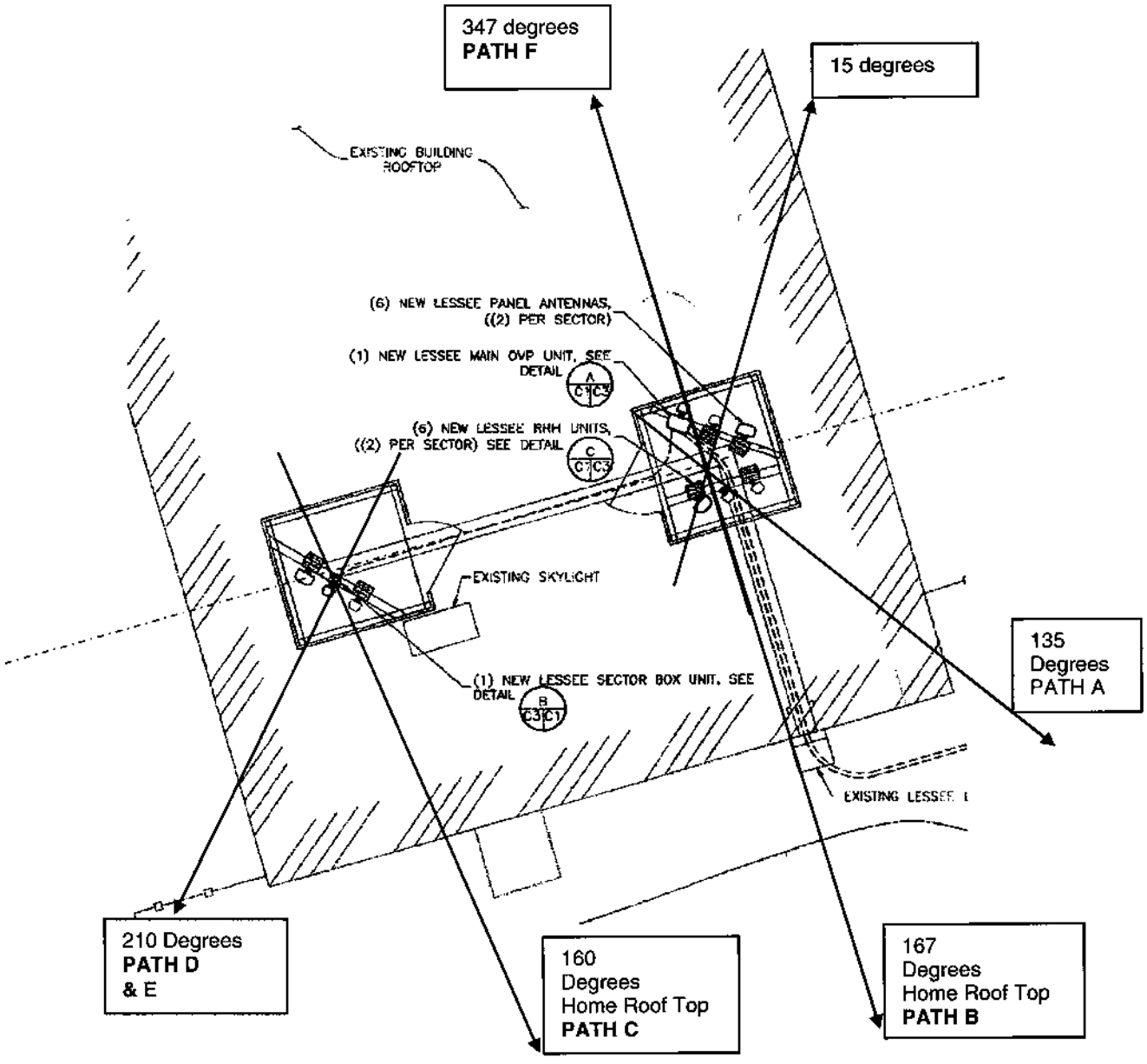
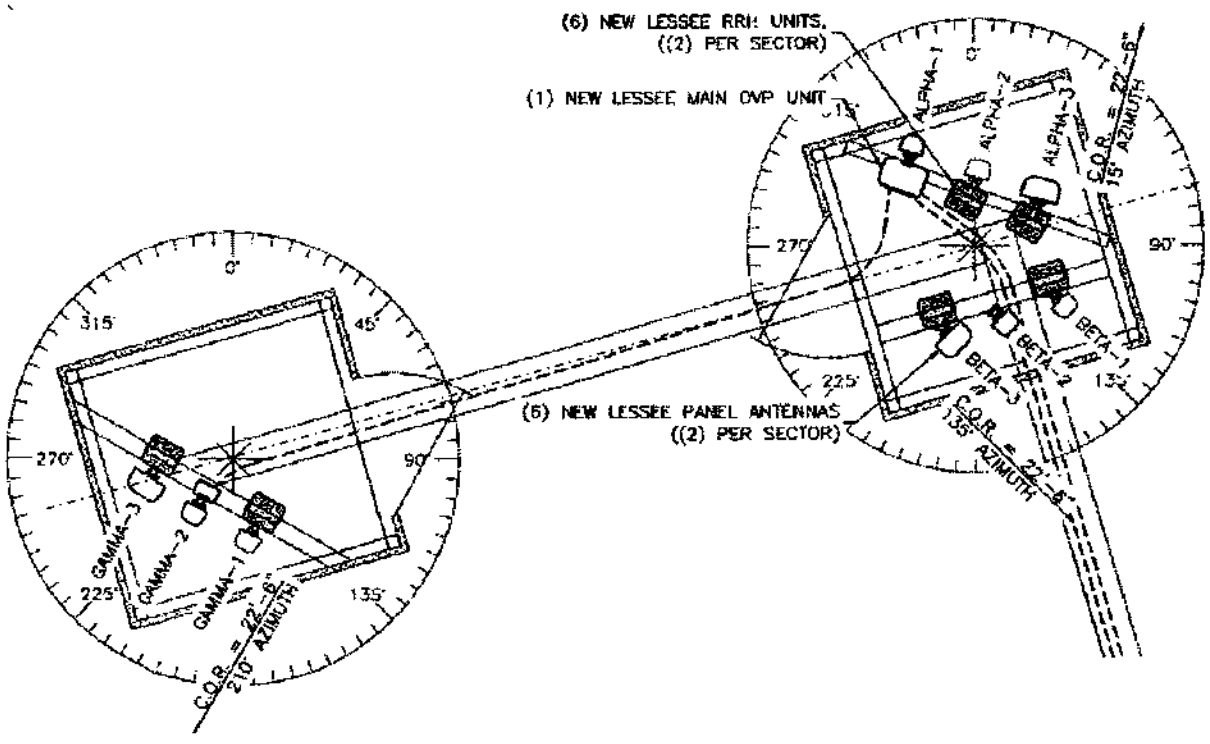


Figure 3A – Roof Top Antenna Locations
Alpha @ 15°, Beta @ 135°, and Gamma @ 210°
1402 Agua Fria Street
Santa Fe, NM



NEW ANTENNA SECTION @ 22'-6"
SCALE: N.T.S.

NORTH

Figure 3B – Roof Top Antenna Azimuths
Alpha @ 15°, Beta @ 135°, and Gamma @ 210°
1402 Agua Fria Street
Santa Fe, NM

As discussed in Bulletin 65, calculations can be made to predict RF field strength and power density levels around typical RF sources. For example, in the case of a non-directional antenna, a prediction for power density in the far-field of the antenna can be made by use of the general Equations (3) or (4) below [for conversion to electric or magnetic field strength see Equation (1) above]. These equations are generally accurate in the far-field of an antenna but will over-predict power density in the near field, where it could be used for making a "worst case" or conservative prediction.

$$S = \frac{PG}{4\pi R^2} \qquad (3)$$

where: S = power density (in appropriate units, e.g. mW/cm^2)
P = power input to the antenna (in appropriate units, e.g., mW)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator (dBi)
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

or:

$$S = \frac{EIRP}{4\pi R^2} \qquad (4)$$

where: EIRP = equivalent (or effective) isotropically radiated power

Table I and Table II below depict the General Population/Uncontrolled Environment MPE analysis. Table I uses the following formula for surface or ground reflections, such as those on roof tops, for analysis of reflected signals. The EPA model recommended is a more realistic approximation for ground reflection by assuming a maximum 1.6-fold increase in field strength leading to an increase in power density of 2.56 (1.6 X 1.6). This Equation used for Table I:

$$S = \frac{2.56\ EIRP}{4\pi R^2} = \frac{0.64\ EIRP}{\pi R^2} \qquad (7)$$

(Note: This page derived from OET Bulletin 65)

PATH A (57.86 ft)

MPE Percentages to Property Line of Home Lot at 135° (Main Beam)

Frequency	Power Density	Input Power	Antenna Gain	Roof Top			General Public
MHz	mW/cm²	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	3.11E-01	80000	36	2.56	17.69	0.501	61.93%
875	3.11E-01	80000	36	2.56	17.69	0.583	53.23%
885	6.25E-01	160000	36	2.56	17.69	0.590	105.98%
					TOTAL MPE PERCENTAGES		

PATH B (70.61 ft)

MPE Percentages to Roof of Home at 167° (@32° off Main Beam of BETA Antennas)

Frequency	Power Density	Input Power	Antenna Gain	Roof Top			General Public
MHz	mW/cm²	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	1.32E-01	80000	23	2.56	21.59	0.501	26.37%
875	1.32E-01	80000	23	2.56	21.59	0.583	22.66%
885	2.64E-01	160000	23	2.56	21.59	0.590	44.81%
					TOTAL MPE PERCENTAGES		93.85%

PATH C (70.61 ft)

MPE Percentages to Roof of Home at 160° (@50° off Main Beam of GAMMA Antennas)

Frequency	Power Density	Input Power	Antenna Gain	Roof Top			General Public
MHz	mW/cm²	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	6.63E-02	80000	11.5	2.56	21.59	0.501	13.22%
875	6.63E-02	80000	11.5	2.56	21.59	0.583	11.37%
885	1.33E-01	160000	11.5	2.56	21.59	0.590	22.46%
					TOTAL MPE PERCENTAGES		47.05%

PATH B AND C Combined Antenna MPE Percentages

PATH D (118.5 ft)

MPE Percentages to Home on Property at 210° (Main Beam)

Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	General Public
MHz	mW/cm²	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	7.50E-02	80000	36	2.56	36.23	0.501	14.96%
875	7.50E-02	80000	36	2.56	36.23	0.583	12.86%
885	1.48E-01	160000	36	2.56	36.23	0.590	25.00%
					TOTAL MPE PERCENTAGES		**52.82%**

PATH E (65.8 ft)

MPE Percentages to Property Line of Adjacent Empty Lot at 210° (Main Beam)

Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	General Public
MHz	mW/cm²	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	2.40E-01	80000	36	2.56	20.12	0.501	47.83%
875	2.40E-01	80000	36	2.56	20.12	0.583	41.11%
885	4.80E-01	160000	36	2.56	20.12	0.590	81.29%
					TOTAL MPE PERCENTAGES		

PATH F (84.7 ft)

MPE Percentages to Roof Area at Front of Bldg. at 347° (@ 28° off Main Beam of ALPHA Antennas)

Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	General Public
MHz	mW/cm²	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	1.01E-01	80000	25	2.56	25.9	0.501	20.09%
875	1.01E-01	80000	25	2.56	25.9	0.583	17.26%
885	2.02E-01	160000	25	2.56	25.9	0.590	34.15%
					TOTAL MPE PERCENTAGES		**71.50%**

TABLE I (General Public MPE Analysis)

For a truly worst-case prediction of power density at or near a surface, such as at ground-level or on a rooftop, 100% reflection of incoming radiation could be assumed, resulting in a potential doubling of predicted field strength and a four-fold increase in (far-field equivalent) power density. In that case Equations (3) and (4) can be modified as follows to:

$$S = \frac{(2)^2 PG}{4\pi R^2} = \frac{PG}{\pi R^2} = \frac{EIRP}{\pi R^2} \qquad (6)$$

(Note: This page derived from OET Bulletin 65)

		PATH A (57.86 ft)					
	MPE Percentages to Property Line of Home Lot at 135° (Main Beam)						
Frequency	Power Density	Input Power	Antenna Gain	Ground			General Public
MHz	mW/cm²	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	4.89E-01	80000	36	4	17.69	0.501	97.44%
875	4.89E-01	80000	36	4	17.69	0.583	83.74%
885	9.77E-01	160000	36	4	17.69	0.590	165.61%
					TOTAL MPE PERCENTAGES		
		PATH B (70.61 ft)					
MPE Percentages to Roof of Home at 167° (@32° off Main Beam of BETA Antennas)							
Frequency	Power Density	Input Power	Antenna Gain	Roof Top			General Public
MHz	mW/cm²	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	2.07E-01	80000	23	4	21.59	0.501	41.21%
875	2.07E-01	80000	23	4	21.59	0.583	35.42%
885	4.13E-01	160000	23	4	21.59	0.590	70.03%
					TOTAL MPE PERCENTAGES		
		PATH C (70.61 ft)					
MPE Percentages to Roof of Home at 160° (@50° off Main Beam of GAMMA Antennas)							
Frequency	Power Density	Input Power	Antenna Gain	Roof Top			General Public
MHz	mW/cm²	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	1.04E-01	80000	11.5	4	21.59	0.501	20.64%
875	1.04E-01	80000	11.5	4	21.59	0.583	17.74%
885	2.07E-01	160000	11.5	4	21.59	0.590	35.10%
					TOTAL MPE PERCENTAGES		73.49%
			PATH B AND C Combined Antenna MPE Percentages				
		PATH D (118.5 ft)					
	MPE Percentages to Home on Property at 210° (Main Beam)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	General Public
MHz	mW/cm²	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	1.16E-01	80000	36	4	36.23	0.501	23.18%
875	1.16E-01	80000	36	4	36.23	0.583	19.92%
885	2.33E-01	160000	36	4	36.23	0.590	39.41%
					TOTAL MPE PERCENTAGES		82.50%
		PATH E (65.8 ft)					
	MPE Percentages to Property Line of Adjacent Empty Lot at 210° (Main Beam)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	General Public
MHz	mW/cm²	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	3.77E-01	80000	36	4	20.12	0.501	75.20%
875	3.77E-01	80000	36	4	20.12	0.583	64.63%
885	7.54E-01	160000	36	4	20.12	0.590	127.78%
					TOTAL MPE PERCENTAGES		
		PATH F (84.7 ft)					
MPE Percentages to Roof Area at Front of Bldg. at 347° (@ 28° off Main Beam of ALPHA Antennas)							
Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	General Public
MHz	mW/cm²	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	1.57E-01	80000	25	4	25.9	0.501	31.40%
875	1.57E-01	80000	25	4	25.9	0.583	26.98%
885	3.15E-01	160000	25	4	25.9	0.590	53.36%
					TOTAL MPE PERCENTAGES		

TABLE II (General Public MPE Analysis)

5.0 Conclusions

When in the direct beam or path of the transmitting antennas, the properties to the South-Southeast, and South-Southwest, adjacent to the Agua Fria Cellular site are exposed to radio frequency emissions that may exceed the Maximum Permissible Exposure limits for the General Public as set forth by the FCC guidelines for Human Exposure to Radio Frequency Electromagnetic Fields, (OET Bulletin 65). The direct in line path is at 22.6' above ground level, and the analysis was done at various azimuths from the transmitting antennas at this elevation.

Appendix A contains the analysis for the Occupational MPE requirements.

Analysis was conducted using information provided to ATSI via email, from Kelly Schilling kellybennett2@comcast.net, and Arthur Firstenberg at bearstar@fastmail.fm

Reviewed and Approved By:

Antonio L. Cardenas

Antonio L. Cardenas, Sr.
NARTE Certified Engineer
#E2-00176

Appendix A
Occupational MPE Analysis Tables

Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3 - 3.0	614	1.63	100*	6
3.0 - 30	1842/f	4.89/f	$900/F^2$	6
30 - 300	61.4	0.163	1.0	6
300 - 1500	--	--	f/300	6
1500 - 100,000	--	--	5	6

f = frequency
** = Plane-wave equivalent power density*

		PATH A (57.86 ft)					
	MPE Percentages to Property Line of Home Lot at 135° (Main Beam)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top			**Occupational**
MHz	mW/cm²	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	3.11E-01	80000	36	2.56	17.69	2.507	12.39%
875	3.11E-01	80000	36	2.56	17.69	2.917	10.65%
885	6.25E-01	160000	36	2.56	17.69	2.950	21.20%
					TOTAL MPE PERCENTAGES		**44.23%**
		PATH B (70.61 ft)					
	MPE Percentages to Roof of Home at 167° (@32° off Main Beam of BETA Antennas)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top			**Occupational**
MHz	mW/cm²	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	1.32E-01	80000	23	2.56	21.59	2.507	5.27%
875	1.32E-01	80000	23	2.56	21.59	2.917	4.53%
885	2.64E-01	160000	23	2.56	21.59	2.950	8.96%
					TOTAL MPE PERCENTAGES		18.77%
		PATH C (70.61 ft)					
	MPE Percentages to Roof of Home at 160° (@50° off Main Beam of GAMMA Antennas)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top			**Occupational**
MHz	mW/cm²	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	6.63E-02	80000	11.5	2.56	21.59	2.507	2.64%
875	6.63E-02	80000	11.5	2.56	21.59	2.917	2.27%
885	1.33E-01	160000	11.5	2.56	21.59	2.950	4.49%
					TOTAL MPE PERCENTAGES		9.41%
			PATH B AND C Combined Antenna MPE Percentages				**28.18%**
		PATH D (118.5 ft)					
	MPE Percentages to Home on Property at 210° (Main Beam)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	**Occupational**
MHz	mW/cm²	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	7.50E-02	80000	36	2.56	36.23	2.507	2.99%
875	7.50E-02	80000	36	2.56	36.23	2.917	2.57%
885	1.48E-01	160000	36	2.56	36.23	2.950	5.00%
					TOTAL MPE PERCENTAGES		**10.56%**
		PATH E (65.8 ft)					
	MPE Percentages to Property Line of Adjacent Empty Lot at 210° (Main Beam)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	**Occupational**
MHz	mW/cm²	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	2.40E-01	80000	36	2.56	20.12	2.507	9.57%
875	2.40E-01	80000	36	2.56	20.12	2.917	8.22%
885	4.80E-01	160000	36	2.56	20.12	2.950	16.26%
					TOTAL MPE PERCENTAGES		**34.05%**
		PATH F (84.7 ft)					
	MPE Percentages to Roof Area at Front of Bldg. at 347° (@ 28° off Main Beam of ALPHA Antennas)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	**Occupational**
MHz	mW/cm²	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	1.01E-01	80000	25	2.56	25.9	2.507	4.02%
875	1.01E-01	80000	25	2.56	25.9	2.917	3.45%
885	2.02E-01	160000	25	2.56	25.9	2.950	6.83%
					TOTAL MPE PERCENTAGES		**14.30%**

TABLE I-A (Occupational MPE Analysis)

		PATH A (57.86 ft)					
	MPE Percentages to Property Line of Home Lot at 135° (Main Beam)						
Frequency	Power Density	Input Power	Antenna Gain	Ground			**Occupational**
MHz	mW/cm^2	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	4.89E-01	80000	36	4	17.69	2.507	19.49%
875	4.89E-01	80000	36	4	17.69	2.917	16.75%
885	9.77E-01	160000	36	4	17.69	2.950	33.12%
					TOTAL MPE PERCENTAGES		**69.36%**
		PATH B (70.61 ft)					
	MPE Percentages to Roof of Home at 167° (@32° off Main Beam of BETA Antennas)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top			**Occupational**
MHz	mW/cm^2	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	2.07E-01	80000	23	4	21.59	2.507	8.24%
875	2.07E-01	80000	23	4	21.59	2.917	7.08%
885	4.13E-01	160000	23	4	21.59	2.950	14.01%
					TOTAL MPE PERCENTAGES		29.33%
		PATH C (70.61 ft)					
	MPE Percentages to Roof of Home at 160° (@50° off Main Beam of GAMMA Antennas)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top			**Occupational**
MHz	mW/cm^2	Watts	Numerical	Reflection Coef.	Distance (m)	MPE	MPE Percentage
752	1.04E-01	80000	11.5	4	21.59	2.507	4.13%
875	1.04E-01	80000	11.5	4	21.59	2.917	3.55%
885	2.07E-01	160000	11.5	4	21.59	2.950	7.02%
					TOTAL MPE PERCENTAGES		14.70%
			PATH B AND C Combined Antenna MPE Percentages				**44.03%**
		PATH D (118.5 ft)					
	MPE Percentages to Home on Property at 210° (Main Beam)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	**Occupational**
MHz	mW/cm^2	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	1.16E-01	80000	36	4	36.23	2.507	4.64%
875	1.16E-01	80000	36	4	36.23	2.917	3.98%
885	2.33E-01	160000	36	4	36.23	2.950	7.88%
					TOTAL MPE PERCENTAGES		**16.50%**
		PATH E (65.8 ft)					
	MPE Percentages to Property Line of Adjacent Empty Lot at 210° (Main Beam)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	**Occupational**
MHz	mW/cm^2	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	3.77E-01	80000	36	4	20.12	2.507	15.04%
875	3.77E-01	80000	36	4	20.12	2.917	12.93%
885	7.54E-01	160000	36	4	20.12	2.950	25.56%
					TOTAL MPE PERCENTAGES		**53.52%**
		PATH F (84.7 ft)					
	MPE Percentages to Roof Area at Front of Bldg. at 347° (@ 28° off Main Beam of ALPHA Antennas)						
Frequency	Power Density	Input Power	Antenna Gain	Roof Top		Limits	**Occupational**
MHz	mW/cm^2	mWatts	Numerical	Reflection Coef.	Distance (cm)	MPE	MPE Percentage
752	1.57E-01	80000	25	4	25.9	2.507	6.28%
875	1.57E-01	80000	25	4	25.9	2.917	5.40%
885	3.15E-01	160000	25	4	25.9	2.950	10.67%
					TOTAL MPE PERCENTAGES		**22.35%**

TABLE II-A (Occupational MPE Analysis)

ATSI *Advanced Testing Services, Inc.*

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About Us

Advanced Testing Services, Inc. (ATSI) is an independent field testing organization specializing in EMI, EMC, HEMP, RF Shielding Effectiveness and Acoustic testing. ATSI has been the quality control, testing and certifying agency on many shielding projects such as the National Test Facility at Falcon AFB in Colorado, a 350,000 square foot RF shielded building and the LC-40 Launch Complex in Cape Canaveral Florida, which is a 21 story RF shielded complex used to house the TITAN IV missile prior to launch.

ATSI has been performing EMI and EMC measurements for IEC 801.3 chamber verification, MIL STD 188-125-1, MIL STD 461 EMC testing, MIL STD 285, NSA 65-6, NSA 65-5 and NSA 73-2A RF Shield testing since 1992. ATSI has also performed acoustic measurements of SCIF Facilities and other secure type enclosures in the continental US and overseas.

The engineering and technical diversity that ATSI possesses provides customers with accurate solutions to their RF Shielding, Electromagnetic Interference and Compatibility problems, as well as providing testing services for certification of there EMI/EMC test chambers. Our staff has provided services at many locations worldwide; Europe, Canada, Panama, the Middle East, and Africa . ATSIs' field test teams are geared up to respond immediately and travel to any location in the world. The principal at ATSI, Antonio L. Cardenas, is an EMI/EMC Certified Engineer by the National Association of Radio and Telecommunications Engineers (NARTE). With his experience, education and specialized expertise the customer will always get the best testing documentation and professional effort that the industry has to offer.

Santa Fe County Assessor's Office

(http://www.santafecountynm.gov/assessor)

SELECT SEARCH TYPE: Parcel Number ▼ **ENTER SEARCH VALUE:** Go

PROPERTY INFORMATION

Parcel Number:
18207639

UPC:
1052098507427000000

Physical Address:
0 AGUA FRIA ST
SANTA FE, NM 87505

Owner Name:
MARTINEZ, JOSE C

Owner Mailing Address:
1404 AGUA FRIA
SANTA FE, NM 87501

TCA (Tax Code Area):
CI-N

Section Township Range:
S27 T17N US

Legal Description:
TR E BLK 5

Neighborhood: (for Assessor's use only)

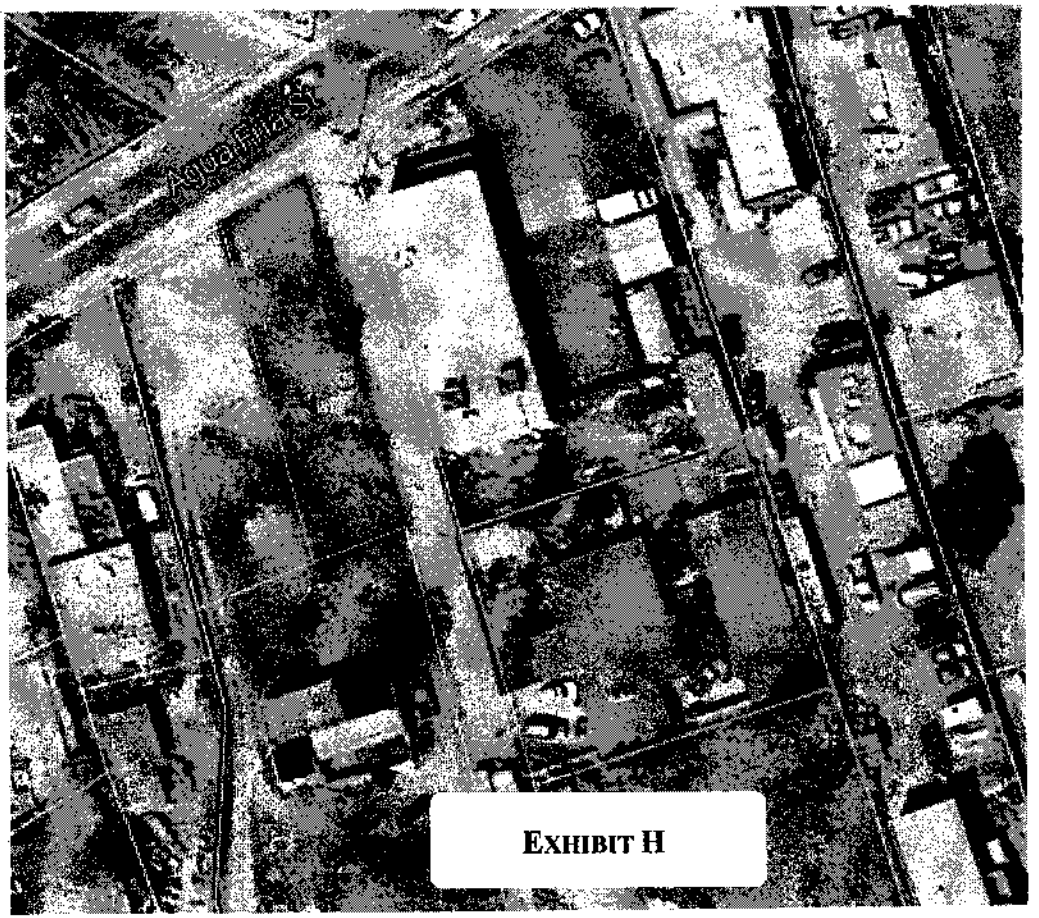


EXHIBIT H

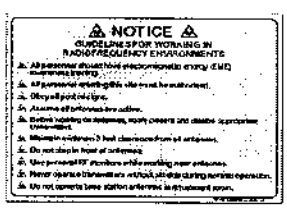
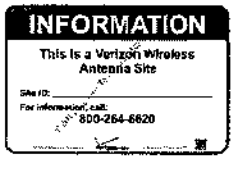
EXHIBIT J

verizon wireless

Radio Frequency Exposure Post-Installation FCC Compliance Assessment

Site Specific Information			
Site Name	**NM4-Silva**	**Categorically Excluded?**	**No**
Street Address	**1402 Agua Fria St.**	**5% Contributor To Areas Requiring Mitigation?**	**No**
City, State, Zip	**Santa Fe, NM 87501**		
Multi-Licensee Facility	**No**	**Max % MPE (Predictive)**	**320% Occupational**
Structure Type	**Rooftop**	**Max % MPE (Measured)**	**42% Occupational**
Broadcast Equipment	**No**	**Assessment Date**	**03/13/2013**
# of Access Points	**0**	**Assessment Purpose**	**Site Audit**
Compliance Status		**In Compliance**	

☐	Worst-case RF power density levels are BELOW the MPE for General Population/Uncontrolled Environments in accessible areas.
☐	Worst-case RF power density levels are ABOVE the MPE for General Population/Uncontrolled Environments but BELOW the MPE for Occupational/Controlled environments.
x	Worst-case RF power density levels are ABOVE the MPE for Occupational/Controlled Environments but BELOW 10x the MPE for Occupational/Controlled environments.
☐	Worst-case RF power density levels are ABOVE 10x the MPE for Occupational/Controlled environments.

Compliance Requirements						
	Guidelines	**Notice**	**Caution**	**Warning**	**NOC Information**	**Barrier**
Access Points	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Alpha	x [1]	☐ [#]	x [1]	☐ [#]	x [1]	x
Beta	x [1]	☐ [#]	x [1]	☐ [#]	x [1]	x
Gamma	x [1]	☐ [#]	x [1]	☐ [#]	x [1]	x

Additional Compliance Requirements(s):
Barriers have been constructed with signage placed, but administrative controls are to be employed to ensure compliance. Landlord must ensure that Verizon Wireless antenna access will be restricted to personnel that have been authorized by Verizon Wireless (EME Awareness trained personnel only). This would include all maintenance personnel and contractors accessing the antenna area.

Consultant Legal Name	Global RF Solutions	**Phone/Fax**	480-814-1393/509-275-0709

Contents

1. Executive Summary

Verizon Wireless has contracted with Global RF Solutions, an independent Radio Frequency consulting firm, to conduct a Radio Frequency Exposure (RFE) Compliance **Post-Installation Assessment** of the NM4-Silva cell site. The following report contains a detailed summary of the Radio Frequency environment as it relates to Federal Communications Commission (FCC) and Occupational Safety & Health Administration (OSHA) Rules and Regulations for all individuals.

The **Verizon Wireless antenna data** was provided by:

Name	Steve Cahn
Title	RF Engineer
Date	01/15/2013
Region	Southwest

This **post-installation** compliance assessment and report has been **prepared** and **reviewed** by:

	Preparer	**Reviewer**
Name	Marvin Wessel	Harry Young
Title	CEO	Field Engineer
Date	10/07/2013	10/07/2013

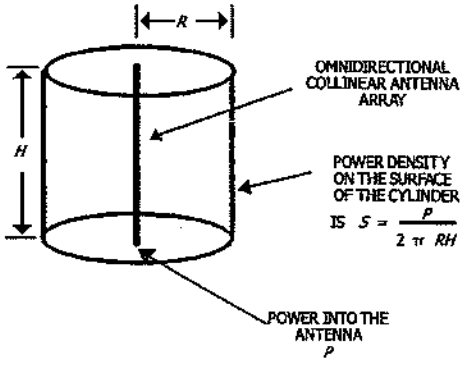
This report utilizes the following **for predictive modeling of the ambient RF environment**:
MPE Modeling Program: RoofView®, Version 4.15
Required Modeling Assumptions: 100% Duty Cycle and Maximum Total Power Output.

Additional Modeling Assumptions:

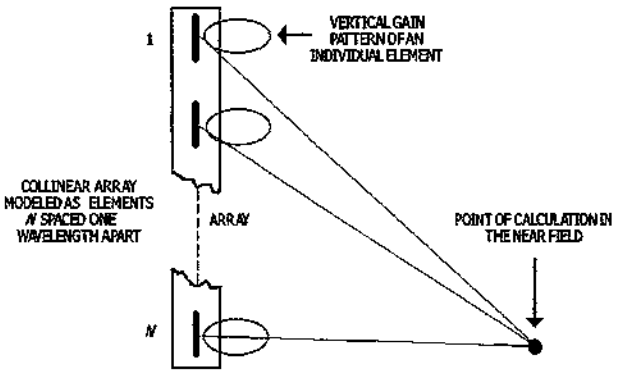
Electromagnetic energy (EME) exposure situations have been modeled at this site by using the following techniques. A cylindrical model in the near field of a vertical collinear antenna is run through a computer calculation engine. This model was used to compute the average power density on the surface of an imaginary cylinder, with a height equal to the antenna's aperture, and a radius equal to the distance of interest.

The collinear antenna model estimates the number of elements in the array and in the gain pattern of each element. The power density in the near field of the antenna is calculated by combining the contributions from each element in the array. The completed calculations of these models are plotted in the Analysis-Predictive Model section. The software tool utilized for predictive analysis is RoofView®, a product of Richard Tell Associates, Inc.

CYLINDRICAL RADIATION MODEL



COLLINEAR ARRAY MODEL FOR NEAR FIELD



2. Existing Site Characteristics

a. Structure

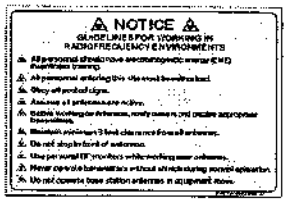
Physical Description	This communications site is located in stealth enclosures on the roof of a single-story commercial building.
Site Latitude (NAD 83)	N 35.679539
Site Longitude (NAD 83)	W 105.965579
Site Elevation (AMSL)	6872'
Structure Height (AGL)	19'
Overall Structure Height	19'

b. Accessibility

Roof access is by extension ladder only. Access is not restricted to EME Awareness trained personnel and an RF Safety plan is not in place.

All access points locked at time of assessment?	N/A
All access points alarmed at time of assessment?	N/A

c. Verizon Wireless Signage

Existing Signage						
	Guidelines	**Notice**	**Caution**	**Warning**	**NOC Information**	**Barrier**
Access Points	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Alpha	x [1]	☐ [#]	x [1]	☐ [#]	x [1]	x
Beta	x [1]	☐ [#]	x [1]	☐ [#]	x [1]	x
Gamma	x [1]	☐ [#]	x [1]	☐ [#]	x [1]	x

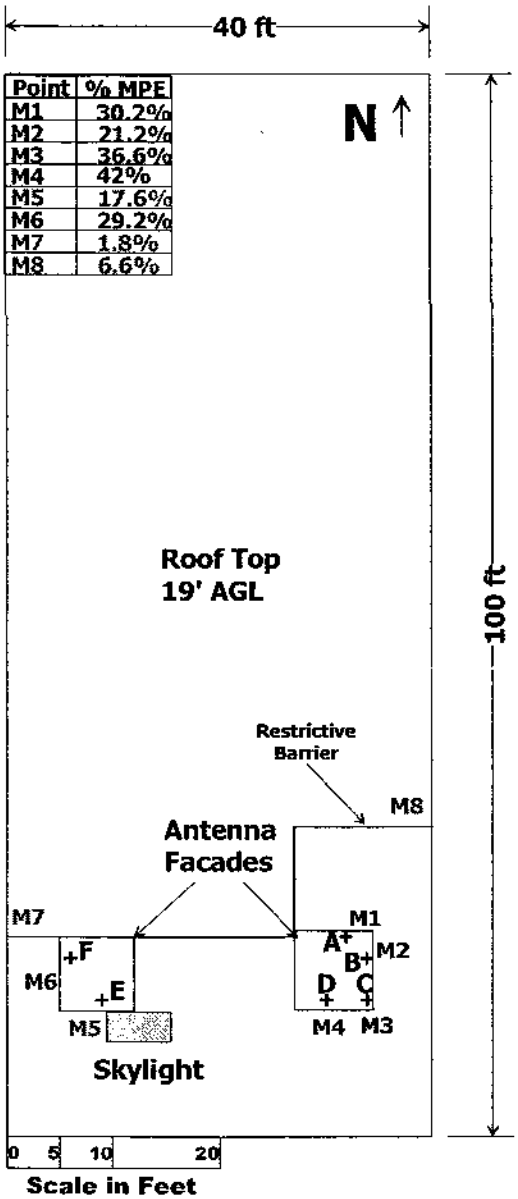
Existing Signage Adheres to VZW Signage & Demarcation Policy?	Yes

d. Antenna Inventory

ID	Name	(MHz) Freq	Input Power	Calc Power	Mfg	Model	(ft) X	(ft) Y	(ft) Z	Type	(ft) Aper	dBd Gain	BWidth Pt Dir
A	Verizon	875.00000		80.0	Antel	BXA-70080/6CF	32.0	19.0	1.0	TX	6.0		80;45
a	Verizon	752.00000		80.0	Antel	BXA-70080/6CF	32.0	19.0	1.0	TX	6.0		80;45
B	Verizon	885.00000		160.0	Antel	QXA-806080120	34.0	17.0	1.0	TX	6.0		80;45
C	Verizon	875.00000		80.0	Antel	BXA-70080/6CF	34.0	13.0	1.0	TX	6.0		80;190
c	Verizon	752.00000		80.0	Antel	BXA-70080/6CF	34.0	13.0	1.0	TX	6.0		80;190
D	Verizon	885.00000		160.0	Antel	QXA-806080120	30.0	13.0	1.0	TX	6.0		80;190
E	Verizon	875.00000		80.0	Antel	BXA-70080/6CF	9.0	13.0	1.0	TX	6.0		80;240
e	Verizon	752.00000		80.0	Antel	BXA-70080/6CF	9.0	13.0	1.0	TX	6.0		80;240
F	Verizon	885.00000		160.0	Antel	QXA-806080120	6.0	17.0	2.0	TX	6.0		80;240

3. **Analysis**

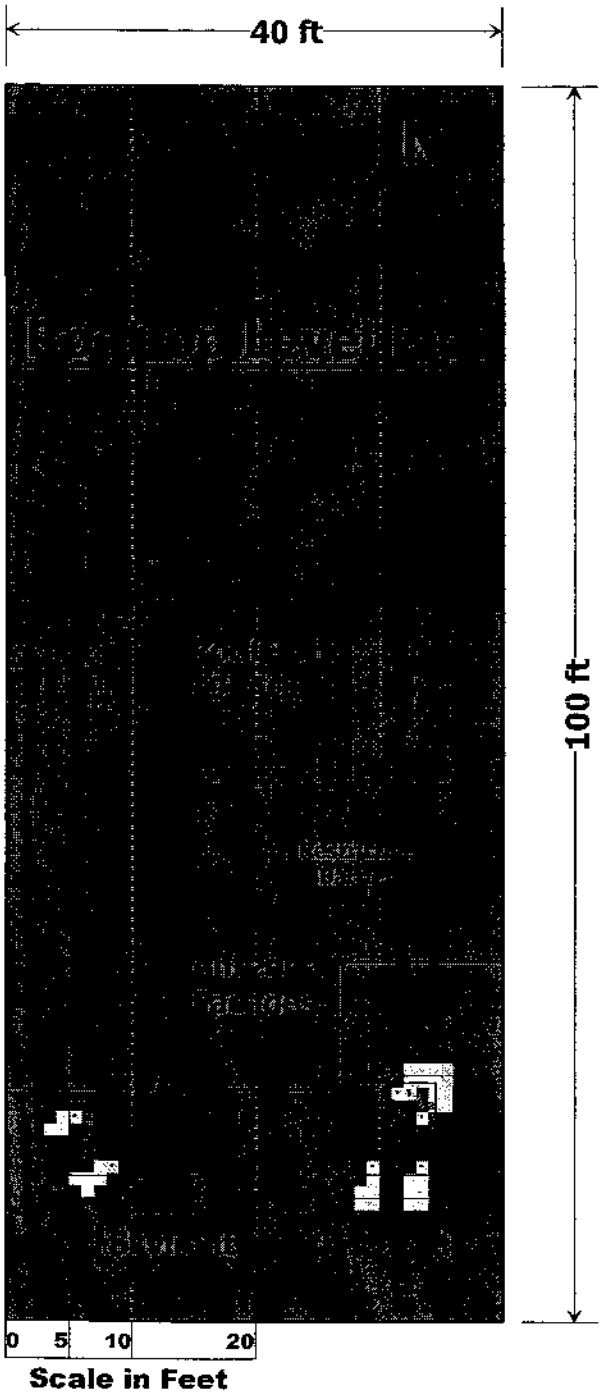
a. **Field Measurements:**



Survey Start Time	13:12	Survey End Time	13:37

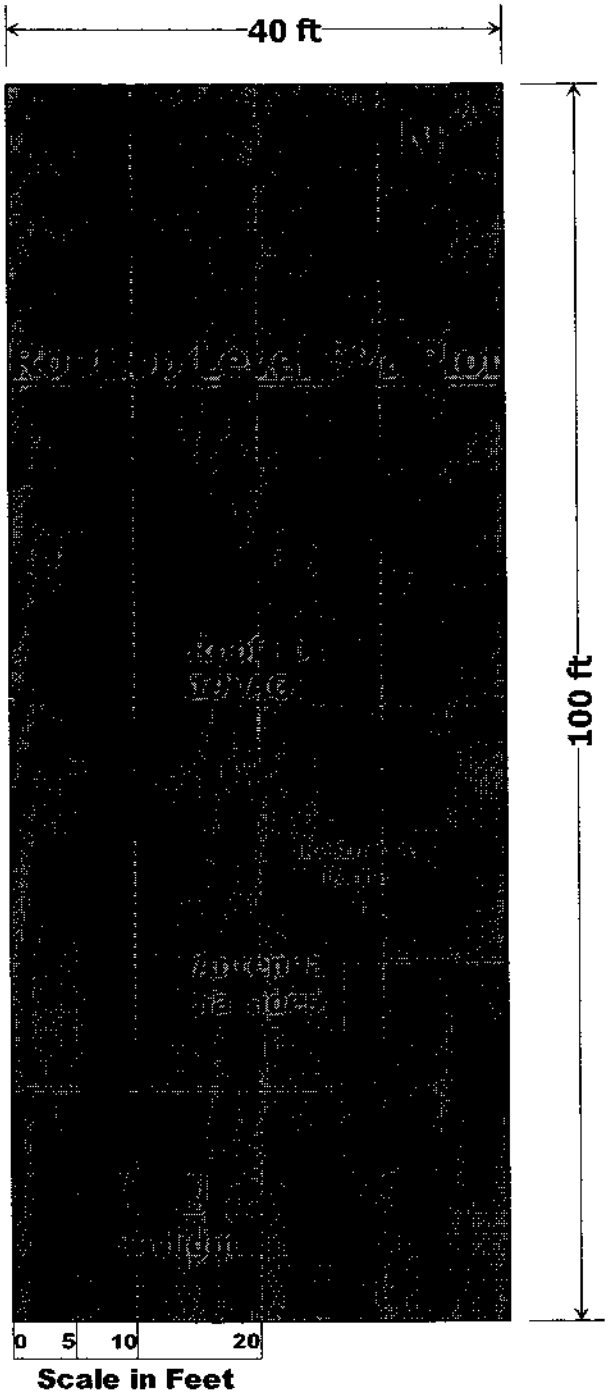
Spatially-Averaged Power Density Levels (mW/cm^2)	% Occupational MPE
[redacted]	0 to 20
[redacted]	20 to 100
Above Occupational MPE	Greater Than 100
[redacted]	Greater Than 1000

b. Predictive Model : All Transmitters



Color	% Occupational MPE
	0 to 20
	20 to 100
	Greater Than 100
	Greater Than 1000

c. **Predictive Model: Significant Contribution of Verizon Wireless**



Color	% Occupational MPE
	0 to 1
	> 1%

4. **Conclusion**
a. **Conclusion Narrative**

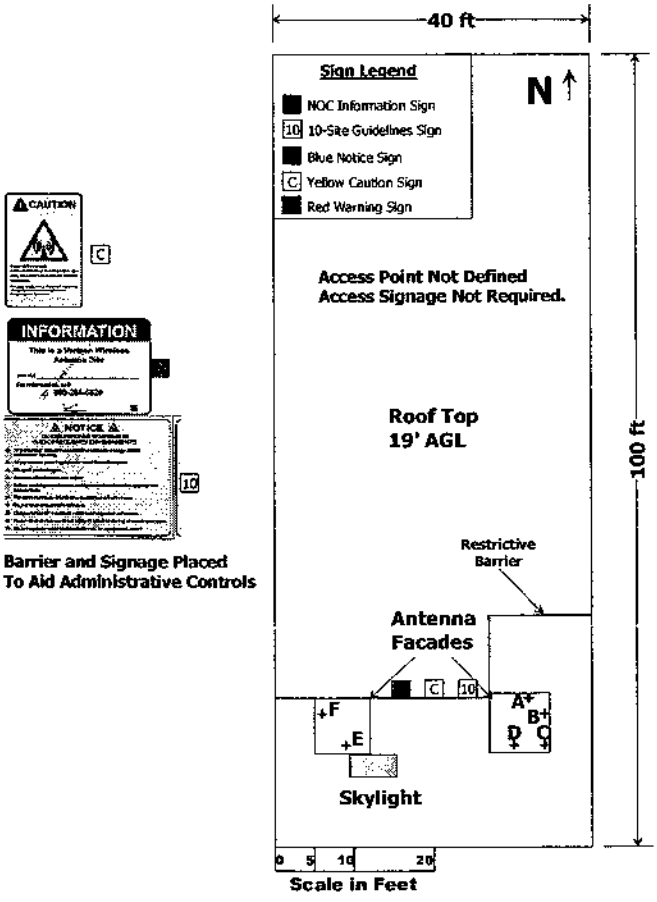
Description of MPE-Limit Exceeding Areas:
Verizon Wireless can exceed FCC Public (measurements and software) and FCC Occupational (software) standards in accessible area at this site, i.e. inside the restrictive barriers at this site.

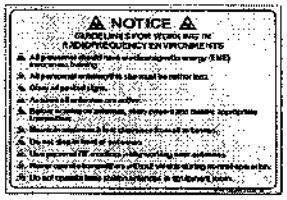
Verizon Significant Contribution Areas:
Verizon Wireless can exceed 5% of the FCC Public standard in accessible areas outside the restrictive barriers at this site, but the total levels in these areas do not exceed FCC Public or FCC Occupational standards.

Collocator Significant Contribution Areas:
No collocators are present at this site.

b. Compliance Requirements

Signage/Barrier Diagram



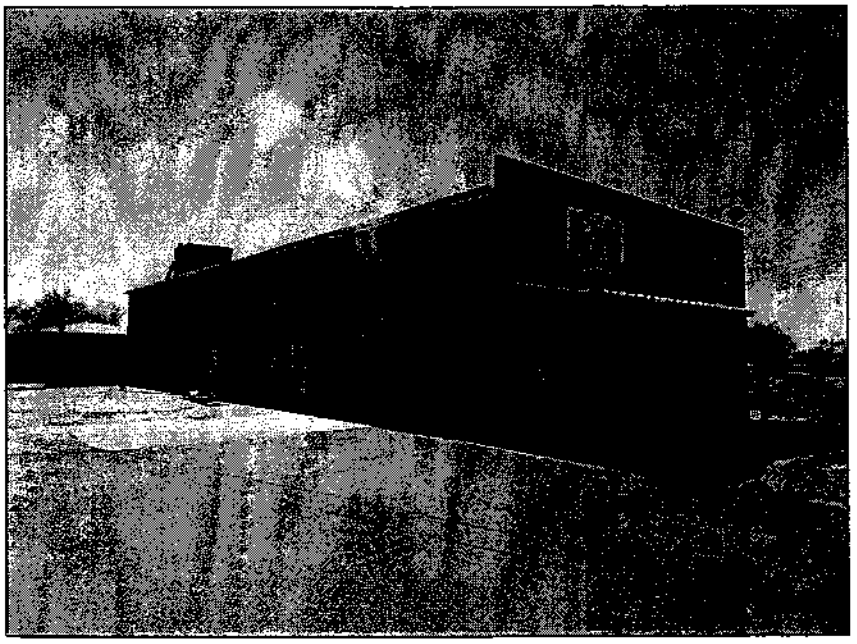
Compliance Requirements						
	Guidelines	Notice	Caution	Warning	NOC Information	Barrier
Access Points	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Alpha	x [1]	☐ [#]	x [1]	☐ [#]	x [1]	x
Beta	x [1]	☐ [#]	x [1]	☐ [#]	x [1]	x
Gamma	x [1]	☐ [#]	x [1]	☐ [#]	x [1]	x

Signage/Barrier Installation Detail

Barriers have been constructed with signage placed, but administrative controls are to be employed to ensure compliance.

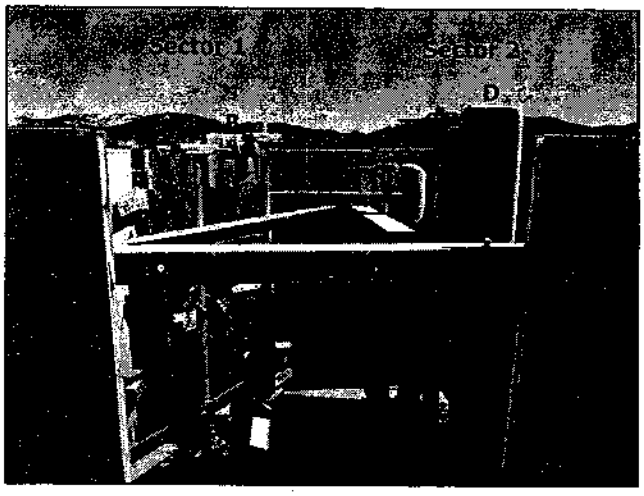
5. Appendix A: Site Photos

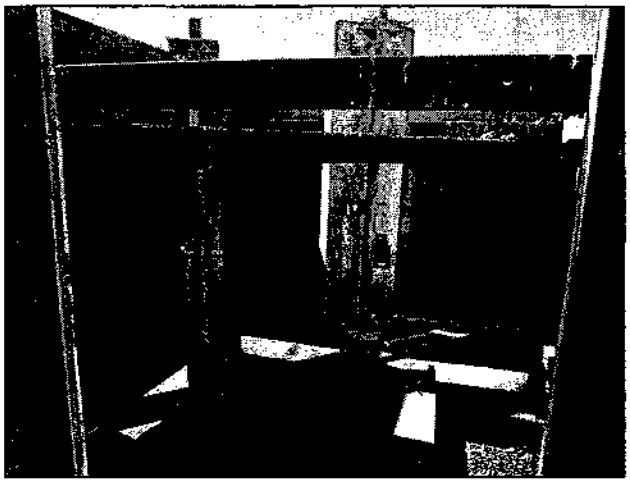
a. Structure

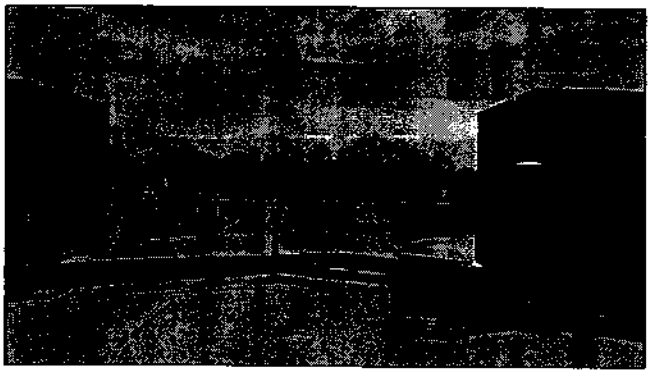


b. Access Point(s)

c. **Individual Sectors**







d. **Miscellaneous**

Not Applicable.

6. Appendix B: Survey Methodology

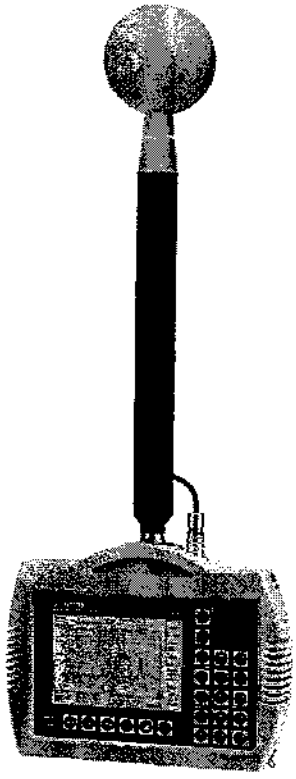
a. Survey Procedures

The field survey defines exclusion areas at the site. Electromagnetic energy (EME) fields were assessed through direct measurement at the transmitter site, using properly calibrated field probes.

An SRM-3000 Selective Measurement Device was used for the measurement phase of this survey. This meter represents the latest generation of equipment designed to measure RF energy by Narda Safety Test Solutions.

This device uses an isotropic antenna that is calibrated to measure Radio Frequency power densities using specific selectable frequencies. Measurements were made for SMR, PCS, Cellular, AWS, paging, land mobile, etc., and commercial broadcast frequencies that includes FM radio and television.

Narda SRM-3000



b. Survey Equipment Certification

Narda Safety Test Solutions GmbH

narda Safety Test Solutions

Calibration Certificate

Narda Safety Test Solutions hereby certifies that this object referred to in this certificate has been calibrated by qualified personnel using Narda's approved procedures. The calibration was carried out in accordance with a certified quality management system which conforms to ISO 9001

OBJECT	Selective Radiation Meter Base Unit, SRM-3000
MANUFACTURER	Narda Safety Test Solutions GmbH
PART NUMBER (P/N)	3001/01
SERIAL NUMBER (S/N)	N-0014
CUSTOMER	
CALIBRATION DATE	10-Jan-2013
RESULT ASSESSMENT	within specifications
AMBIENT CONDITIONS	Temperature (23 ± 3)°C Relative humidity (20 to 60) %
CALIBRATION PROCEDURE	3000-27CT-06A

ISSUE DATE 2013-01-10

CALIBRATED BY

AUTHORIZED SIGNATORY

MANAGEMENT SYSTEM

Certificate no. 008 updated ISO 9001:2008

This calibration certificate may not be reproduced other than in full except with the permission of the issuing laboratory. Calibration certificates without signature are not valid.

Narda Safety Test Solutions GmbH

narda Safety Test Solutions

Calibration Certificate

Narda Safety Test Solutions hereby certifies that the object referred to in this certificate has been calibrated by qualified personnel using Narda's approved procedures. The calibration was carried out in accordance with a certified quality management system which conforms to ISO 9001

OBJECT	Antenna, Tri-axis-Field, E-Field, 27 MHz to 3 GHz
MANUFACTURER	Narda Safety Test Solutions GmbH
PART NUMBER (P/N)	3501/02
SERIAL NUMBER (S/N)	11-0358
CUSTOMER	
CALIBRATION DATE	10-Jan-2013
RESULT ASSESSMENT	within specifications
AMBIENT CONDITIONS	Temperature (23 ± 3) °C Relative humidity (23 ± 5) %
CALIBRATION PROCEDURE	3000-8702-06A

ISSUE DATE 2013-01-10

CALIBRATED BY

AUTHORIZED SIGNATORY

MANAGEMENT SYSTEM

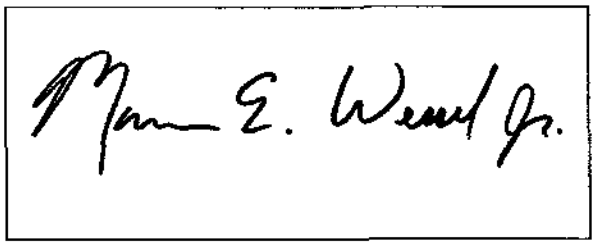
Certificate no. 008 updated ISO 9001:2008

This calibration certificate may not be reproduced other than in full except with the permission of the issuing laboratory. Calibration certificates without signature are not valid.

7. Appendix C: RF Consultant Certifications

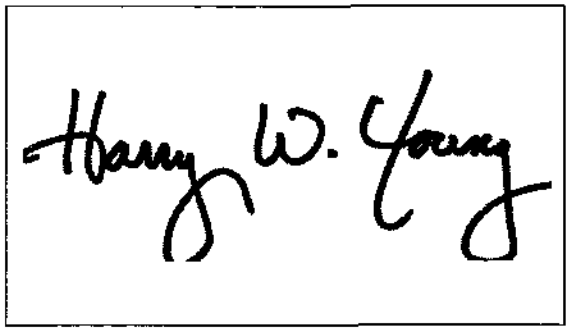
a. Preparer Certification

I, Marvin Wessel, the preparer of this report, am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I am also fully aware of and familiar with the Verizon Wireless Signage & Demarcation Policy. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.



b. Reviewer Certification

I, Harry Young, the reviewer, approved of this report, and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I am also fully aware of and familiar with the Verizon Wireless Signage & Demarcation Policy. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.



8. Appendix D: Reference Information

a. FCC Rules & Regulations

The Federal Communications Commission (FCC) has established safety guidelines relating to RF exposure from cell sites. The FCC developed those standards, known as Maximum Permissible Exposure (MPE) limits, in consultation with numerous other federal agencies, including the Environmental Protection Agency, the Food and Drug Administration, and the Occupational Safety and Health Administration. The standards were developed by expert scientists and engineers after extensive reviews of the scientific literature related to RF biological effects. The FCC explains that its standards "incorporate prudent margins of safety." The following represents explanations of the most applicable information:

Two Classifications for Exposure Limits

Occupational – Applies to situations in which persons are "exposed as a consequence of their *employment*" and are "*fully aware* of the potential for exposure and can *exercise control* over their exposure".	General Population – Applies to situations in which persons are "exposed as a consequence of their employment *may not be made fully aware* of the potential for exposure or *cannot exercise control* over their exposure". Generally speaking, those without significant and documented RF Safety & Awareness training would be in the General Population classification.

Environment Classification

Controlled – An area where the occupancy and activity of those within is subject to control and accountability as established by an RF safety program for the purpose of protection from RF exposure hazards.	Uncontrolled – Any area other than a controlled environment. Applies to environments that are unrestricted or "uncontrolled" that allow access from members of the General Population classification.

Limits for Occupational/Controlled Exposure		
Frequency Range (MHz)	**Power Density (S) (mW/cm^2)**	**Averaging Time $\|E\|^2$, $\|H\|^2$, or S (minutes)**
300-1500	f/300	6
1500-100,000	5	6
Limits for General Population/Uncontrolled Exposure		
Frequency Range (MHz)	**Power Density (S) (mW/cm^2)**	**Averaging Time $\|E\|^2$, $\|H\|^2$, or S (minutes)**
300-1500	f/1500	30
1500-100,000	1	30
f = frequency in MHz		

Significant Contribution to the RF Environment

Any carrier contributing an aggregate MPE percentage of 5 or more (to the applicable RF Environment Classification) is defined as a significant contributor. This means that if any area is determined to be out of compliance with FCC rules, all significant contributors are jointly responsible for correcting any deficiencies.

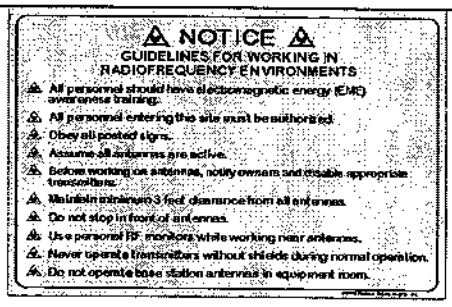
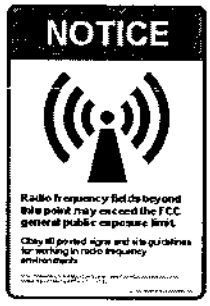
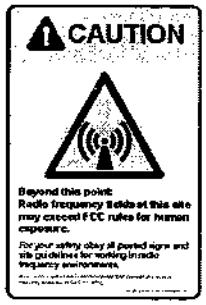
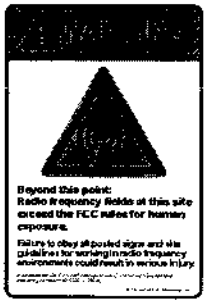
b. Occupational Safety and Health Administration (OSHA) Requirements

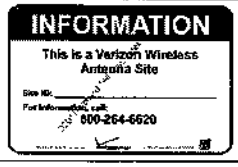
A formal adopter of FCC Standards, OSHA stipulates that those in the Occupational classification must complete training in the following: RF Safety, RF Awareness, and Utilization of Personal Protective Equipment. OSHA also provides options for Hazard Prevention and Control:

Hazard Prevention	Control
• Utilization of good equipment • Enact control of hazard areas • Limit exposures • Employ medical surveillance and accident response	• Employ Lockout/Tag out • Utilize personal alarms & protective clothing • Prevent access to hazardous locations • Develop or operate an administrative control program

c. RF Signage

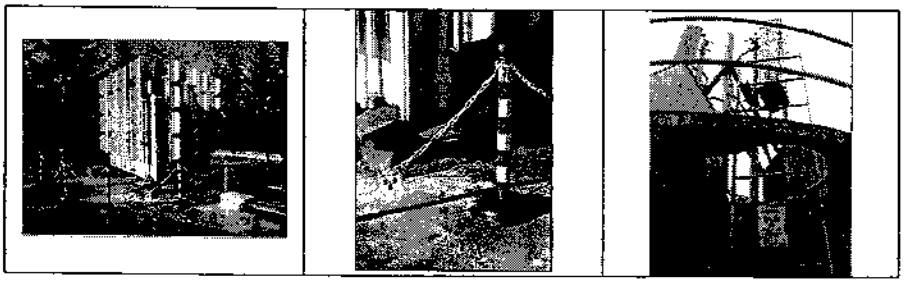
Areas or portions of any transmitter site may be susceptible to high power densities that could cause personnel exposures in excess of the FCC guidelines. These areas must be demarcated by conspicuously posted signage that identifies the potential exposure. Signage MUST be viewable regardless of the viewer's position.

GUIDELINES	NOTICE	CAUTION	WARNING
Used anytime hazard signage is employed to achieve FCC compliance. This sign will inform visitors of the basic precautions to follow when working around radiofrequency equipment.	Used to distinguish the boundary between the General Population/Uncontrolled and the Occupational/Controlled areas. The limits associated with this notification must be less than the Occupational/Controlled MPE.	Identifies RF controlled areas where RF exposure can exceed the Occupational/Controlled MPE but below 10 x the Occupational/Controlled MPE.	Denotes the boundary of areas with RF levels substantially above the FCC limits, normally defined as those greater than ten (10) times the Occupational/Controlled MPE.
			

INFORMATION SIGN	
Information signs are used as a means to provide contact information for any questions or concerns. They will include specific cell site identification information and the Verizon Wireless Network Operations Center phone number.	

d. Barriers

A barrier is any physical demarcation employed as a preventative and/or notification measure that one is entering into an area with RF power density levels greater than the General Population/Uncontrolled limit.



LIMITED WARRANTY

Global RF Solutions warrants that this analysis was performed using substantially the methods that are referenced and described in this report and based entirely upon the information on the antenna site that was provided by Verizon Wireless. Global RF Solutions disclaims all other warranties either expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose.

In no event will Global RF Solutions be liable to you or by any other person for damages, including any loss of profits, lost savings, or other special, exemplary, punitive, incidental or consequential damages arising out of your use or inability to use the analysis whether such claim is based on breach of warranty, contract, tort or other legal theory and regardless of the causes of such loss or damages. In no event shall Global RF Solutions entire liability to you under this Agreement exceed an amount equal to the price paid to for the analysis.

Article 14-6: PERMITTED USES AND USE REGULATIONS
(Ord. No. 201137 § 8)

* * *

14-6.2 USE-SPECIFIC STANDARDS

* * *

(E) Telecommunications Facilities

* * *

(5) General Requirements

* * *

(b) Maximum Height

Telecommunications facilities located on existing structures shall not exceed the height of the structure upon which the facility is located unless otherwise allowed under this section. *Telecommunications facilities* located on new *structures* shall not exceed the maximum height for *buildings* otherwise allowed as set forth in Chapter 14 with the exception that in C-2, I-1 and I-2 districts the height limit of *telecommunications facilities* shall be one hundred feet.

EXHIBIT K

EXHIBIT L

verizonwireless

Verizon Wireless
126 W. Gemini Drive
Tempe, AZ 85283

February 20, 2014

City of Santa Fe
Daniel Esquibel
Land Use Planner
200 Lincoln Avenue
Santa Fe, NM 87504

Re: Affidavit of City of Santa Fe Code Requirements, NM4_SILVA - 1402 Agua Fria, Santa Fe, NM 80123

Mr. Esquibel,

Please accept this letter as our written certification by Verizon Wireless (Applicant) and John Malone (Owner) addressing the following sections to the City's Ordinance:

14-6.2(E)(5)(j) - Both Applicant and Owner allow, on a nondiscriminatory basis, to the maximum extent technically feasible the co-location of other antennas on commercially reasonable terms on the approved tower or tower alternative located at the above-referenced address.

14-6.2(E)(6)(b)(x) - Applicant will remove the proposed *telecommunications facilities* if required to pursuant to Subsection 14-6.2(E)(11) and that if the *applicant* fails to do so, the *city* may remove the facilities at the *applicant's* expense and that expense, if unpaid upon demand, shall constitute a lien upon the *property* where such facilities are located. In the event that the *applicant* is not the *owner* of the facilities and *property*, the *applicant* shall provide certification to this effect by the *owner* of the facilities and the *property*.

This letter has been signed and notarized by both the Applicant and Owner.

Please let me know if you require any further documentation to satisfy this requirement.

Sincerely,

Lisa Hanson
Real Estate Specialist (480) 777-4325
Verizon Wireless

Owner:

John Malone

Applicant:

Lisa Hanson – Verizon Wireless

GRANTOR ACKNOWLEDGEMENT

State of New Mexico)
) ss.
County of Santa Fe)

On February, 2014 before me, Amanda Sena, notary public, personally appeared John Malone, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Amanda Sena (Seal)

OFFICIAL SEAL
AMANDA SENA
NOTARY PUBLIC-State of New Mexico
My Commission Expires 8/16/14

GRANTOR ACKNOWLEDGEMENT

State of Arizona)
) ss.
County of Maricopa)

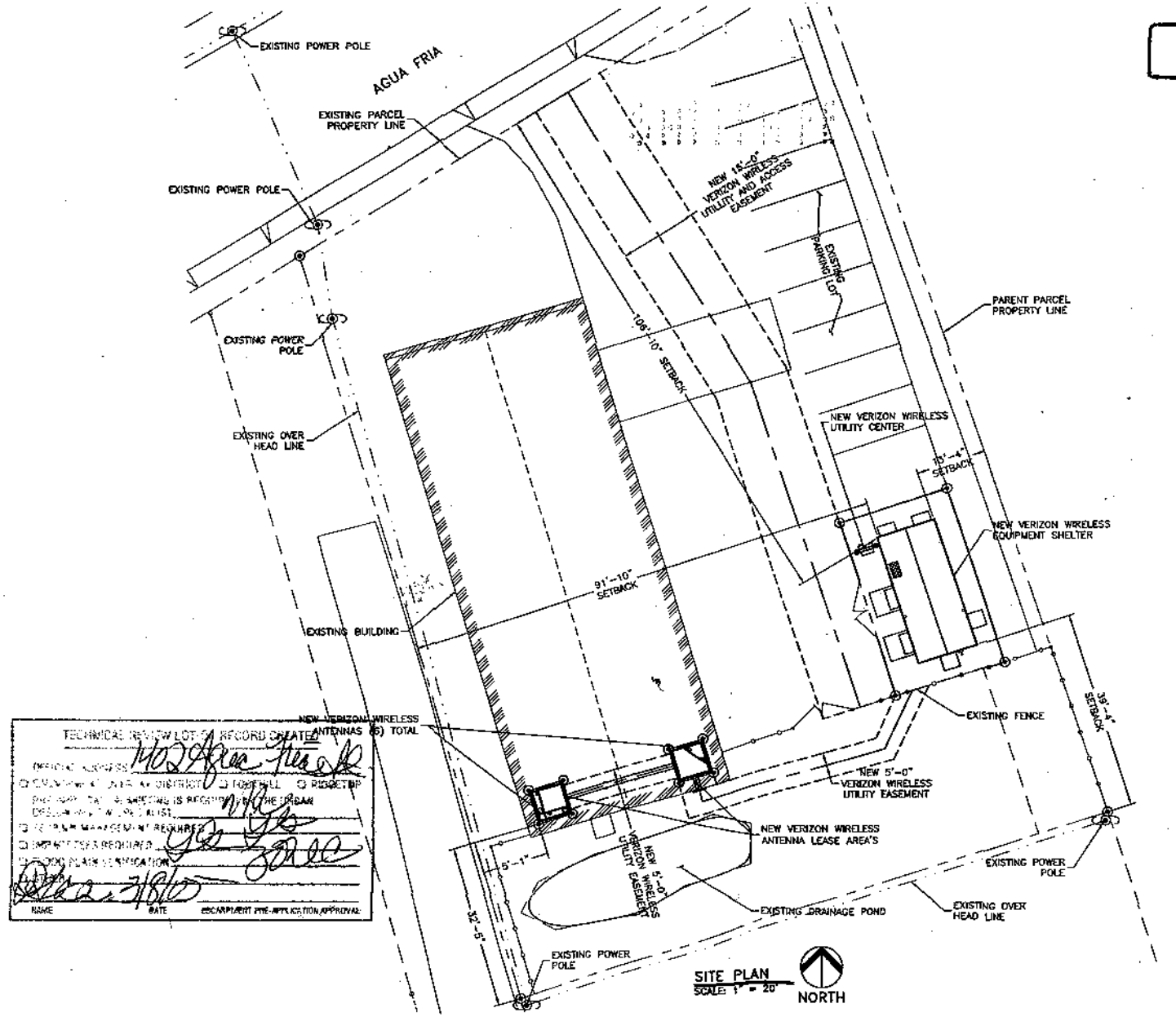
On February 20, 2014, before me, Cynthia A. Roter, notary public, personally appeared Lisa H. Hanson, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Cynthia A. Roter (Seal)

Cynthia A. Roter
Notary Public - Arizona
Maricopa County
My Commission Expires
March 31, 2016

EXHIBIT C



TECHNICAL REVIEW LOT OF RECORD CREATED

NAME DATE ENCROACHMENT PERMIT APPLICATION APPROVAL

JASON D. DICKMAN
NEW MEXICO
14848
REGISTERED PROFESSIONAL ENGINEER

APPROVED FOR CONSTRUCTION

DESIGNED FOR:
verizonwireless
4821 EUBANK NE – ALBUQUERQUE, NEW MEXICO 87111

DESIGNED BY:
TOWERCOM TECHNOLOGIES
TOWERCOM TECHNOLOGIES LLC
4520 Montgomery Blvd. NE, Suite 5 – Albuquerque, NM 87109
Tel: 505-232-4884 Fax: 505-232-4898

PROJECT NAME:
NM4-SILVA
CONCEALED ANTENNA INSTALLATION

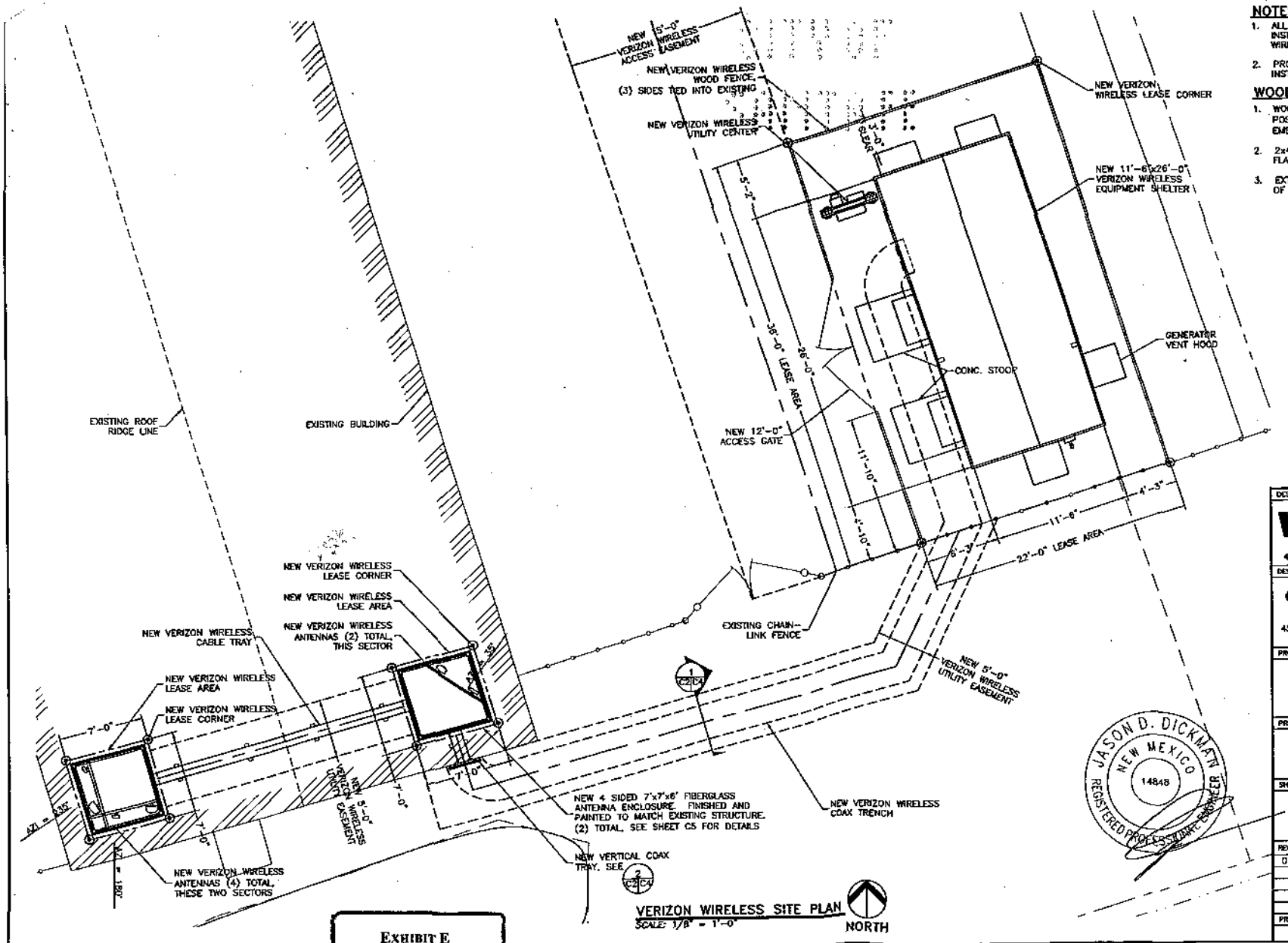
PROJECT ADDRESS:
1402 AGUA FRIA
SANTA FE NM
SANTA FE COUNTY

SHEET TITLE:
SITE PLAN

REV	DESCRIPTION	DATE	BY	CHK
0	APPROVED FOR CONSTRUCTION	3/4/05	MC	JDD

PROJECT NUMBER: 04-037-23
SHEET NUMBER: C1

* Originals are available in the clerk's office.



VERIZON WIRELESS SITE PLAN
SCALE: 1/8" = 1'-0"

NORTH

EXHIBIT E

NOTES:

1. ALL PROPOSED VERIZON WIRELESS COAX CABLE TO BE INSTALLED UNDERGROUND WITHIN PROPOSED VERIZON WIRELESS UTILITY EASEMENT.
2. PROPOSED VERIZON WIRELESS COAX CABLE TO BE INSTALLED ON SOUTHERN SIDE OF BUILDING.

WOOD FENCE NOTES:

1. WOOD FENCE TO BE CONSTRUCTED OF CEDAR 4"x4" POSTS @ 8'-0" MAX ON-CENTER. POSTS TO BE EMBEDDED IN CONCRETE 2'-6" BELOW GRADE.
2. 2x4 CEDAR RAILS TO SPAN BETWEEN POSTS, LONG FLAT LEVEL, 2 TOTAL PER BAY TO SUPPORT SLATS
3. EXTERIOR FINISH OF FENCE TO BE CONSTRUCTED OF 1x6 CEDAR SLATS ALL AROUND PERIMETER

APPROVED FOR CONSTRUCTION

JASON D. DICKMAN NEW MEXICO 14848 REGISTERED PROFESSIONAL ENGINEER

DESIGNED FOR:
verizonwireless
4821 EUBANK NE – ALBUQUERQUE, NEW MEXICO 87111

DESIGNED BY:
TowerCom TECHNOLOGIES
TowerCom Technologies LLC
4520 Montgomery Blvd. NE, Suite 5 – Albuquerque, NM 87109
Tel: 505-232-4884 Fax: 505-232-4898

PROJECT NAME:
NM4-SILVA
CONCEALED ANTENNA INSTALLATION

PROJECT ADDRESS:
1402 AGUA FRIA
SANTA FE NM
SANTA FE COUNTY

SHEET TITLE:
VERIZON WIRELESS SITE PLAN

REV	DESCRIPTION	DATE	BY	CHK
0	APPROVED FOR CONSTRUCTION	3/4/05	MC	JDD

PROJECT NUMBER: 04-037-23

SHEET NUMBER: C2

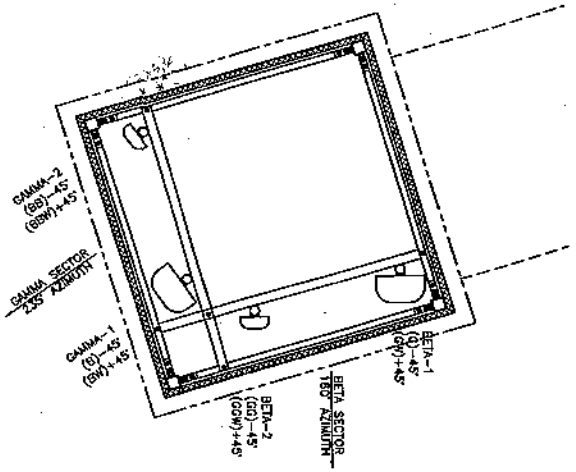
GENERAL ANTENNA NOTES:

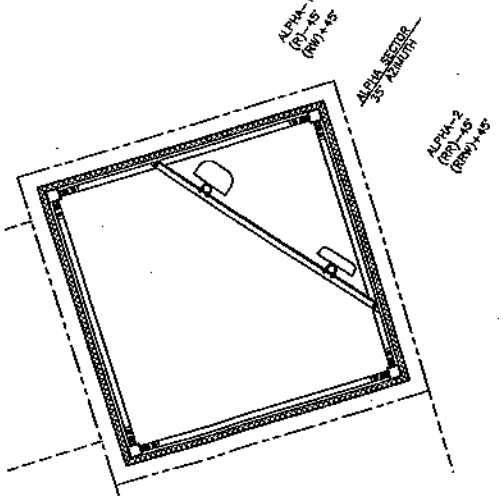
1. DUAL POLAR ANTENNAS REQUIRE TWO RUNS OF COAX PER ANTENNA.
2. LENGTHS GIVEN ON THIS CHART ARE ESTIMATED FROM AVAILABLE INFORMATION.
3. TYPES AND SIZES OF THE ANTENNA CABLES ARE BASED ON THE ESTIMATED LENGTH OF THE CABLES. CONTRACTOR TO VERIFY ALL ACTUAL LENGTHS IN FIELD PRIOR TO INSTALLATION AND NOTIFY THE FIELD ENGINEER FOR VERIFICATION OF SIZES OF CABLES.
4. CONTRACTOR TO PROVIDE AS-BUILTS FOR THE LENGTH OF CABLES UPON COMPLETION OF INSTALLATION.
5. CONTRACTOR TO PROVIDE FINAL CABLE LENGTHS AND RETURN LOSSES FOR ALL CABLES.
6. ALL AZIMUTHS REFERENCE TRUE NORTH. CONSULT REQUIRED QUADRANGLE MAP FOR NECESSARY MECHANICAL DECLINATION.

ANTENNA SCHEDULE

ANTENNA AZIMUTH	CENTER OF RADIATION	NUMBER OF ANTENNAS	ANTENNA TYPE	MECHANICAL DOWN TILT	NUMBER OF COAX CABLES	COAX CABLE DIAMETER	ESTIMATED COAX CABLE LENGTH	HORIZONTAL SEPARATION
35°	22'-10"	1	DB856D90ESX	0°	2	TBD	135'	AS ALLOWED
180°	22'-10"	1	DB854D90ESX	0°	2	TBD	157'	AS ALLOWED
235°	22'-10"	1	DB854D90ESX	0°	2	TBD	157'	AS ALLOWED
35°	22'-10"	1	DB932D90E-M	0°	2	TBD	135'	AS ALLOWED
180°	22'-10"	1	92BD90T5E	0°	2	TBD	157'	AS ALLOWED
235°	22'-10"	1	92BD90T5E	0°	2	TBD	157'	AS ALLOWED

COLOR CODE	
B =	BLUE
G =	GREEN
R =	RED
W =	WHITE





ANTENNA ORIENTATION & COLOR CODE
SCALE: 1/4" = 1'-0"

NORTH

EXHIBIT F

APPROVED FOR CONSTRUCTION

JASON D. DICKMAN
NEW MEXICO
14848
REGISTERED PROFESSIONAL ENGINEER

DESIGNED FOR:
verizonwireless
4821 EUBANK NE - ALBUQUERQUE, NEW MEXICO 87111

DESIGNED BY:
TOWERCOM TECHNOLOGIES
TOWERCOM TECHNOLOGIES LLC
4520 Montgomery Blvd. NE, Suite 5 - Albuquerque, NM 87109
Tel: 505-232-4884 Fax: 505-232-4868

PROJECT NAME:
NM4-SILVA
CONCEALED ANTENNA INSTALLATION

PROJECT ADDRESS:
1402 AGUA FRIA
SANTA FE NM
SANTA FE COUNTY

SHEET TITLE:
ANTENNA INFORMATION

REV	DESCRIPTION	DATE	BY	CHK
0	APPROVED FOR CONSTRUCTION	3/4/05	MC	JDD

PROJECT NUMBER: 04-037-23

SHEET NUMBER: RF1

EXISTING LESSEE ANTENNA SCHEDULE:

ATTACH LEVEL (COR)	AZIMUTHS (DEG., TN)	ANTENNA TYPE	ANTENNA QUANTITY	MOUNT TYPE	COAX (QUANTITY) SIZE (NOMINAL)	NOTES
22'-1"	44° 189° 254°	ANTEL BXA-70080/6CF 6' PANEL ANTENNA	3	PIPE MOUNT	(6) 7/8"ø + (6) 1-5/8"ø	(3) TO REMAIN
22'-9"		ANTEL QXA-80080120E-DIN 6' PANEL ANTENNA	3			(3) TO BE REMOVED

NOTES:
1. ALL EXISTING AZIMUTHS REFERENCE TRUE NORTH.
2. ALL EXISTING AZIMUTHS REFERENCE DATA COLLECTED FROM A RECENT SITE VISIT AND DIFFERS FROM THE INFORMATION PROVIDED IN THE SMR.

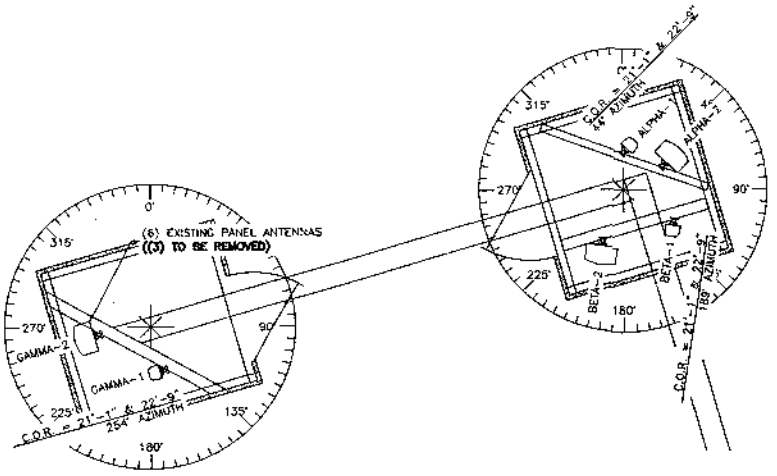
GENERAL ANTENNA NOTES:

1	CONTRACTOR TO VERIFY MECHANICAL DOWNTILT WITH FINAL SMR/RF ENGINEER.
2	DUAL POLAR ANTENNAS REQUIRE TWO RUNS OF COAX PER ANTENNA.
3	CONTRACTOR TO VERIFY ALL ACTUAL LENGTHS IN FIELD PRIOR TO INSTALLATION AND NOTIFY THE FIELD ENGINEER FOR VERIFICATION OF SIZES OF CABLES.
4	CONTRACTOR TO PROVIDE AS BUILT FOR THE LENGTH OF CABLES UPON COMPLETION OF INSTALLATION.
5	CONTRACTOR TO PROVIDE FINAL CABLE LENGTHS AND RETURN LOSSES FOR ALL CABLES.
6	ALL AZIMUTHS REFERENCE TRUE NORTH. CONSULT REQUIRED QUADRANGLE MAP FOR NECESSARY MECHANICAL DECLINATION.

NEW LESSEE ANTENNA SCHEDULE:

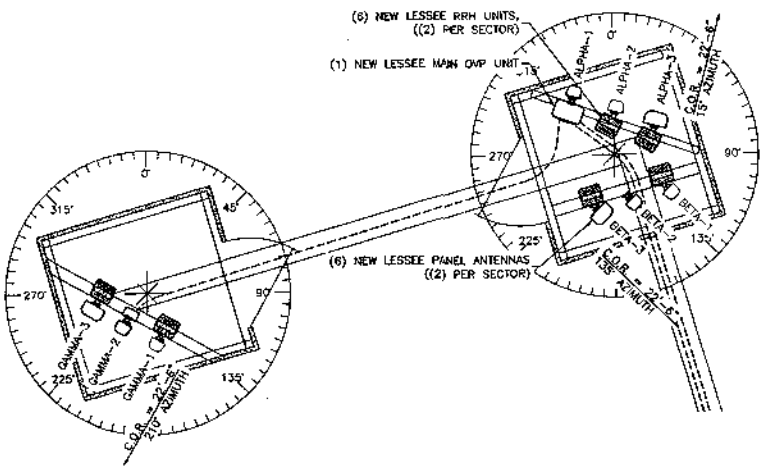
ATTACH LEVEL (COR)	AZIMUTHS (DEG., TN)	ANTENNA TYPE	ANTENNA QUANTITY	MOUNT TYPE	COAX (QUANTITY) SIZE (NOMINAL)	ESTIMATED COAX CABLE LENGTH	MECHANICAL DOWN TILT
22'-6"	15° 135° 210°	ANTLE BXA-70080-6 6' PANEL ANTENNA	3 (EXISTING)	PIPE MOUNT (EXISTING) + (3) PIPE MOUNT (NEW)	(6) 7/8"ø (EXISTING) + (6) 1-5/8"ø (EXISTING) + (6) 7/8"ø (NEW) + (1) HYBRIFLEX CABLE (NEW)	-	REFER TO SMR
		ANTLE BXA-70080-6 6' PANEL ANTENNA	**3 (NEW)**				
		ANTEL QXA-80080120-EDIN 7' PANEL ANTENNA	**3 (NEW)**				

NOTES:
1. FOR EXACT ANTENNA INFORMATION REFER TO THE RF DESIGN.
2. ALL NEW COAX SHALL BE INSTALLED ON EXISTING FEEDLINE LADDER.
3. ALL UNUSED COAX SHALL BE REMOVED.
4. CONTRACTOR TO USE EXISTING COAX FOR NEW ANTENNAS.
5. CONTRACTOR TO INSTALL DIPLEXERS IN SHELTER AND ON TOWER AS REQUIRED BY RF DESIGN. (IF APPLICABLE)



EXISTING ANTENNA SECTION @ 22'-1" & 22'-9"
SCALE: N.T.S.

NORTH



NEW ANTENNA SECTION @ 22'-6"
SCALE: N.T.S.

NORTH

APPROVED FOR CONSTRUCTION

NOTICE:
1. CONTRACTOR SHALL NOT SUBMIT BIDS OR PERFORM CONSTRUCTION WORK ON THIS PROJECT WITHOUT ACCESS TO THE CURRENT COMPLETE SET OF DRAWINGS LISTED IN THE TITLE-SHEET INDEX.

GROUNDING NOTE:
1. ALL NEW EQUIPMENT & COAX TO BE GROUNDED PER VERIZON WIRELESS GROUNDING SPECS

EXHIBIT G

DESIGNED FOR:
verizonwireless
4821 EUBANK NE
ALBUQUERQUE, NM 87111

TowerCom TECHNOLOGIES
ALBUQUERQUE, / BOISE, / EL PASO, / LAS VEGAS, / DENVER, NEW MEXICO / IDAHO / TEXAS / NEVADA / COLORADO

DESIGNED BY:

REV	DESCRIPTION	DATE	BY	CHK
A	PRELIMINARY - NOT FOR CONSTRUCTION	08/02/13	RT	-
B	APPROVED FOR CONSTRUCTION	08/20/13	RT	FDO

JASON D. DICKMAN
NEW MEXICO
14848
PROFESSIONAL ENGINEER
8/20/13

PROJECT MANAGER:

NM4 SILVA
EXISTING COMMUNICATIONS SITE
AWS INSTALLATION PROJECT

PROJECT ADDRESS:
1402 AGUA FRIA STREET
SANTA FE, NEW MEXICO 87505
SANTA FE COUNTY

SHEET TITLE:
ANTENNA INFORMATION

SAVE DATE:
8/20/2013 8:05 AM

SHEET NUMBER:
RF1

CITY OF SANTA FE, NEW MEXICO
P.O. BOX 909
SANTA FE, NEW MEXICO 87504-0909
(505) 955-6646 OR (505) 955-6645

EXHIBIT D

* * * * * * * B U I L D I N G P E R M I T * * * * * * *

Application Number . . . . . 05-00000553 Date 4/07/05
Property Address . . . . . 1402 AGUA FRIA ST
Application description . . . MISCELLANEOUS
Subdivision Name . . . . . DORIS LUNA LOT LINE
Property Zoning . . . . . GENERAL COMMERCIAL
Application valuation 15000

Owner	Contractor
MALONE, JOHN	DW TOWER
VERIZON WIRELESS (LEASED)	PO BOX 91586
4821 EUBANK NE	ALBUQUERQUE NM 87109
ALBUQUERQUE NM 87111	(505) 872-8400

------ Structure Information SHELTER TO HOUSE EQUPMNT CELL SITE "VER"-----
Construction Type . . . . . UPDATE
Occupancy Type . . . . . (OLD CODE) UPDATE
Flood Zone . . . . . UPDATE

Permit . . . . . BUILDING PERMIT COMMERCIAL
Additional desc . . .
Permit Fee . . . 162.25 Plan Check Fee . . 100.69
Issue Date . . . 4/07/05 Valuation 15000
Expiration Date . 4/07/07

Special Notes and Comments
I, THE OWNER OR AGENT FOR THE OWNER HAVE RECEIVED THE FOLLOWING REVIEW SHEETS. I UNDERSTAND I AM TO COMPLY WITH ALL CONDITIONS INDICATED ON THE REVIEW SHEETS. INITIALS _____
LAND MGMT: SEE REVIEW SHEET.
Approved based upon submitted plans.

NOTE: ALL INSPECTIONS MUST BE SCHEDULED 24 HOURS IN ADVANCE

APPROVED BY _____ DATE 4.7.05

APPLICANT _____ DATE 4.7.05

By my signature above I hereby agree to abide with all the laws of the City of Santa Fe as well as with all the conditions stated above. I further state that I understand that this is not a permit to construct anything in violation of the codes adopted by the State of New Mexico. Further, I understand that this permit may be appealed within thirty (30) days of its issuance (the "appeal period") pursuant to 14-7.4 SFCC (1987) and in the event an appeal is upheld this permit may be revoked. I hereby agree that any grading, building, alteration, repairing or any other construction done pursuant to this permit during this appeal period is done at my own risk and without reliance on the issuance of this permit. I also agree that in the event an appeal is upheld and this permit is revoked I may be required to remove any building, grading, alterating, repairing or any other construction done during the appeal period. I hereby certify that I have read the foregoing and understand the same and by my signature assent to the terms stated herein.

DISTRIBUTION: COPIES TO ORIGINATING OFFICE and APPLICANT.

BIOO8.PMD 11/98

CITY OF SANTA FE, NEW MEXICO
P.O. BOX 909
SANTA FE, NEW MEXICO 87504-0909
(505) 955-6646 OR (505) 955-6645

* * * * * * * B U I L D I N G P E R M I T * * * * * * *

Application Number . . . . . 05-00000553 Date 4/07/05

Special Notes and Comments
Conditions of Approval:
1. Provide for 50 cubic feet of surface storage (312x.16 =50). 2. Provide for dispersal of stormwater within 24 hours, as per code. 3. Provide appropriate erosion protection for the discharge and overflow from storage to result in non-erosive flows. 4. Provide appropriate erosion protection from new impervious surface to storage. 5. Maintain existing drainage pattern and conform to all other applicable terrain management code requirements 6. All disturbed areas shall be revegetated with native grasses or other drought tolerant plants or have other erosion control treatment.
FINAL GRADING AND DRAINAGE INPSECTION REQUIRED
Site is not in escarpment overlay or floodplain.
Contact Wendy Blackwell, 955-6127, with questions.
Shall comply with IFC 2003, The International Fire Code 2003 edition.

Fee summary	Charged	Paid	Credited	Due
Permit Fee Total	162.25	162.25	.00	.00
Plan Check Total	100.69	100.69	.00	.00
Grand Total	262.94	262.94	.00	.00

NOTE: ALL INSPECTIONS MUST BE SCHEDULED 24 HOURS IN ADVANCE

APPROVED BY _____ DATE 4.7.05

APPLICANT _____ DATE 4.7.05

By my signature above I hereby agree to abide with all the laws of the City of Santa Fe as well as with all the conditions stated above. I further state that I understand that this is not a permit to construct anything in violation of the codes adopted by the State of New Mexico. Further, I understand that this permit may be appealed within thirty (30) days of its issuance (the "appeal period") pursuant to 14-7.4 SFCC (1987) and in the event an appeal is upheld this permit may be revoked. I hereby agree that any grading, building, alteration, repairing or any other construction done pursuant to this permit during this appeal period is done at my own risk and without reliance on the issuance of this permit. I also agree that in the event an appeal is upheld and this permit is revoked I may be required to remove any building, grading, alterating, repairing or any other construction done during the appeal period. I hereby certify that I have read the foregoing and understand the same and by my signature assent to the terms stated herein.

DISTRIBUTION: COPIES TO ORIGINATING OFFICE and APPLICANT.

City of Santa Fe, New Mexico
Building Code Review

Date In: 3/16 Date Out: 4/1 Reviewed By: CJC Tracking No: 05-0552

Plans Forwarded To: BPC

Project Address: 1402 AGUA FRIA

Action: ~~☐ Approved~~ ☒ Conditional Approval ☐ Rejected

DESCRIPTION OF WORK ELECTRONIC EQUIPMENT SHELTER

SIZE OF BLDG. (total sq. ft.) 312 OCCUPANCY GROUP S-2

CONSTRUCTION TYPE: ☒ VN ☐ V1hr ☐ IV ☐ IIIOne hr ☐ IIN ☐ IIOne Hr ☐ IIFR ☐ IFR

PRINCIPAL TYPE OF FRAME
- ☐ Masonry (wall bearing)
- ☐ Structural Steel
- ☐ Wood Frame
- ☒ Reinforced concrete
- ☒ Other FIBERGLASS
- ☐ Is there an elevator in this building?
  - ☐ Yes ☒ No

TYPE OF HEATING FUEL
- ☐ Gas
- ☐ Electricity
- ☐ Other

NOTE: Backup Heat is Required on Solar

TYPE OF SEWAGE DISPOSAL
- ☐ Public Sewer
- ☐ Private System (septic tank, etc.)

TYPE OF WATER SUPPLY
- ☐ Public
- ☐ Private (well, cistern)

FOR RESIDENTIAL BUILDINGS ONLY

Number of bedrooms _____

Number of bathrooms _____

- ☐ Must comply with Chapter 11 of the UBC and ICC/ANSI A117.1-1998.
- ☐ Must provide wall section and/or roof framing plan.
- ☐ Fuel fired furnaces and water heaters must be in one hour enclosure.
- ☐ Provide proper fire egress.
- ☐ Penetrations in fire-rated walls shall comply with Section 709.6 through 709.8.
- ☐ Submit revised drawings.
- ☐ New Mexico Licensed Architects/Engineers stamp required.

NOTE: THIS PERMIT IS FOR THE EQUIPMENT SHELTER ONLY — THE ANTENNAS ARE NOT APPROVED @ THIS TIME - SEPARATE PERMIT IS REQ'D.

Premises shall not be occupied until a Certificate of Occupancy has been issued pursuant to Sections 101 and 109 of the Uniform Administrative Code.

NOTIFIED: _____ TIME: _____ AM / PM DATE: _____

COMMENTS: _____