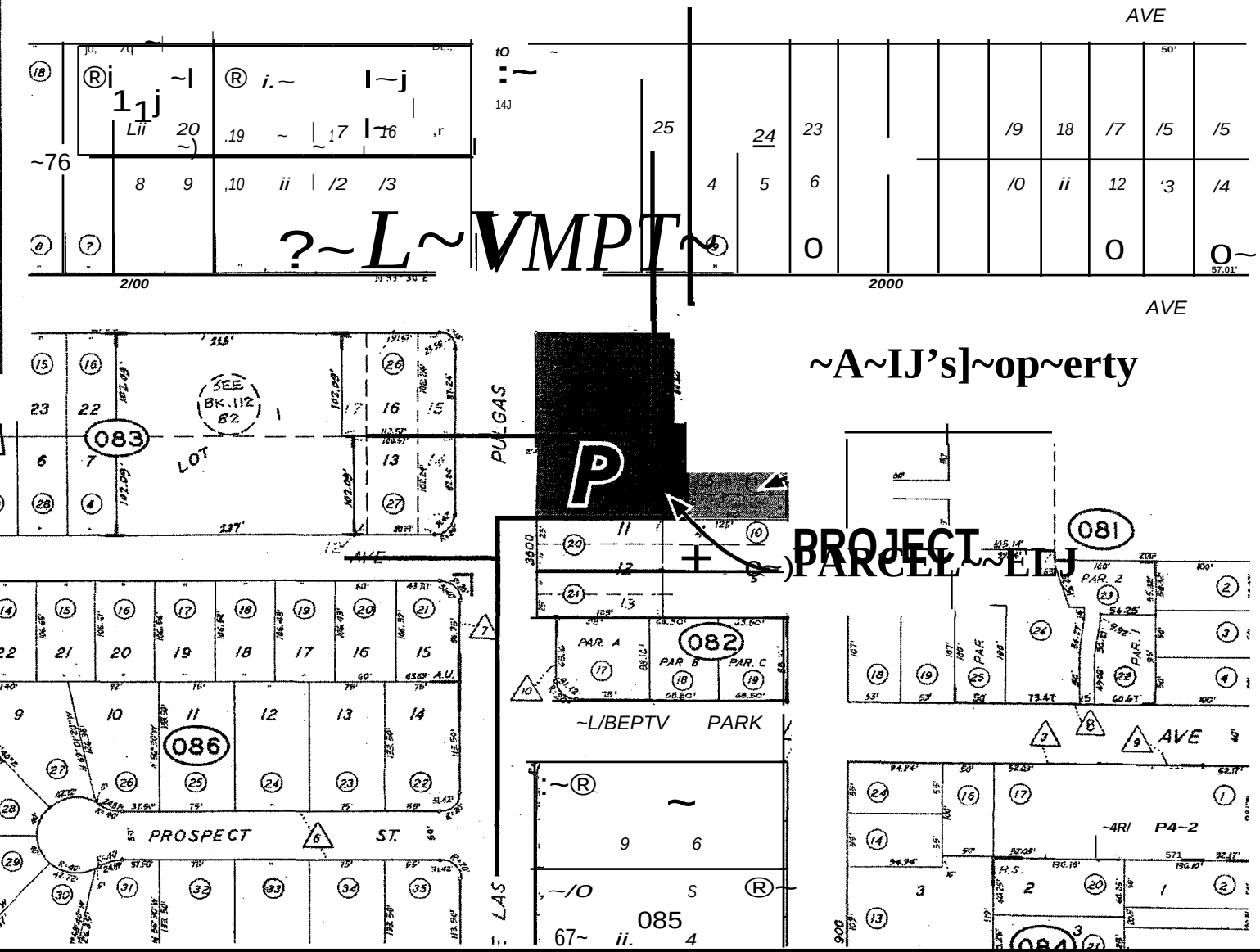
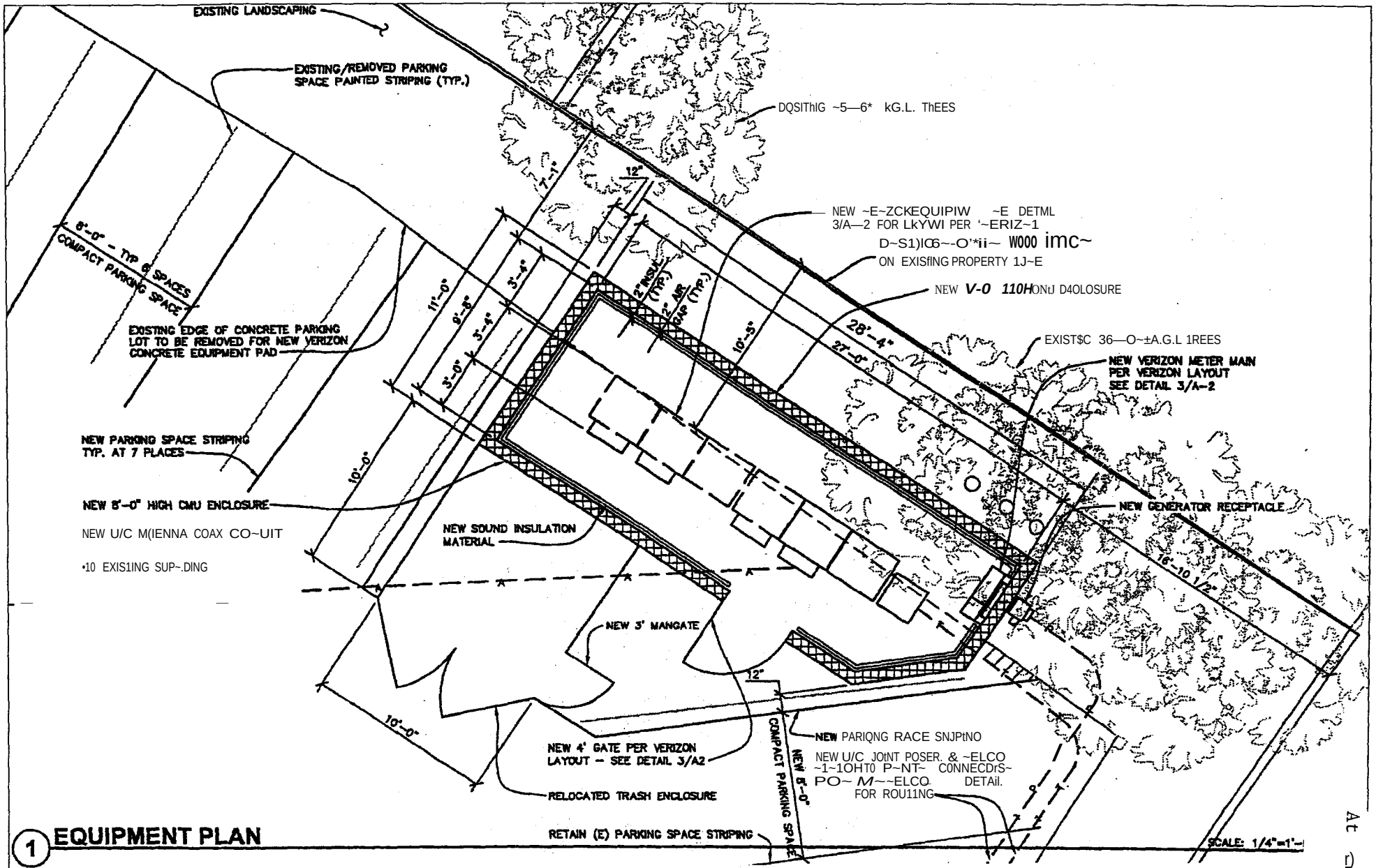


San Mateo County Board of Supervisors



1 EQUIPMENT PLAN

SCALE: 1/4"=1'-

San Mateo County Board of Supervisors

Owner/Applicant: **Verizon Wireless**

File Numbers: **PLN 2002-00267**

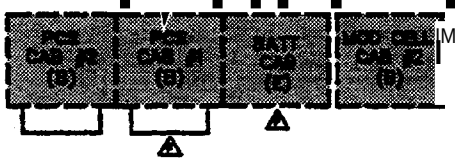
Attachment:

Future Cabinets

1?-V

'-.4.

34.



i~hH~ i~liH~i

MOD ~J. DAT'T~[1] cm~t ~ ~ .asc (~)

£ Ti,,,,,

14?~W

PROPOSE FLE~NTOU1DOOR MOD CELL EOU1PMENT LAYOUT (27' X 9' PADS

WOIES BAiT CAB - ~Icv2 *WI* **10 !1i~** or *150A&i B&TI~ (15o~)*
~0VA – *EL~NTal1DO~*MOD ~U. V4.0 WTh l41EgRA1ED DC P~
P05 LJ~UP~ FU1U~
XTA – Olfl000ll ~C1~AL A~LW C*BM~T

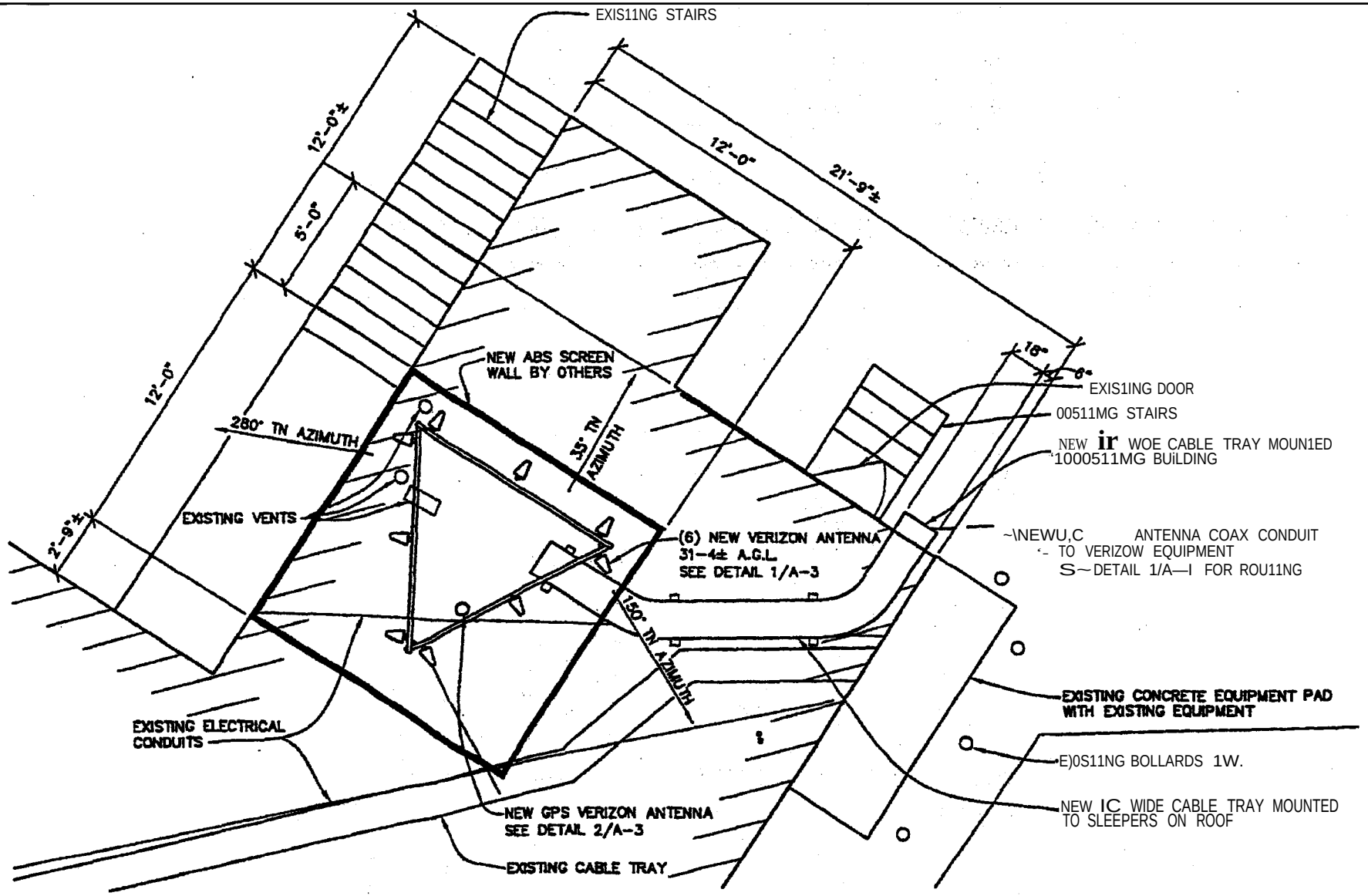
q~i-! *-1---— w-iv-*
1~ r-r~
[SHEET 1
tSAWC(~/~E,B,0Amc (1eooo7~se

O PROPOSED FLEXENT OUTDOORMOD CELL EQUIPMENT ScALE 1/4-1'-O
LAYOUT PER VERIZON

San Mateo County Board of Supervisors

Owner/Applicant:	**Verizon Wireless**	Attachment:	
File Numbers:	**PLN 2002-00267**		~rj

WU1~IWI-~



®ANTENNA PLAN

SCALE: i/C—i—C

San Mateo County Board of Supervisors

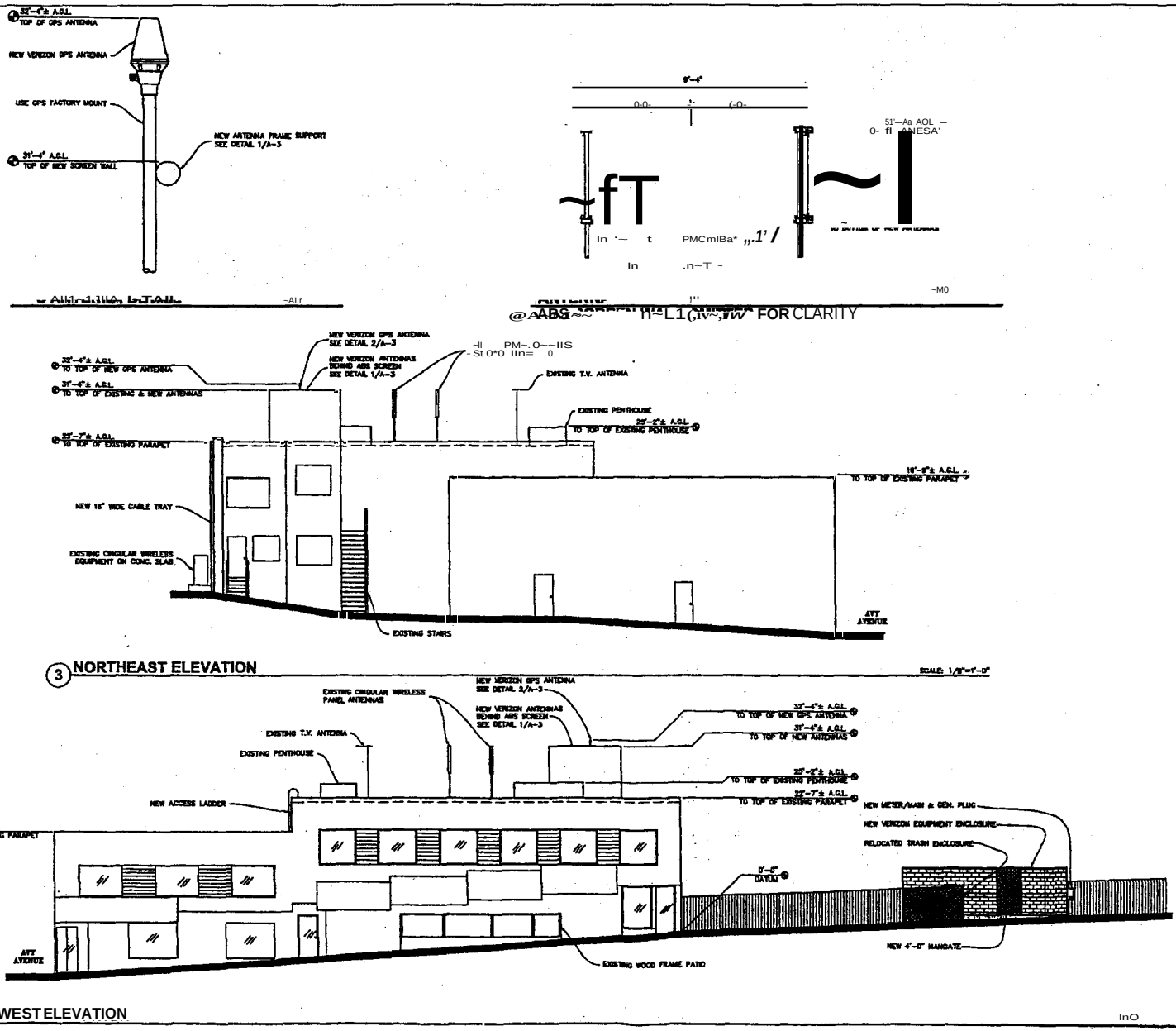
Owner/Applicant: **Verizon Wireless**

File **Numbers:** **PLN 2002-00267**

Attachment:

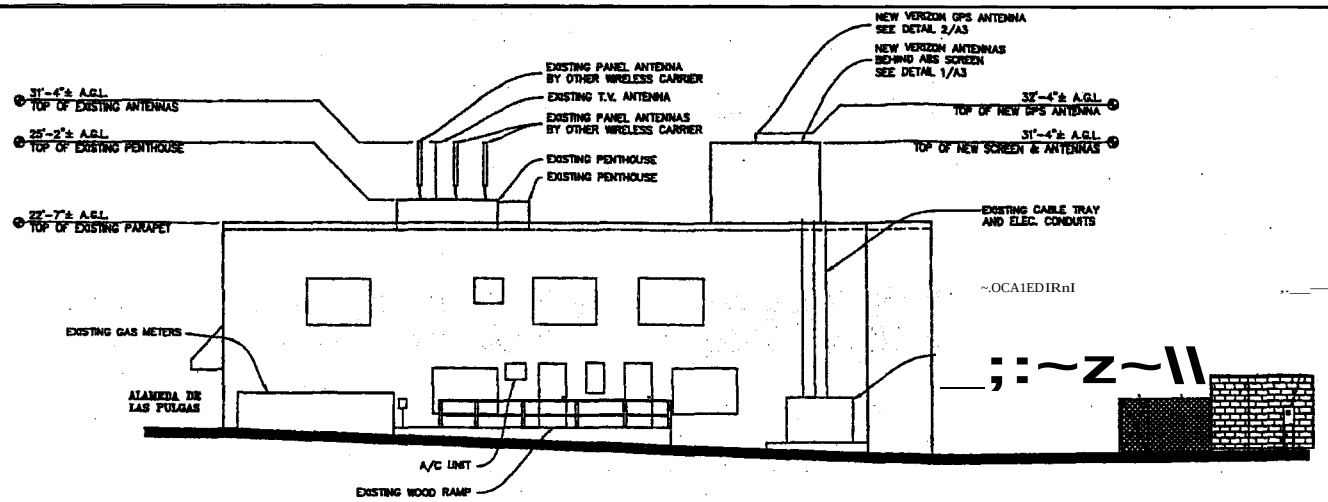
E

CDU\ 4a02-21
1

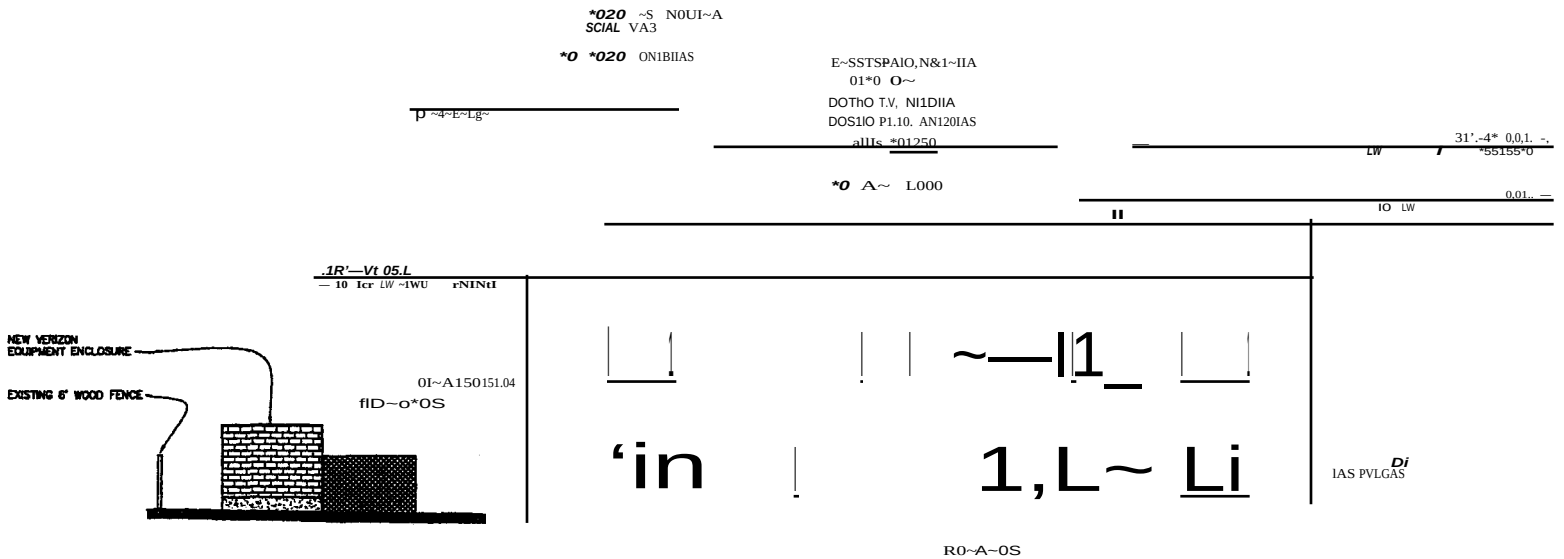


San Mateo County Board of Supervisors

Owner/Applicant:	**Verizon** Wireless	Attachment:	
File Numbers:	**PLN 2002-00267**		



®SOUTHEAST ELEVATiON



(~)NORThWESTELEVA11ON

San Mateo County Board of Supervisors

Owner/Applicant:	**Verizon Wireless**	Attachment:
File Numbers:	**PLN 2002-00267**	

3/17/2004

Photosirnulation of view looking southeast along Aiarnida .De Las Pulgas.

Previsu

San Mateo County Board of Supervisors

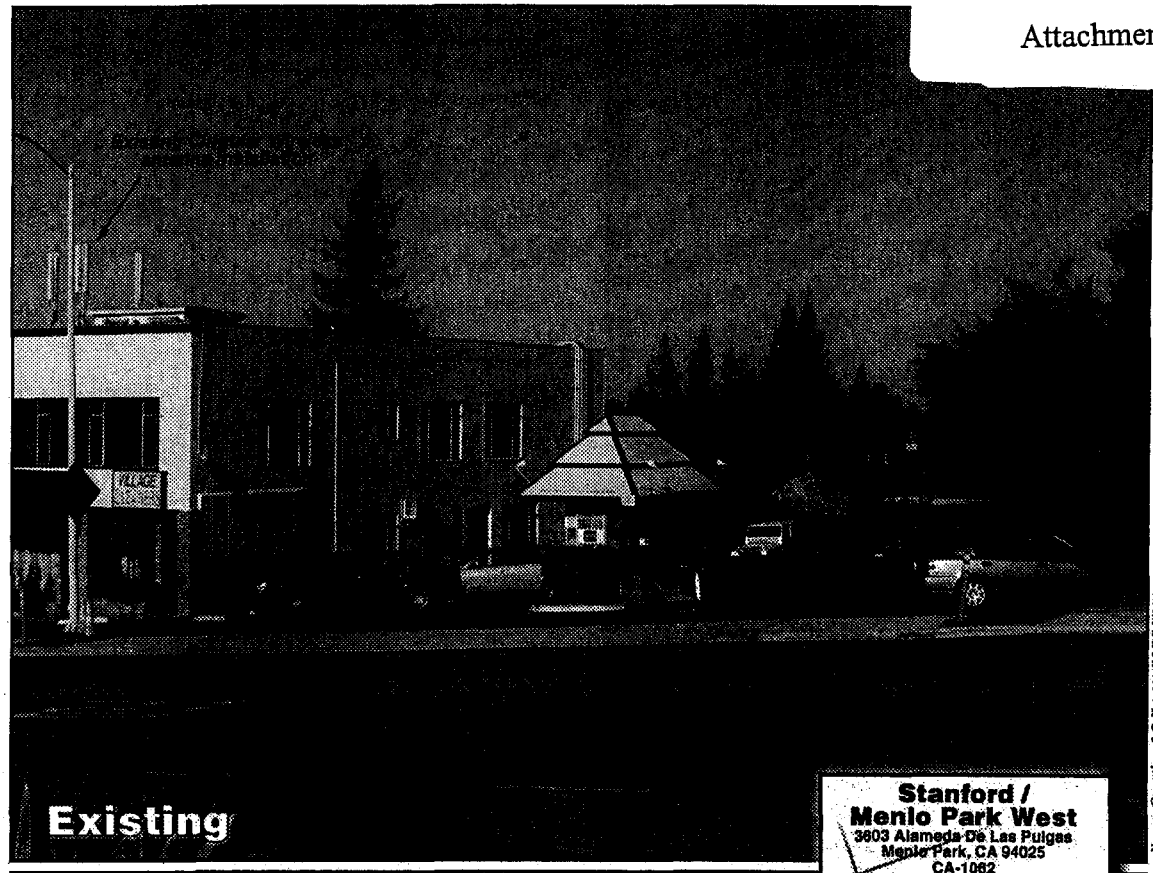
Applicant:

3

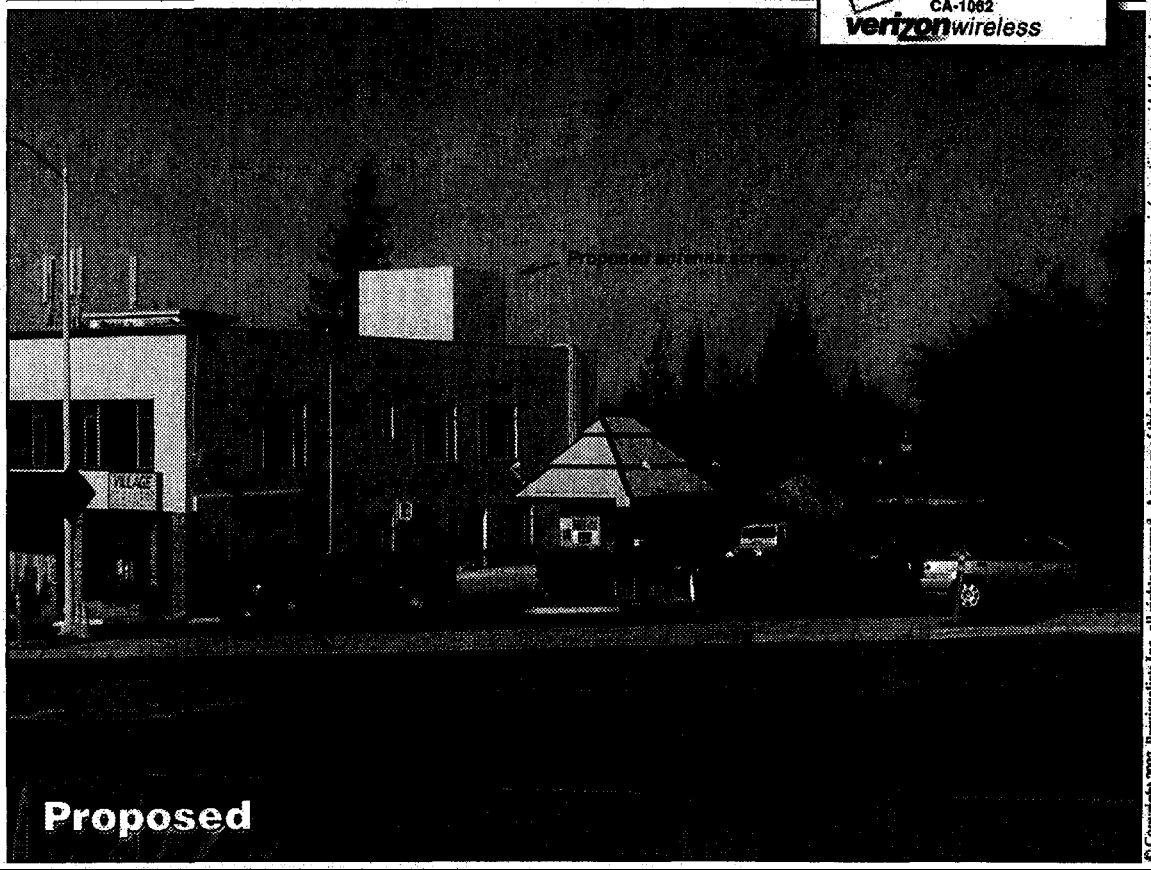
Attachment I

3/16/2004

Photosimulation of view looking north across Alameda De Las Pulgas.



Stanford / Menlo Park West
3603 Alameda De Las Pulgas
Menlo Park, CA 94025
CA-1062
verizonwireless

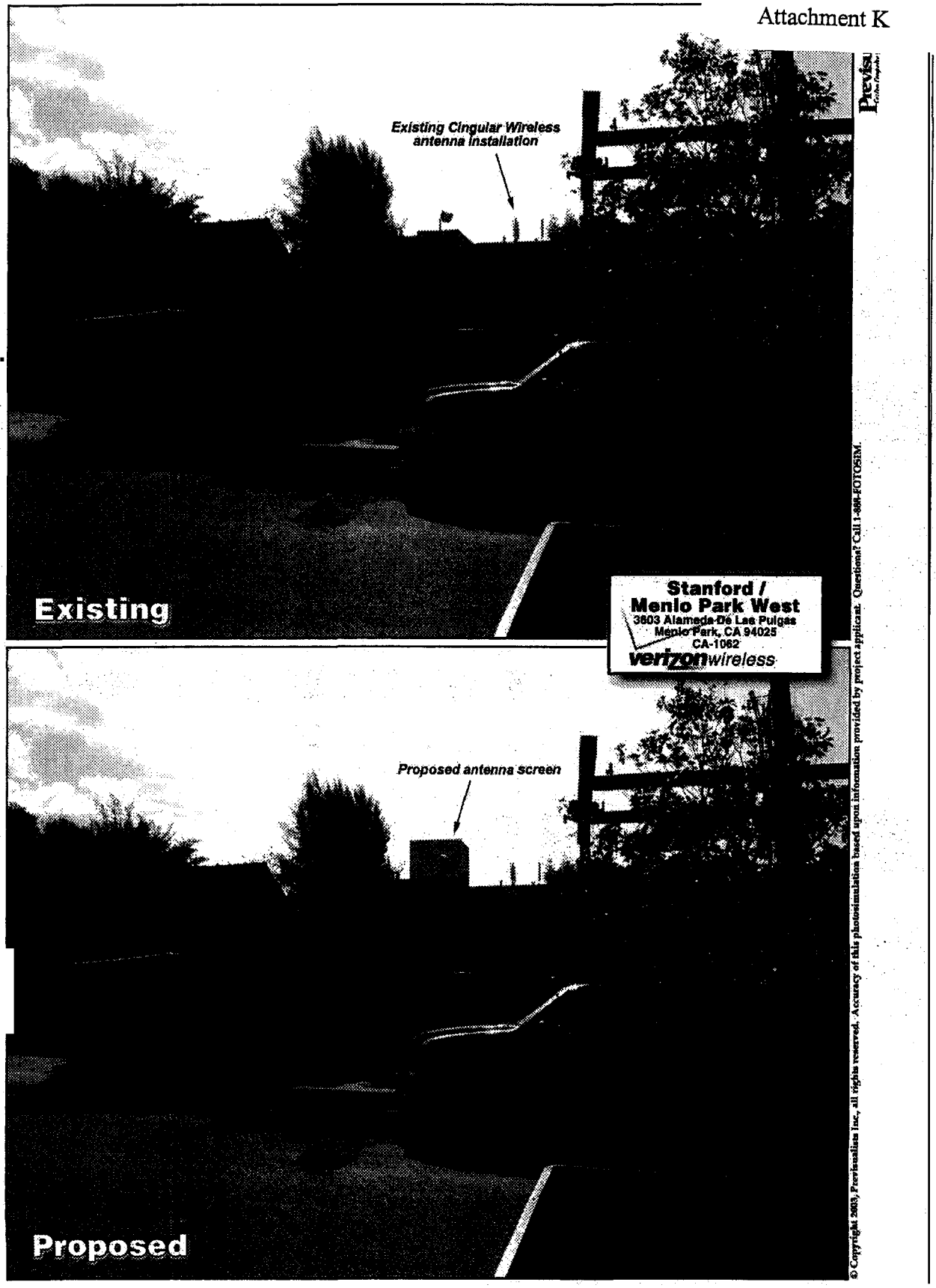


San Mateo County Board of Supervisors

Applicant:	**Verizon Wireless**	Attachment:	
File Numbers:	**PLN2002-00267**		

Attachment K

3/16/2004

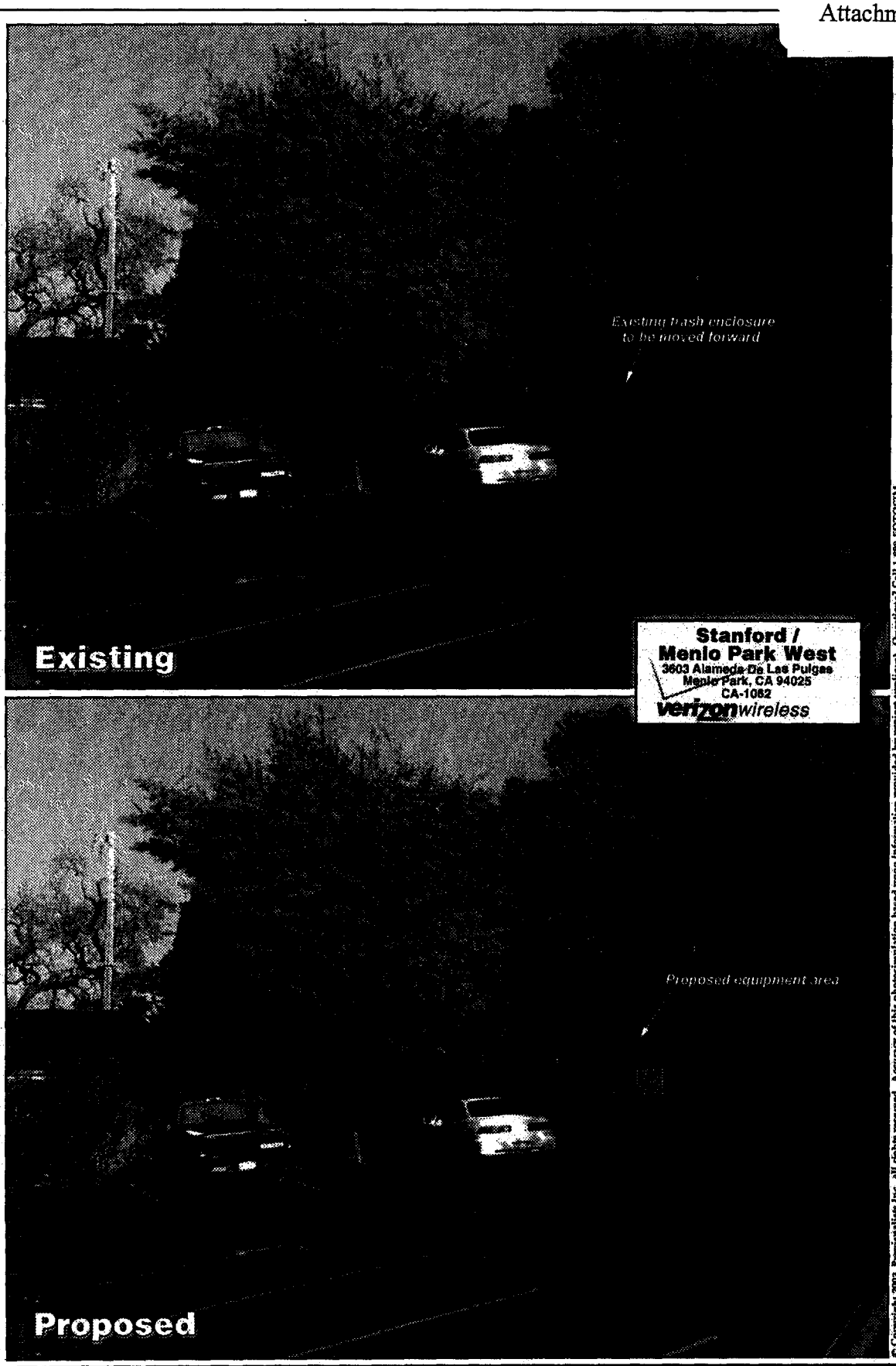


San Mateo County Board of Supervisors

Applicant:	**Verizon Wireless**	Attachment:	
File Numbers:	**PLN2002-00267**		

3/17/2004

Photosimulation of view looking east from alongside the building, across the parking.



San Mateo County Board of Supervisors

Applicant: **Verizon Wireless** Attachment:

File Numbers: **PLN2002-00267**

Verizon Wireless' Proposed Base Station (Site No. 150007226~,
3603 Alameda De Las Pulgas• Menlo Park, California
Statement of Hammett & Edison, Inc., Consulting Engineers

The finn of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a wireless telecommunications carrier, to evaluate the base station (Site No. 1500072268, formerly CA-1962) proposed to be located at 3603 Alameda De Las Pulgas in Menlo Park, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission ("FCC") evaluate its actions for possible significant impact on the environment. In Docket 93-62, effective October *15,* 1997, the FCC adopted the human exposure limits for field strength and power density recommended in Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent Institute of Electrical and Electronics Engineers ("IEEE") Standard C95.1-1999, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 0Hz," includes nearly identical exposure limits. A summary of the FCC's exposure limits is shown in Figure 1. 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.

The most restrictive thresholds for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Personal Wireless Service	Approx. Freauency	Occu~ationa1 Limit	Public Limit
Personal Communication ("PCS")	1,950 MHz	5.00 mW/cm^2	1.00 mW/cm^2
Cellular Telephone	870	2.90	0.58
Specialized Mobile Radio	*855*	*2.85*	*0.57*
{most restrictive frequency range]	30—300	1.00	0.20

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called "radios" or "cabinets") that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables about 1 inch thick. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are

installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. Along with the low power of such facilities, this means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. *65,* "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation," dated August 1997. Figure 2 attached describes the calculation methodologies, reflecting the facts that a directional antenna's radiation pattern is not fully formed at locations very close by (the "near-field" effect) and that the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). The conservative nature of this method for evaluating exposure conditions has, been verified by numerous field tests.

Site and Facility Description

Based upon information provided by Verizon, including drawings by Diamond Services, dated February 3, 2004, it is proposed to mount nine Andrew antennas, six Model. DB874H83-ESX directional cellular antennas and three Model 932LG65VTE-B directional PCS antennas, behind a new view screen to be installed above the east corner of the roof of the two-story building located at 3603 Alameda De Las Pulgas in Menlo Park. The antennas would be mounted at an effective height of about 291/2 feet above ground, 8 feet above the roof, and would be oriented in three groups of three toward *35°T,* 150°T, and 280°T. The maximum effective radiated power in any direction would be 1,050 watts, representing the simultaneous operation of five cellular channels and five PCS channels at 105 watts each.

Presently located above the roof of the same building are similar antennas for use by Cingular Wireless, another telecommunications carrier. Cingular reports that it has installed DAPA Model 58210 directional panel antennas and operates with a maximum effective radiated power of 250 watts.

Study Results

The maximum ambient RF level anywhere at ground level due to the proposed Verizon cellular and PCS operation by itself is calculated to be '0.0090 niW/cm^2, which is 1.4% of the applicable public limit. The maximum calculated cumulative level at ground for the simultaneous operation of both Verizon and Cingular is also 1.4% of the public exposure limit. The maximum calculated cumulative level on the second floor of the subject building for the simultaneous operation of both Verizon and Cingular is *0.45%* of the public exposure limit; the maximum calculated level at the second floor

elevation of any of the nearby homes* is 1.7% of the public exposure limit. It ~should be noted that these results include several "worst-case" assumptions and therefore are expected to overstate actual power density levels. Areas on the roof of the subject building near the transmitting antennas may exceed the applicable exposure limit.

Recommended Mitigation Measures

It is recommended that the roof of the building be kept locked, so that the antennas are not accessible to the general public. To prevent occupational exposures in excess of the FCC guidelines, no access within 8 feet in front of the Verizon antennas themselves, such as might occur during building maintenance activities, should be allowed while the site is in operation, unless other measures can be demonstrated to also ensure that occupational protection requirements are met. Provided the roof is kept locked, posting explanatory warning signst at roof access location(s) and on the screen in front of each transmitting antenna, such that the signs would be readily visible from any angle of approach to persons who might need to work within that distance, would be sufficient to meet FCC-adopted guidelines. Similar measures should already be implemented with regard to the Cingular antennas; applicable keep-back distances have not been determined as part of this study.

Conclusion

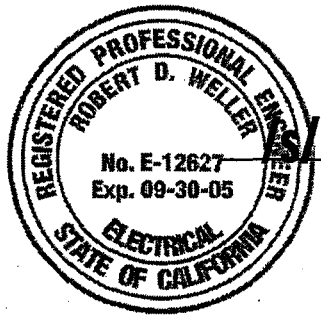
Based on the information and analysis above, it is the undersigned's professional opinion that the base station proposed by Verizon Wireless at 3603 Alameda De Las Pulgas in Menlo Park, California, can comply with the prevailing standards for limiting human exposure to radio frequency energy and, therefore, need not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations.

* Located at least 45 feet away, based on Mapquest aerial photographs.

~ Warning signs should comply with ANSI C95.2 color, symbol, and content conventions. In addition, contact information should be provided ***(e.g.,*** a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration No. E-12627, which expires on September 30, 2005. This work has been carried out by him or under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.



/S/ Robert D. Weller
Robert D. Weller, P.E.

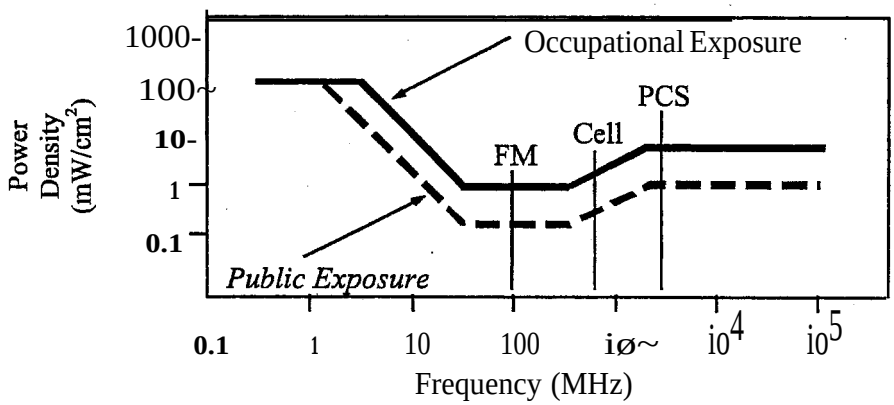
March 29, 2004

FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements, which are nearly identical to the more recent Institute of Electrical and Electronics Engineers Standard C95.1-1999, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz." These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency Applicable Range (MHz)	Electromagnetic Fields (f is frequency of emission in MHz)					
	Electric Field Strength (V/rn)		Magnetic Field Strength (Aim)		Equivalent Far-Field Power Density (mW/cm^2)	
0.3— 1.34	614	*614*	**1.63**	*1.63*	100	*100*
1.34— 3.0	614	*823.8/f*	1.63	*2.19/f*	100	*180/f*
3.0—30	1842/f	***823.8/f***	4.89/f	*2.19/f*	900/f	*180/f*
30— 300	61.4	*27.5*	0.163	***0.0729***	1.0	*0.2*
300— 1,500	3.54~I~	*1.59'Tf*	~J~/l06	*'.If/238*	ff300	*f/1500*
1,500— 100,000	137	*61.4*	0.364	*0.163*	*5.0*	*1.0*



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.

RFR.CALC~Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications. Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near **Field.**

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications cell sites. The near field zone is defmed by the distance, D, from an antenna beyond which the manufacturer's published, far field antenna patterns will be fully formed; the near field may exist for increasing D until some or all of three conditions have been met:

$$1)\ D > \frac{2h^2}{\lambda} \qquad 2)\ D > 5h \qquad 3)\ D > 1.6\lambda$$

where h = aperture height of the antenna, in meters, and
λ = wavelength of the transmitted signal, in meters.

The FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives this formula for 'calculating power density in the near field zone about an individual RF source:

$$\text{power density} \quad \approx = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi} \quad \text{mW/cm}^2$$

where θ_{BW} = half-power beamwidth of antenna, in degrees, and
Pnet = net power input to the antenna, in watts.

The factor of 0.1 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates distances to FCC public and occupational limits.

Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

$$\text{power density} \quad S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4\pi D^2} \quad \text{in mW/cm2,}$$

where ERP = total ERP (all polarizations), in kilowatts,
RFF = relative field factor at the direction to the actual point of calculation, and
D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = *2.56).* The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.

April 20, 2004

Mr. Jeff Giese
L.D. Strobel Co., Jnc~
1018 Shary Circle, Suite E
Concord, CA *94518*

Dear Mr. Giese:

AS you requested, Brown-Buntin Associates, Inc.. (~BA) has prepared a revised noise analysis for the proposed Venzon Stanford/Menlo Park West Flexent Outdoor Modular Cell Equipment installation, to be located on Alameda de las Pulgas in Menlo Park, California. This revialon has been performed to address the revised location of the equipment enclosure, the revised barrier configuration, and the addition of an absorptive treatment to the mterior of the enclosure As before, this analysis was based upon actual measurements of noise levels and frequency content of sound emitted by equipment that is reported to be identical to that prpposed, and the analysis addresses whether noise produced by the proposed mstallation would be hkely to exceed the noise standards of the San Mateo County Code

Criteria:

The San Mateo County Code, Chapter 4 88, Section 4 88330, provides

It is unlawful for any person at any location within the unincorporated area of the County to create any noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the exterior noise level when measured at any single or multiple family residence, school, hospital, church, public library situated in either the incorporated or unincorporated area to exceed the noise level stàndar4s as set forth in Table I following:

Tablel Land use: Single or Multiple Family Residence, School, Hospital, Church, or Public Libi~ary Properties.		
Cumulative number of. minutes in any one hour time period	Noise Level Standards, cIBA'	
	Daytime 7 A.M. to 10 P.M.	Nighttime 10 P.M. to 7A.M.
30	*55*	*50*
15	60	*55*
.5	£5	60'
1', 0	**70** 75	*65*

a) In the event the measured background noise level exceeds the applicable noise level standard m any category above, the applicable standard shall be adjusted m five *(5)* dBA mcrements so as to encompass the background noise level

b) Each of the noise level standards specified above shall be reduced by *5* dBA for s]mple tone noises, consisting primarily of speech or music, or for recurring or mterimttent impulsive noises

c) If the intruding noise source is continuous and cannot reasonably be stopped for a period' of time whereby the background noise level can be measured, the noise level measured while the source is in operation shall be com~,ared dimctly to the noise level standards in Table I.

-Because the project could produce continuous noise levels during any time of the day, the nighttime noise standard of 50 dBA would apply, unless ~imp1e tone noises were found to be present.

Analysis

Equipment Specifications

The project would include installation of up to four Outdoor Flexent modular cell cabinets with heat exchangers, t~rd battery enclosures with ventilation fans, and a "miscellaneous" cabinet, also fitted with a ventilation fan. No transformers would be required. The project design would place the Flexent modular cell enclosures 10 feet from a residential property line, enclosed on three sides by an 8-foot tall CMU wall, and facing away from the residential property line.

See Appendix A for definitions of acoustical terminology.

According to Lucent Technologies data[2], the noise standard for this equipment is established 'by Beilcore Requirement R3-157 at 65 dBA at a distance of 5 feet, measured at a height.of 3 feet from the cabinet mounting surface.

Acoustical testing of a Modular Cell Enclosure by Lucent Techiiologies[3] revealed that the equipment noise emissions satisfied the Belicore. specification, as.shown.by Table II. The frequency content ofthe sound was not. specified.

Tablell

Emissions **of Outdoor Flexent Modular *Cell**** **Lucent Techno1o~es**

January24, 2000

	Sound Level,' dBA
	61
Side	53
Rear.	52
	53

away at a height of 3 feet above the mounting surface

Noise Measurements

BBA conducted measurements of noise levels' and frequency content of a representative modular cell enclosure adjacent to the Healcl Business College building' at the Great Mall in Milpitas, California, on January 7~2004.. The measurements were performed using a Larson Davis Laboratories (LDL) Model 824 precision real time analyzer fitted with an LDL Model. 2541 microphone, which was calibrated before use with, a Bruel & Kjaer Type 4230 acoustical calibrator

The equipment at the Healci site mcluded a modular cell enclosure, a battery cabinet, and a miscellaneous cabinet. The noise sOurces were fans, which operated during the measurement period. The modular cell enclosure contains two sets of fans. The hell exchanger on one side of the enclosure is cooled by a group of three fans, and the cabinet itself is cooled by a single 6-inch ventilation fan The battery cabinet and the miscellaneous cabinet each were fitted with a single 6-inch fan, identical to the 6-inch fan in the modular cell enclosure The cabinets are arranged so that the heat exchanger fan array and the 6-inch miscellaneous cabinet fan are on one side of the cabinets, and. the battery and modular cell enclosure 6-inch fans are on the other side. The heat exchanger fan array faced the building wall, so it was between the fans and the wall.

Noise measurements were performed in close proximity to the heat exchanger, and to the 6-inch fan on the modular cell enclosure during their operation. The noise sources were centered at heights of 52 inches for the heat exchanger, and 60 inches for the 6-inch fan.

2 Memorandum for Record from Gregory P. Mikus, January 24, 2000, Lucent Technologies.

~ Memorandum for Record from Gregory P. Mikus, January 24, 2000, Lucent Technologies.

Due to high background traffic noise levels, it was not possible to measure noise levels outside the block enclosure surrounding the equipment. Reflections were noted in the space between the heat exchanger fan array and the building wall.

Figure 1 shows the frequency content of each noise source, in terms of sound power levels. The data show that the noise produced by the fans is centered around 400 Hz. The noise from the heat exchanger fans could be considered to be a~impl~tone noise.

Noise Modeling

The noise level and frequency content data described above were entered into the Environmental Noise Model (ENM), which is a commercially available noise prediction model that accounts for the sound levels, frequency content and locations of multiple noise sources, the topography of the site and the surrounding area, and the attenuation due to air, the ground surfaces, and barriers. The ENM was first calibrated so that the predicted noise levels and frequency content due to the equipment used at the project site matched the measured noise level and frequency content data at the given measurement locations.

BBA prepared a base map in ENM from CAD files supplied by your firm. The assumed noise sources were located on the base map. For this analysis, it was assumed that the units would be oriented so that the heat exchanger fan would face towards the parking lot, away from the residential property line. The ground elevations of the sources were assumed to be near existing grade. The existing wood fence on the east property line was entered into the ENM as a barrier. Figure 2 shows the project base map used for the ENM analysis.

The proposed enclosure completely encircles the equipment, and would serve as a noise barrier for all residential receivers. The insertion loss values of this barrier were calculated using the ENM, accounting for the measured noise levels and frequency content of the noise sources

The analysis assumed that the installation consisted of four modular cell enclosures, two battery cabinets, and a miscellaneous cabinet A 5-foot tall receiver was located about 5 feet inside each of the nearest residential properties, located to the north and east of the enclosure. The receiver on the north side was placed about 4 feet below project grade, as the site is about 4 feet above that residential lot

In all cases, the cabinets were assumed to be oriented so that the heat exchanger fans were directed away from the residential property line. Table III shows the predicted noise levels expected at the receiver.

Tableffi
Predicted Noise Levels at Adjacent Residential Property
Stanford/Menlo Park West Flexent Outdoor Modular Cell Equipment Installation

Residential Receiver Location H	Sound Level, dBA
'North	44.6
East	44.0

No pure tones are expected, 'due' to proposed installation of absorptIve material inside the enclosure. The predicted noise levels for the Stanford/Menlo Park West Flexent Outdoor Modular Cell equipment installation alternatives are below the noise standard of San Mateo County.

The ENM does not account .for reflection of sound within the enclosure. The noise level due to the 6-inch ventilation fans facing the rear wall of the enclosure could be increased by, 3 to 5 dBA by reflections. To prevent the occurrence of significant reflections, the designer has proposed installing a 2-inch thick layer of absorptive material, furred out 2 inches from the enclosure walls. ~This wili be' effective in significantly reducing the overall noise levels inside the enclosure, and in preventing sound buildup. Therefore, actual noise levels measured outside the enplosure are expected to be about 3 dB lower than predicted using 'the ENM.

Conclusions:

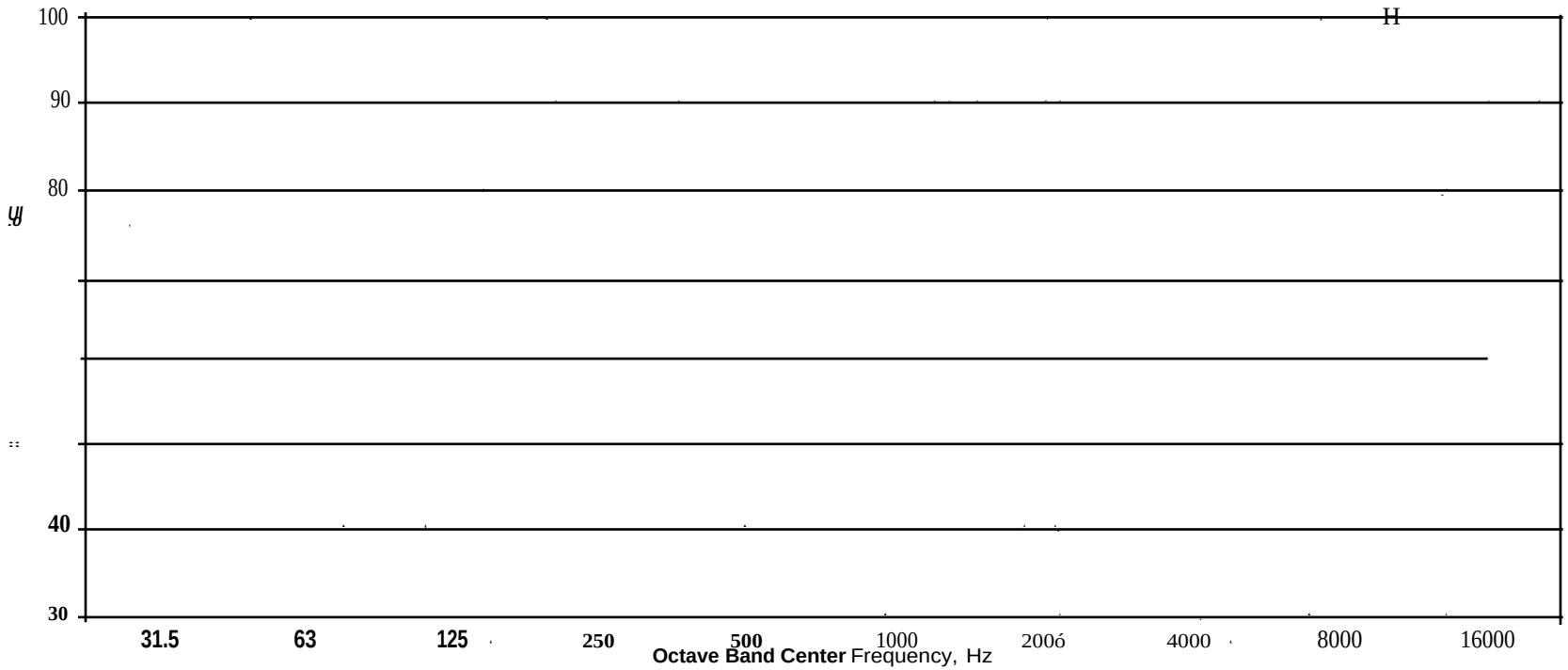
Based upon a review of the proposed site design and the available acoustical data, it is our opinion that the noise produced by the proposed Stanford/Menlo Park West Flexent Outdoor Modular Cell Equipment Installation as currently designed will comply with the noise standards of San Mateo County.

I hope that this information will meet your needs at this time'. If you have any questions concerning this matter, please call me in Fair Oaks at (916) 961-5822.

Respectfully submitted,:
Brown-Buntin Associates,'Inc.

Jim Buntin
Vice President

:FIGURE1
Assumed Sound Power Levels
Verizon Cellular Installation Fans



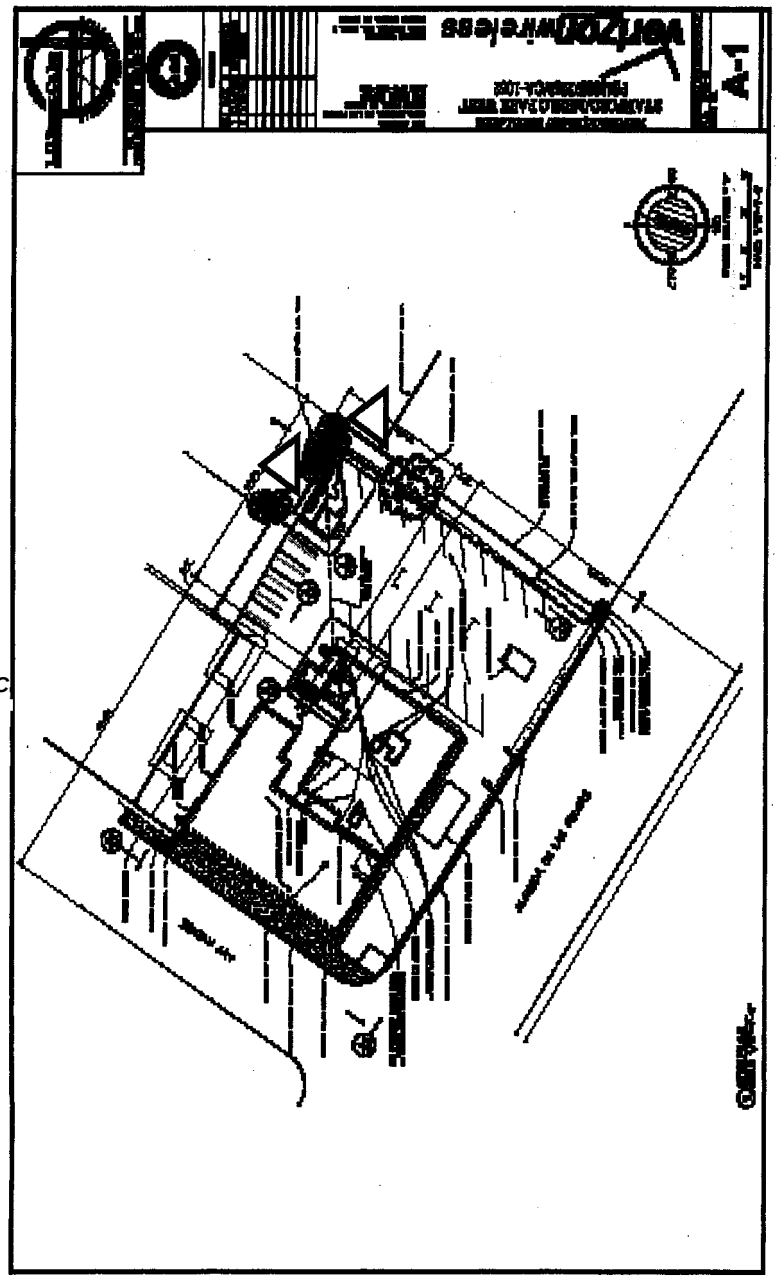
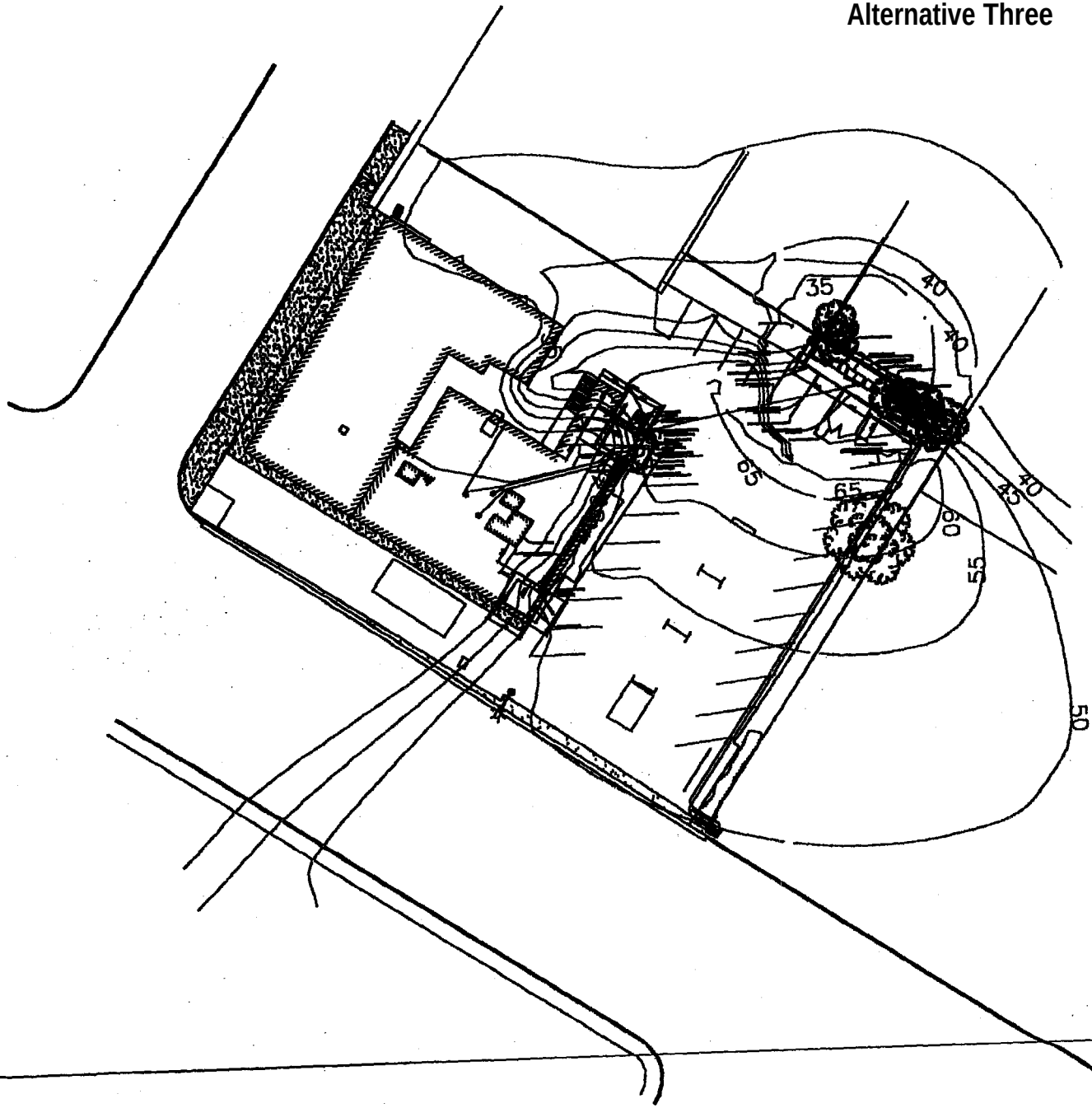

verizon wireless
A-1

FIGURE 4
PREDICTED LOCATIONS OF NOISE CONTOURS (dBA)
Verizon Menlo Park Installation
Alternative Three



to

BBA

BROWN BUNTIN
hSSOC%ATES INC.

Chapter 4.8

NOISE CONTROL

Sections:

4.88.010 Findings-—Declaration **of policy.**

In **order to** control 'unnecessary, **excessive** and annoying noise in **the** County **of** San Matec, **it is** hereby declared **to' be the policy of the** County **to** 'prohibit such noise generated from or by all sources as specified in this chapter. It shall be the policy of the County to maintain quiet in those areas which **exhibit lownoise levels** and **to implement** programs aimed at reducing noise in those areas within **the** County **where noise levels are** above acceptable values.

It is 'hereby determined that certain noise levels are detrimental to the **public** health, welfare and safety, and are contrary to **public** interest. Th~refore, **the** Board **of** Supervisors does ordain and declare **that** creating, causing or maintaining **or** allowing **to** be created, **caused or maintained,** any noise in a manner prohibited **by or not in** conformity with **the** provisions of this chapter, is a public nuisance and shall be punishable as such. (Prior code § 4920; Ord. 2803, i0/i9/82~

4.88.020 "'A' weighted sound level" defined.

The sound **level in** decibels as measured with **the sound level** meter using **"A"** weighted network. The unit of measurement is referred **to herein as** dB(A) or dBA. (Prior code § **4921;** Ord. **2803, 10/19/82)**

4.88.030 "Background **noise level"** defined.

The composite of noise from all sources, near an defined far, excluding the alleged offensive noise. in this context it represents the normal or existing **l~vebf** environmental ,noise'at a given location for a specified time **of the** day or night. (Prior code § 4922; Ord. 2803,' 10/19/82)

4.88.040 **"Commercial facility" 'defined.**

Any building, structure, premise or portion thereof used for wholesal~orretail commercial purposes. (Prior code § 4923; Ord. 2803, 10/19/82)

4.88.050 **"Construction"** defined.

Any site preparation, assembly, erection, substantial repair, or alteration of any buildifig, structures, or land, public or private, together with any associ-,ated scientific or. engineering surveys. (Prior, code s 4924; Ord. 2803, 10/19/82)

4.88.060 "Cumulative period'! defined.

An additive period of time composed of individual time segnients which may be continuous or interrupted. (Prior 'code § 4925; Ord. 2803, 10/19/82)

4.88.070 :9~ecthpJ"defined.

A unit for measuring the amplitude of a sound, equal **to** twenty times the logarithm to **the base 'ten** of the ratio of the pressure of the sound measured to the reference pressure, which is twenty micropascals. (Prior code § **4926; Ord.** 2803, 10119/82)

4.88.080 **"Demolition" defined.**

Any dismantling, intentional destruction, or removal **of** structures, surfaces,. or similar property, public or private. (Prior code § 4927; 0th. 2803, *10119/82)*

4.88.090 "Dwelling unit" defined.

Any building or separate portion thereof used for residential purposes. The term shall include, 'but not be limited to, single family dwellings, apartments, condominiums, and' other distinct residential units. (Prior code § 4928; Ord.2803, 10/19/82)

4.88.100 "Emergency **work"** defined.

Any work performed to protect~maintain, or restore safe and/or healthy conditions in the community, along with work performed by private or public utilities when restoringutility ~etvice(~Or code **§ 4929; Ord. 2803,iO/19/82)**

4.88.110 **'~Exterior-noise"defined.**

Noise which impacts the area outside the outermost wails **of** any dwelling unit. (Prior code § 4930; Ord. 2803, 10/19/82)

4.88.120 **'Pixed noise source"** defined.

A device or machine which creates sounds while fixed **or** stationary, including, but not limited to, residential, agricultural, industrial and commercial machinery and equipment, pumps, fans, compressors, air 'conditioners,' refrigeration equipment, and constmction equipment moving within the' fixed boundaries **of 'a** construction site. (Prior code § 4931; 0th. 2803,' 10119/82)

4.88.130 '~Health'officer" **defined.**

The Health 'Officer **of the County or** his duly authorized deputy. (Prior code § 4932; Ord. 2803, 10/1 9/82)

4.88.140 "Hospital" defined.

Any building **or** pOrtion "thereof used for the accommodation and medical care **of** siclç injured, or infirm persons and 'includes rest homes, nursing homes and convalescent hospitals. (Prior code § 4933; 0th. 2803, **10/19/82)**

4.88.150 **"Impulsive noise" defined.**

A noise of short duration, usually less than one second, with an abrupt onset and rapid decay. (Prior code § 4934; Ord. 2803, 10/19182)

4.88.160 "Interior **noise"** defined.

Noise which impacts the area, within the outer-

mosLwalls of any dwelling unit. (Prior code § *4935;* oth. 2803, 10/19/82)

4.88.170 "Intermittent **noise" defined.**

A noise that is repeated **at non-uniform** time intervals. (Prior code § **4936; Ord. 2803, 10/19/82)**

'4.88.180 "Industrial facility" defined.

Any building, structure, fa~toiy,plant, premise or portion thereof used **for** inanufacturhig **or** industrial purposes. (Prior code § 937;Ord. 2803, **10/19/82)**

'4.88.190 "Intrusive **noise"** defined.

''That noise **which intmde~o~er** and **above the** existing background **noise at a** given location. The 'relative intrusiveness **of a** sound depends upon its IevCl, duration, frequency, time **of** occurrence, and tonal **or** informatiànal **content as well as the** prevail-**lug background noise level. '(Prior** code § **4938;** Ord 2803, 10/19/82)

:421)0 "Intruding **noise level" defined.**

The sound level created, caused, maintained, or originating from an alleged offensive intrusive noise source, measured in decibels, **at a** specified location while **the** alleged **offensive intrusive noise source is** in 'operation. (Prior code § **4939; Ord. 2803,** 10/19/82)

4.88210 "Mobile noise source" defined.

Any noise source other than a fixed noise source. (Prior code § 4940; Ord. **2803, 10/19/82)**

4.88220 '"Noise disturbance" defined.

Any **sound which (1)** endangers **or** injures **the** safety or health **of** human beings **or (2)** annoys or disturbs persons **of** normal sensitivities, **or (3) en-**dangers or injures personal **or** real property, **or (4)** violates the factors **set** forth in section 4.88.380 of this chapter, **or** *(5)* violates **the** quantitative standards set forth in section 4.88.360 and section 4.88.370. (Prior code § 4941; Ord. 2803, 10/19/82)

4.88.230 'Person" defined.

Any individual, association, partnership, or corporation, and includes any officer, employee, department, agency or instrumentality of a State or any **political** subdivision of.a State, or any **other entity,** public or private in nature, (Prior code § 4942; Ord. **2803,** *101l9f82)*

4.88.240 'Property line" defined.

The imaginary lines along the ground surface, and their vertical extension, whiOh separate the real property o~ied **by One** person from that owned **by** another person, **but not** including intra-building real property divisions. (Prior code § **4943;** Ord. 2803, **10/19/82)**

4.88.250 "Recurrent noise" **defined.**

A noise that is repeated **at relatively** uniform time intervals. (Prior code § 4944; 0th. 2803, *10/19182)*

4.88.260 **'~Residentia1property"** defined.

A parcel of real property which is developed and **used either in 'whole or in** part for residential purposes, other than transient use such as hotels or motels. (Prior code § *4945;* Ord. 2803, 10/19/82)

4.88.270 "School" defined.

Any **public or** private institution conducting **regular** academic **instruction or planned** activity at the preschool, elementary, secondar~**or** collegiate **1ev-**cia, or **which** provides adult **or** continuing education. (Prior code § **4946;** Ord. 2803, 10/19/82)

4.88.280 "Simple **tone** noise" defined.

Any noise which is distinctly audible as a single pitch (frequency) **or set of** pitches as determined **by** the Health Officer. (Prior code § 4947; Ord. 2803, **10/19182)**

4.88.290 **"Sound level meter"** defined.

An instrument, including a microphone, an atuplifler, an output meter, and frequency weighting networks, 'for the measurement of sound **levels which** meets the American National Standards Institute's Standard S1.4-1971 for Type 1 or Type 2 sound **level** meters or an instrument and the associated recording and analyzing equipment which will pro-

vide equivalent data. (Prior code, § 4948; Ord. ~2803, 10119/82)

4.88.300 'LeadOffidal,

The noise control program established by' this 'ordinance shall be adn±Iistered by the Health Officer. (Prior code § *4950;* Ord. 2803, 10/19/82)

4.88310 'Power.

In order to implement and enforce, this ordinance the Health Officer shall have the power to:

a) 'Coordinate the noise control program established by this ordinance ~th all other governmental agencies.

b) Conduct public education in all ispects of noise control.

c) Conduct all necessary inspections, monitorlug, and surveys necessary for the enforcement of this, ordinance.

•d) Establish an interdepartinenthl noise enforcernent responsibilityand procedures document relathe to the investigation of noise complaints. This procedure shall definejurisdictional 'responsibilities 'of the Environmental Health section, Sheriffs Dcpartrnent, Pl2llning 'Department.and Department of Animal Control.

e) 'Enter into contacts, with the approval of the Board of Supervisors, for the provision of technical and enforcement servicós to the Cities of'the Cóunty. (Prior code § 4951; Ord. 2803, 10/19182)

4.88.320 Procedures~

All noise measurements taken for the enforcement of this chapter shall 'be in accordance with the following criteria:

a) Any noise measurement made pursuant to the provisions of this ordinance shall be made with a sound level meter as defined in section 4.88.290. The "A" weighted network (scale) at "slow" respouse shall be used.to measure the sound level. The "fast" or "impulsive" response shall be used to measure impulsive type sound levels; the response used shall be stated. The time durations for each of the sound levels occurring shall 'be measured, together with the duration of the measurements.

b) Calibration of the measurement equipment 'utilizing an acoustic calibrator shall be performed 'immediately prior to recording any noise data.

c) A winiscreen shall be used on the sound level meter for all sound measurements'. No external measurements shajibe made during precipitation, or if wind speed exceeds 12 miles per hour.

d) Exterior noise levels shall be measured within 50 feet of the affected residence, school, hospital, .~:church,public library but in no case beyon&the property line. Where practical, the microphone shall be positioned four to five feet above the ground and ten feet or more away from any reflective surface. ''The location of microphone and adjacent surfaces 'shallbe. described. The microphone orientation shall 'be as recommendedby the sound meter manufacturer.

e) Interior noise levels shall be measured within the affected dwelling unit at a point at least four feet from the wall, ceiling, or floor nearest the, noise source, with windows in the normal seasonal configuration. The microphone location and room configuration shall be described. (Prior code § *4952;* Oth. 2803, 10/19/82)

4.88330 'Exterior noise standards.

It is unlawful for any person at any location within the unincorporated area of the County to create any noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the exterior noise level when measured at any single or multiple family residence, school, hospital, church, public library situated in either the incorporated or unincorporated area 'to exceed the noise level standards as set forth in Table I following:

'Table I - Receiving Land use: Single or Multipie Family Residence, School, Hospital, Church, or Public Library Properties.

'NOISE LEVEL STANDARDS, **BA**

Category	Cwnulath'e Nnniberof Minutésin. any, one hour ,limeperiod	Daytime 7A.M~— 10 P.M.	Nighttime 10 P.M.— 7A.M.
1	30	55	50
2	15	60	'55
3	5	65,	60
4	1	70	65
5	0	75	70

a) In the event the measured background **noise level exceeds the applicable noise level standard in** any category above, **the applicable standard** shall be adjusted in **five** *(5)* dBA increments **so as to encompass the** background noise **level.**

b) Each **of the noise level** standards specified above shall be reduced **'by** *5* CIBA **for simple tone** noises, consisting primarily **of Speech or** music, **or for** recurring orirnennittent impulsive **noisàs.**

c) If the' intruding noises source **is continuous** and cannot reasonably be stopped **for a period of time whereby 'the** background **'noise level** can be **measured, the noise level** measured while **the** source **is in** operation shall be compared directly **to' the** noise **level** standards **in Table I.** (Prior code § *4953;* Ord. 2803, **10/19/82)**

4.88.344) Interior noise standards.

No person Sball~**at** any location within **the unincorporated area of** the **County' operate, or** cause to be operated within a dwelling unit, any source **of** sound, **or create, or** allow **the** creation **of,** any **noise** which causes **the noise level when** measured inside **a receiving dwelling** unit with **windows in** their normal seasonal configuration **to exceed the follow-lug** ~noise**devel** standards as **set forth in Table II** following:

Table II - Interior **Noise** Level Standards - **Dwell-**ingTjtht

NOISE LEVEL STANDARDS, **dBA**

Category	Cumulative Number **of** Minutes in any one hour time period	Daytime *7* A.M.— 10 P.M.	Nighttime 10 PM.— *7 AM.*
''1	'5	45	'40
2'	1	'50	45
.'3	0	55	'50

a) In the event the measured background **noise level exceeds** the applicable **noise level** standard in **'any categoryabove, the applicable standard** shall be adjusted in **five** *(5)* dBA increments **so 'to encompass the** background **noise level.**

b) Each **of the** noise **level** standards specified **above** shall be reduced **by** *5,* CIBA **for** simple **tone noises, noises consisting primarily of speech or** music, or **for** recurring **or** intermittent impulsive **noises.**

c) If the intruding noise ,squrce is continuous and cannot. reasonably **'be** stopped **for a period of'** time **'whereby 'the** background noise **level can be** measured, **the** noise level measured while **the source** is in operation shall be compared directly to **the** noise **level** standards in Table 11. (Prior code § *4954;* Ord. 2803, 10/19/82)

4.88.350 General noise, regulation.

Notwithstanding any **other provision of** this ordi-**nance, it** shall be unlawful **for** any person **to willfully or** negligently make **or continue, or** cause to be made **or** continued any unreasonably **loud, unnecess-**S5XYr **or** unusual noise which disturbs **the** peace and **quiet of** any neighborhood **or which** causes any discomfort **or** annoyance **to** any person **of** normal sensitivity residing in **the area. The** factors which shall be **considered in** determining **whether a violation of** the provisions, **of this** section exist include **the** following:

a) The sound level **of the** objectionable noise.

b) The sound level of the background noise.

c) The proximity **of the noise to** residential sleeping **or hospital** facilities.

d) The nature and zoning **of** the area **from** which the **noise emanates** and upon, which **the noise** impacts.

e) The number **of persons' affected by the noise** sources

f) **The** time **of** day **or** night **the noise occurs.**

'g) The duration **of the noise** and its tonal, informational, **or** musical **content.**

h) Whether **the** noise **is** continuous, recurrent, **or** intermittent.

i) Whether the noise is produced **by a** corumercial **or** i~On~.cómntherciaactivity., (Prior code § ***4955;*** Ord ***2803,*** **10/19/82)**

'4.88.360 E*emptions.

The following' ñctivities aball be exempted frOm **the** provisions of this chapter:

a) School bàñds, school" athletic and school entertainment events.

'b) Outdoor gatherings, **public** dances, shows and sporting and **'entertainment' events providing** said **events are** conducted pursuàñt **to** a11 County regulations.

.c)Activities conducted **on** part,' **public** playgrounds and school grounds provided such"parks, playgrounds and school grounds are o~iedand operated **by a public entity.**

d) Any 'mechanical 'device, apparatus **or equipment'**~sedrelated **to** 0r connected with **emergency** machinery, **vehicle' or** work.'

e) NOise sources associated **with demolition,** construction, repair, remodeling, or grading of'any real propèrty~provided said. 'activities do **not take place between the' hours of &OO P.M.** 'and, '7:00 **'A.M. weekdays.** 5:00 P.M. and 9:00 AM. **on** Saturdays **or at** anytime **on** Sundays, Thanksgiving and Chris~nas.

f) All mechanical devices, apparatus **or equipment** which are utilized **for the protection or salvage 0f** agricultural crops during periods **of potential or actual frost** damage **or other adverse weather conditions.**

g) Mobile noise sources associated with agriculturd operations provided **such** operations **do not** take place between **the hours of** 8:00 **P.M.,** and 7:00 **A.M.**

h) Mobile noise sources associated with **agricultural pest control through** pesticide **application provide**l that **the** application 'is made in accordance **with** restricted material permits **issued by** 0r regulations enforced by the Agricultural Commissioner.

i) Noise sources associated with **the** maintenance **of real** property used **for** residential purpOses **provided said activities** take**place** between **the hours of** 7:00 kM. and 8:00P.M.

j) Any activity **to the 'extent** regulation thereof has been pi~emnpted**by,** State **or Fe** erl.law. (Prior code § ***4956;*** 'Ord..2803, **10/19/82;'. 04 ~32O8,** 03/06/90)

4 88370 Air **conditioning** and **refrigeration. Transition period.**

During the three yàar period foliowing the effective date **of this** chapter, **the** noise standards enumnerated in section 4.88.330 and, section **4.88.340 shall** be increased~.byeight, (8) dBA where **the** alleged óffensiye noise source is an .air conditioning **or** reMgeraiion system or,associated equipment which 'was installed prior to **the** effective date **of this chap**ter. (Prior code ~***4958;*** Ord. 2803, 10/19182)'

4.88.380' . Exemption.

Whenever, for the good **of the public, a government agency, public utility, or** private utility determines a project must be **done** before 7:00 A.M., **or** after 6:00 P.M., **or** weekends, and **so** states in its contract, change order(s), **or bid** documents, said **work shall be** exempted **from this** chapter. (Prior code § ***4959;*** Ord. 3208,03/06190; catchline editorially created, 6/94)

4.88390 Noise board **of review.**

The Planning Commission **of the County of,San** Mateo shall serve as **the Noise Board of Review.** (Prior code § 4960; Ord. **2803, 10/19/82)**

4.88.400 Variances—Authorization.

This Noise Board of Review is authorized **to**

grant variances **for exception from any provision of this ordinance, subject to** imposed limitations as **to area,,** noise **levels,** time limits, and **any other terms** and conditions **the Noise Board of Review determines are** appropriate **to protect the public** health, safety and **welfare. Three (3)** members shall constitute **a** quorum and **at least three (3)** affirmative votes shall be required in support **of** any action. This section shall **in no way be** construed as granting **authority to** operate **or conduct** any activity which **is otherwise** regulated **by law. (Prior code § 4961;** Ord. **2803, 10/19/82)**

4.88.410 Variances—Procedure.

Any person seeking a variance for a noise source which the Health Officer has determined violates any provision **of this** ordinance **may** file an applica-

don with the Noise Board of Review Secretary. Said application shall be accompanied by a fee in the amount of Fifty Dollars *($50.00)*. The application shall contain information that demonstrates that bringing the noise source into compliance with this ordinance would constitute an unreasonable hardship on the applicant, the community, or on other persons. The applicant shall also set forth any actions already taken to comply with the provisions of this ordinance. A separate application shall be filed for each noise source; provided, however, that several mobile sources operating within the boundaries of a single property may be combined into one application. Notice of an application for a variance shall be published (according to established jurisdictional procedure). Any individual who claims to be adversely affected by the allowance of the variance may file a statement with the Noise Board of Review containing any information to support his/her claim.

Upon receipt of the application and all supporting evidence deemed necessary by the Noise Board of Review, the Board shall within (30) days, (1) approve the application in whole or in part, or (2) deny the application.

Applicants for variances and persons contesting variances may be required to submit such information as the Board may reasonably require. In granting or denying an application, the Board Secretary shall keep on public file a copy of the decision and the reason for granting or denying the variance. (Prior code § 4962; Ord. 2803, '10/19/82)

4.88.420 Guidelines for variance.

In determining whether to grant or deny an application for variance the following criteria shall be considered:

a) The magnitude of nuisance caused by the offensive noise,

b) The uses of property within the area of impingement by the noise,

c) The time factors related to study, design, financing and construction of remedial work,

d) The economic factors related to age and useful life of equipment,

e) The general public interest and welfan.

f) Whether strict compliance with the requirement of this chapter will cause practical difficulties, unnecessary hardship or unreasonable expense and any other relevant considerations, including but not limited to, the fact that a commercial or industrial facility as defined in section 4.88.040 and section 4.88.180 commenced development prior to the existence of a resident affected by noise from such facility.

g) The extent to which a commercial or industrial applicant has endeavored to reduce noise. (Prior code § 4963; Ord. 2803, 10/19/82; Ord. 2870, 1/3/84)

4.88.430 Variances—Notification and restrictions.

In the event the variance is granted, the applicant shall be notified of all conditions, which may include restrictions on noise level, noise, duration and operating hours, an approved method of achieving compliance, and a time schedule for its implementation. The variance shall not become effective until all conditions are agreed to by the applicant Noncompliance with any condition of the variance shall terminate the variance and subject the person holding it to those provisions of this ordinance for which the variance was granted. (Prior code § 4964; Ord. 2803, 10/19/82)

4.88.440 Time limit for variance.

A variance will not exceed one (1) year from the date on which it was granted. Application for extension of the time limits specified in variances or for modification of other substantial conditions shall be treated like applications for initial variances under this chapter. (Piior code § 4965; Ord. 2803, 10/19/82)

4.88.450 Appeal to board of supervisors.

Within fifteen *(15)* days following the decision of the Noise Board of Review, the applicant may appeal the decision to the Board of Supervisors by filing a notice of appeal with the Clerk of the Board of Supervisors. The Board of Supervisors shall

either affirm, modil~' or reverse the decision of the N~ise Board of Review. Such decision ~shall be final and shall be based upon such considerations as are set forth in this chapter. (P~ior code § 4967; Ord. 2803, 10/19/82~

4.88.460 Misdemeanors.

Any person violating any of the provisions Of this chapter shall be deemed 'guilty of a misdemeanor. Each day such violation is committed or permitted 'to continue,. shall constitute a separate 'offense and ~hallbe punishable as such. The provisions of this chapter shall not be construed as permitting conduct not proscribed herein and shall not affect' the enforceability of any other applicable provisions of law. (Prior code § 4968; Qrd. 2803, 10/19/82)'

4.88.470~' Responsibility.

The primary responsibility for the enforcement of the provisions of. this chapter shall be with the Health Officer. The Sheriff may also enforce the provisions of this chapter in his area of responsibility as described in the ~~interdepartmental~~ noise enforcement responsibility and procedure document established under section 4.88.310 of this'chapter. (Prior. code § 4969; 0th. 2803, 10/19/82)

Sound Prer3ure rn Sound flresSurctt~e;p’

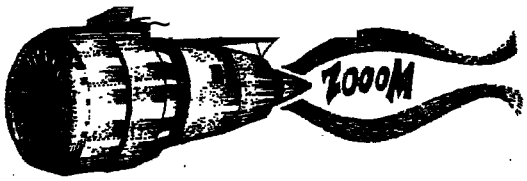
Jet Engine

(25m distance)

µPa

iOOOOO~O

140 dB Threshold ol



130

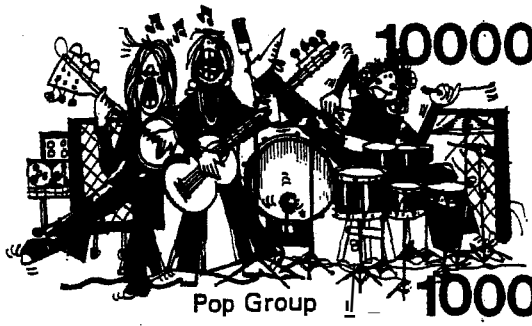
120

Jet Take-Off
(1 00 m distance)

10000000

110

Pneumatic Chipper

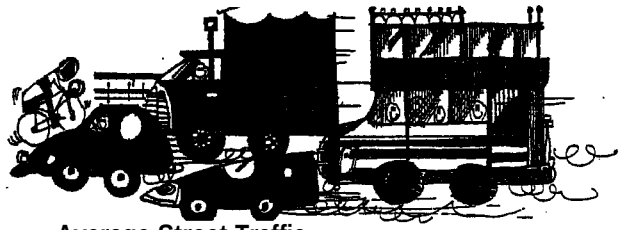


Pop Group

1000000

100

90



Average Street Traffic

Heavy **Truck**

100000

80

70

Business Office

Conversational
Speech

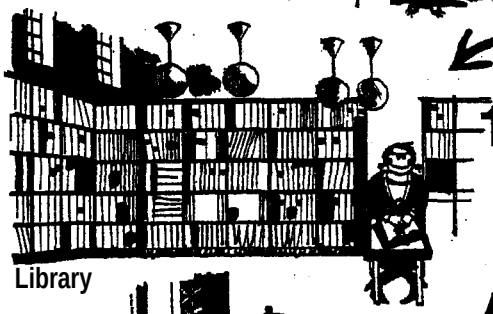
1000

60

50

Jving ~

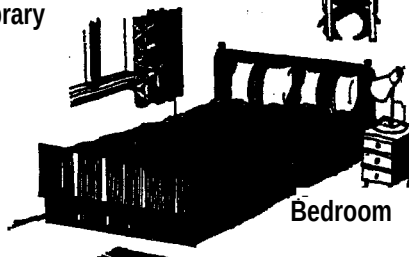
40



1000

30

Library



20

100

10

Wood

Bedroom

20

La’ Threshold 0f Hearing

50

‘BrUel&Kj~r B~K

Bruel &Klaer Instruments, Inc.

Attachment Q

San Mateo County Environmental S

Application for Appeal

Planning and Building

County Government Center - 590 Hamilton St - Redwood City CA 94063
MaH Drop PLN 122.415.363.4161

~J To the Planning Commission

To the Board of Supervisors

flW~1?flJflThr~1ETflE

Name: Yflc,IA6tk%~tj(i_€tkJcJs
C

Address: 9ô. 'SOkc~,Z- b(~

Akt4%L, PCVk) Cd- flla4o RJIL QL9yôa?

Phone, W: ~,$O~9-oso? 1-i:

Zip: 9Cf02b

~1 I~i I 014 ~ I

Permit Numbers involved:

?LkI2ØZ~Qo?jc2.~

I have read and understood the attached information regarding appeal process and alternatives.

,E1' yes **0** no

I hereby appeal the decision of the:

0 Staff or Planning Director
0 Zoning Hearing Officer
O Design Review Committee
Planning Commission

made on)w~c-9 iS .to4~ deny the above-listed permit applications.

Appellant's Signature:

Date: 7-13-2004

Planning staff will prepare a report based on your appeal. In order to facilitate this, your precise objections are needed. For example: Do you wish the decision reversed? If so, why? Do you object to certain conditions of approval? If so, then which~ conditions and why?

Appeal to Board of Supervisors

To Deny Permit PLN 2002-00267

Contents

Basis for Appeal

On June 23, 2004 the Planning Commission, approved the Use Permit request PLN2002-00267 from Verizon Wireless to construct a cellular facility located at 3603 Alameda de las Pulgas. This approval must be reversed in accordance with Section 6254, San Mateo County Zoning Regulations: Chapter 15. "C-1/WMP" District (Neighborhood Commercial/West Menlo Park), and Section 6500 (Use Permits).

Approval of Use Permit 'Does Not Protect the Viability of the SUrrounding Residential Areas and is Injurious to Property in Neighborhood

The purpose of section 6254 is to "Protect the viability of the surrounding residential areas by regulating commercial development and land uses." ***See Section 6254.1 paragraph 2.*** In addition, to make a finding to approve a use permit pursuant to Section 6500, the "establishment, maintenance and/or conducting of the use, as conditioned, will not under the circumstances of the particular case, be detrimental to the public welfare or injurious to property or improvements in the neighborhood."

Aetua~impact of Antennae and Equipment Too Specu~ativeto Accept

The **Use Permit is for nine antennas to be mounted on the roof of the subject property and seven equipment cabinets with heat exchangers and fans in a 27 feet by 9 feet' base station to be placed in the rear of the property. Six of the nine antennas and four** of the seven equipment cabinets being proposed have not been designed or developed **because their development is dependent on the licenses the FCC may grant to Verizon for new frequencies. As a result, the parameters of these antennae and equipment** cabinets are not known at this time. This lack of information invalidates the EMF and **noise reports submitted by Verizon in order to obtain this use permit.**

The EMF report prepared by Hammett and Edison, Inc Consulting Engineering (EMF report) on behalf of Verizon provides conclusions but does not provide information about the values used as input to reach those conclusions. The report mentions computer modeling method and lists the formulas used. However, no where in the report does it indicate the values of h or A to evaluate D to determine whether the exposures are in the near field or far field. The report does not indicate the power density. In addition, No where in the report does it **indicate how the values were arrived at. In addition, the basis of his findings is on antennae that are thought to be similar to the ones they may develop. However, these antennae are not developed and the specific parameters are unknown at this time.**

The cellular facilities of other carriers already present on the subject property are also emitting radiated power. Strangely, according to the EMF report the calculated RF level for the proposed Verizon cellular facility by itself is the same as the cumulative calculated RF level of the two carriers. The results of this study are suspect.

The EMF report indicates that calculations were based on an effective height of 29 1/2 feet. The application for permit indicates that the effective height of the antennae is 32 feet 4 inches. Again the results of this report are suspect.

Forty years ago, Asbestos was also considered a wonderful thing, but we now know that the health risks and exposures are extremely harmful and cause cancer. With the scientific community split on how much exposure to EMF a human can endure before suffering health problems, The Board of Supervisors should protect us in means that are available.

Unfortunately, the Planning Commission was not concerned with this lack in the report. They relied on the results of the study. The study results are suspect and must not be relied on. The Planning Commission is charged with protecting the viability of the surrounding residential areas; the Planning Commission failed in their duty to do so. Their lack of diligence in understanding the report and requiring that it provide minimal information should not be acceptable by this body. Accepting a report for which no one can determine on its face how the results were reached when those results go directly to the hazardous exposure to radio frequency energy of the surrounding residential area violates the purpose of Section 6254.

The Noise Emission report prepared by Brown-Buntin Associates, Inc. on behalf of Verizon, is based on a noise levels and frequency content of a supposedly an identical cell enclosure adjacent to Heald Business College. However, the identical cell enclosure has only one modular cell while the proposed enclosure has more than one modular cell' and the cabinets that will be used for the proposed enclosure are not designed or developed. Again, the equipment cabinets are not created yet since the licenses have not been granted and the antennae these cabinets are to support have not been developed. So to say they are identical is inaccurate and misleading.

It is worth noting that the representative enclosure referred to in the report is in an industrial area, on the corner of Great Mall Parkway (which has six lanes in each direction) and Montague Expressway (which has four lanes in each direction). This representative facility is the only one in the area that Verizon could point to as comparable and even it is less than half the size of the one for which a Use Permit has been approved in West Menlo Park, a quiet bedroom community. Despite counsel's characterization of the equipment cabinet being of "stealth" design. It is a bunker-style monstrosity that will not go unnoticed and will also require disclosure for those in the area that want to sell their property.

Once again the Planning Commission has disregarded the information provided. The cellular facility is not appropriate in size or scope for West Menlo Park and is not in keeping with the purpose of Section 6254. The cellular facility may be appropriate for an industrial area where residents and residential property are not affected, but is absolutely inappropriate for our quiet residential community.

Noise Level Produced By Proposed Equipment Violates Declared Policy, County Code and Zoning Perfomance Standards

Based on the noise study of January 15, 2204, which was first submitted by Verizon and considered by the Zoning Hearing Office and submitted to the Planning Commission, the acceptable noise levels defined in this section are exceeded. According to their study based on specifications of the Modular Flexent Outdoor Modular Cell Equipment, for Alternative Three, which is four modular cell enclosures, two battery cabinets, and a miscellaheous cabinet, the predicted locations of noise contours (dBa) indicated in Figure 4 at all times of day at the limits of the property are shown to be 65 dBa at one contour and 60 dBa at another. In the Noise Emission report it states that the noise levels could be increased 3 to 5 dBa by reflections, and states "This could be of concern for alternative 3."

Table III Predicted Noise Levels at Adjacent Residential Property is 49.2. The report also states the heat exchangers include simple tone noise. As such this brings the allowable dBa under **Section 4.88.330(b)** to be 50 dBa between 7.AM-10 P.M. and 45 dBa between 10 P.M. and 7 A.M.

In their latest noise study which is based on the Heald College site, the emissions levels have been significantly, but inexplicably reduced from the initial study that was based on the specifications. Despite the following statement in the most current Noise report "the noise measurements at the Heald site showed that the fan noise levels of the units at the location were substantially higher than allowed by Belicore Requirement R3-157. The noise from the heat exchanger fans was considered to include a simple tone noise."

When Mr. Buntin was asked what could he attribute this drastic reduction to, he said it puzzled him too. Hehad to "combine the sources because his proprietary computer program crashed using the inputs he used."

In addition, we have requested the input and assumptions that were used to arrive at these new dBa levels. On advice of Verizon's attorney P. Albritton , he could not make these available to us so that another Acoustics Engineer could review the flawed report that the Planning Commission has so readily accepted.

The June 9, Noise Report uses receiver locations are inside the property boundaries 5 ft and 50 ft. The ordinances require that they be at the property not inside the property. The entire method of measurement and prediction is unreliable.

The procedures used by the Mr. Buntin did not follow procedures for measurement identified in Section 4.88.320 and therefore are not acceptable for San Mateo County Standards.

The Staff Report shows lack of due diligence on part of this junior planner who is clearly not versed in acoustic engineering and did not take the time to demand clarification on a clearly flawed report or even attempt to inquire about dramatic differences in the reports.

The Board must reverse the Planning Commission's approval in that the proposed cellular facility because it exceeds the allowable noise levels and the dBa levels are

suspect and have been contrived in an attempt to meet the controlling noise level ordinances and policy.

Section 4.88.010 Findings--Declaration of policy.

In order to control unnecessary, excessive and annoying noise in the County of San Mateo, it is hereby declared to be the policy of the County to prohibit such noise generated from or by all sources as specified in this chapter. It shall be the policy of the County to maintain quiet in those areas which exhibit low noise levels and to implement programs aimed at reducing noise in those areas within the County where noise levels are above acceptable values.

It is hereby determined that certain noise levels are detrimental to the public health, welfare and safety, and are contrary to public interest. Therefore, the Board of Supervisors does ordain and declare that creating, causing or maintaining or allowing to be created, caused or maintained, any noise in a manner prohibited by or not in conformity with the provisions of this chapter, is a public nuisance and shall be punishable as such. (Prior code § 4920; Ord. 2803, 10/19/82)

Section 4.88.330 Exterior noise standards.

It is unlawful for any person at any location within the unincorporated area of the County to create any noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the exterior noise level when measured at any single or multiple family residence, school, hospital, church, public library situated in either the incorporated or unincorporated area to exceed the noise level standards as set forth in Table I following:

Category	Cumulative number of minutes in any one hour period	Noise Level Standards, dBa	
		Daytime 7 A.M. to 10 P.M.	Nighttime 10 P.M> to 7 A.M.
1	30	55	50
2	15	60	55
3	5	65	60
4	1	70	65
5	0	75	70

a) In the event the measured background noise level exceeds the applicable noise level standard in' any category above, the applicable standard shall be adjusted in five (5) dBA increments so as to encompass the background noise level.

b) Each of the noise level standards specified above shall be reduced by 5 dBA for simple tone noises, consisting primarily of speech or music, or for recurring or intermittent impulsive' noises.

c) If the intruding noise source is continuous and cannot reasonably be stopped for a period of time whereby the background noise level can be measured, the noise level measured while the source is in operation shall be compared directly to the noise level standards in Table I. (Prior code § 4953; Ord. 2803, 10/19/82)

Section 6254.5- Performance Standards (paragraph 1) Noise. No use will be permitted which exceeds the following sound levels more than 30 minutes in any hour:

Time of Day	Level (in dBa) Not To Be Exceeded		
	More than 30 minutes in Any Hour	More than 5 minutes in any hour	At any moment
7am'tolOam	60	70	80
10 am to 7am	55	65	75

BuDding He~ght'ExceedsDevelopment Standard

Section 6254.4-Development Standards (paragraph 5) Maximum Building Height provides that the maximum building height shall be two stories not to exceed thirty (30) feet.

As one of the conditions of approval, rooftop screening with the same architectural features and color of the existing building is required to deal with the visual impact of the nine (9) additional antennae on the subject property. This rooftop screening is desirable for reducing the visual impact, but does not take into account the impact it has on the daylight requirements of the adjacent property which will be directly and adversely affected by the screening. The screening, which is effectively a building is since it must have the same features and color as the existing building, will exceed the 30 foot limit for a building.

The Zoning Hearing Officer might have addressed the daylight issue by relocating the mounted antennae at least 5 feet. However, the condition states that they only need to relocate the antennae "provided the equipment performance is not compromised." In the hearing, Verizon stated that the only workable location on the rooftop was the corner that they proposed. This irresolute condition therefore, does not deal with the daylight problem that may be caused by the necessary screening of the ugly antennae if the relocation compromises the operation of the equipment.

In addition, the recommendation submitted by the Planner relied on Section 6405 of the San Mateo County Regulations to support a finding for approval for the facility with the screening. This section provides:

> **"Upon securing of** a **use permit as provided** in **Chapter 24 of this part, towers, radio towers, television towers, gables, spires, penthouses, scenery lofts, water towers and tanks and similar structures and necessary mechanical appurtenances may be built and used to a greater height than the limit established for the district in which the building or structure is located; provided that, no such exception shall cover, at any level, more than 15 percent in area of the lot nor have an area at the base greater than sixteen hundred (1600) square feet; provided further, that no tower, gable, spire or similar structure shall be used for sleeping or eating quarters or for any commercial purpose other than such as may be incidental to the permitted uses of the main building; and provided further, that no building or structure** in **any district except an "A-12," "A-2," or "M-2" District shall ever exceed a maximum height of one hundred fifty (150) feet.**

This section as written was improperly relied on in this situation. The screening does not come under this section. It is not a necessary mechanical appurtenance and does not fall in one of the other categories, gable, spire, scenery loft. Therefore, the screening must come under Section 6254.4 and not exceed 30 feet.

The only reasonable conclusion that can be reached is that the proposed cellular facility is inappropriate for this site. One cannot reach a workable compromise for the visual impact of the antennae and the height and daylight problems that result from the screening.

Property Vaiues Reduced as a Direct Result of Cellular Facility

The level of RF radiation that is injurious to the health of the person is still being debated by the scientific community. There are reports from both sides of the argument that are equally compelling. Whether the injury caused by the cellular facilities is real or simply perceived, this neighborhood has to deal the public perception that such a facility is injurious. This perception results in reduction of property values and our ability to rent units to tenants as the units come available.

The Burden of Facility should be Born By the; Benefici~ries

This West Menlo residential community is asked to bear' the entire burden, reduction in property values, health risks, and noise while the community that is the beneficiary of this facility bears none of these risks.

If such a facility is to be located to provide coverage for the dead spots in Atherton, it is that community that should bear the burden. Alternative sites in that area should be sought.