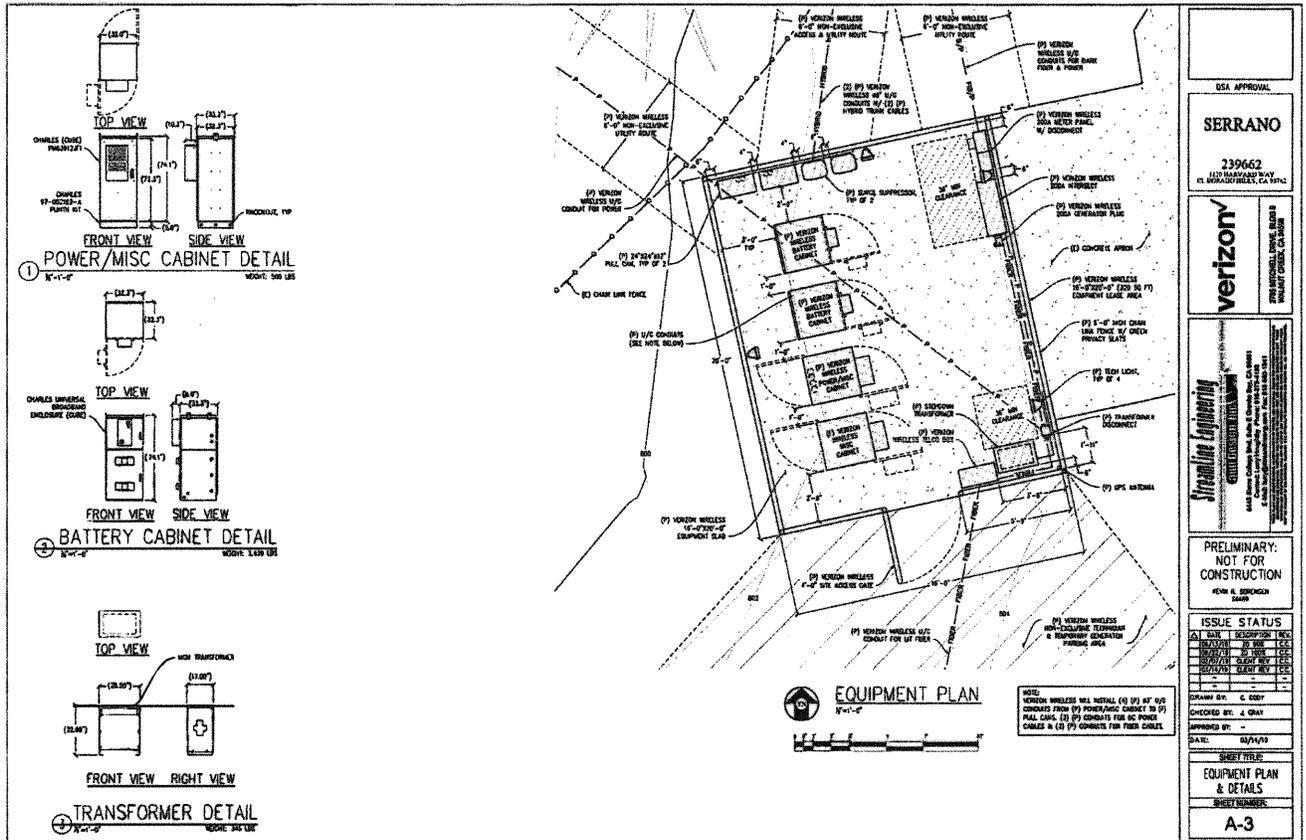
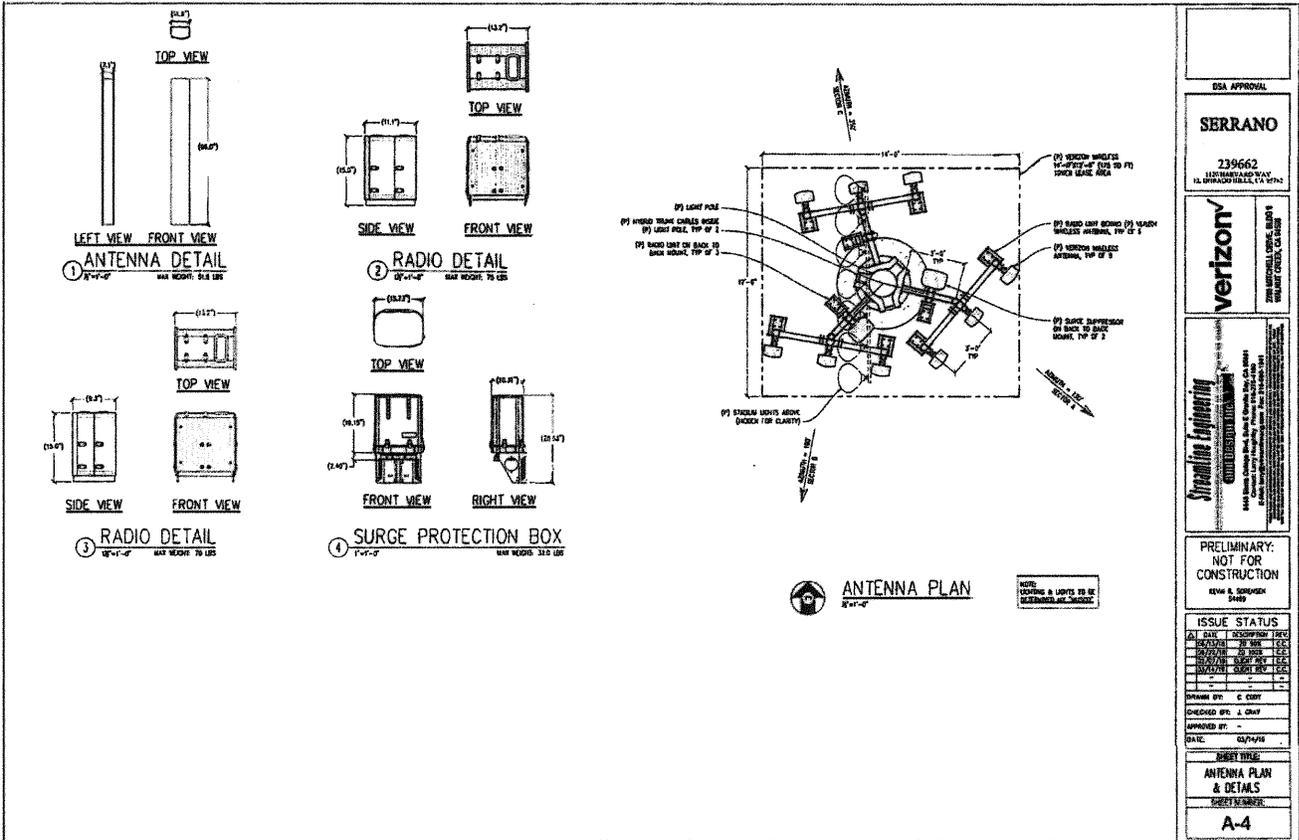


CUP20-0006 Exhibit F: Project Plans



CUP20-0006 Exhibit F: Project Plans



DSA APPROVAL

SERRANO

239662
11515 MOUNTAIN VIEW
EL MERRADO HILLS, CA 95742

verizon
VERIZON COMMUNICATIONS, INC.
300 SOUTH ZEEB RD
MOUNTAIN VIEW, CA 94039

Streamline Engineering
COMMUNICATIONS CONSULTANTS
10000 E. 15th Ave. Suite 100
Denver, CO 80232
Tel: 303.751.1111
Fax: 303.751.1112

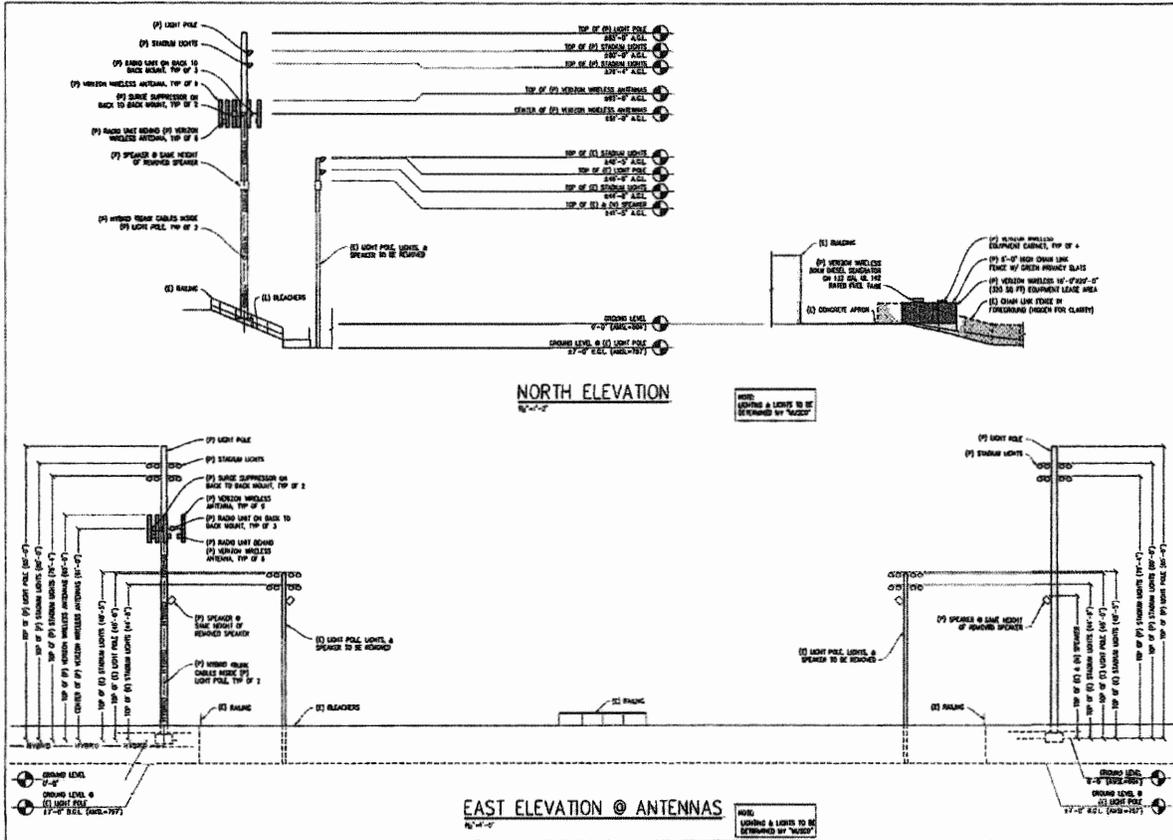
PRELIMINARY:
NOT FOR
CONSTRUCTION

KEVIN S. GORDON
DASH

ISSUE STATUS	DATE	DESCRIPTION	BY

DRAWN BY: E. COFF
 CHECKED BY: J. GARY
 APPROVED BY:
 DATE: 05/14/11
 SHEET TITLE:
ANTENNA PLAN & DETAILS
 SHEET NUMBER:
A-4

CUP20-0006 Exhibit F: Project Plans



ISSA APPROVAL

SERRANO

239662
DESIGNED BY: M. SERRANO
CHECKED BY: M. SERRANO

verizon
2015 VERIZON WIRELESS COMMUNICATIONS
2015 VERIZON WIRELESS COMMUNICATIONS

Streamline Engineering
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10000 E. HIGHWAY 100, SUITE 100
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TEL: 303.751.1111
WWW.STREAMLINEENGINEERING.COM

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REVA R. SERRANO
DATE:

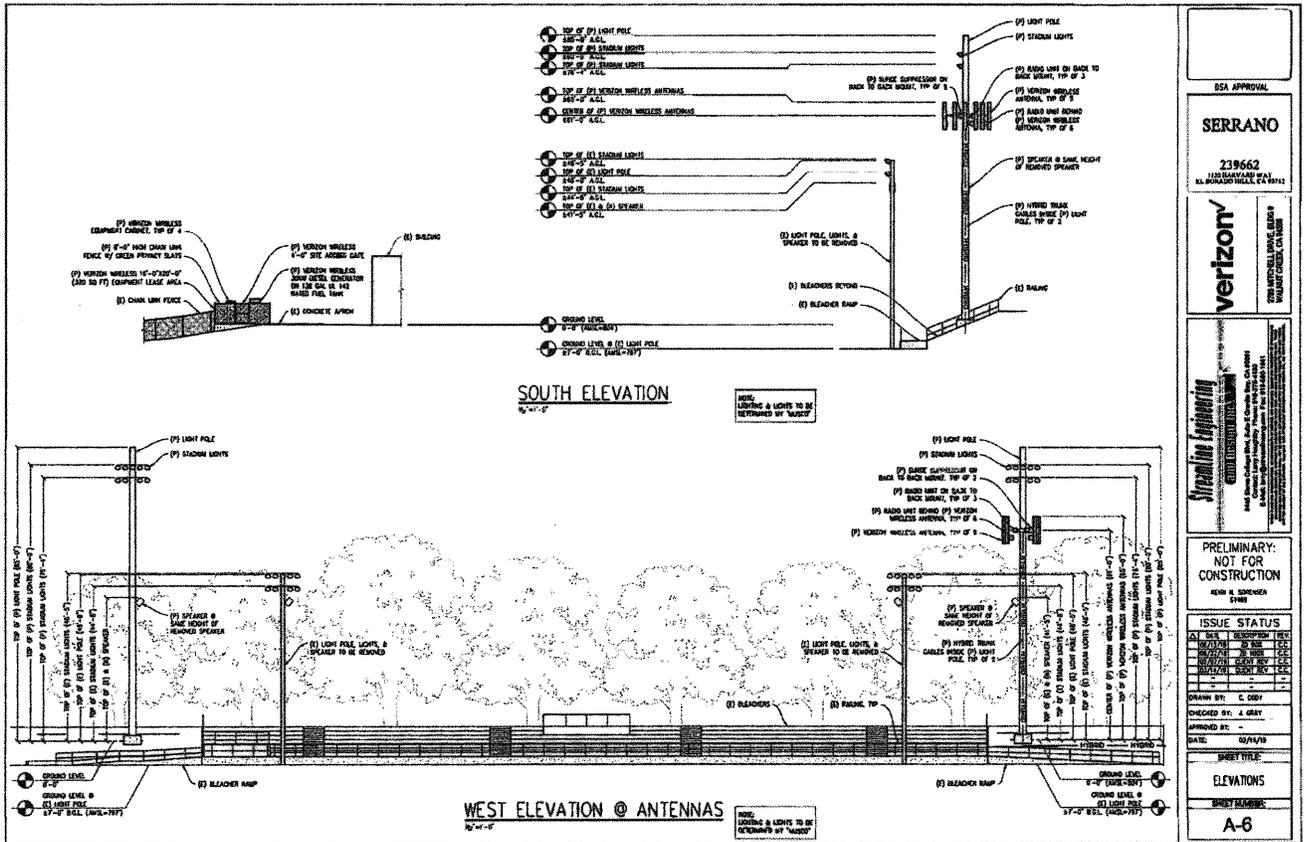
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NO.	DATE	DESCRIPTION	BY
1	08/11/15	ISSUED FOR PERMIT	MS
2	08/11/15	ISSUED FOR PERMIT	MS
3	08/11/15	ISSUED FOR PERMIT	MS
4	08/11/15	ISSUED FOR PERMIT	MS
5	08/11/15	ISSUED FOR PERMIT	MS
6	08/11/15	ISSUED FOR PERMIT	MS
7	08/11/15	ISSUED FOR PERMIT	MS
8	08/11/15	ISSUED FOR PERMIT	MS
9	08/11/15	ISSUED FOR PERMIT	MS
10	08/11/15	ISSUED FOR PERMIT	MS

DESIGNED BY: C. COFF
CHECKED BY: J. GARY
DRAWN BY: SERRANO
DATE: 8/11/15

SHEET TITLE: ELEVATIONS
SHEET NUMBER: A-5

CUP20-0006 Exhibit F: Project Plans



SEA APPROVAL

SERRANO

238662
ALHAMBRA, CA 91801

verizon

COMMERCIAL WIRELESS
INSTALLATION CONTRACT

Streamline Engineering
CONSULTING ENGINEERS

1000 S. GARDEN ST. SUITE 100
GARDEN CITY, CA 94014
TEL: (415) 554-1100
WWW.STREAMLINE-ENG.COM

PRELIMINARY:
NOT FOR
CONSTRUCTION

SEAN H. SERRANO
5/18/10

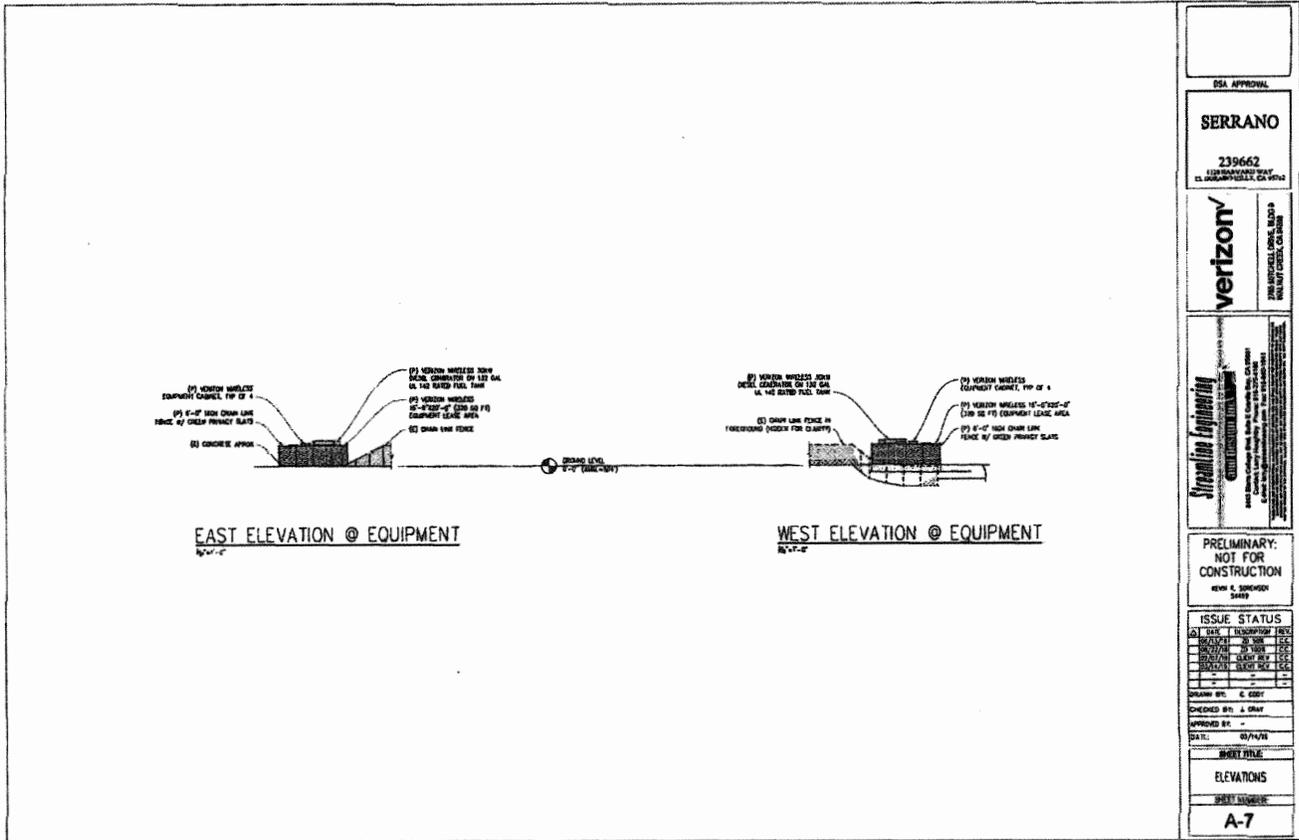
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02	FOR THE CITY	05/27/10
03	FOR THE CITY	06/10/10
04	FOR THE CITY	06/10/10
05	FOR THE CITY	06/10/10

DRAWN BY: C. DEBY
CHECKED BY: J. GRAY
APPROVED BY: SERRANO
DATE: 5/18/10

SHEET TITLE:
ELEVATIONS
SHEET NUMBER:
A-6

CUP20-0006 Exhibit F: Project Plans



DSA APPROVAL

SERRANO

239662

REGISTERED PROFESSIONAL ENGINEER
CALIFORNIA LICENSE NO. 50123

verizon

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Streamline Engineering

1000 BAYVIEW DRIVE, SUITE 200
DUBLIN, CALIFORNIA 94568
TEL: 925-835-1111
WWW.STREAMLINE-ENG.COM

PRELIMINARY:
NOT FOR
CONSTRUCTION

REVISED BY: SERRANO
DATE:

NO.	DATE	DESCRIPTION	BY	CHKD.
1	03/14/11	ISSUE FOR PERMIT	SERRANO	---
2	03/14/11	ISSUE FOR PERMIT	SERRANO	---
3	03/14/11	ISSUE FOR PERMIT	SERRANO	---
4	03/14/11	ISSUE FOR PERMIT	SERRANO	---
5	03/14/11	ISSUE FOR PERMIT	SERRANO	---

ISSUE STATUS

DATE: 03/14/11

DRAWN BY: SERRANO

CHECKED BY: SERRANO

APPROVED BY: SERRANO

ELEVATIONS

DRAWING NUMBER: **A-7**

CUP20-0006 Exhibit F: Project Plans

Alternative Site Analysis

Verizon Wireless Telecommunications Facility "Serrano"
1120 Harvard Way
El Dorado Hills, CA 95762
121-190-022

Summary of Site Evaluations and Technical Evidence Conducted by Epic
Wireless Group, LLC.



**APPROVED
EL DORADO COUNTY**

*Board of Supervisors
July 20, 2021*

Tiffany Schmid/GAS
EXECUTIVE SECRETARY

I. Executive Summary

In 2017 Epic Wireless Group was contracted to identify a wireless site location and design to serve a significant gap in wireless coverage identified by Verizon Wireless in a heavily residential area of El Dorado Hills, California centered around Silva Valley Pkwy and Harvard Way. After conducting a thorough research and evaluation of existing buildings and structures in the area that would accommodate a collocation, Verizon Wireless, determined that collocating on the existing light standards would adequately meet the coverage and capacity goals. Epic Wireless investigated a total of five (5) potential sites and concluded that the presently proposed light standard collocation located at the Oak Ridge HS Football field would be the least intrusive site as there are already multiple carriers located on light standards on the field. The other four (4) alternative site locations were investigated by Epic Wireless and/or Verizon's Radiofrequency Engineer and determined not to be viable for the reasons described below.

II. Coverage Objective

Area resident requests, customer complaints, and Verizon Wireless RF Engineers have confirmed a significant wireless gap in this area of El Dorado Hills, CA from east of Silva Valley Pkwy to El Dorado Hills Blvd and north of Harvard Way and down over half a mile south of Serrano Pkwy. The coverage maps indicate a lack in coverage denoted as yellow and grey coloring. This area of El Dorado Hills consists mostly of residential parcels. It is Verizon Wireless's goal to provide exceptional coverage to all of its current and future customers by filling existing significant gaps in coverage as identified in this section of El Dorado Hills. The number of residents, business owners, schools and travelers that would benefit from this proposal each day are numbered in the thousands.

III. Methodology

In identifying the least intrusive site location and design, Verizon Wireless looks to the local municipal code, ordinances, and general plans to identify the values significant to the local community for placement of wireless facilities. In addition, each proposed site must meet minimum requirements of a site located within the designated search area, a willing landlord, feasible construction, road access, available telephone and electrical utilities as well as compliance with local zoning requirements. In completing its Alternative Site Analysis, Epic Wireless first looked to El Dorado County's wireless use regulations in Section 130.40.130 which establishes standards for the placement of antennae. The subject property is located within El Dorado County's planning jurisdiction. This parcel is zoned Single Family Residential (R1), new wireless facilities are an allowed use in this zoning district with Commission approval of a Conditional Use Permit. Epic Wireless evaluated site locations per the below siting preferences as stated in §130.40.130. D:

1. **Screening.** All facilities shall be screened with vegetation or landscaping. Where screening with vegetation is not feasible, the facilities shall be disguised to blend with the surrounding area. The facility shall be painted or constructed with stealth technology to blend with the prevalent architecture, natural features, or vegetation of the site.
2. **Setbacks.** Compliance with the applicable zone setbacks is required. Setback waivers shall be considered to allow flexibility in siting the facility in a location that best reduces the visual impact on the surrounding area and roads, subject to Zoning Administrator approval of a Minor Use Permit in compliance with Section 130.52.020 (Minor Use Permits) in Article 5 (Planning Permit Processing) of this Title.
3. **Maintenance.** All improvements associated with the communication facility, such as equipment shelters, towers, antennas, fencing, and landscaping shall be properly maintained at all times. Design, color, and textural requirements under the approved conditions shall be maintained to ensure a consistent appearance over time.

Epic Wireless first looks for viable existing telecommunications towers offering collocation opportunities within the designated search area, including PG&E transmission towers, water tanks, and tall building rooftops and stadium lighting, within the designated search area. Below is a list of alternative sites evaluated and the reasons they did not work.

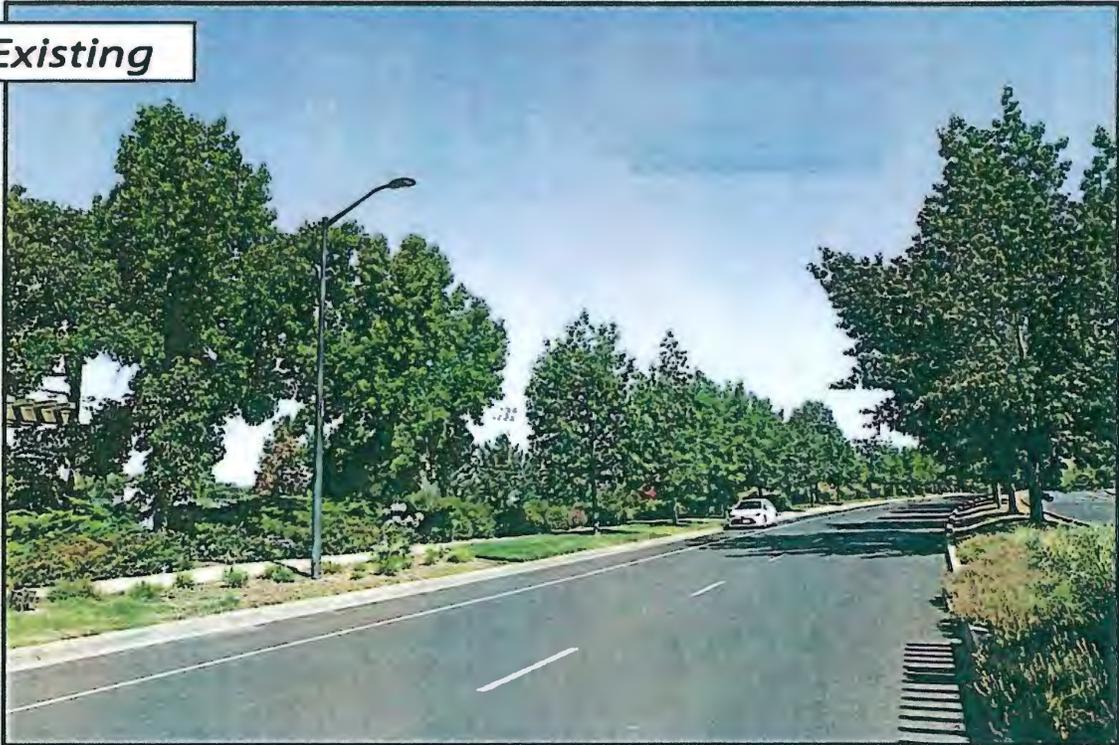


1. Existing EID water tanks on the hills at the edge of the Serrano neighborhood just east of Oak Ridge HS. Access needed to be gained through another parcel owned by the Serrano Association. The negotiations ultimately fell through and Verizon was forced to look elsewhere
2. A PGE tower is located on the edge of the Serrano Community at 5108 Breese Circle. The site did not meet the RF coverage objective.
3. Serrano Golf Course was presented to Verizon, but it did not meet the RF objective of covering Silva Valley Pkwy.
4. A property owned by the Sahtout's was ranked highly by the Verizon RF Engineer, but the property owners never responded with interest.

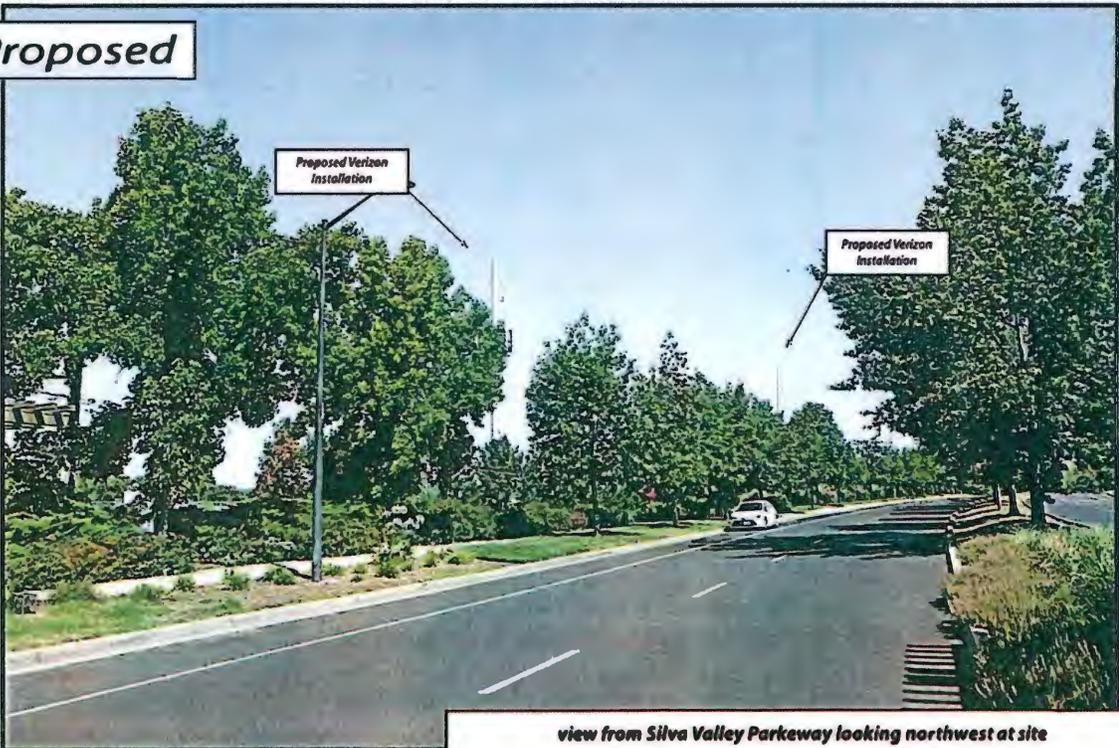
IV. Conclusion

The identified site location and design of the proposed facility represents a thorough and responsible investigation of alternative site locations. Verizon Wireless, with the help of Epic Wireless and Verizon Wireless RF Engineers, has determined the proposed site to be the least intrusive means to service the identified significant gap in coverage. This facility is believed to have the least impacts to the community while meeting the networks coverage needs.

Existing



Proposed

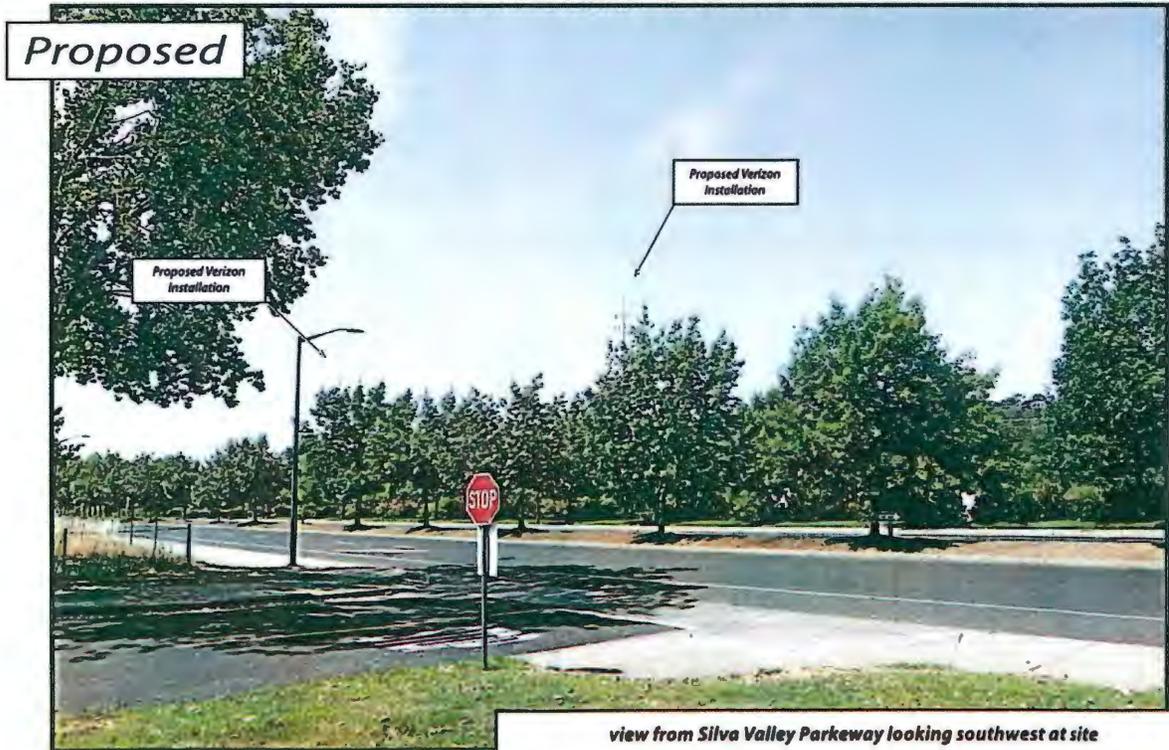


view from Silva Valley Parkway looking northwest at site

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

verizon

239662 Serrano
1120 Harvard Way, El Dorado Hills, CA
Photograph rendered on 8-17-20



view from Silva Valley Parkway looking southwest at site

239662 Serrano
1120 Harvard Way, El Dorado Hills, CA
Photosims Produced on 8-6-2019

Advance Sims
 a subsidiary of Sims
 contact (925) 202-8507



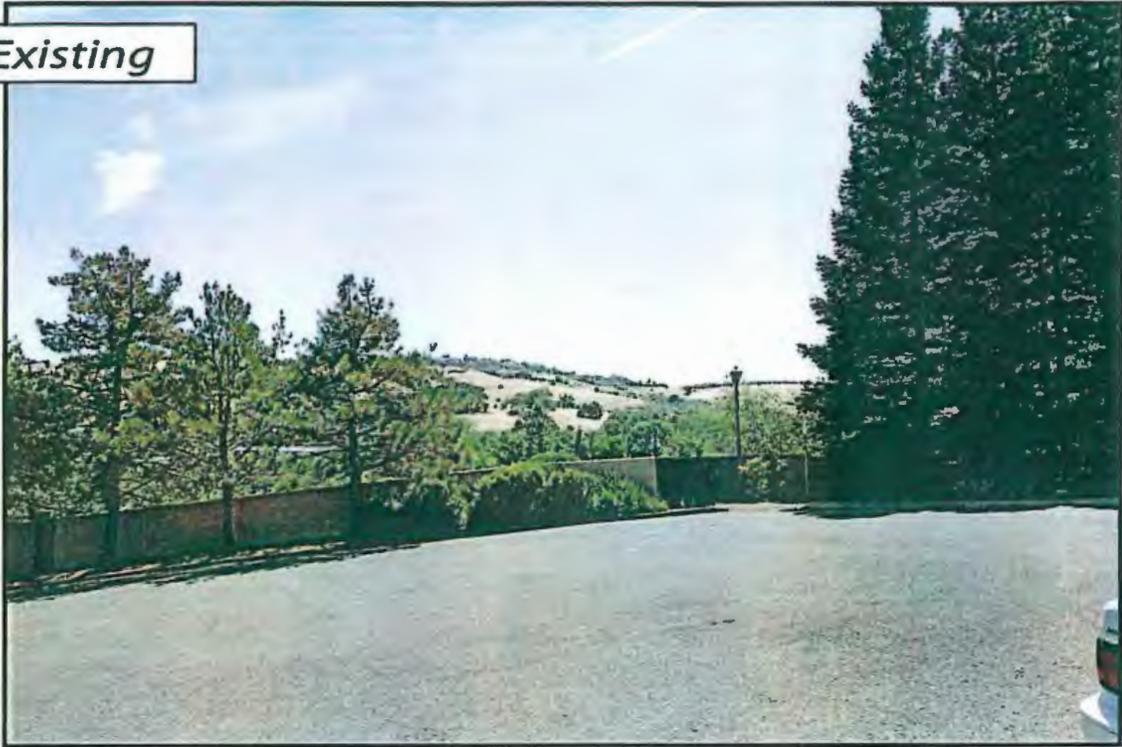
view from Harvard Way looking south at site

AdvanceSim
 Photo Simulation Solutions
 Contact (925) 202-8507

verizon✓

239662 Serrano
 1120 Harvard Way, El Dorado Hills, CA
 Photosims Produced on 8-6-2019

Existing



Proposed



view from Tah Nee Way looking southeast at site

AdvanceSim
Photo Simulation Solutions
Contact | 925 | 202 4507

verizon✓

239662 Serrano
1120 Harvard Way, El Dorado Hills, CA
Photosims Produced on 8-6-2019

verizon

239662 Semano
1120 Harvard Way, El Dorado Hills, CA
Photosims Produced on 8-6-2019



AdvanceSim
Photo Simulator Solutions
Contact (925) 202-8502

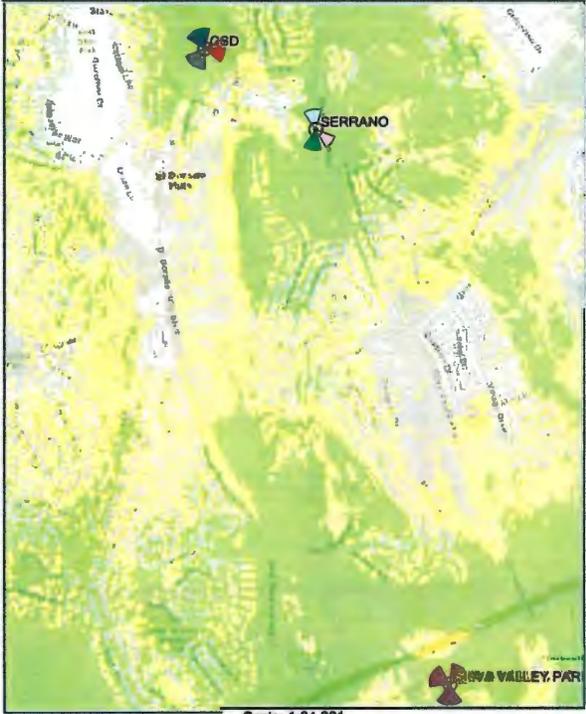
Shot Point Map

CUP20-0006 Exhibit G: Alternative Site Analysis

SERRANO COVERAGE MAPS



After Coverage

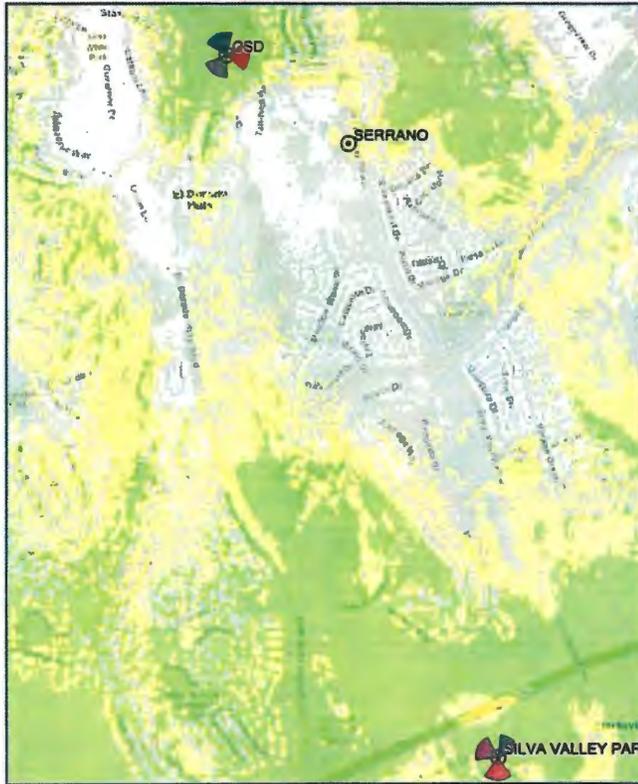


LTE: AWS: RSRP - After Coverage
Best Signal Level (dBm) >=-85
Best Signal Level (dBm) >=-95
Best Signal Level (dBm) >=-105

SERRANO COVERAGE MAPS



Before Coverage



- LTE: AWS: RSRP - Existing Coverage
- Best Signal Level (dBm) ≥ -85
 - Best Signal Level (dBm) ≥ -95
 - Best Signal Level (dBm) ≥ -105

SERRANO COVERAGE MAPS

verizon

Site Coverage





YOUR RF SAFETY PARTNER

RADIO FREQUENCY ELECTROMAGNETIC FIELDS EXPOSURE REPORT

Prepared for Verizon

c/o Epic Wireless Group LLC

Site Name: Serrano
Site Type: Ball-field Light

Located at:

**1120 Harvard Way
El Dorado Hills, CA 95762
Latitude: 38.6790 / Longitude: -121.0686**

**APPROVED
EL DORADO COUNTY**

Board of Supervisors
DATE: *July 20, 2021*
BY: *Tiffany Schmid/gos*
EXECUTIVE SECRETARY

Report Date: 2/5/2019
Report By: Christopher Stollar, P.E.

Based on FCC Rules and Regulations, Verizon will be compliant provided recommendation(s) are implemented.

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1.0 EXECUTIVE SUMMARY

Dtech Communications, LLC ("Dtech") has been retained by Epic Wireless Group LLC., contractors to Verizon, to determine whether its wireless communications facility complies with the Federal Communications Commission ("FCC") Radio Frequency ("RF") Safety Guidelines. This report contains a computer-simulated with an on-site visit analysis of the Electromagnetic Fields ("EMF") exposure resulting from the facility. The analysis also includes assessment of existing wireless carriers on site, where information is provided. The table below summarizes the results at a glance:

Table 1: EMF Summary

Verizon	Summary
Access Type	Man-Lift/Ladder
Access to antennas locked	NA
RF Sign(s) @ access point(s)	Caution (Recommended)
RF Sign(s) @ antennas	None
Barrier(s) @ sectors	NA
Max EMF level for Verizon on Ground	1.0% General Population
Max cumulative EMF level for facility on Ground	1.0% General Population
Min Clearance Distance from Face of Verizon's Antennas	52 Feet

2.2 Site Photographs



Verizon Proposed Location



Verizon Proposed Location



Verizon Proposed Location



Verizon Proposed Location



T-Mobile All Sectors



Sprint All Sectors

2.3 Antenna Inventory

Technical specifications in the table below are provided by our clients and/or gathered from physical field surveys where applicable and/or possible. Conservative estimates are used where information is not provided or available.

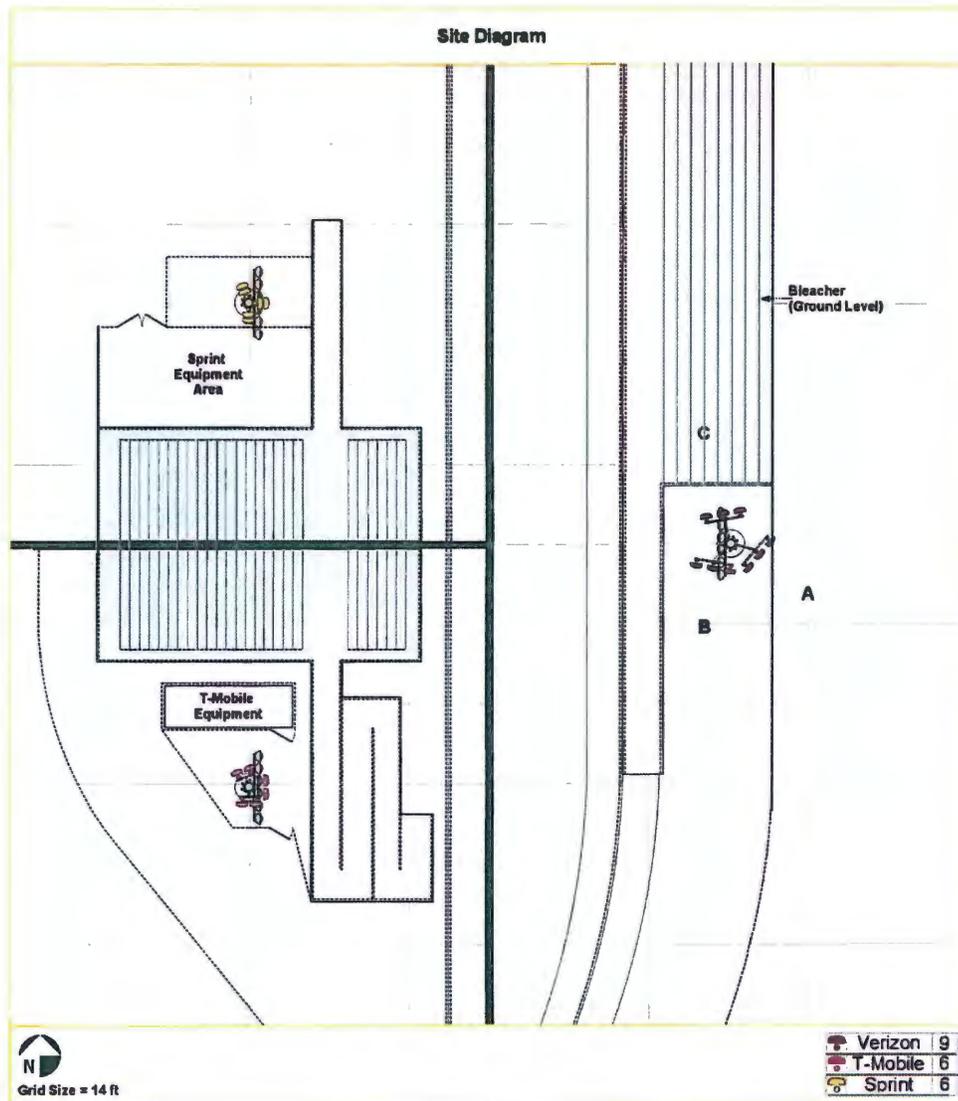
Table 2: Site Technical Specifications

Antenna ID	Operator	Antenna Mtg	Antenna Model	Type	Frequency (MHz)	Orientation (°T)	Horizontal BWidth (°)	Antenna Aperture (ft)	Antenna Gain (dBd)	Total Input Power (Watts)	Total ERP (Watts)	Bottom Tip Height Above Ground (Z) (ft)	Bottom Tip Height Ant Level (Z) (ft)
A1	Verizon	Commscope	NHH-45C-R2B	Panel	746	130	48	8.0	15.4	142	4932	57.0	0.0
A1	Verizon	Commscope	NHH-45C-R2B	Panel	880	130	43	8.0	16.2	142	5902	57.0	0.0
A1	Verizon	Commscope	NHH-45C-R2B	Panel	2120	130	42	8.0	17.7	283	16756	57.0	0.0
A2	Verizon	Commscope	NHH-45C-R2B	Panel	746	130	48	8.0	15.4	142	4932	57.0	0.0
A2	Verizon	Commscope	NHH-45C-R2B	Panel	880	130	43	8.0	16.2	142	5902	57.0	0.0
A2	Verizon	Commscope	NHH-45C-R2B	Panel	1965	130	38	8.0	17.4	283	15459	57.0	0.0
A3	Verizon	Commscope	NHH-45C-R2B	Panel	2120	130	42	8.0	17.7	283	16756	57.0	0.0
B1	Verizon	Commscope	NHH-45C-R2B	Panel	746	190	48	8.0	15.4	142	4932	57.0	0.0
B1	Verizon	Commscope	NHH-45C-R2B	Panel	880	190	43	8.0	16.2	142	5902	57.0	0.0
B1	Verizon	Commscope	NHH-45C-R2B	Panel	2120	190	42	8.0	17.7	283	16756	57.0	0.0
B2	Verizon	Commscope	NHH-45C-R2B	Panel	746	190	48	8.0	15.4	142	4932	57.0	0.0
B2	Verizon	Commscope	NHH-45C-R2B	Panel	880	190	43	8.0	16.2	142	5902	57.0	0.0
B2	Verizon	Commscope	NHH-45C-R2B	Panel	1965	190	38	8.0	17.4	283	15459	57.0	0.0
B3	Verizon	Commscope	NHH-45C-R2B	Panel	2120	190	42	8.0	17.7	283	16756	57.0	0.0
C1	Verizon	Commscope	NHH-45C-R2B	Panel	746	350	48	8.0	15.4	142	4932	57.0	0.0
C1	Verizon	Commscope	NHH-45C-R2B	Panel	880	350	43	8.0	16.2	142	5902	57.0	0.0
C1	Verizon	Commscope	NHH-45C-R2B	Panel	2120	350	42	8.0	17.7	283	16756	57.0	0.0
C2	Verizon	Commscope	NHH-45C-R2B	Panel	746	350	48	8.0	15.4	142	4932	57.0	0.0
C2	Verizon	Commscope	NHH-45C-R2B	Panel	880	350	43	8.0	16.2	142	5902	57.0	0.0
C2	Verizon	Commscope	NHH-45C-R2B	Panel	1965	350	38	8.0	17.4	283	15459	57.0	0.0
C3	Verizon	Commscope	NHH-45C-R2B	Panel	2120	350	42	8.0	17.7	283	16756	57.0	0.0
A1	T-Mobile	Ericsson	AIR 21	Panel	1900	90	62	4.5	15.5	-	2083	44.7	NA
A1	T-Mobile	Ericsson	AIR 21	Panel	2100	90	61	4.5	15.7	-	1936	44.7	NA
A2	T-Mobile	Commscope	LNK-6514DS-VTM	Panel	700	90	65	6.1	13.8	-	1702	44.0	NA
B1	T-Mobile	Ericsson	AIR 21	Panel	1900	180	62	4.5	15.5	-	2083	44.7	NA
B1	T-Mobile	Ericsson	AIR 21	Panel	2100	180	61	4.5	15.7	-	1936	44.7	NA
B2	T-Mobile	Commscope	LNK-6514DS-VTM	Panel	700	180	65	6.1	13.8	-	1702	44.0	NA
C1	T-Mobile	Ericsson	AIR 21	Panel	1900	340	62	4.5	15.5	-	2083	44.7	NA
C1	T-Mobile	Ericsson	AIR 21	Panel	2100	340	61	4.5	15.7	-	1936	44.7	NA
C2	T-Mobile	Commscope	LNK-6514DS-VTM	Panel	700	340	65	6.1	13.8	-	1702	44.0	NA
A1	Sprint	Unknown	Unknown	Panel	1900	90	66	6.0	15.8	-	1500	44.0	NA
A2	Sprint	Unknown	Unknown	Panel	2500	90	60	6.0	14.5	-	1500	36.0	NA
B1	Sprint	Unknown	Unknown	Panel	1900	180	66	6.0	15.8	-	1500	44.0	NA
B2	Sprint	Unknown	Unknown	Panel	2500	180	60	6.0	14.5	-	1500	36.0	NA
C1	Sprint	Unknown	Unknown	Panel	1900	340	66	6.0	15.8	-	1500	44.0	NA
C2	Sprint	Unknown	Unknown	Panel	2500	340	60	6.0	14.5	-	1500	36.0	NA

3.0 ANALYSIS

3.1 Site Diagram

Figure 1: Site Diagram - Plan (bird's eye view)



3.2 Emission Predictions

Figure 2: Plan (bird's eye) view map of results compared to FCC's General Population MPE (Maximum Permissible Exposure) Limits. Gray represents areas where exposure levels are calculated to be at or below 5%; Green- between 5% & 100% (below MPE limits); blue, yellow & red – greater than 100% (exceeds MPE limits). Individuals can safely occupy areas in gray and green for indefinite amount of time; whereas areas in blue, yellow & red must be restricted to RF trained personnel who has been made fully aware of potential for exposure, has control and knows how to reduce their exposure with the use of personal protection equipment or has the ability to power down the transmitters.

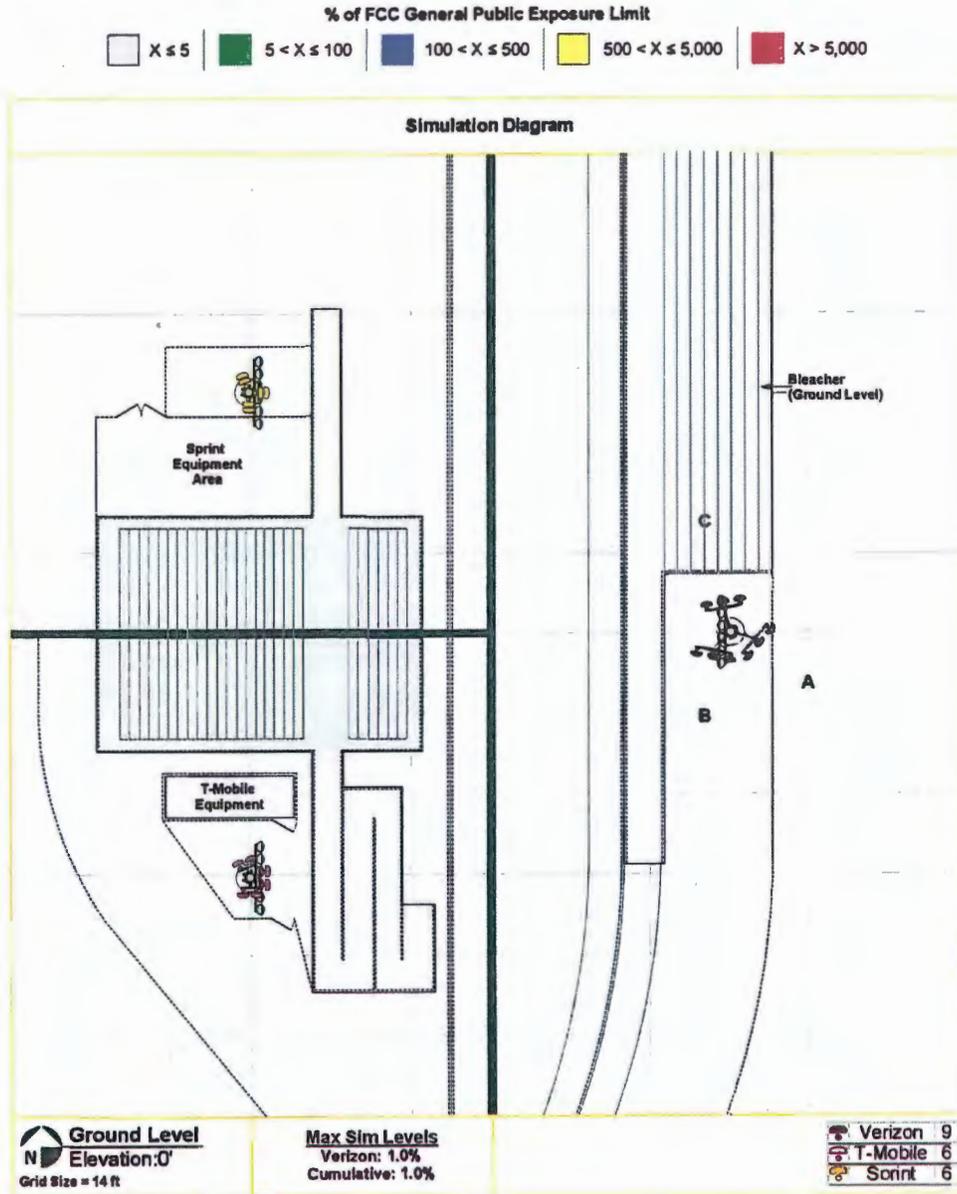
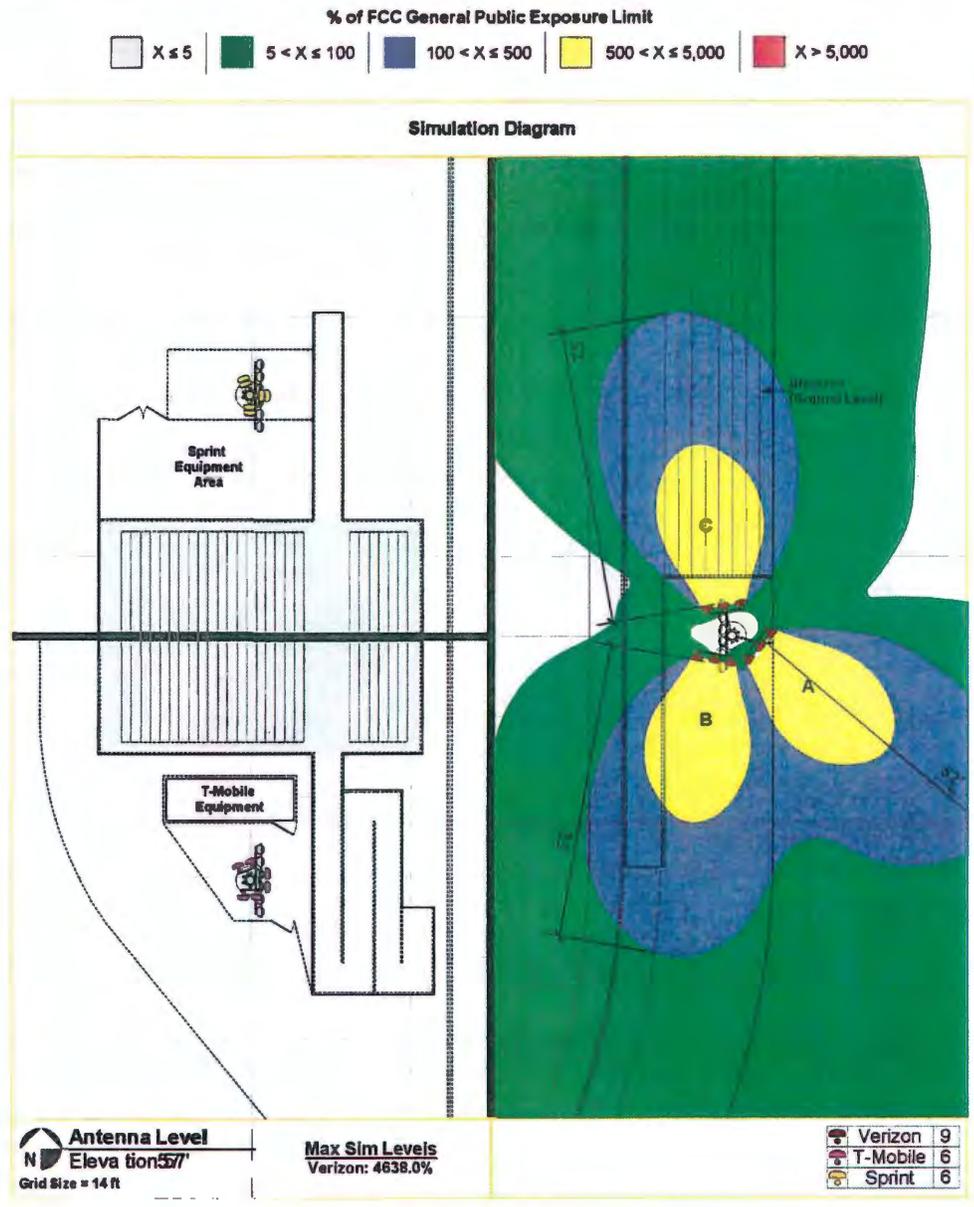


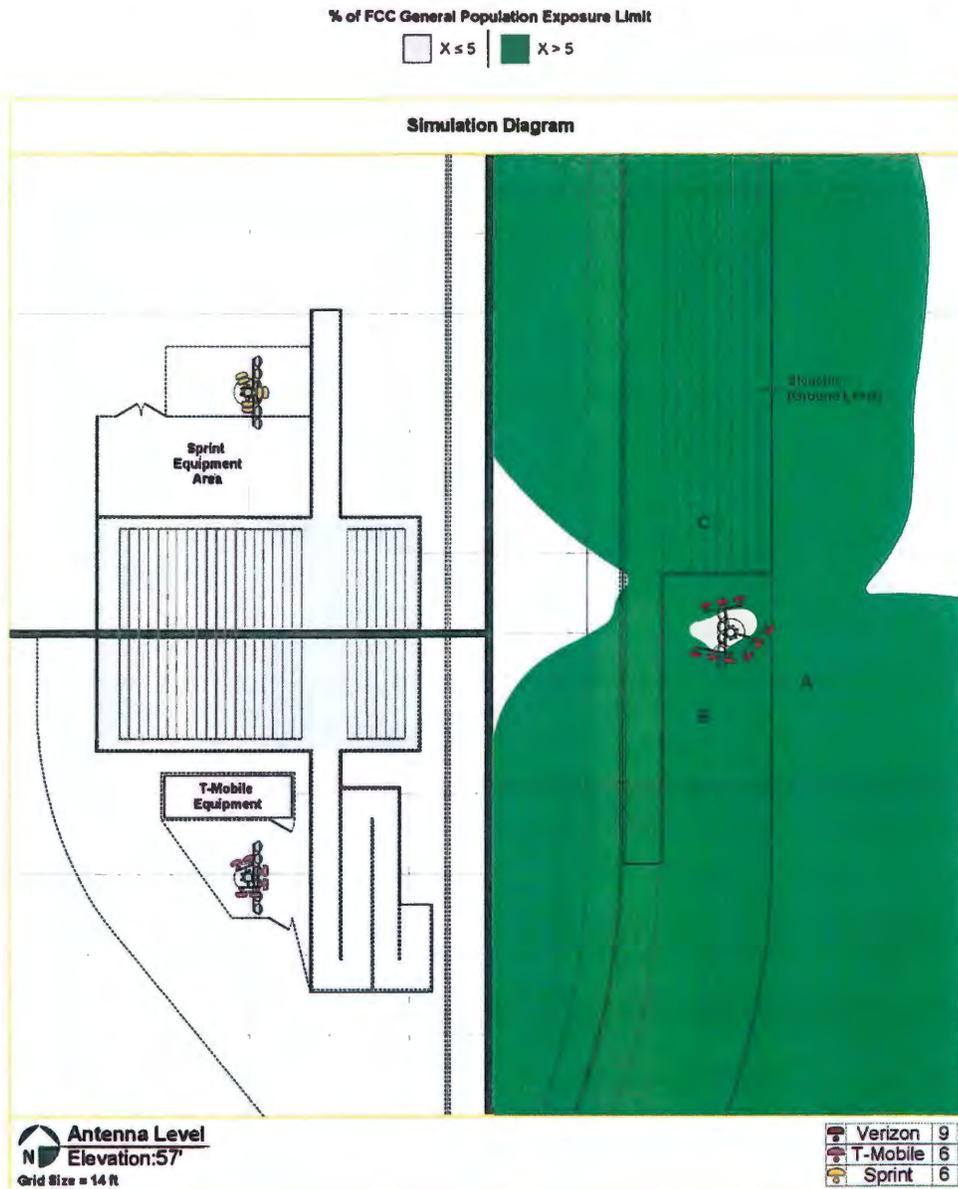
Figure 3: Plan (bird's eye) view map of results compared to FCC's General Population MPE (Maximum Permissible Exposure) Limits. Gray represents areas where exposure levels are calculated to be at or below 5%; Green- between 5% & 100% (below MPE limits); blue, yellow & red – greater than 100% (exceeds MPE limits). Individuals can safely occupy areas in gray and green for indefinite amount of time; whereas areas in blue, yellow & red must be restricted to RF trained personnel who has been made fully aware of potential for exposure, has control and knows how to reduce their exposure with the use of personal protection equipment or has the ability to power down the transmitters.



3.3 Five Percent Contributions

Mitigation measures are a shared responsibility for carriers whose RF emission levels exceed five percent of the FCC's exposure limits in areas of non-compliance.

Figure 4: Plan (bird's eye) view map of results compared to FCC's General Population MPE (Maximum Permissible Exposure) Limits. Gray represents areas where exposure levels are calculated to be at or below 5%; Green – greater than 5%.



4.0 CONCLUSION

4.1 Results

For a person standing on the ground, calculations for Verizon's site including contributions from existing carriers resulted in exposure levels below the FCC's most stringent General Population MPE Limits (see figure 2).

At antenna elevation, the highest calculated exposure level is above the FCC's General Population MPE Limits near the Verizon antennas (see figure 3). The overexposed (yellow and blue) areas extend 52-feet from the front face of the Verizon antennas. From the provided drawings, there are no other buildings or surrounding structures within 52-feet of the Verizon antennas. Beyond 52-feet, exposure levels are predicted to be below the FCC's most stringent General Population MPE Limits.

The antennas are mounted on a tall pole and therefore not accessible by the general public. It is presumed that Verizon employees and contractors are aware of the transmitting antennas and will take appropriate precautions when working near them. However, there may be situations where workers i.e. light standard personnel, etc. may find themselves directly in front of the antennas. Individuals working near/in front of antennas must receive appropriate RF safety training¹ and be made aware of the HotZones (areas where RF exposure may potentially exceed FCC safety limits). In addition, contact information should be made available in the event work is required within the HotZones.

4.2 Recommendation(s)

For the facility to be classified as an Occupational/Controlled environment, the following action(s) are recommended in accordance with the FCC's and Verizon's RF Safety Guidelines² (see figure 5):

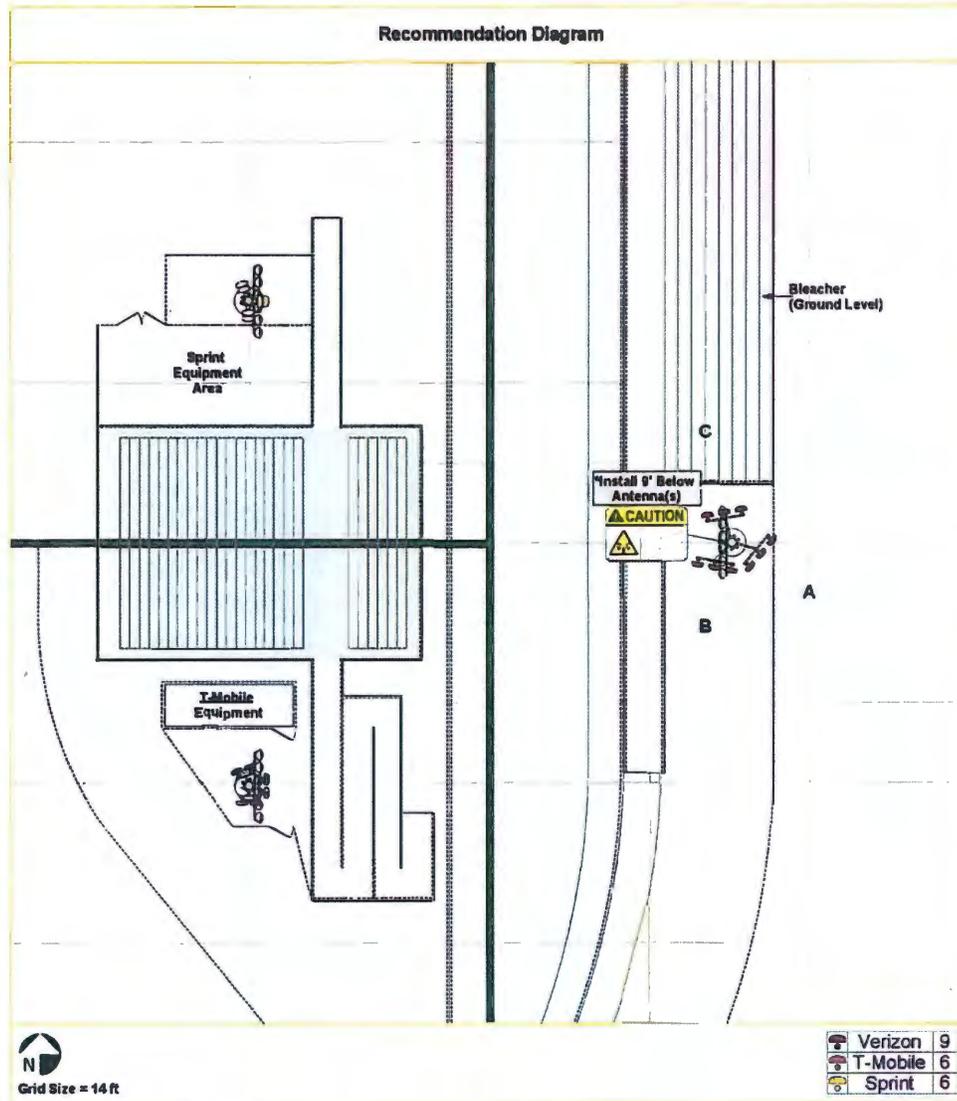
- 1) Install CAUTION Sign(s) on the pole where they will be clearly visible to workers. Signage should be placed at least 9-feet below the antennas, where RF emissions may start to exceed the General Population Limits.

Compliance actions, if necessary, for the other carrier(s) at this site have not been determined as part of this study since estimates were used for their site specifications.

¹ See Appendix for Dtech's RF Safety training program - AntennaView®

² Verizon Radio Frequency Compliance (RFC) Signage & Demarcation Policy – June 2014

Figure 5: Recommendation(s)



4.3 Statement of Compliance

Based on the above results, analysis and recommendation(s), it is the undersigned's professional opinion that Verizon's site including contributions from existing carriers will be compliant with the FCC's RF Safety Guidelines provided recommendation(s) are implemented.

4.4 Engineer Certification

This report has been prepared by or under the direction of the following Registered Professional Engineer: Darang Tech, holding California registration number 16000. I have reviewed this report and believe it to be both true and accurate to the best of my knowledge.


Darang Tech, P.E.



Appendix A: Background

Dtech uses the FCC's guidelines described in detail in Office of Engineering & Technology, Bulletin No. 65 ("OET-65") "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields". The table below summarizes the current Maximum Permissible Exposure ("MPE") safety limits classified into two groups: General population and Occupational.

Table 3: FCC MPE Limits (from OET-65)

Frequency (MHz)	General Population/ Uncontrolled MPE (mW/cm ²)	Averaging Time (minutes)	Occupational/ Controlled MPE (mW/cm ²)	Averaging Time (minutes)
30 - 300	0.2	30	1.0	6
300 - 1500	Frequency (Mhz)/1500 (0.2 - 1.0)	30	Frequency (Mhz)/300 (1.0 - 5.0)	6
1500 - 100,000	1.0	30	5.0	6

General population/uncontrolled limits apply in situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment, and may not be fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public always fall under this category when exposure is not employment-related.

Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment, and those persons have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled 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 population/uncontrolled limits, 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.

It is important to understand that the FCC guidelines specify *exposure* limits not *emission* limits. For a transmitting facility to be out of compliance with the FCC's RF safety guidelines an area or areas where levels exceed the MPE limits must, first of all, be in some way *accessible* to the public or to workers. When accessibility to an area where excessive levels is appropriately restricted, the facility or operation can certify that it complies with the FCC requirements.

Appendix B: Measurement and/or Computer Simulation Methods

Spatial averaging measurement technique is used. An area between 2 and 6 feet, approximately the size of an average human, is scanned in single passes from top to bottom in multiple planes. When possible, measurements were made at very close proximity to the antennas and inside the main beam where most of the energy is emitted. The spatial averaged values were recorded.

Dtech uses an industry standard power density prediction computer Model³ to assess the worse-case, cumulative EMF impact of the surrounding areas of the subject site. The Model does not take into account losses due to buildings. Its methodologies are conservative enough to account for typical down-tilts deployed in wireless communications. In addition, the analysis is performed at 100% duty cycle-all transmitters are active at all times and transmitting at maximum power. For purposes of a cumulative study, nearby transmitters are included where possible. The result is a surrounding area map color-coded to percentages of the applicable FCC's MPE Limits. A result higher than 100% exceeds the Limits.

Appendix C: Limitations

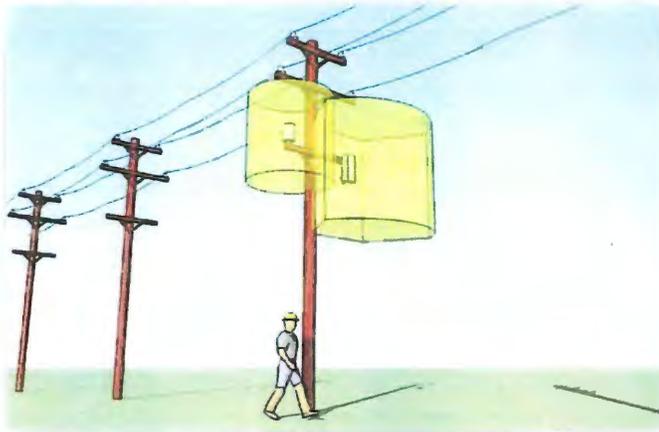
The conclusions in this document rendered by Dtech are based solely upon the information collected during the site survey and/or furnished by our Client which Dtech believes is accurate and correct. Dtech, however, has no responsibility should such Client provided information prove to be inaccurate or incorrect. Third party specifications estimates used for cumulative computer simulation purposes, where applicable, are based on common industry practices and our best interpretation of available information. Data, results and conclusions in this document are valid as of its date. However, as mobile technologies continuously change, these data, results and conclusions may also be at variance with such future changes. Dtech has no responsibility to update its survey or report to account for such future technology changes. This document was prepared for the use of our Client only and cannot be utilized by any third party for any purpose without Dtech's written consent. Dtech shall have no liability for any unauthorized use of this document and any such unauthorized user shall defend, indemnify and hold Dtech and its owners, directors, officers and employees harmless from and against any liability, claim, demand, loss or expense (including reasonable attorney's fees) arising from such unauthorized use.

³ Dtech uses Roofmaster(tm) 2015 Version 15.7.2.18 per Verizon's direction.

Appendix D: AntennaView®

Dtech Communications offers a unique, online tool (AntennaView®) to train, identify and inform individuals of site-specific HotZones – areas that may potentially exceed the FCC's Safety Limits. AntennaView® is an online, interactive training tool that will educate nontechnical people in about ten minutes. It is a site-specific, RF safety training program that requires the end user to sign an online agreement thereby limiting the liability to the landlord and carriers. Some of the advantages include:

- Virtual walk-through in 3-D with corresponding photographs
- Site-specific, interactive, simple to understand
- Delivers pertinent information i.e. HotZones (areas that may potentially exceed FCC safety limits), site owners and contact numbers.
- User online agreement = accountability



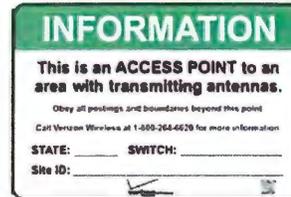
We invite you to take a quick tour at www.AntennaView.com and see how easy to understand and informative AntennaView® is.

Under Article 47 CFR § 1.1307(b), the FCC & OSHA mandates wireless operators/facility owners to have an RF survey completed including a safety plan and training to ensure that their tenants, employees and contractors who work in or around RF sites are aware of the potential risks posed by RF radiation. Most cell sites are located on building rooftops where HVAC contractors, window washers, painters, etc. routinely work and generally do not know what antennas even look like. Dtech Communications can help with ongoing FCC/OSHA compliance and provide practical training that is easy to understand by anyone regardless of their technical background.

Appendix E: Verizon's RF Advisory Signs



GUIDELINES Sign



NOC INFORMATION Sign



NOTICE Sign



CAUTION Sign



WARNING Sign

Board of Supervisors
July 20, 2021

Tiffany Schmid/Gas
EXECUTIVE SECRETARY

Existing



Proposed

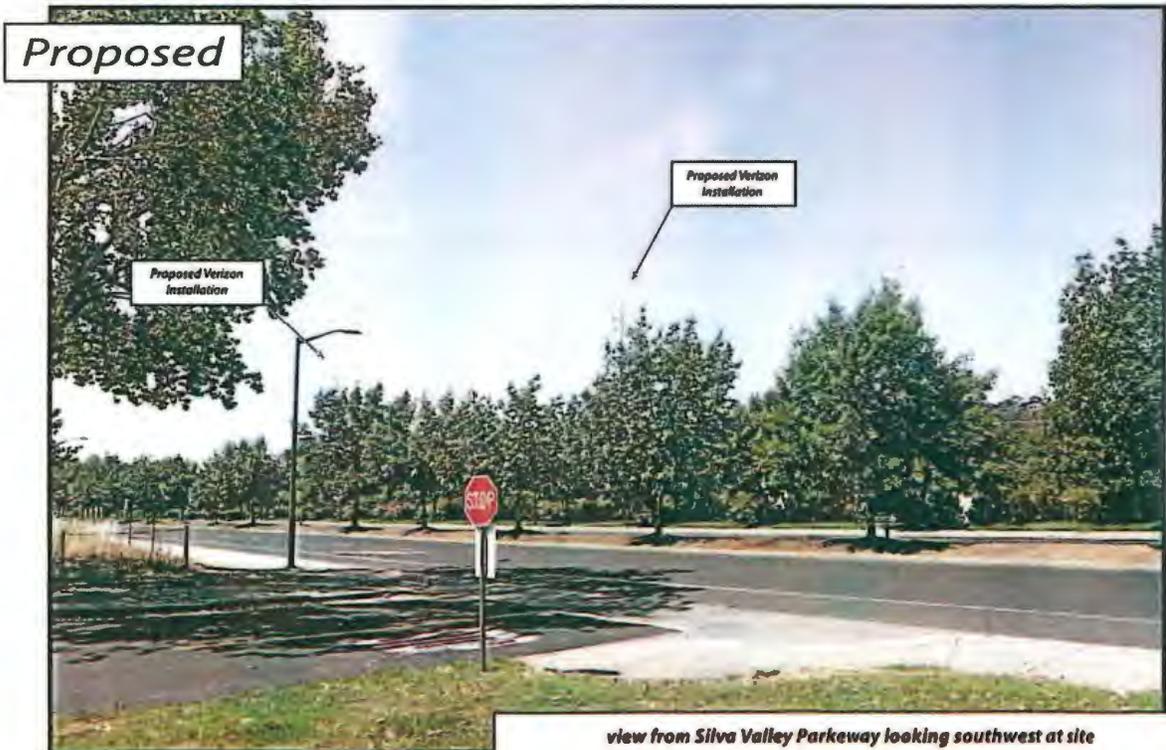


view from Silva Valley Parkway looking northwest at site

Advance 8ime
3D Photo Simulation Solutions
Contact (925) 202-8507

verizon

239662 Serrano
1120 Harvard Way, El Dorado Hills, CA
Photorealism Rendered on 8.4.10



view from Silva Valley Parkway looking southwest at site

AdvanceSim
PHOTO SIMULATIONS
Contact: 916-370-3837

verizon

239662 Serrano
1120 Harvard Way, El Dorado Hills, CA
Photosims Produced on 8-6-2019

Existing



Proposed



view from Harvard Way looking south at site

Advance Sim
3D Visual Simulation Solutions
Fax: 925 282 0587

verizon

239662 Serrano
1120 Harvard Way, El Dorado Hills, CA
Photosims Produced on 8-6-2019

Existing



Proposed

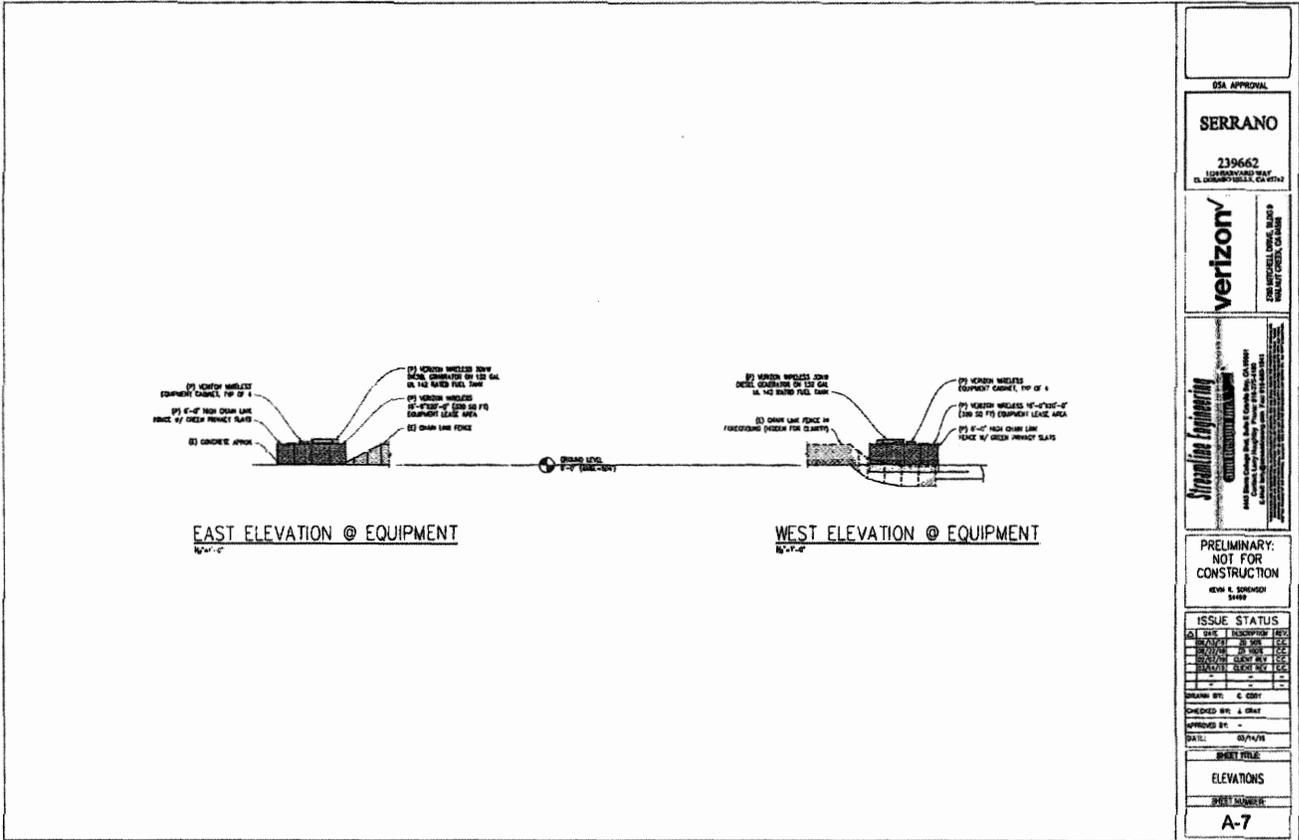


view from Tah Nee Way looking southeast at site

AdvanceSim
Mobile Simulation Solutions
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Photosims Produced on 8-6-2019



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PRELIMINARY:
 NOT FOR
 CONSTRUCTION
 KEVIN H. SORRENTI
 54109

ISSUE	DATE	DESCRIPTION	BY
1	08/11/11	ISSUE FOR PERMIT	CS
2	08/11/11	ISSUE FOR PERMIT	CS
3	08/11/11	ISSUE FOR PERMIT	CS
4	08/11/11	ISSUE FOR PERMIT	CS
5	08/11/11	ISSUE FOR PERMIT	CS

DRAWN BY: C. CHRY
 CHECKED BY: J. CHRY
 APPROVED BY: [Signature]
 DATE: 08/11/11

SHEET TITLE:
ELEVATIONS
 SHEET NUMBER:
A-7

CUP20-0006 Exhibit J: Elevation Plans