

Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report

USID# 193667
Site No. CVL00431
Plymouth-Bell Road
Bell Road
Plymouth, California 95669
Plymouth County
38.529489; -120.813464 NAD83
Water Tank

EBI Project No. 6218003806
May 21, 2018



Prepared for:

AT&T Mobility, LLC
c/o Shore 2 Shore Wireless, Inc.
5550 Merrick Rd Ste 302
Massapequa, New York 11758-6238

Prepared by:



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EXECUTIVE SUMMARY

Purpose of Report

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by AT&T Mobility, LLC to conduct radio frequency electromagnetic (RF-EME) modeling for AT&T Site CVL00431 located at Bell Road in Plymouth, California to determine RF-EME exposure levels from proposed AT&T wireless communications equipment at this site. As described in greater detail in Section 2.0 of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

This report contains a detailed summary of the RF EME analysis for the site, including the following:

- Antenna Inventory
- Site Plan with antenna locations
- Antenna inventory with relevant parameters for theoretical modeling
- Graphical representation of theoretical MPE fields based on modeling
- Graphical representation of recommended signage and/or barriers

This document addresses the compliance of AT&T's transmitting facilities independently and in relation to all collocated facilities at the site.

Statement of Compliance

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.

As presented in the sections below, based on worst-case predictive modeling, there are no modeled exposures on any accessible rooftop or ground walking/working surface related to ATT's proposed antennas that exceed the FCC's occupational and/or general public exposure limits at this site.

AT&T Recommended Signage/Compliance Plan

AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014, requires that:

1. All sites must be analyzed for RF exposure compliance;
2. All sites must have that analysis documented; and
3. All sites must have any necessary signage and barriers installed.

Site compliance recommendations have been developed based upon protocols presented in AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014, additional guidance provided by AT&T, EBI's understanding of FCC and OSHA requirements, and common industry practice. Barrier locations have been identified (when required) based on guidance presented in AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014. The following signage is recommended at this site:

- Yellow CAUTION 2 sign posted at the base of the water tank climbing ladder.

The signage proposed for installation at this site complies with AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document and therefore complies with FCC and OSHA requirements. Barriers are not recommended on this site. More detailed information concerning site compliance recommendations is presented in Section 5.0 and Appendix E of this report.

1.0 SITE DESCRIPTION

This project involves the proposed installation of twelve (12) wireless telecommunication antennas on a water tank in Plymouth, California. There are three Sectors (A, B, and C) proposed at the site, with four (4) proposed antennas per sector. To be conservative, modeling was performed assuming the full build-out in case of further expansion at this site. For modeling purposes, it is assumed that there will be two one (1) LTE antenna in each sector transmitting in the 700, 1900, 850, 2100, and 2300 MHz frequency ranges. The Sector A antennas will be oriented 0° (LTE) from true north. The Sector B antennas will be oriented 240° (LTE) from true north. The Sector C antennas will be oriented 120° (LTE) from true north. The bottoms of the antennas will be 27.72 feet and 28 feet above the ground. Appendix B presents an antenna inventory for the site.

Access to this site is accomplished via a gate in the fence surrounding the water tank. Workers must be elevated to antenna level to access them, so these antennas are not accessible to the general public.

Modeling results were generated based on information from the following materials:

- RFDS – CVL00431 pRFDS v1.00.03 - 04-16-18 dated 4/16/2018
- CDs – CVL00431 100 ZD - DRM Review - 04-13-18_(RF)v2 dated 4/13/2018

2.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS

The FCC has established Maximum Permissible Exposure (MPE) limits for human exposure to Radiofrequency Electromagnetic (RF-EME) energy fields, based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general public/uncontrolled exposure limits for members of the general public.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general public/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

General public/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who 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. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Table I and Figure I (below), which are included within the FCC's OET Bulletin 65, summarize the MPE limits for RF emissions. These limits are designed to provide a substantial margin of safety. They vary by frequency to take into account the different types of equipment that may be in operation at a particular

facility and are “time-averaged” limits to reflect different durations resulting from controlled and uncontrolled exposures.

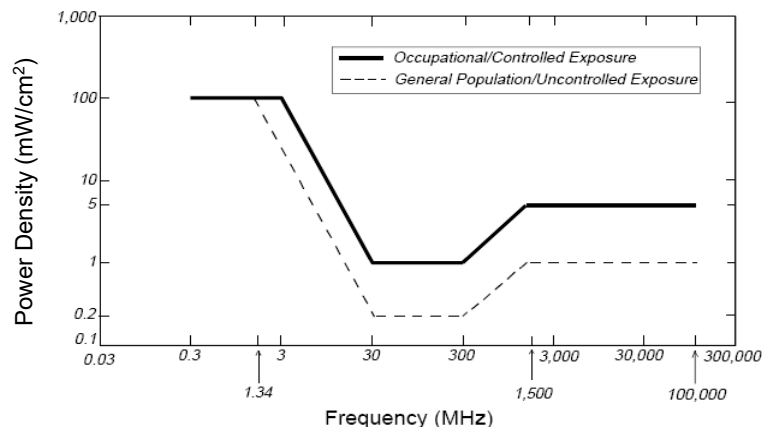
The FCC’s MPEs are measured in terms of power (mW) over a unit surface area (cm²). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm²) and an uncontrolled MPE of 1 mW/cm² for equipment operating in the 1900 MHz frequency range. For the AT&T equipment operating at 850 MHz, the FCC’s occupational MPE is 2.83 mW/cm² and an uncontrolled MPE of 0.57 mW/cm². For the AT&T equipment operating at 700 MHz, the FCC’s occupational MPE is 2.33 mW/cm² and an uncontrolled MPE of 0.47 mW/cm². These limits are considered protective of these populations.

Table 1: Limits for Maximum Permissible Exposure (MPE)				
(A) 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
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Public/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
300-1,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

f = Frequency in (MHz)

* Plane-wave equivalent power density

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)
 Plane-wave Equivalent Power Density



Based on the above, the most restrictive thresholds for exposures of unlimited duration to RF energy for several personal wireless services are summarized below:

Personal Wireless Service	Approximate Frequency	Occupational MPE	Public MPE
Personal Communication (PCS)	1,950 MHz	5.00 mW/cm ²	1.00 mW/cm ²
Cellular Telephone	870 MHz	2.90 mW/cm ²	0.58 mW/cm ²
Specialized Mobile Radio	855 MHz	2.85 mW/cm ²	0.57 mW/cm ²
Long Term Evolution (LTE)	700 MHz	2.33 mW/cm ²	0.47 mW/cm ²
Most Restrictive Freq. Range	30-300 MHz	1.00 mW/cm ²	0.20 mW/cm ²

MPE limits are designed to provide a substantial margin of safety. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

Personal Communication (PCS) facilities used by AT&T in this area operate within a frequency range of 700-1900 MHz. Facilities typically consist of: 1) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of areas directly in front of the antennas.

3.0 AT&T RF EXPOSURE POLICY REQUIREMENTS

AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014, requires that:

1. All sites must be analyzed for RF exposure compliance;
2. All sites must have that analysis documented; and
3. All sites must have any necessary signage and barriers installed.

Pursuant to this guidance, worst-case predictive modeling was performed for the site. This modeling is described below in Section 4.0. Lastly, based on the modeling and survey data, EBI has produced a Compliance Plan for this site that outlines the recommended signage and barriers. The recommended Compliance Plan for this site is described in Section 5.0.

4.0 WORST-CASE PREDICTIVE MODELING

In accordance with AT&T's RF Exposure policy, EBI performed theoretical modeling using RoofView® software to estimate the worst-case power density at the site rooftop and ground-level resulting from operation of the antennas. RoofView® is a widely-used predictive modeling program that has been developed by Richard Tell Associates to predict both near field and far field RF power density values for roof-top and tower telecommunications sites produced by vertical collinear antennas that are typically used in the cellular, PCS, paging and other communications services. The models utilize several operational specifications for different types of antennas to produce a plot of spatially-averaged power densities that can be expressed as a percentage of the applicable exposure limit.

For this report, EBI utilized antenna and power data provided by AT&T and compared the resultant worst-case MPE levels to the FCC's occupational/controlled exposure limits outlined in OET Bulletin 65. The assumptions used in the modeling are based upon information provided by AT&T and information gathered from other sources. There are no other wireless carriers with equipment installed at this site.

Based on worst-case predictive modeling, there are no modeled exposures on any accessible rooftop or ground walking/working surface related to ATT's proposed antennas that exceed the FCC's occupational and/or general public exposure limits at this site.

At the nearest walking/working surfaces to the AT&T antennas, the maximum power density generated by the AT&T antennas is approximately 22.80 percent of the FCC's general public limit (4.56 percent of the FCC's occupational limit). The composite exposure level from all carriers on this site is approximately 22.80 percent of the FCC's general public limit (4.56 percent of the FCC's occupational limit) at the nearest walking/working surface to each antenna



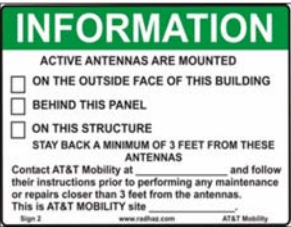





The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix C. A graphical representation of the RoofView® modeling results is presented in Appendix D. It should be noted that RoofView® is not suitable for modeling microwave dish antennas; however, these units are designed for point-to-point operations at the elevations of the installed equipment rather than ground-level coverage. Based on AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014, microwave antennas are considered compliant if they are higher than 20 feet above any accessible walking/working surface. There are no microwaves installed at this site.

5.0 RECOMMENDED SIGNAGE/COMPLIANCE PLAN

Signs are the primary means for control of access to areas where RF exposure levels may potentially exceed the MPE. As presented in the AT&T guidance document, the signs must:

- Be posted at a conspicuous point;
- Be posted at the appropriate locations;
- Be readily visible; and
- Make the reader aware of the potential risks prior to entering the affected area.

The table below presents the signs that may be used for AT&T installations.

Informational Signs		Alerting Signs	
	INFO 1		NOTICE
	INFO 2		CAUTION - ROOFTOP
	INFO 3		CAUTION - TOWER
	INFO 4		WARNING

Based upon protocols presented in AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014, and additional guidance provided by AT&T, the following signage is recommended on the site:

Recommended Signage:

- Yellow CAUTION 2 sign posted at the base of the water tank climbing ladder.

No barriers are required for this site. Barriers should be constructed of weather-resistant plastic or wood fencing. Barriers may consist of railing, rope, chain, or weather-resistant plastic if no other types are permitted or are feasible. Painted stripes should only be used as a last resort and only in regions where there is little chance of snowfall. If painted stripes are selected as barriers, it is recommended that the stripes and signage be illuminated. The signage and any barriers are graphically represented in the Signage Plan presented in Appendix E.

6.0 SUMMARY AND CONCLUSIONS

EBI has prepared this Radiofrequency Emissions Compliance Report for the proposed AT&T telecommunications equipment at the site located at Bell Road in Plymouth, California.

EBI has conducted theoretical modeling to estimate the worst-case power density from AT&T antennas to document potential MPE levels at this location and ensure that site control measures are adequate to meet FCC and OSHA requirements, as well as AT&T's corporate RF safety policies. As presented in the preceding sections, based on worst-case predictive modeling, there are no modeled exposures on any accessible rooftop or ground walking/working surface related to ATT's proposed antennas that exceed the FCC's occupational and/or general public exposure limits at this site.

Signage is recommended at the site as presented in Section 5.0 and Appendix E. Posting of the signage brings the site into compliance with FCC rules and regulations and AT&T's corporate RF safety policies.

7.0 LIMITATIONS

This report was prepared for the use of AT&T Mobility, LLC to meet requirements outlined in AT&T's corporate RF safety guidelines. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information provided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.

Appendix A

Certifications

Reviewed and Approved by:



sealed 21may2018

Michael McGuire
Electrical Engineer

Note that EBI's scope of work is limited to an evaluation of the Radio Frequency – Electromagnetic Energy (RF-EME) field generated by the antennas and broadcast equipment noted in this report. The engineering and design of the structure, as well as the impact of the antennas and broadcast equipment on the structural integrity of the structure, are specifically excluded from EBI's scope of work.

Preparer Certification

I, Rebecca Sinisgalli, state that:

- I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
- I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified “occupational” under the FCC regulations.
- I am familiar with the FCC rules and regulations as well as OSHA regulations both in general and as they apply to RF-EME exposure.
- I have been trained in on the procedures outlined in AT&T’s RF Exposure: Responsibilities, Procedures & Guidelines document (dated October 28, 2014) and on RF-EME modeling using RoofView® modeling software.
- I have reviewed the data provided by the client and incorporated it into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.

Rebecca Sinisgalli

Appendix B

Antenna Inventory

Antenna #	Operator	Antenna Type	TX Freq (MHz)	# of TX	ERP (Watts)	Gain (dBd)	Antenna Model	Azimuth (deg.)	Length (feet)	Horizontal Beamwidth (Degrees)	X	Y	Z (Ground)
ATT A1	AT&T	Panel	LTE 700	2	671.04	12.65	Kathrein 800-10965K	0	6.6	62	17	16	27.7
ATT A1	AT&T	Panel	LTE 850	2	981.05	13.45	Kathrein 800-10965K	0	6.6	60	17	16	27.7
ATT A1	AT&T	Panel	LTE 1900	4	3256.27	15.65	Kathrein 800-10965K	0	6.6	65	17	16	27.7
ATT A2	AT&T	Panel	LTE 2300	4	2131.08	15.85	Quintel QS6656-3	0	6.0	58	15	16	28.0
ATT A3	AT&T	Panel	LTE 700	4	1789.45	12.65	Kathrein 800-10965K	0	6.6	62	13	16	27.7
ATT A4	AT&T	Panel	LTE 700	2	894.73	12.65	Kathrein 800-10965K	0	6.6	62	11	16	27.7
ATT A4	AT&T	Panel	LTE 850	2	981.05	13.45	Kathrein 800-10965K	0	6.6	60	11	16	27.7
ATT A4	AT&T	Panel	LTE 2100	4	5233.73	15.95	Kathrein 800-10965K	0	6.6	62	11	16	27.7
ATT B1	AT&T	Panel	LTE 700	2	671.04	12.65	Kathrein 800-10965K	240	6.6	62	10	14	27.7
ATT B1	AT&T	Panel	LTE 850	2	981.05	13.45	Kathrein 800-10965K	240	6.6	60	10	14	27.7
ATT B1	AT&T	Panel	LTE 1900	4	3256.27	15.65	Kathrein 800-10965K	240	6.6	65	10	14	27.7
ATT B2	AT&T	Panel	LTE 2300	4	2180.72	15.95	CCI BSA-M65R-BUJH6	240	6.0	26	11	13	28.0
ATT B3	AT&T	Panel	LTE 700	4	1789.45	12.65	Kathrein 800-10965K	240	6.6	62	12	11	27.7
ATT B4	AT&T	Panel	LTE 700	2	894.73	12.65	Kathrein 800-10965K	240	6.6	62	13	9	27.7
ATT B4	AT&T	Panel	LTE 850	2	981.05	13.45	Kathrein 800-10965K	240	6.6	60	13	9	27.7
ATT B4	AT&T	Panel	LTE 2100	4	5233.73	15.95	Kathrein 800-10965K	240	6.6	62	13	9	27.7

Antenna #	Operator	Antenna Type	TX Freq (MHz)	# of TX	ERP (Watts)	Gain (dBd)	Antenna Model	Azimuth (deg.)	Length (feet)	Horizontal Beamwidth (Degrees)	X	Y	Z (Ground)
ATT C1	AT&T	Panel	LTE 700	2	671.04	12.65	Kathrein 800-10965K	120	6.6	62	15	9	27.7
ATT C1	AT&T	Panel	LTE 850	2	981.05	13.45	Kathrein 800-10965K	120	6.6	60	15	9	27.7
ATT C1	AT&T	Panel	LTE 1900	4	3256.27	15.65	Kathrein 800-10965K	120	6.6	65	15	9	27.7
ATT C2	AT&T	Panel	LTE 2300	4	2131.08	15.85	Quintel QS6656-3	120	6.0	58	16	11	28.0
ATT C3	AT&T	Panel	LTE 700	4	1789.45	12.65	Kathrein 800-10965K	120	6.6	62	18	13	27.7
ATT C4	AT&T	Panel	LTE 700	2	894.73	12.65	Kathrein 800-10965K	120	6.6	62	18	15	27.7
ATT C4	AT&T	Panel	LTE 850	2	981.05	13.45	Kathrein 800-10965K	120	6.6	60	18	15	27.7
ATT C4	AT&T	Panel	LTE 2100	4	5233.73	15.95	Kathrein 800-10965K	120	6.6	62	18	15	27.7

I. Note there are only 4 AT&T antennas per sector at this site. For clarity, the different frequencies for each antenna are entered on separate lines.

Appendix C

Roofview® Export File

StartMapDefinition

Roof Max : Roof Max : Map Max : Map Max : Y Offset X Offset Number of envelope
 120 100 150 120 20 20 1 \$AES81:\$C \$AES81:\$DZ\$200

StartSettingsData

Standard Method Uptime Scale Fact Low Thr Low Color Mid Thr Mid Color Hi Thr Hi Color Over Color Ap Ht Mult Ap Ht Method
 4 2 1 1 100 1 500 4 5000 2 3 1.5 1

StartAntennaData

It is advisable to provide an ID (ant 1) for all antennas

ID	Name	Freq (MHz)	Power	Trans Count	Coax Len	Coax Type	Other Loss	Input Power	Calc Power	Mfg	Model	(ft) X	(ft) Y	(ft) Z	Type	Aper	dBd Gain	BWdth Pt Dir	Uptime Profile	ON flag
ATT A1	LTE	700	30	2	80	7/8 LDF	1.46	36.45451	Kathrein	800-10965	17	16	10.81	6.56	12.65	62;0	ON			
ATT A1	LTE	850	40	2	80	7/8 LDF	1.46	44.32921	Kathrein	800-10965	17	16	10.81	6.56	13.45	60;0	ON			
ATT A1	LTE	1900	40	4	80	7/8 LDF	1.46	88.65842	Kathrein	800-10965	17	16	10.81	6.56	15.65	65;0	ON			
ATT A2	LTE	2300	25	4	80	7/8 LDF	1.46	55.41151	Quintel	Q56656-3	15	16	11.09	6	15.85	58;0	ON			
ATT A3	LTE	700	40	4	80	7/8 LDF	1.46	97.21202	Kathrein	800-10965	13	16	10.81	6.56	12.65	62;0	ON			
ATT A4	LTE	700	40	2	80	7/8 LDF	1.46	48.60601	Kathrein	800-10965	11	16	10.81	6.56	12.65	62;0	ON			
ATT A4	LTE	850	40	2	80	7/8 LDF	1.46	44.32921	Kathrein	800-10965	11	16	10.81	6.56	13.45	60;0	ON			
ATT A4	LTE	2100	60	4	80	7/8 LDF	1.46	132.9876	Kathrein	800-10965	11	16	10.81	6.56	15.95	62;0	ON			
ATT B1	LTE	700	30	2	80	7/8 LDF	1.46	36.45451	Kathrein	800-10965	10	14	10.81	6.56	12.65	62;240	ON			
ATT B1	LTE	850	40	2	80	7/8 LDF	1.46	44.32921	Kathrein	800-10965	10	14	10.81	6.56	13.45	60;240	ON			
ATT B1	LTE	1900	40	4	80	7/8 LDF	1.46	88.65842	Kathrein	800-10965	10	14	10.81	6.56	15.65	65;240	ON			
ATT B2	LTE	2300	25	4	80	7/8 LDF	1.46	55.41151	CCI	BSA-M65R	11	13	11.09	6	15.95	26;240	ON			
ATT B3	LTE	700	40	4	80	7/8 LDF	1.46	97.21202	Kathrein	800-10965	12	11	10.81	6.56	12.65	62;240	ON			
ATT B4	LTE	700	40	2	80	7/8 LDF	1.46	48.60601	Kathrein	800-10965	13	9	10.81	6.56	12.65	62;240	ON			
ATT B4	LTE	850	40	2	80	7/8 LDF	1.46	44.32921	Kathrein	800-10965	13	9	10.81	6.56	13.45	60;240	ON			
ATT B4	LTE	2100	60	4	80	7/8 LDF	1.46	132.9876	Kathrein	800-10965	13	9	10.81	6.56	15.95	62;240	ON			
ATT C1	LTE	700	30	2	80	7/8 LDF	1.46	36.45451	Kathrein	800-10965	15	9	10.81	6.56	12.65	62;120	ON			
ATT C1	LTE	850	40	2	80	7/8 LDF	1.46	44.32921	Kathrein	800-10965	15	9	10.81	6.56	13.45	60;120	ON			
ATT C1	LTE	1900	40	4	80	7/8 LDF	1.46	88.65842	Kathrein	800-10965	15	9	10.81	6.56	15.65	65;120	ON			
ATT C2	LTE	2300	25	4	80	7/8 LDF	1.46	55.41151	Quintel	Q56656-3	16	11	11.09	6	15.85	58;120	ON			
ATT C3	LTE	700	40	4	80	7/8 LDF	1.46	97.21202	Kathrein	800-10965	18	13	10.81	6.56	12.65	62;120	ON			
ATT C4	LTE	700	40	2	80	7/8 LDF	1.46	48.60601	Kathrein	800-10965	18	15	10.81	6.56	12.65	62;120	ON			
ATT C4	LTE	850	40	2	80	7/8 LDF	1.46	44.32921	Kathrein	800-10965	18	15	10.81	6.56	13.45	60;120	ON			
ATT C4	LTE	2100	60	4	80	7/8 LDF	1.46	132.9876	Kathrein	800-10965	18	15	10.81	6.56	15.95	62;120	ON			

StartSymbolData

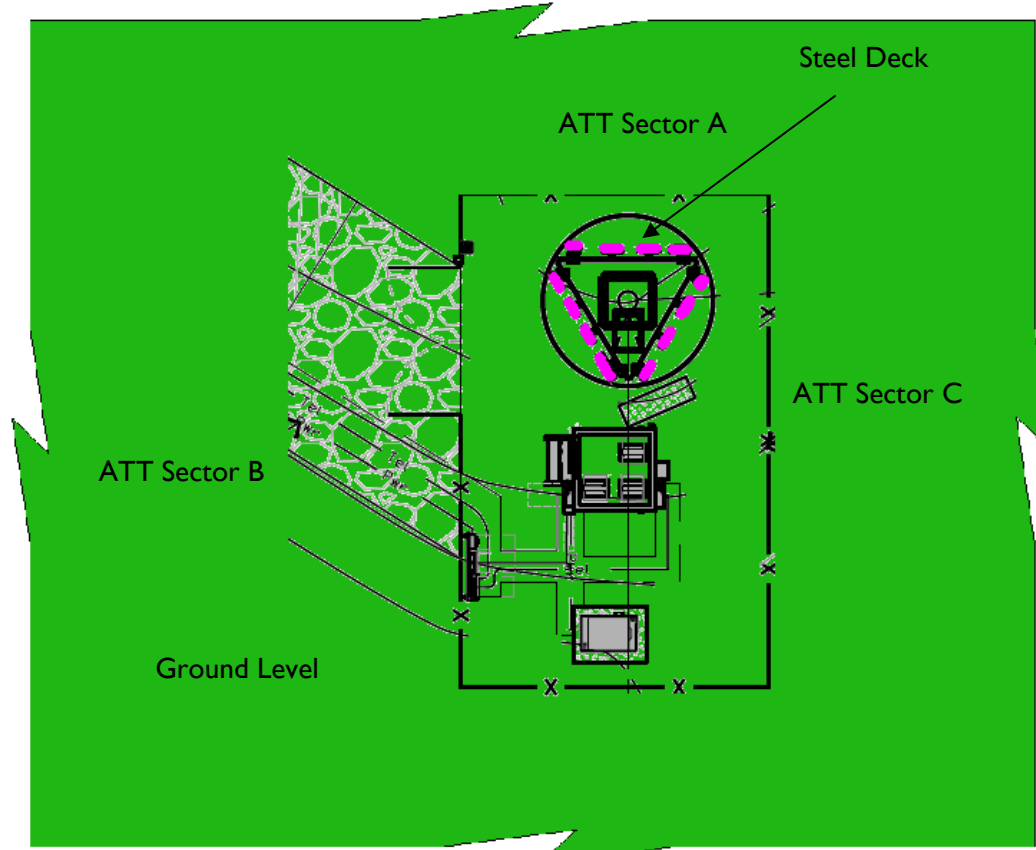
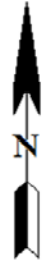
Sym	Map Mark	Roof X	Roof Y	Map Label	Description (notes for this table only)
Sym		5	35	AC Unit	Sample symbols
Sym		14	5	Roof Access	

Appendix D





Roofview® Graphics

 **AT&T Antennas**

***Ground Level Simulation**



% FCC Public Exposure Limit

-  Exposure Level $\geq 5,000$
-  $500 < \text{Exposure Level} \leq 5,000$
-  $100 < \text{Exposure Level} \leq 500$
-  Exposure Level ≤ 100

Roofview: Composite Exposure Levels

Facility Operator: AT&T Mobility

Site Name: Plymouth-Bell Road

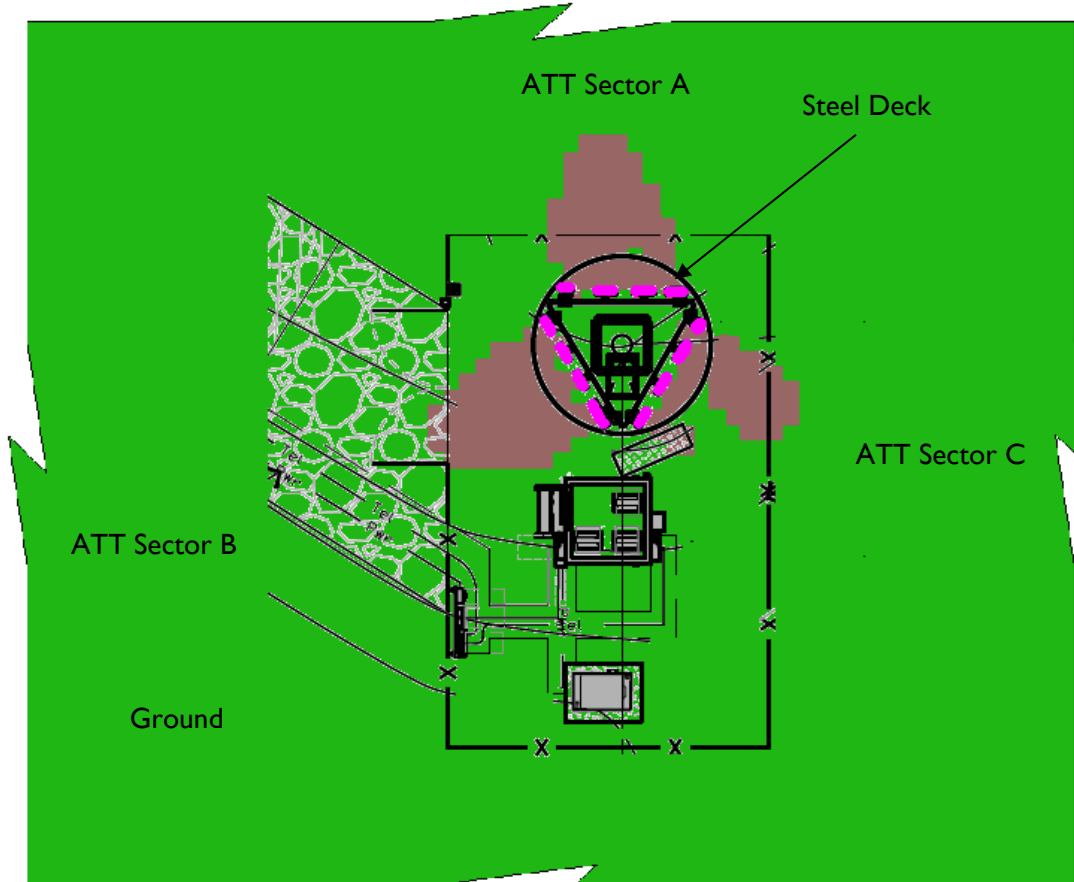
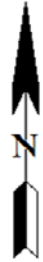
AT&T Site Number: CVL00431

USID Number: 193667



Report Date: May 21, 2018



 **AT&T Antennas**



Note that the areas shown in brown are where AT&T antennas contribute more than 5% of the FCC's general exposure RF limit. These do not overlap any areas in front of other carrier antennas exceeding the FCC's general exposure RF limit because there are no other carriers as shown in Figure I. Under FCC regulations, AT&T is therefore not responsible for any predicted exceedances of another carrier's antennas.

% FCC Public Exposure Limit	
	Exposure Level > 5
	Exposure Level ≤ 5

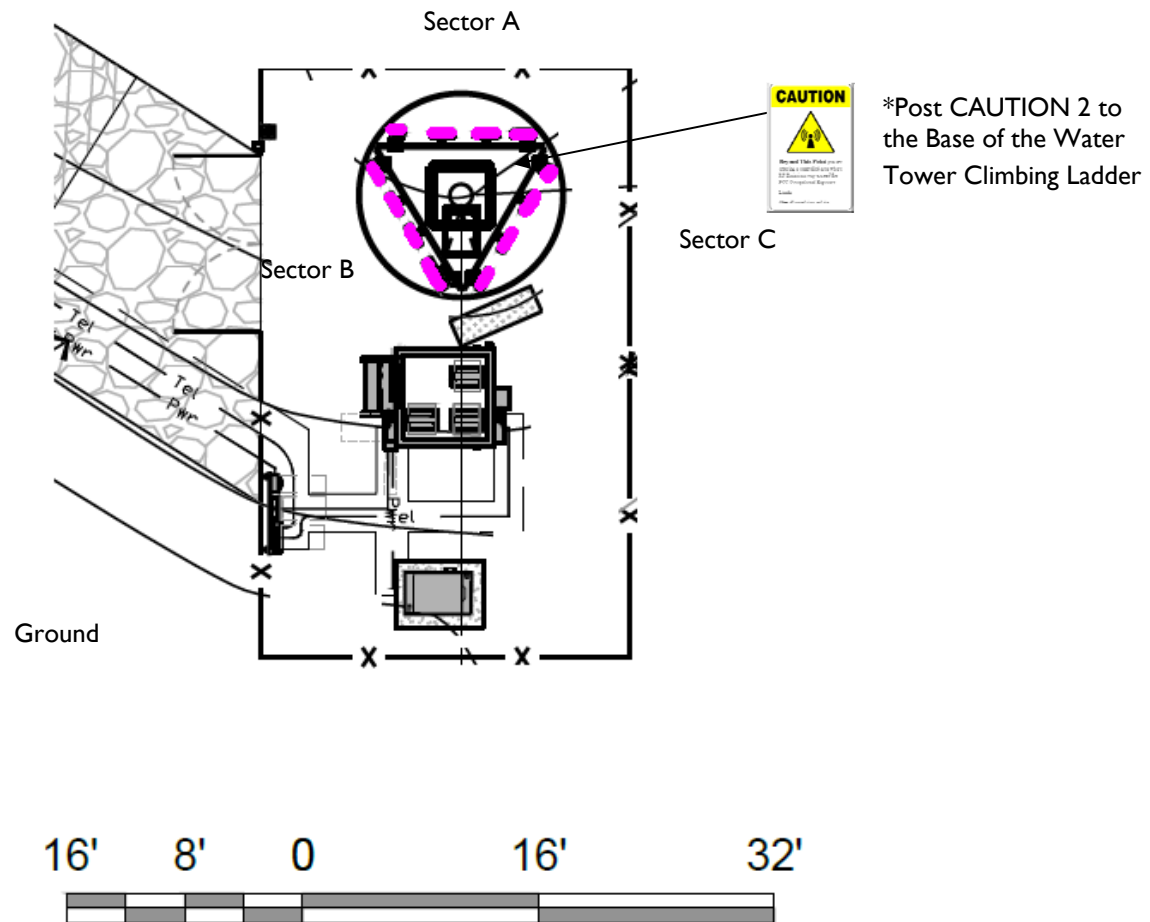
Roofview: AT&T Exposure Levels

Facility Operator: AT&T Mobility
Site Name: Plymouth-Bell Road
AT&T Site Number: CVL00431
USID Number: 193667
Report Date: May 21, 2018



Appendix E

Compliance/Signage Plan



AT&T Antennas

Sign Identification Legend			
	Denotes AT&T Information Sign 1		Denotes AT&T NOTICE Sign
	Denotes AT&T Information Sign 2		Denotes AT&T CAUTION Sign
	Denotes AT&T Information Sign 3		Denotes AT&T CAUTION Tower Sign
	Denotes AT&T Information Sign 4		Denotes AT&T WARNING Sign

Compliance/Signage Plan
Facility Operator: AT&T Mobility
Site Name: Plymouth-Bell Road
AT&T Site Number: CVL00431
USID Number: 193667
Report Date: May 21, 2018