



## MILPITAS PLANNING COMMISSION AGENDA REPORT

### PUBLIC HEARING

Meeting Date: May 13, 2009

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**APPLICATION:** **CONDITIONAL USE PERMIT NO. UP08-0047, VERIZON WIRELESS TEMPORARY FACILITY.**

**APPLICATION  
SUMMARY:**

A request to locate and operate a temporary wireless telecommunication facility for a maximum of two years. The proposed facility consists of three panel antennas attached to a 60-foot tall monopole and moveable equipment shelter that would occupy approximately five parking spaces at the rear of the parking lot of an existing industrial building.

**LOCATION:** 1501 McCarthy Boulevard (APN 8603005)

**APPLICANT** Karen McPherson for Verizon Wireless, 2785 Mitch Drive, Walnut Creek, CA 94598

**OWNER:** J D Molex One LLC, 1484 Saratoga Avenue, Saratoga, CA 95070-3612

**RECOMMENDATION:** **Staff recommends that the Planning Commission:**  
**1. Close the public hearing; and**  
**2. Adopt Resolution No. 09-023 approving the project subject to conditions of approval.**

**PROJECT DATA:**

General Plan/  
Zoning Designation: Highway Services (HWS)/Light Industrial (M1)

Overlay District: Site and Architectural Overlay (-S)  
Specific Plan: N/A

Site Area: 9.42 Acres  
Monopole Height: 60-feet  
Lease Area: 445.5 square feet  
Parking: 466 provided; 23 surplus stalls

CEQA Determination: Categorically Exempt from further Environmental Review pursuant to Class 3, Section 15303 (New Construction or Conversion of Small Structures) and Class 4, Section 15304

(Minor Alterations to Land) of the California Environmental Quality Act (CEQA).

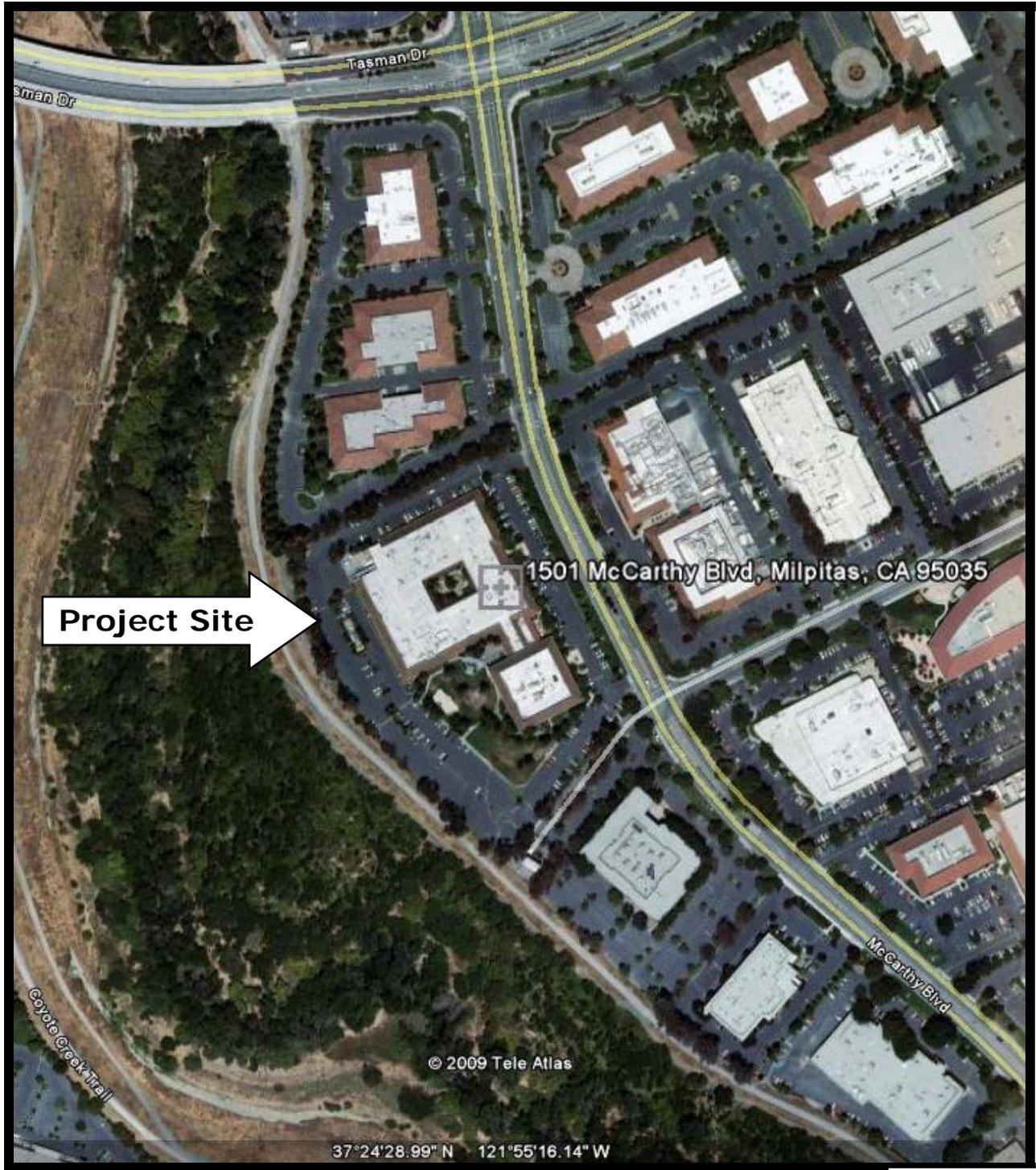
PLANNER: Cindy Hom, Assistant Planner

PJ: 2563

ATTACHMENTS:

- A. Resolution/Conditions of Approval
- B. Project Plans
- C. Telecommunication Information Packet
- D. Photo Simulations

# LOCATION MAP



No scale

**BACKGROUND**

On August 18, 1981, the Planning Commission approved a Site Development Permit for the construction of a 135,648 square foot concrete tilt up Research & Development building and installation of various site improvements for the site located at the northwest corner of the intersection at McCarthy Boulevard and Sycamore Drive.

On November 25, 2008, Karen McPherson with Verizon Wireless submitted an application to locate and operate a temporary wireless telecommunication facility located at rear parking area of an existing industrial development. The purpose of the temporary facility is to establish temporary coverage of the existing Verizon's service area while they secure a permanent cell site. Verizon is currently located on the Agnew Hospital located on the adjacent site in San Jose. The state has the Hospital property for sale and Verizon needs to be able to move the site on short notice should the property sell. The temporary facility would be operated for a maximum period of two years. The application is submitted pursuant to Milpitas Municipal Code XI-10-13.09 and XI-10-57.03 (Conditional Use Permit) that requires Planning Commission review and approval.

**PROJECT DESCRIPTION**

The project site is a 9.45 acre site that is developed with a 135,648 square foot one-story concrete tilt up industrial building and existing site improvements that includes 466 on-site parking spaces, mature landscaping, a generator enclosure, and an employee courtyard consisting of an outdoor amphitheatre, volleyball court and barbeque area. Access to the site is provided by two driveway entrances that are located along McCarthy Boulevard. On-site vehicle circulation is provided by existing two-way drive aisles that runs loops around the main building and courtyard.

The site is surrounded by other industrial buildings to the north, east, and south. The Coyote Creek and creek trail is located to the west. Surrounding land uses includes Highway Services Zoning to the north, Industrial Park Zoning to the east, Light Industrial Zoning to the south, and Park and Open Space to the west. A vicinity map of the subject site location is included on the previous page.

The project proposes a temporary facility that consists of an extending pole system that extends a pole to a maximum height of sixty feet (60'). The pole structure is anchored by guy wires that are attached to the ground. The associated equipment cabinets will be housed within a twenty-two feet long, eight and half feet wide and twelve feet seven inches tall (22' x 8'-6" x 12'-7") moveable trailer that will be located at rear parking and occupy approximately five parking spaces. The applicant proposes to operate for a maximum period of two year period. Staff is recommends as conditions of approval that the conditional use permit is for a maximum period of two years. Upon cessation, the equipment and structures must be removed and the site restored to its original condition. Furthermore, prior to building permit issuance, the applicant shall provide wooden fencing around the leased area as shown on the project plans. To ensure architectural compatibility, the pole and antennae shall be painted an earth tone brown, to the satisfaction of the Planning Division, as to blend with surrounding trees.

***Development Standards***

The project proposal would not affect compliance with setbacks, landscaping requirements, or floor area ratio restrictions for the Light Industrial Zoning District (M1).

***Radio Frequency Emissions:***

Federal law preserves the City’s authority to regulate the placement, construction, and modification of personal wireless service facilities (47 U.S.C. 332((c)(7)(A).) However, federal law does impose a limitation on this authority in the area of radio frequency (RF) emissions. The City is prohibited by federal law from regulating the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of RF emissions to the extent the facilities comply with the Federal Communications Commission’s (FCC) regulations concerning such emissions. (47 U.S.C. 332(c)(7)(B)(iv).

The FCC has established guidelines that place limits on human exposure to RF fields generated by personal wireless service facilities. These guidelines have been endorsed by the U.S. Environmental Protection Agency and the Food and Drug Administration. The FCC requires all personal wireless facilities to comply with these guidelines.

The City, however, may still verify that applicants are in compliance with the FCC’s guidelines. Therefore, the City requires applicants applying for use approval for any telecommunications device to submit a power density report. This report is reviewed by the City’s Telecommunications Advisory Commission to ensure compliance with the FCC’s guidelines.

***Telecommunications Commission Review***

The City of Milpitas Telecommunication Commission conducted a technical review of this project at its April 20, 2009 meeting. The unapproved Telecommunication meeting minutes are attached to this report.

**ADOPTED PLANS AND ORDINANCES CONSISTENCY**

***General Plan***

The table below outlines the project’s consistency with applicable General Plan Guiding Principles and Implementing Policies:

**Table 1**  
**General Plan Consistency**

Policy	Consistency Finding
<p><b>Guiding Principle 2.a-G-1.</b> <i>Maintain a land use program that balances Milpitas’ regional and local roles by providing a highly amendable community environment and a thriving regional center</i></p>	<p>Consistent. The project proposes a temporary wireless facility to provide temporary coverage while a permanent sited is secured. The project will allow uninterrupted service for Verizon Wireless costumers within Verizon’s service area in Milpitas.</p>

***Zoning Ordinance***

As conditioned the project complies with zoning regulations in that the use is permitted with a conditional use permit. The temporary facility complies with the development standards for the Light Industrial Zoning District in that the project proposes no changes to the existing setbacks, Floor Area Ratio, existing landscaping, and complies with the height regulations. Since the proposed facility is a temporary use of the site, the project will be conditioned for a maximum period of two years. To ensure compliance with temporary buildings and uses permit provisions, staff is recommending three six months review. As conditioned, visual impacts will be minimized with appropriate screening and camouflaging to provide for an orderly and harmonious development.

**ENVIRONMENTAL REVIEW**

The Planning Division conducted an initial environmental assessment of the project in accordance with the California Environmental Quality Act (CEQA). Staff determined that the project is Categorically Exempt from further environmental review pursuant to Class 3, Section 15303 (New Construction or Conversion of Small Structures) and Class 4, Section 15304 (Minor Alterations to Land) of the California Environmental Quality Act (CEQA). The project proposes a temporary wireless telecommunication facility that occupies approximately 445.5 square foot area on a developed industrial site and entails installation of a 187 square foot equipment trailer and 60' pole structure. The project also proposes minor trenching in the parking lot for utilities connections.

**PUBLIC COMMENT/OUTREACH**

Staff publicly noticed the application in accordance with City and State law. As of the time of writing this report, there have been no inquiries from the public.

**CONCLUSION**

The project is consistent with the General Plan and Milpitas Zoning in terms of land use and development standards. The project will not have a negative impact to aesthetics given that it is a temporary use and conditioned to operate for a maximum period of two years. The use and location is appropriate given that site is not adjacent to any residential uses. As conditioned, the equipment shelter shall be screened with a wooden fence enclosure and the monopole painted an earth tone brown to blend with adjacent surroundings.

**RECOMMENDATION**

**STAFF RECOMMENDS THAT** the Planning Commission adopt Resolution No. 09-023 approving Conditional Use Permit No. UP08-0047, Temporary Verizon Wireless facility subject to the attached Conditions of Approval.

***Attachments:***

- A. Resolution No. 09-023
- B. Project Plans
- C. Telecommunication Information Packet

**RESOLUTION NO. 09-023****A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MILPITAS, CALIFORNIA, APPROVING CONDITIONAL USE PERMIT NO. UP08-0047, VERIZON WIRELESS, A REQUEST TO LOCATE AND OPERATE A TEMPORARY WIRELESS TELECOMMUNICATION FACILITY LOCATED AT 1501 MCCARTHY BOULEVARD.**

**WHEREAS**, on November 25, 2008, an application was submitted by Karen McPherson, for Verizon Wireless, 12667 Alcosta Boulevard, San Ramon, CA 94583, to locate and operate a temporary wireless telecommunication facility consisting of a 60-foot monopole and 187 square foot movable equipment trailer at any existing industrial property located at 1501 McCarthy Boulevard (APN 86-03-005). The property is located within the Light Industrial Zoning District with Site and Architectural Overlay (M1-S); and

**WHEREAS**, the Planning Division completed an environmental assessment for the project in accordance with the California Environmental Quality Act (CEQA), and recommends that the Planning Commission determine this project is categorically exempt from further environmental review pursuant to Class 3, Section 15303 (New Construction or Conversion of Small Structures) and Class 4, Section 15304 (Minor Alterations to Land) of the California Environmental Quality Act (CEQA).

**WHEREAS**, on May 13, 2009, the Planning Commission held a duly noticed public hearing on the subject application, and considered evidence presented by City staff, the applicant, and other interested parties.

**NOW THEREFORE**, the Planning Commission of the City of Milpitas hereby finds, determines and resolves as follows:

**Section 1:** The recitals set forth above are true and correct and incorporated herein by reference.

**Section 2:** The project is categorically exempt from further environmental review pursuant to Class 3, Section 15303 (New Construction or Conversion of Small Structures) and Class 4, Section 15304 (Minor Alterations to Land) of the California Environmental Quality Act (CEQA). The project proposes a small temporary wireless telecommunication facility that occupies approximately 445.5 square foot area on a developed industrial site and entails installation of a 187 square foot equipment trailer and 60-foot pole structure. The project also proposes minor trenching and patching in the parking lot for utilities connections.

**Section 3:** The project is consistent with the General Plan in that the project balances Milpitas' regional and local roles by providing a highly amendable community environment. The project would provide temporary coverage to ensure uninterrupted service for Verizon Wireless costumers within the service area in Milpitas.

**Section 4:** The project complies with zoning regulations in terms of land use and development standards. The project is conditionally permitted in the Light Industrial Zone. The project proposes no changes to the existing setbacks, Floor Area Ratio, existing landscaping, and complies with the height regulations. As conditioned the proposed facility may operated for a maximum period of two years with three six-month reviews. Visual impacts will be minimized with appropriate screening and camouflaging to provide for an orderly and harmonious development.

**Section 5:** The Planning Commission of the City of Milpitas hereby approves Conditional Use Permit No. Up08-0047, Verizon Wireless, subject to the above Findings, and Conditions of Approval attached hereto as Exhibit 1.

**PASSED AND ADOPTED** at a regular meeting of the Planning Commission of the City of Milpitas on May 13, 2009.

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Chair

**TO WIT:**

**I HEREBY CERTIFY** that the following resolution was duly adopted at a regular meeting of the Planning Commission of the City of Milpitas on May 13, 2009, and carried by the following roll call vote:

<b>COMMISSIONER</b>	<b>AYES</b>	<b>NOES</b>	<b>ABSENT</b>	<b>ABSTAIN</b>
Cliff Williams				
Aslam Ali				
Lawrence Ciardella				
Alexander Galang				
Sudhir Mandal				
Gurdev Sandhu				
Noella Tabladillo				
Mark Tiernan				

**EXHIBIT 1**

**CONDITIONS OF APPROVAL  
CONDITIONAL USE PERMIT NO. UP08-0047**

A request to locate and operate a temporary wireless telecommunication facility for a maximum of two years. The proposed facility consists of three panel antennas attached to a 60-foot tall monopole and moveable equipment shelter that would occupy approximately five parking spaces at the rear of the parking lot of an existing industrial building.  
1501 McCarthy Boulevard (APN 8603005)

**Planning Division**

1. The owner or designee shall develop the approved project in conformance with the approved plans and color and materials sample boards approved by the Planning Commission on May 13, 2009, in accordance with these Conditions of Approval. (P)  
  
Any deviation from the approved site plan, elevations, materials, colors, landscape plan, or other approved submittal shall require that, prior to the issuance of building permits, the owner or designee shall submit modified plans and any other applicable materials as required by the City for review and obtain the approval of the Planning Director or Designee. If the Planning Director or designee determines that the deviation is significant, the owner or designee shall be required to apply for review and obtain approval of the Planning Commission, in accordance with the Zoning Ordinance.
2. Conditional Use Permit No. UP08-0047 shall become null and void if the project is not commenced within 18 months from the date of approval. Pursuant to Section 64.04-2 of the Zoning Ordinance of the City of Milpitas, since the project requires the issuance of a building permit, the project shall not be deemed to have commenced until the date of the building permit is issued and a foundation is completed. (P)  
  
Pursuant to Section 64.04-1, the owner or designee shall have the right to request an extension of UP08-0047 if said request is made, filed and approved by the Planning Commission prior to expiration dates set forth herein.
3. The temporary facility shall operate for a **maximum period of two (2) years**. The project shall be subject to three (3) six-month reviews from the time the site is operational to ensure compliance with these conditions of approval. (P)
4. Upon cessation, the equipment and structures must be removed and the site restored to its original condition. (P)
5. Prior to building permit issuance, the applicant shall provide wooden fencing around the leased area as shown on the project plans. (P)
6. To ensure architectural compatibility, the pole and antennae shall be painted an earth tone brown, to the satisfaction of the Planning Division, as to blend with surrounding trees. (P)
7. The use shall be operated in accordance with all local, state, and federal regulations. (P)

8. If at the time of project conformance with conditions of approval there is a project job account balance due to the City for recovery of review fees, review of plans will not be initiated until the balance is paid in full. (P)
9. Prior to facility installation, plans shall be submitted that show how the project complies with the following requirements (F):
  - a. Approved access shall be provided to the equipment. Verify KNOX lock (quantity and location to be determined by the Fire Dept. if none exists) for Fire Department access. CFC (California Fire Code) Section 902.4.
  - b. Equipment shall be posted with signage identifying the company name and the site identification number.
  - c. The location shall be labeled for the hazard with a sign approved for location and content by the Fire Department. Signage shall conform to the NFPA 704 standards
  - d. Each antenna shall be identified to denote its function, i.e., transmitter or receiver antenna when located on roof structures or other places subject to close proximity to humans.
  - e. Shutdown of transmitter antenna(s) shall be provided. Written shutdown procedures (including remote shutdown) shall be provided to the Milpitas Fire Department Inspector at the time of inspection. Fire Department inspection shall include system shutdown.
  - f. For remote shutdown process, the phone number, the specific SITE I.D. number shall be posted outside of the equipment enclosure, on the face of the wireless equipment cabinet, at the electrical equipment (if different location than the wireless equipment), roof hatch, fire control, and other access points to the transmitter antennae.
  - g. If manual shutdown mechanism is located on site, the shutdown mechanism shall be identified.
  - h. Prior to final permit signoff, the installer shall call for an inspection by the Fire Department to verify labeling, signage and transmission shutdown.
10. It is the developer's responsibility to obtain any necessary permits or approvals from affected agencies or private parties. Copies of these approvals or permits must be submitted to the City of Milpitas Engineering Division. (E)
11. Prior to building permit issuance, developer must pay all applicable development fees, including but not limited to plan check and inspection deposit, and 2.5% building permit automation fee. (E)

P = Planning

F = Fire Prevention

E = Engineering



# "AGNEW" PS# 117274 TEMPORARY SITE

**1501 McCARTHY BLVD  
MILPITAS, CA 95035**

**RECEIVED**

MAR 16 2009

**CITY OF MILPITAS  
PLANNING DIVISION**

**JES  
ENGINEERING, INC.**  
CIVIL ENGINEERING & LAND SURVEYING  
1355 WILLOW WAY, SUITE 105  
CONCORD, CA 94520  
PHONE: (925) 674-1151  
FAX: (925) 674-1314

**verizon**wireless  
2785 MITCHELL DRIVE, BLDG 9  
WALNUT CREEK, CA 94598  
OFFICE: (925) 279-6000  
CONTACT: JIM GRAHAM  
PHONE: (925) 279-6333

PS NO. 117274  
"AGNEW (RELOCATION)"-TEMP SITE  
1501 McCARTHY BLVD  
MILPITAS, CA 95035  
SANTA CLARA COUNTY

VZW CE	
SIGNATURE	DATE
VZW RF	
SIGNATURE	DATE
VZW PA	
SIGNATURE	DATE
VZW EE	
SIGNATURE	DATE
PROPERTY OWNER	
SIGNATURE	DATE
RIDGE COMM ZONING	
SIGNATURE	DATE
RIDGE COMM RE	
SIGNATURE	DATE
RIDGE COMM CONSTR	
SIGNATURE	DATE



DRAWN BY: WCM/JWH/WCM  
CHECKED BY: JI

NO.	DATE	ISSUE
A	10/06/08	90% CD'S
1	10/14/08	REDLINE CORR
2	10/31/08	PER REDLINES
3	11/13/08	100% CD'S
4	02/23/09	PLAN CHECK COMM.
5	03/11/09	UPDATED PER C1

SHEET TITLE

**TITLE SHEET**

SHEET NUMBER

**T-1**

JES JOB NO. 08079RIDGE

	VICINITY MAP	CODE COMPLIANCE	PROJECT TEAM														
		<p>ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED NOT CONFORMING TO THESE CODES.</p> <ol style="list-style-type: none"> <li>CALIFORNIA ADMINISTRATIVE CODE (INCLUDING TITLES 24 &amp; 25)</li> <li>CALIFORNIA BUILDING CODE (CBC) 2007</li> <li>CALIFORNIA MECHANICAL CODE (CMC) 2007</li> <li>CALIFORNIA PLUMBING CODE (CPC) 2007</li> <li>CALIFORNIA ELECTRIC CODE (CEC) 2007</li> <li>BUILDING ENERGY EFFICIENCY STANDARDS (BEES) 2007</li> <li>COUNTY ORDINANCES</li> </ol> <p>ACCESSIBILITY REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2007 UNIFORM BUILDING CODE.</p>	<p><b>CIVIL ENGINEER:</b> JES ENGINEERING, INC. 1355 WILLOW WAY, SUITE 105 CONCORD, CA 94520 PHONE: (925) 674-1151 FAX: (925) 674-1314</p> <p><b>SURVEYOR:</b> QUIET RIVER 5673 WEST LAS POSITAS BLVD, SUITE 215 PLEASANTON, CA 94588 PHONE: (925) 734-6788 FAX: (925) 734-6732</p> <p><b>OWNER:</b> J.D MOLEX ONE, LLC 1501 McCARTHY BLVD MILPITAS, CA 95035 CONTACT: DON ICHIKAWA PHONE: (408) 374-1613 FAX: (408) 374-4095</p>														
<p><b>DRIVING DIRECTIONS</b></p> <p>FROM VERIZON WIRELESS (WALNUT CREEK): TAKE I-680 SOUTH TOWARDS SAN JOSE. TAKE THE MISSION BLVD/WARD SPRINGS DIST (I-680) EXIT AND TURN RIGHT ONTO MISSION BLVD. TAKE I-680 SOUTH TOWARDS SAN JOSE. TAKE GREAT MALL PKWY/TASMAN DRIVE. TURN RIGHT ON TASMAN DRIVE. TURN LEFT ON McCARTHY BLVD. PROPERTY IS ON THE RIGHT SIDE OF McCARTHY AND THE SITE IS LOCATED AT THE BACK PORTION OF THE PROPERTY.</p>	<p><b>SHEET INDEX</b></p> <table border="0"> <tr> <td>T1 TITLE SHEET</td> <td>E1 SINGLE LINE DIAGRAM</td> </tr> <tr> <td>C1 SITE SURVEY</td> <td>E2 ELECTRICAL PLAN</td> </tr> <tr> <td>A1.0 OVERALL SITE PLAN</td> <td>E3 GROUNDING PLAN</td> </tr> <tr> <td>A1 SITE PLAN</td> <td>E4 GROUNDING DETAILS</td> </tr> <tr> <td>A2 ELEVATIONS</td> <td></td> </tr> <tr> <td>A3 UTILITY EASEMENT PLAN</td> <td></td> </tr> </table>	T1 TITLE SHEET	E1 SINGLE LINE DIAGRAM	C1 SITE SURVEY	E2 ELECTRICAL PLAN	A1.0 OVERALL SITE PLAN	E3 GROUNDING PLAN	A1 SITE PLAN	E4 GROUNDING DETAILS	A2 ELEVATIONS		A3 UTILITY EASEMENT PLAN		<p><b>PROJECT DESCRIPTION</b></p> <ol style="list-style-type: none"> <li>PLACE A VERIZON WIRELESS TEMPORARY COW (CELL ON WHEELS) WITHIN A 16'-6"x27'-0" LEASE AREA ON WEST SIDE OF (E) GENERATORS EQUIPMENT AREA INSIDE 3 PARKING SPACES</li> <li>ADD (3) NEW PANEL ANTENNAS ON TEMPORARY COW</li> <li>INSTALL NEW TELCO &amp; POWER CONDUITS</li> </ol>	<p><b>APPLICANT:</b> <b>verizon</b>wireless 2785 MITCHELL DRIVE WALNUT CREEK, CA 94598 CONTACT: JIM GRAHAM PHONE: (925) 279-6333 FAX: (925) 279-6365</p> <p><b>AGENT:</b> RIDGE COMMUNICATIONS, INC. 12667 ALCOSTA BLVD., SUITE 175 SAN RAMON, CA 94583 CONTACT: SUE FINCH PHONE: (925) 519-5706 FAX: (925) 498-2341</p> <p><b>CONSTRUCTION:</b> CONTACT: KEITH SCHMID PHONE: (408) 679-1141 FAX: (925) 498-2340</p>		
T1 TITLE SHEET	E1 SINGLE LINE DIAGRAM																
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A3 UTILITY EASEMENT PLAN																	
	<p><b>BUILDING / SITE DATA LEGEND</b></p> <table border="0"> <tr> <td>A.P.N.:</td> <td>086-03-005</td> </tr> <tr> <td>PS NUMBER:</td> <td>117274</td> </tr> <tr> <td>ZONING:</td> <td>INDUSTRIAL PARK (IP)</td> </tr> <tr> <td>OCCUPANCY TYPE:</td> <td>U (UNMANNED)</td> </tr> <tr> <td>CONSTRUCTION TYPE:</td> <td>TYPE V (ONE HOUR)</td> </tr> <tr> <td>LEASE AREA:</td> <td>16'-6"x27'-0" (445.5± SQ. FT.)</td> </tr> <tr> <td>ANTENNAS</td> <td>(3) PANEL ANTENNAS</td> </tr> </table> <p>LATITUDE: 37°24'27.00"N (NAD 83)      LATITUDE: 37°24'27.22"N (NAD 27) LONGITUDE: 121°55'20.39"W              LONGITUDE: 121°55'16.54"W</p> <p>SITE GROUND ELEVATION @ PROPOSED PROJECT AREA = 25.7± AMSL (NGVD 29)</p>	A.P.N.:	086-03-005	PS NUMBER:	117274	ZONING:	INDUSTRIAL PARK (IP)	OCCUPANCY TYPE:	U (UNMANNED)	CONSTRUCTION TYPE:	TYPE V (ONE HOUR)	LEASE AREA:	16'-6"x27'-0" (445.5± SQ. FT.)	ANTENNAS	(3) PANEL ANTENNAS		
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LEASE AREA:	16'-6"x27'-0" (445.5± SQ. FT.)																
ANTENNAS	(3) PANEL ANTENNAS																

DATE: 03/04/09

DRAWN BY: MAS

FILE NO.: RIDG8003COW

REVISIONS		
DATE	DESCRIPTION	INITIAL
09/05/08	90% ISSUE	MAS
10/20/08	REVISE C.O.W. SIZE	MAS
10/29/08	100% COMPLETE	MAS
11/06/08	COW SITE ONLY REMOVE C2	MAS
03/04/09	ADDITIONAL TOPO	ROC

**verizon wireless**

2785 MITCHELL DRIVE  
WALNUT CREEK, CA 94598  
TEL: (925) 279-6333  
FAX: (925) 279-6365

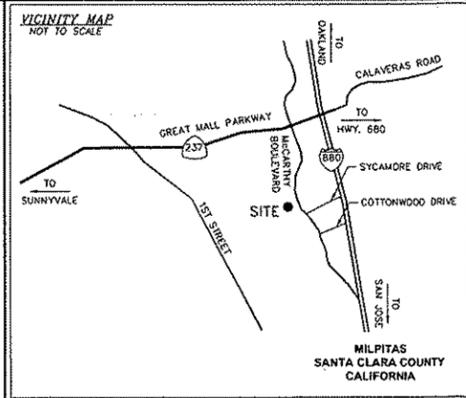
**QUIET RIVER**  
Land Services Inc.

5673 West Las Positas Boulevard, Suite 215  
Pleasanton, California 94566  
(925) 734-6788 Phone  
(925) 734-6732 Fax

EXISTING SITE CONDITIONS

117274  
AGNEW  
TEMPORARY C.O.W. LOCATION  
1501 MCCARTHY BOULEVARD  
MILPITAS, CA 95035

**C1**  
OF 1 SHEET



**PROPERTY INFORMATION**

Owner: J.D. MOLEX ONE, LLC  
Address: 1501 MCCARTHY BOULEVARD  
MILPITAS, CA 95035

Site: AGNEW TEMPORARY SITE  
Address: 1501 MCCARTHY BOULEVARD  
MILPITAS, CA 95035

Assessor's Parcel Number: 086-03-005

Height of Building/Tower: N/A

Title Report:  
TITLE REPORT FOR THIS PROPERTY WAS PROVIDED BY FIDELITY NATIONAL TITLE COMPANY, REPORT #06-51043444, DATED JULY 21, 2008.

EASEMENT NOTES:  
ITEM 3 - POLE LINE EASEMENT, 1956. EXACT LOCATION NOT SLOISED OF RECORD.

Legal Description:  
PROPERTY SITUATED IN THE CITY OF MILPITAS, COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, BEING PARCEL 8 OF PARCEL MAP FILED FOR RECORD IN BOOK 441 OF PARCEL MAPS AT PAGE 43, RECORDS OF SAID COUNTY.

**FEMA FLOOD ZONE DESIGNATION** National Flood Insurance Program  
County: SANTA CLARA Effective Date: JUNE 22, 1998  
Community-Panel Number: 050344-0003-G  
The Flood Zone Designation for this site as plotted by scale is:

X Areas of 500-year flood; areas of 100-year flood with average deposits of less than 1 foot or deposits less than 1 square mile and areas protected by levees from 100 year flood.

**SURVEY DATA**  
NAD 83 Datum:  
Lot: N 37°24'27.00" Long: W 121°55'20.39"  
Datum Base: NAD 83 Equipment Used: Topcon Hyperite Receiver  
(See Note 2)

Site Ground Elevation: 25.7± AMSL (NGVD 29) AT PROPOSED C.O.W.

Basis of Elevations:  
GLOBAL POSITIONING SYSTEM (GPS)  
(SEE NOTE 2)

Basis of Bearings:  
PARCEL MAP FILED IN BOOK 441 AT PAGE 43 IN THE RECORDS OF SANTA CLARA COUNTY, AND TWO FOUND MONUMENTS AS SHOWN.

Date of Field Survey: 09/02/08

**NOTES**

1.) This is not a boundary survey. This is a specialized topographic map with property lines and easements being a graphic depiction of various information gathered from previous title reports, back-up documents of record, maps and available monuments found during the field survey. No property monuments were set. No title research was performed by Quiet River Land Services, Inc.

2.) The latitude, longitude and elevation shown herein were derived from post-processed L-1/L-2 data collected using Novstar Global Positioning System (GPS) and a Topcon Hyperite Receiver. Topcon specifications report decimeter level accuracy (horizontal) when data is properly collected and processed. (Elevation = ±3.0 feet.)

3.) Unless otherwise noted, no underground utility locating service company was contacted prior to this map being prepared; therefore, there may be non-visible or obscure utilities existing on the property not shown on this map - so CALL BEFORE YOU DIG.

4.) Any electronic digital media provided by Quiet River Land Services, Inc. to our client is a courtesy and is not to be reproduced, distributed, sold, altered, revised, edited or amended without the express written consent of an Officer of Quiet River Land Services, Inc. Further, only the final stamped, signed and dated original "hard copy" version of our survey or map is considered to be our legally recognized product.

**SURVEYOR'S STATEMENT**

I, the undersigned, a Registered Professional Land Surveyor licensed under the laws of the State of California do hereby state that the information, measurements, easements, record boundary lines, bearings and distances as shown hereon are based upon a field survey as dated above and upon items of public record and data contained in a title report, as referenced. Furthermore, the latitude and longitude coordinates are reported in NAD 83 Datum and are accurate to within ±15 centimeters horizontally; and the ground elevation, reported in NGVD 1929 Datum, is within ±3 feet vertically. The coordinate values and elevations are within the I-A Accuracy Code designation as listed in the A.S.A.C. Information Sheet 91-003 and are accurate to the best of my knowledge and belief.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

**LEGEND**

ASSESSOR'S PARCEL NUMBER	ASPHALT
CP CONTROL POINT	CONCRETE
EL ELEVATION	CONCRETE POINT
FH FIRE HYDRANT	CONTROL POINT
FND. FOUND	FOUND MONUMENT
HT. HEIGHT	GPS POINT
MON. MONUMENT	MONUMENT TO MONUMENT
(M-M) MONUMENT TO MONUMENT	P 15.3 PARAPET/ROOF ELEVATIONS
P.O.B. POINT OF BEGINNING	R 12.3 SPOT ELEVATION
P.O.C. POINT OF COMMENCEMENT	× 12.3 TEMPORARY BENCHMARK
PP POWER POLE	
(TYP.) TYPICAL	

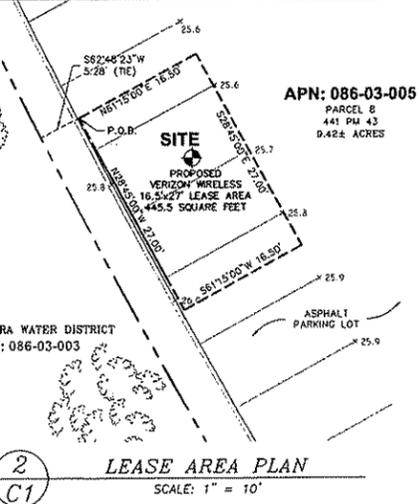
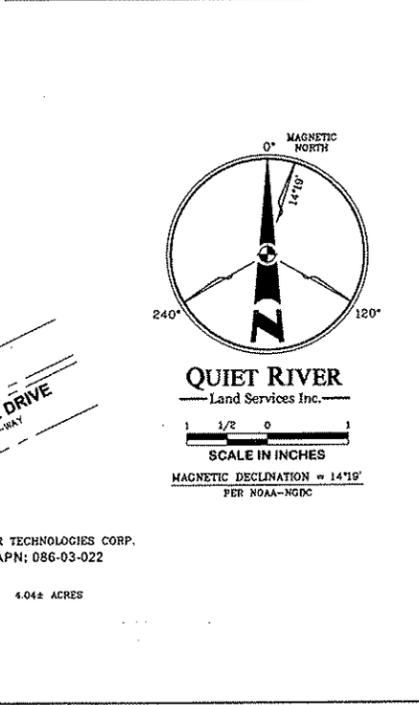
**LEGAL DESCRIPTION**

REAL PROPERTY LOCATED IN THE CITY OF SAN JOSE, COUNTY OF SANTA CLARA, STATE OF CALIFORNIA BEING A TWENTY-TWO FOOT BY FORTY-FIVE FOOT (22'x45') RECTANGULAR LEASE AREA SITUATED ENTIRELY WITHIN THAT CERTAIN 9.42± ACRE PARCEL OF LAND IDENTIFIED AS PARCEL 8 OF THAT CERTAIN PARCEL MAP FILED FOR RECORD IN BOOK 441 OF MAPS AT PAGE 43, RECORDS OF SAID COUNTY, SAID LEASE AREA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A STANDARD CITY MONUMENT FOUND AT THE INTERSECTION OF MCCARTHY BOULEVARD AND SYCAMORE DRIVE, AS SAID MONUMENT AND STREETS ARE SHOWN ON SAID PARCEL MAP; THENCE ALONG THE MONUMENT LINES AS SHOWN ON SAID MAP, NORTH 28°49'20" WEST, 33.92 FEET TO A SIMILAR MONUMENT MARKING AN ANGLE POINT; THENCE CONTINUING, NORTH 28°00'40" WEST, 401.08 FEET TO ANOTHER STANDARD MONUMENT MARKING A POINT OF CURVE; THENCE LEAVING SAID MONUMENT LINE AT A RIGHT ANGLE, SOUTH 63°39'20" WEST, 48.00 FEET TO A POINT ON THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF SAID MCCARTHY BLVD., SAID POINT BEING A POINT OF CIRCULAR CURVE; THENCE ALONG SAID RIGHT-OF-WAY LINE IN A NORTHEASTERLY DIRECTION, 241.53 FEET ALONG THE ARC OF SAID CIRCULAR CURVE TO THE RIGHT, HAVING A RADIUS OF 1240.00 FEET, A CENTRAL ANGLE OF 113°21'33", AND A LONG CHORD WHICH BEARS NORTH 20°25'52" WEST, 241.15 FEET TO THE NORTHEASTERLY CORNER OF SAID PARCEL 8; THENCE ALONG THE NORTHERLY LINE OF SAID PARCEL 8, SOUTH 83°59'20" WEST, 548.02 FEET TO A NON-TANGENT INTERSECTION WITH A CIRCULAR CURVE, SAID INTERSECTION BEING THE NORTHWESTERLY CORNER OF PARCEL 8; THENCE IN A SOUTHEASTERLY DIRECTION ALONG THE WESTERLY LINE OF SAID PARCEL 8, 305.66 FEET ALONG THE ARC OF SAID CIRCULAR CURVE TO THE LEFT, HAVING A RADIUS OF 900.00 FEET, A CENTRAL ANGLE OF 19°27'33", AND A LONG CHORD WHICH BEARS, SOUTH 17°27'50" EAST, 304.20 FEET; THENCE LEAVING SAID LINE ON A RADIAL BEARING, NORTH 52°48'23" EAST, 5.28 FEET TO THE NORTHWEST CORNER OF, AND POINT OF BEGINNING FOR THE LEASE AREA HERIN DESCRIBED; THENCE IN A CLOCKWISE DIRECTION AROUND THE PERIMETER OF SAID LEASE THE FOLLOWING FOUR (4) COURSES AND DISTANCES:

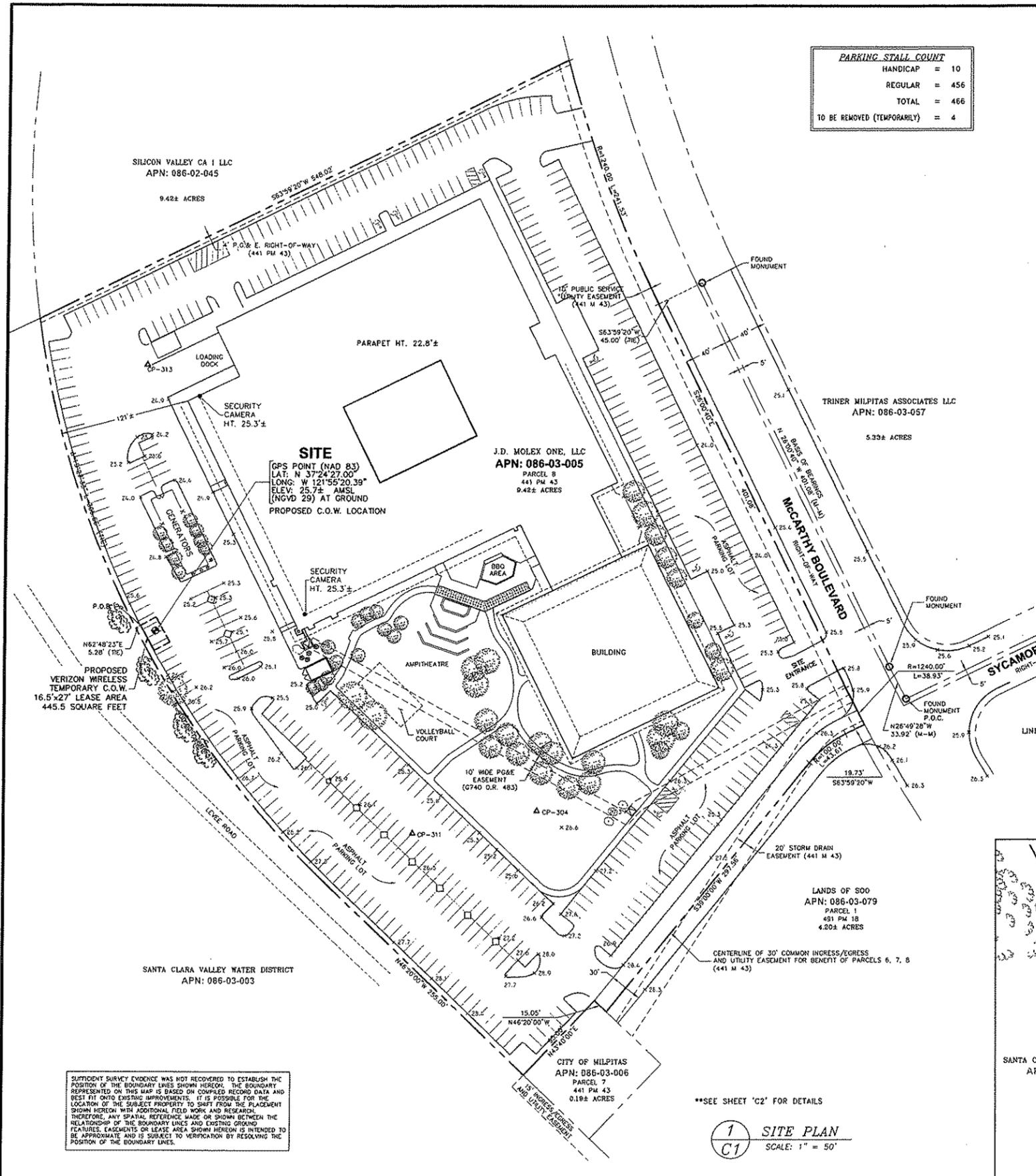
- 1.) NORTH 61°15'00" EAST, 16.50 FEET; THENCE,
- 2.) SOUTH 28°45'00" EAST, 27.00 FEET; THENCE,
- 3.) SOUTH 61°15'00" WEST, 16.50 FEET; THENCE,
- 4.) NORTH 28°45'00" WEST, 27.00 FEET TO THE POINT OF BEGINNING AND CONTAINING 445.5 SQUARE FEET.

TOGETHER WITH ACCESS AND UTILITY EASEMENTS AS SHOWN OR AS NEEDED TO SERVICE THE LEASE AREA.



**PARKING STALL COUNT**

HANDICAP	= 10
REGULAR	= 456
TOTAL	= 466
TO BE REMOVED (TEMPORARILY)	= 4



SUFFICIENT SURVEY EVIDENCE WAS NOT RECOVERED TO ESTABLISH THE POSITION OF THE BOUNDARY LINES SHOWN HEREON. THE BOUNDARY REPRESENTED ON THIS MAP IS BASED ON COMPILED RECORD DATA AND BEST FIT ONTO EXISTING IMPROVEMENTS. IT IS POSSIBLE FOR THE LOCATION OF THE SUBJECT PROPERTY TO SHIFT FROM THE PLACEMENT SHOWN HEREON WITH ADDITIONAL FIELD WORK AND RESEARCH. THEREFORE, ANY SPATIAL REFERENCE MADE OR SHOWN BETWEEN THE RELATIONSHIP OF THE BOUNDARY LINES AND EXISTING GROUND FEATURES, EASEMENTS OR LEASE AREA SHOWN HEREON IS INTENDED TO BE APPROXIMATE AND IS SUBJECT TO VERIFICATION BY RESOLVING THE POSITION OF THE BOUNDARY LINES.

**1**  
**C1**

**SITE PLAN**  
SCALE: 1" = 50'

F:\RIDG8003\Map\RIDG8003COW.dwg Mar. 04, 2009 - 5:50pm mshewartz

**JES ENGINEERING, INC.**  
 CIVIL ENGINEERING & LAND SURVEYING  
 1355 WILLOW WAY, SUITE 105  
 CONCORD, CA 94520  
 PHONE: (925) 674-1151  
 FAX: (925) 674-1314

**verizonwireless**  
 2785 MITCHELL DRIVE, BLDG 9  
 WALNUT CREEK, CA. 94598  
 OFFICE: (925) 279-6000  
 CONTACT: JIM GRAHAM  
 PHONE: (925) 279-6333

PS NO. 117274  
 "AGNEW (RELOCATION)"-TEMP SITE  
 1501 McCARTHY BLVD  
 MILPITAS, CA 95035  
 SANTA CLARA COUNTY

VZW CE	
SIGNATURE	DATE
VZW RF	
SIGNATURE	DATE
VZW PA	
SIGNATURE	DATE
VZW EE	
SIGNATURE	DATE
PROPERTY OWNER	
SIGNATURE	DATE
RIDGE COMM ZONING	
SIGNATURE	DATE
RIDGE COMM RE	
SIGNATURE	DATE
RIDGE COMM CONSTR	
SIGNATURE	DATE



DRAWN BY: WCM/JWH/WCM  
 CHECKED BY: JH

NO.	DATE	ISSUE
A	10/06/08	90% CD'S
1	10/14/08	REDLINE CORR
2	10/31/08	PER REDLINES
3	11/13/08	100% CD'S
4	02/23/09	PLAN CHECK COMM.
5	03/11/09	UPDATED PER C1

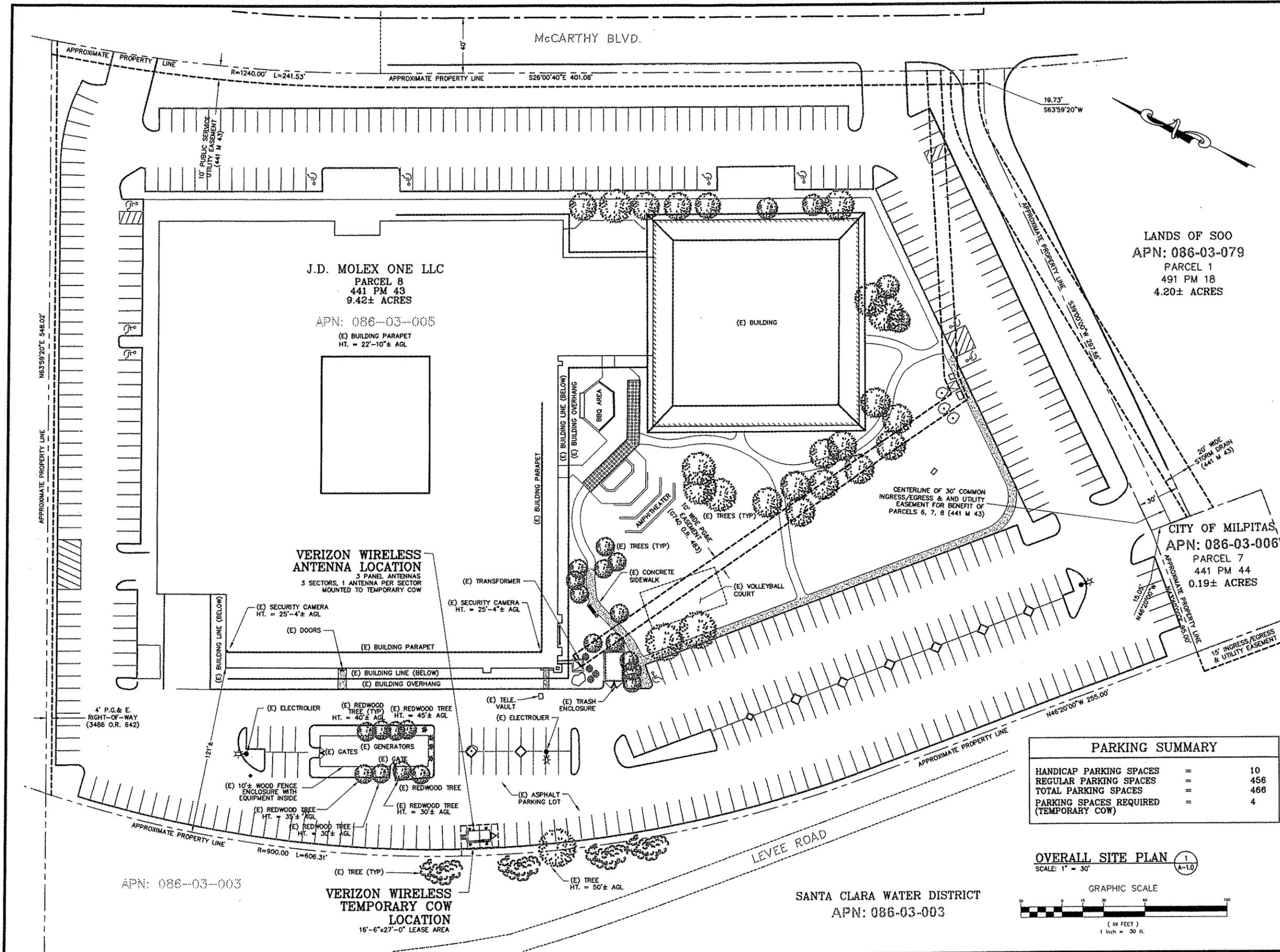
SHEET TITLE

**OVERALL SITE PLAN**

SHEET NUMBER

**A-1.0**

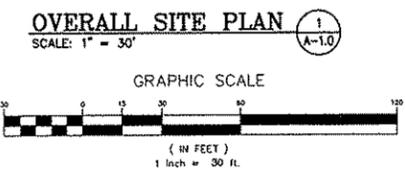
JES JOB NO. 08079RIDGE



LANDS OF SOO  
 APN: 086-03-079  
 PARCEL 1  
 491 PM 18  
 4.20± ACRES

CITY OF MILPITAS  
 APN: 086-03-006  
 PARCEL 7  
 441 PM 44  
 0.19± ACRES

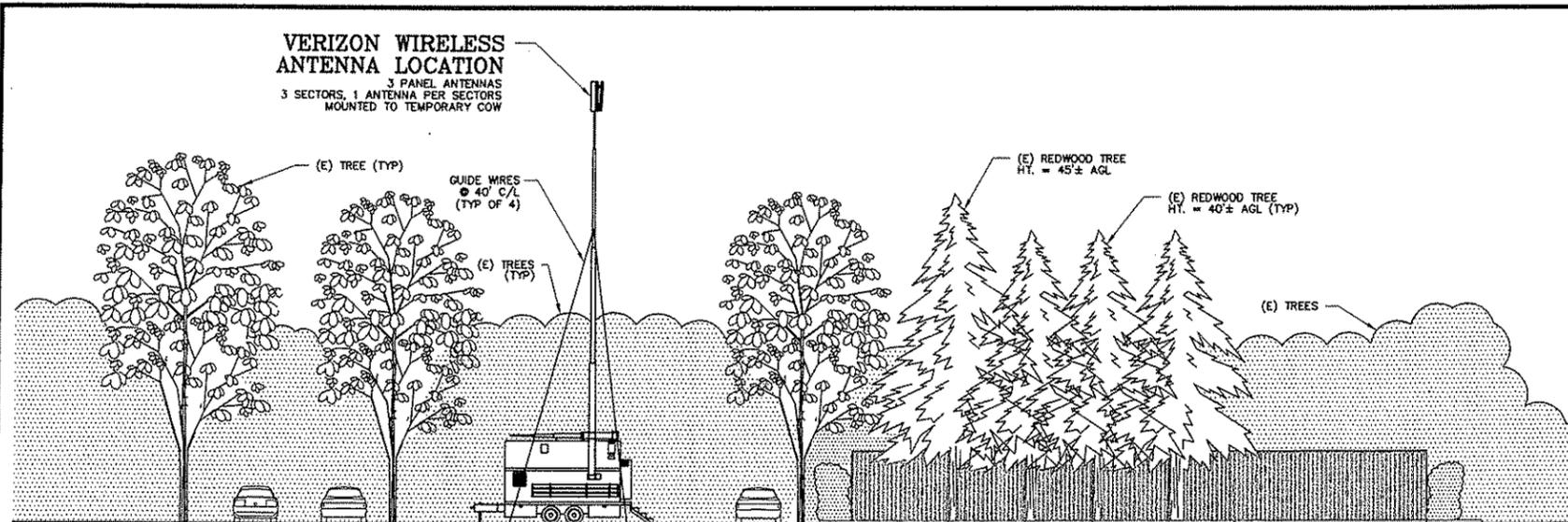
HANDICAP PARKING SPACES	=	10
REGULAR PARKING SPACES	=	456
TOTAL PARKING SPACES	=	466
PARKING SPACES REQUIRED (TEMPORARY COW)	=	4



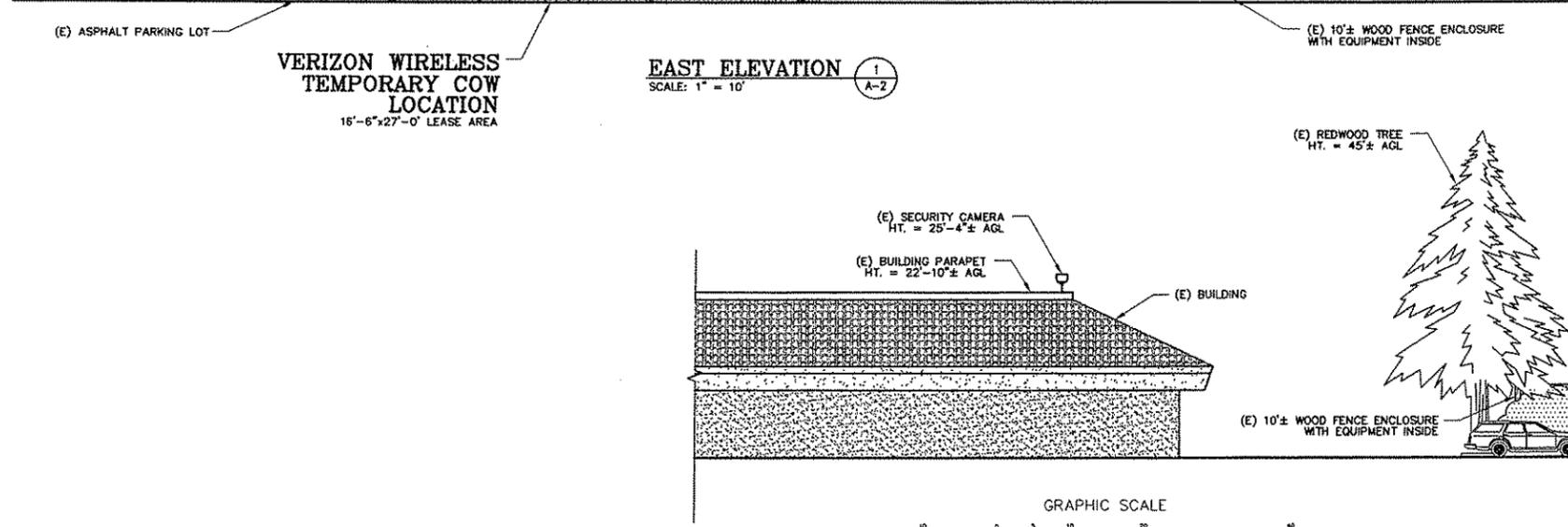
SANTA CLARA WATER DISTRICT  
 APN: 086-03-003

APN: 086-03-003

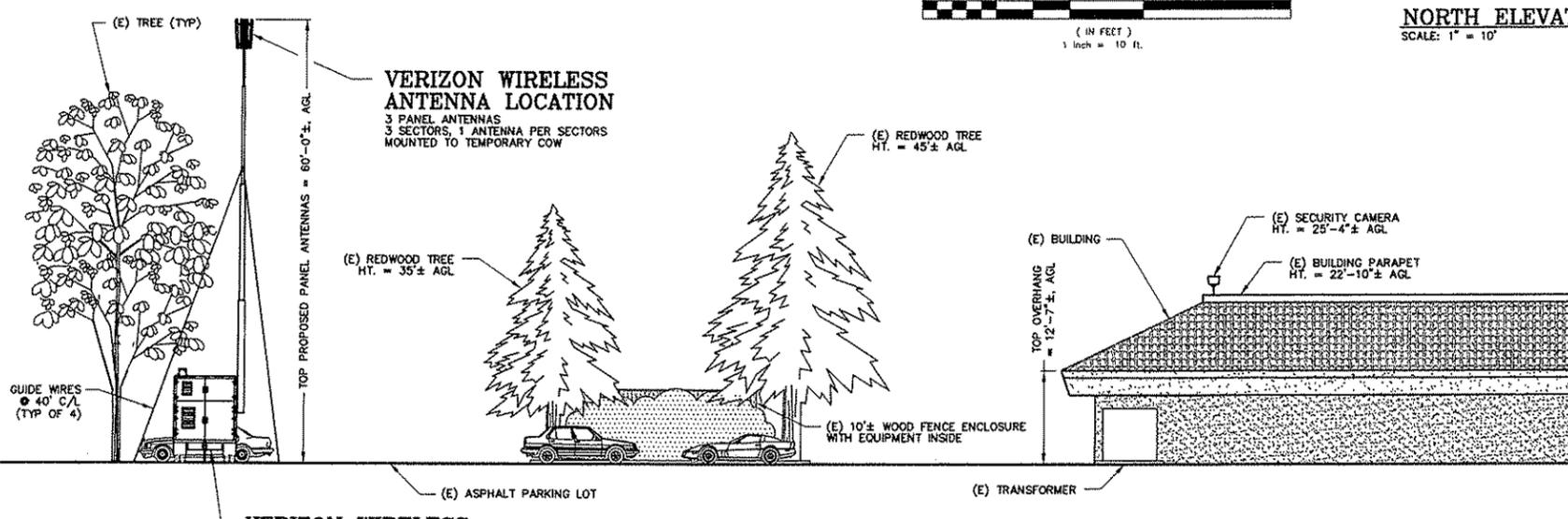
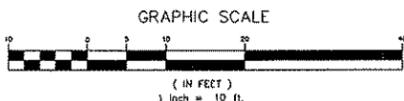




**EAST ELEVATION** 1  
SCALE: 1" = 10'  
A-2



**NORTH ELEVATION** 2  
SCALE: 1" = 10'  
A-2



**SOUTH ELEVATION** 3  
SCALE: 1" = 10'  
A-2

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MILPITAS, CA 95035  
SANTA CLARA COUNTY

VZW CE	
SIGNATURE	DATE
VZW RF	
SIGNATURE	DATE
VZW PA	
SIGNATURE	DATE
VZW EE	
SIGNATURE	DATE
PROPERTY OWNER	
SIGNATURE	DATE
RIDGE COMM ZONING	
SIGNATURE	DATE
RIDGE COMM RE	
SIGNATURE	DATE
RIDGE COMM CONSTR	
SIGNATURE	DATE



DRAWN BY: WCM/JWH/WCM  
CHECKED BY: JI

NO.	DATE	ISSUE
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2	10/31/08	PER REDLINES
3	11/13/08	100% CD'S
4	02/23/09	PLAN CHECK COMM.
5	03/11/09	UPDATED PER CI

SHEET TITLE

**ELEVATIONS**

SHEET NUMBER

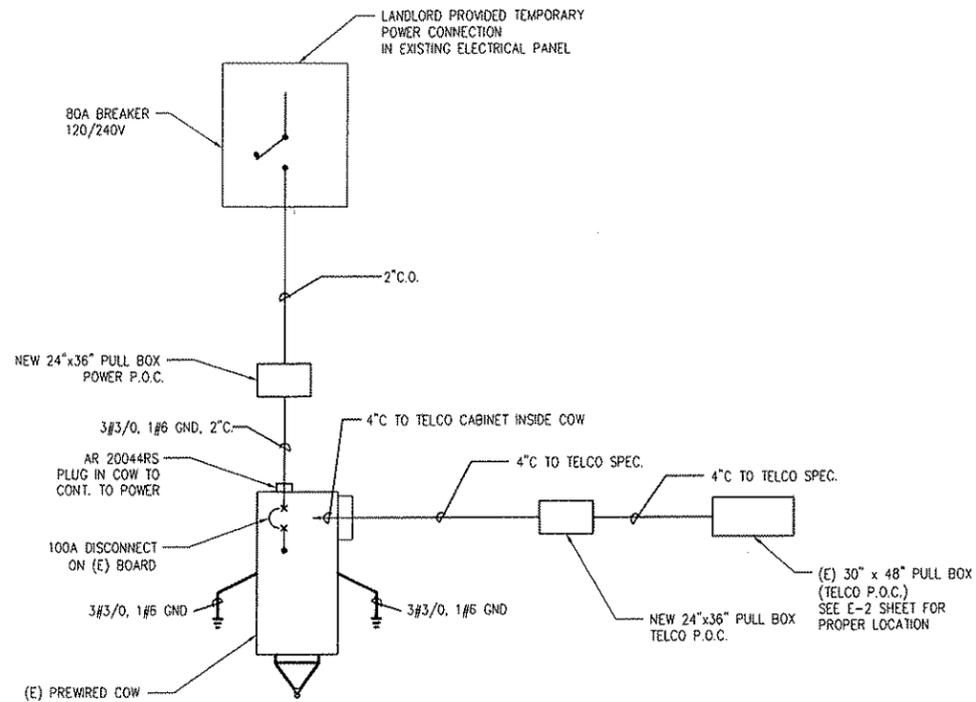
**A-2**

JES JOB NO. 08079RIDGE



**GENERAL ELECTRICAL NOTES**

1. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
2. CONTRACTOR SHALL PERFORM ALL VERIFICATION, OBSERVATION TESTS, AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
3. HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
4. THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
5. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (O.S.H.A.)
6. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREON AND/OR AS OTHERWISE REQUIRED.
7. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORY AND SHALL BEAR THE INSPECTION LABEL "I" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NEFU.
8. ALL CONDUIT INSTALLED SHALL BE SURFACE MOUNTED UNLESS OTHERWISE NOTED.
9. CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
10. CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS AND PAY ALL REQUIRED FEES.
11. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
12. ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE AND A TRUE TAPE.
13. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
14. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
15. USE T-TAP CONNECTIONS ON ALL MULTI-CIRCUITS WITH COMMON NEUTRAL CONDUCTOR FOR LIGHTING FIXTURE.
16. ALL CONDUCTORS SHALL BE COPPER.
17. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THAN THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
18. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES.
19. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
20. IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC., IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
21. LOCATION OF TENDONS AND/OR REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT VIA X-RAY OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.
22. PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH APPLICABLE LOCAL BUILDING CODES USING U.L. RATED MATERIALS.
23. RECEPTACLES SHALL BE 20 AMPERE, 125 VOLT A.C., HUBBELL #5362, MORY AS REQUIRED BY THE ARCHITECT, OR APPROVED EQUAL.
24. WALL SWITCHES SHALL BE SINGLE-POLE, HUBBELL #1221, MORY AS REQUIRED BY THE ARCHITECT.
25. PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS, SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE SIERRA #WPO-8 LIFT COVERPLATES.
26. WIRE AND CABLE CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.
27. GROUNDING CONDUCTORS SHALL BE AS INDICATED ON GROUNDING PLAN.
28. GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8" ROUND AND 10' LONG. COPPERWELDED OR APPROVED EQUAL.
29. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS. MANUFACTURED BY SQUARE "D" COMPANY OR APPROVED EQUAL.
30. ALL EXTERIOR WALL PENETRATIONS SHALL BE SEALED WITH POLYSEAM SEALANT.
31. CONDUIT:
  - a. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2" LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3. INTERMEDIATE METAL CONDUIT (IMC) MAY BE SUBSTITUTED FOR RIGID CONDUIT ONLY WHEN ABOVE GROUND AND EXPOSED.
  - b. ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
  - c. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE.
  - d. CONDUIT RUNS MAY BE SURFACE MOUNTED IN CEILINGS OR WALLS UNLESS INDICATED OTHERWISE. CONDUIT INDICATED SHALL RUN PARALLEL OR AT RIGHT ANGLES TO CEILING, FLOOR OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH ARCHITECT PRIOR TO INSTALLING.
  - e. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 24" BELOW GRADE, OR GREATER IF REQUIRED OTHERWISE) AT BY LOCAL CODE.
    - 1. CONDUIT IS FOR UTILITIES, DEPTH IS BY LOCAL CODE OR SERVICE PROVIDER, WHICH EVER IS GREATER.
32. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.
33. COORDINATE THE ELECTRICAL SERVICE WITH THE UTILITY COMPANY.
34. GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE OWNER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE. SUBMIT TEST REPORTS AND FURNISH TO OWNER ONE COMPLETE SET OF PRINTS SHOWING "INSTALLED WORK".
35. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL OF POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER.
36. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
37. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS TO BE PAID BY CONTRACTOR.



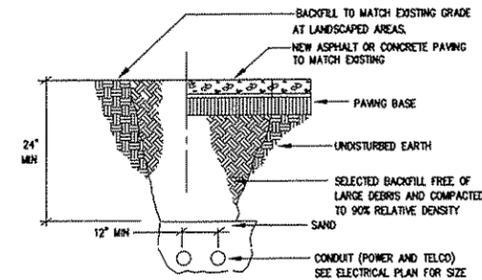
- NOTES:
1. CONTRACTOR TO PROVIDE ALL CIRCUIT BREAKERS AND ASSOCIATED WRING TO ALL LUCENT POWER CABINETS.

**SINGLE LINE DIAGRAM**

NOT TO SCALE 1 E-1

**POWER & TELEPHONE GENERAL NOTES**

1. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY COMPANY ENGINEERING PLANS AND SPECIFICATIONS ONLY.
  2. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, PULL WIRES, CABLE PULLBOXES, CONCRETE ENCASEMENT OF CONDUIT (IF REQUIRED), TRANSFORMER PAD, SAUBERIES, POLE RISERS, TRUNCING, BACKFILL, AND INCLUDE ANY UTILITY COMPANY REQUIREMENTS IN SCOPE OF WORK.
  3. UTILITY CONTACTS
- |                         |                         |
|-------------------------|-------------------------|
| TELEPHONE COMPANY:      | POWER COMPANY:          |
| COMPANY NAME: AT&T      | COMPANY NAME: S&B&E     |
| ADDRESS: _____          | ADDRESS: _____          |
| CITY, STATE, ZIP: _____ | CITY, STATE, ZIP: _____ |
| PHONE NUMBER: _____     | PHONE NUMBER: _____     |
| CONTACT: _____          | CONTACT: _____          |



**JOINT TRENCH DETAIL**

NOT TO SCALE 2 E-1

**J E S ENGINEERING, INC.**  
 CIVIL ENGINEERING & LAND SURVEYING  
 1355 WILLOW WAY, SUITE 105  
 CONCORD, CA 94520  
 PHONE: (925) 674-1151  
 FAX: (925) 674-1314

**Verizon wireless**

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 CONTACT: JIM GRAHAM  
 PHONE: (925) 279-6333

PS NO. 112724  
 "AGNEW (RELOCATION)"-TEMP SITE  
 1501 MCCARTHY BLVD  
 MILPITAS, CA 95035  
 SANTA CLARA COUNTY

VZW CE	SIGNATURE	DATE
VZW RF	SIGNATURE	DATE
VZW PA	SIGNATURE	DATE
VZW EE	SIGNATURE	DATE
PROPERTY OWNER	SIGNATURE	DATE
RIDGE COMM ZONING	SIGNATURE	DATE
RIDGE COMM RE	SIGNATURE	DATE
RIDGE COMM CONSTR	SIGNATURE	DATE



DRAWN BY: WCM/JWH/WCM  
 CHECKED BY: JI

NO.	DATE	ISSUE
A	10/06/08	90% CD'S
1	10/14/08	REDLINE CORR
2	10/31/08	PER REDLINES
3	11/13/08	100% CD'S
4	02/23/09	PLAN CHECK COMM.
5	03/11/09	UPDATED PER C1

SHEET TITLE

**SINGLE LINE DIAGRAM**

SHEET NUMBER

**E-1**

JES JOB NO. 08079RIDGE

**JES ENGINEERING, INC.**  
 CIVIL ENGINEERING & LAND SURVEYING  
 1355 WILLOW WAY, SUITE 105  
 CONCORD, CA 94520  
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PS NO. 117274  
 "AGNEW (RELOCATION)"-TEMP SITE  
 1501 MCCARTHY BLVD  
 MILPITAS, CA 95035  
 SANTA CLARA COUNTY

VZW CE	
SIGNATURE	DATE
VZW RF	
SIGNATURE	DATE
VZW PA	
SIGNATURE	DATE
VZW EE	
SIGNATURE	DATE
PROPERTY OWNER	
SIGNATURE	DATE
RIDGE COMM ZONING	
SIGNATURE	DATE
RIDGE COMM RE	
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RIDGE COMM CONSTR	
SIGNATURE	DATE



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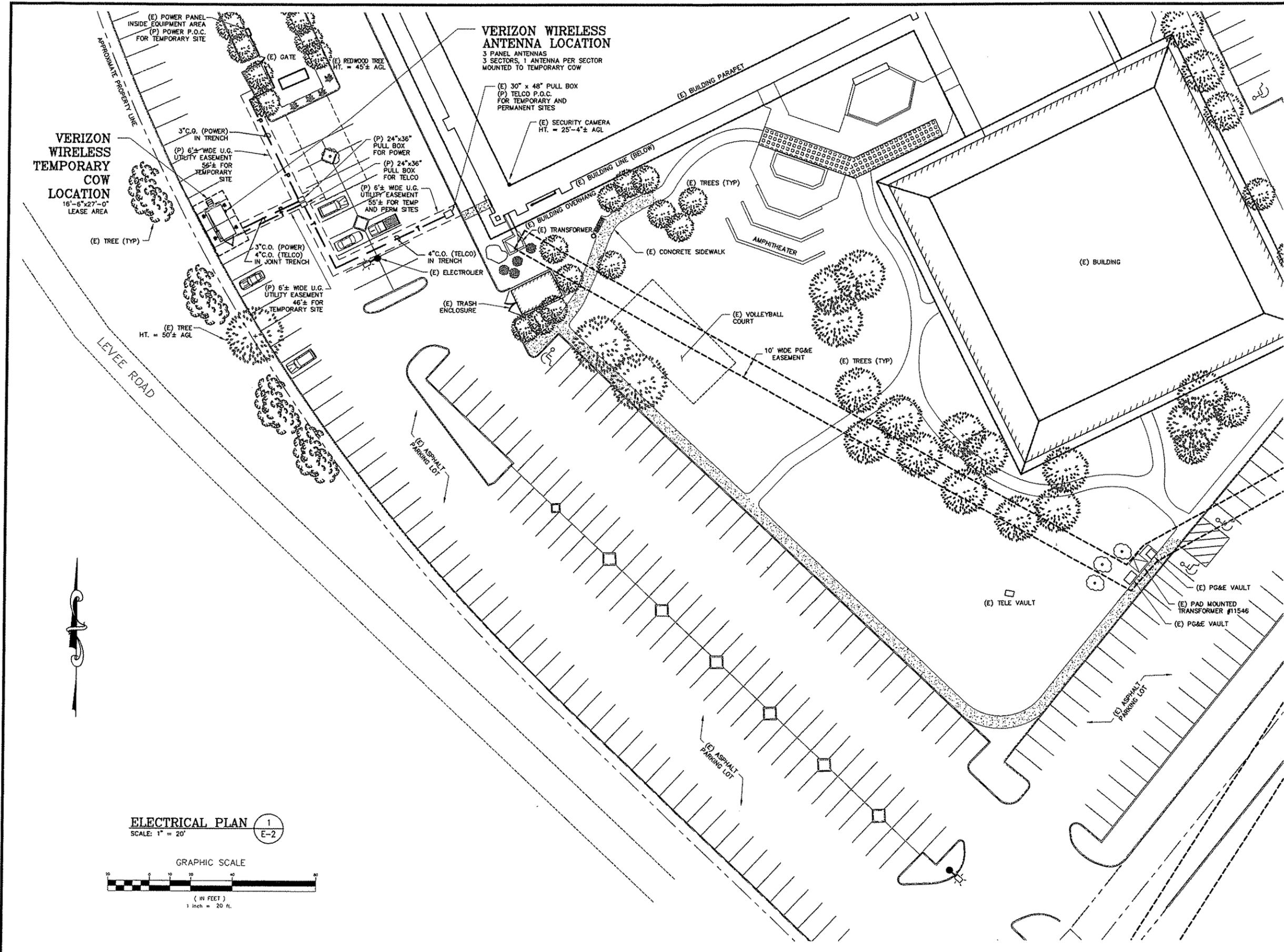
SHEET TITLE

**ELECTRICAL PLAN**

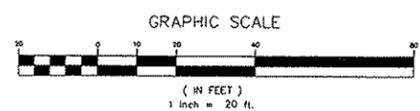
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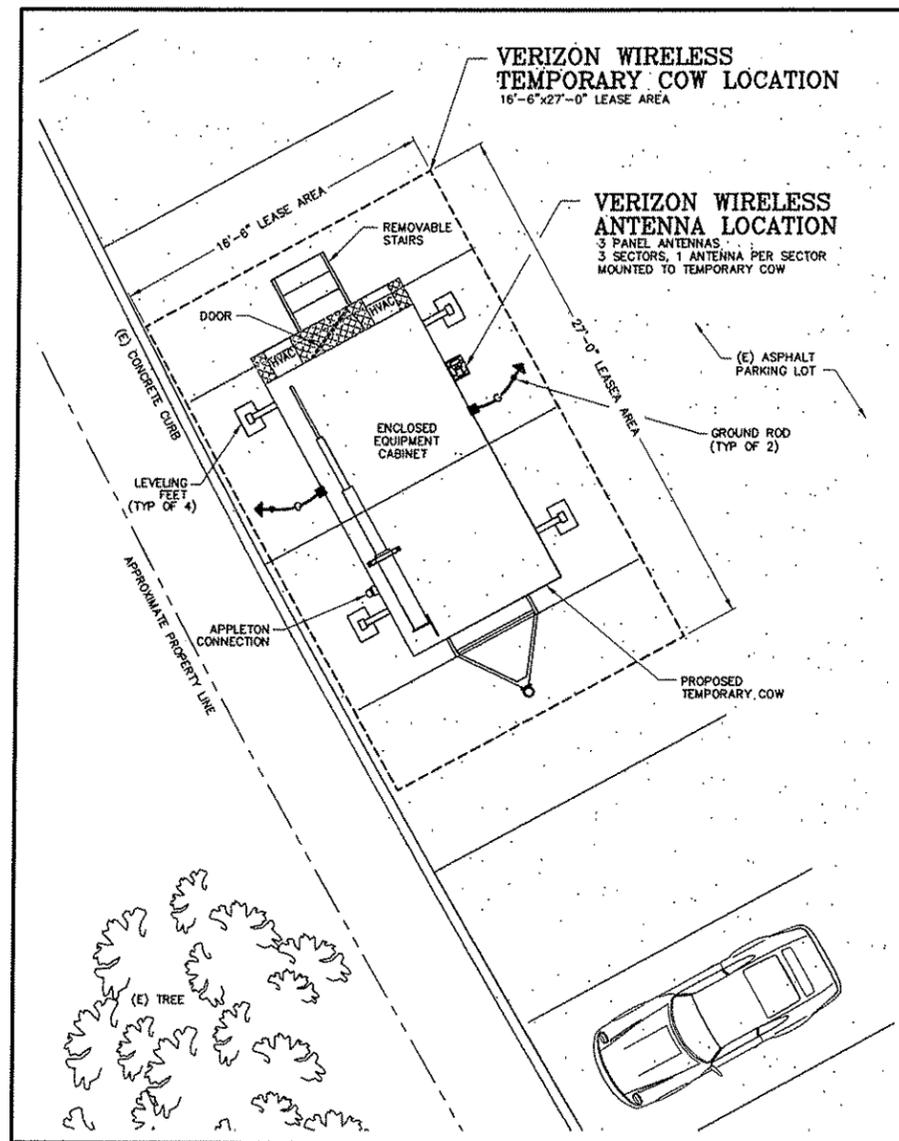
**E-2**

JES JOB NO. 08079RIDGE



**ELECTRICAL PLAN** 1  
 SCALE: 1" = 20'  
 E-2





**GROUNDING PLAN** 1  
E-3  
SCALE: 1/4" = 1'-0"

GROUNDING LEGEND	
SYMBOL	DESCRIPTION
↑	5/8" x 10'-0" COPPER CLAD GROUND ROD
—G—	#6 SOLID TINNED COPPER WIRE UNLESS OTHERWISE NOTED. ROUTE ABOVE GRADE COVER WITH ROCK BASE.
■	MECHANICAL CONNECTION

**J E S  
ENGINEERING, INC.**  
CIVIL ENGINEERING & LAND SURVEYING  
1355 WILLOW WAY, SUITE 105  
CONCORD, CA 94520  
PHONE: (925) 674-1151  
FAX: (925) 674-1314

**verizon**wireless  
2785 MITCHELL DRIVE, BLDG 9  
WALNUT CREEK, CA. 94598  
OFFICE: (925) 279-6000  
CONTACT: JIM GRAHAM  
PHONE: (925) 279-6333

PS NO. 117274  
"AGNEW (RELOCATION)"--TEMP SITE  
1501 MCCARTHY BLVD  
MILPITAS, CA 95035  
SANTA CLARA COUNTY

VZW CE	
SIGNATURE	DATE
VZW RF	
SIGNATURE	DATE
VZW PA	
SIGNATURE	DATE
VZW EE	
SIGNATURE	DATE
PROPERTY OWNER	
SIGNATURE	DATE
RIDGE COMM ZONING	
SIGNATURE	DATE
RIDGE COMM RE	
SIGNATURE	DATE
RIDGE COMM CONSTR	
SIGNATURE	DATE



DRAWN BY: WCM/JWH/WCM  
CHECKED BY: JI

NO.	DATE	ISSUE
A	10/06/08	90% CD'S
1	10/14/08	REDLINE CORR
2	10/31/08	PER REDLINES
3	11/13/08	100% CD'S
4	02/23/09	PLAN CHECK COMM.
5	03/11/09	UPDATED PER C1

SHEET TITLE

**GROUNDING  
PLAN**

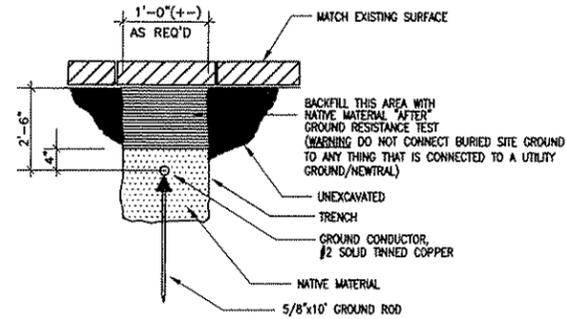
SHEET NUMBER

**E-3**

JES JOB NO. 08079RIDGE

**GROUNDING GENERAL NOTES**

1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
2. ALL EXTERIOR GROUNDING AND TOP OF GROUNDING RODS SHALL BE BURIED TO A MINIMUM DEPTH OF 1'-6" BELOW FINISH GRADE, ELECTRIC METER GROUND EXCEPTED.
3. ALL GROUNDING LEAD CONDUCTORS SHALL BE #2 SOLID TINNED BARE COPPER.
4. GROUND SYSTEM MUST BE TESTED AND SHALL HAVE A RESISTANCE OF 5 OHMS OR LESS, SUBMIT AN INDEPENDENT FALL OF POTENTIAL TESTING REPORT.
5. NOTIFY PROJECT MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
6. CHEMICAL GROUNDS SHALL BE XIT, CHEM-ROD OR APPROVED EQUAL, WHEN REQUIRED.
7. ALL UNDERGROUND GROUNDING CONNECTORS ARE TO BE CADWELDED ABOVE GRADE GROUNDING SHALL BE EITHER CADWELD OR MECHANICAL AS SPECIFIED ON DRAWINGS.



**GROUND TRENCH DETAIL** 1  
NOT TO SCALE E-4

**J E S  
ENGINEERING, INC.**  
CIVIL ENGINEERING & LAND SURVEYING  
1355 WILLOW WAY, SUITE 105  
CONCORD, CA 94520  
PHONE: (925) 674-1151  
FAX: (925) 674-1314



2785 MITCHELL DRIVE, BLDG 9  
WALNUT CREEK, CA 94598  
OFFICE: (925) 279-6000  
CONTACT: JIM GRAHAM  
PHONE: (925) 279-6333

PS NO. 117274  
"AGNEW (RELOCATION)"-TEMP SITE  
1501 MCCARTHY BLVD  
MILPITAS, CA 95035  
SANTA CLARA COUNTY

VZW CE	
SIGNATURE	DATE
VZW RF	
SIGNATURE	DATE
VZW PA	
SIGNATURE	DATE
VZW EE	
SIGNATURE	DATE
PROPERTY OWNER	
SIGNATURE	DATE
RIDGE COMM ZONING	
SIGNATURE	DATE
RIDGE COMM RE	
SIGNATURE	DATE
RIDGE COMM CONSTR	
SIGNATURE	DATE



DRAWN BY WCM/JWH/WCM CHECKED BY JI

NO.	DATE	ISSUE
A	10/06/08	90% CD'S
1	10/14/08	REDLINE CORR
2	10/31/08	PER REDLINES
3	11/13/08	100% CD'S
4	02/23/09	PLAN CHECK COMM.
5	03/11/09	UPDATED PER C1

SHEET TITLE

**GROUNDING  
DETAILS**

SHEET NUMBER

**E-4**

JES JOB NO. 08079RIDGE

**City of Milpitas**  
 Planning Division  
 455 E. Calaveras Blvd.  
 Milpitas, CA 95035  
 (408) 586-3279

**Questionnaire for Telecommunication Facility Providers**

All applicants requesting to install telecommunications facilities within the City of Milpitas must complete this questionnaire as part of their use permit application submittal.

Applicant Name: Verizon Wireless

Applicant Address: 12667 Alcosta Blvd. Suite 175 San Ramon CA 94583

Applicant Phone: 925-200-6328 Applicant Fax: 925-498-2341

Applicant e-mail address: Karen.McPherson@ridgecommunicate.com

Location of Project: 1501 McCarthy Blvd. Milpitas CA 95035

Is this an existing facility or a Co-Location?  Yes  No Previous Owner: \_\_\_\_\_

If yes, are you using the same technology?  Yes  No

Date previously approved by the Telecommunications Commission: \_\_\_\_\_

Provide a brief description of project (Telecommunications Facility): This is proposed to be a temporary cell site or cell on wheels (cow).

1. Please indicate below the frequency range you plan to use?

- VHF Low-Band (30-50 Mhz or 72-76 Mhz)
- VHF High-Band (136-174 Mhz or 220-222 Mhz)
- UHF or T-Band (406-420 Mhz or 450-470 Mhz or 470-512 Mhz)
- 800 or 900 Mhz Band (800-960 except 900 Mhz Spread Spectrum)
- 900 Mhz Spread Spectrum (902-928 Mhz)
- Other than specified above (State frequency band in Mhz). Describe: 1985-1990 + 1905-1910

2. Please indicate below the channel/system proposed for use?

- A single channel
- Multiple channel
- A frequency agile system
- A spread spectrum system
- Other: \_\_\_\_\_

3. Please indicate below the frequency range you plan to use?

- Narrow band ( $\pm 5$  KHz or less deviation)
- Broad band (greater than  $\pm 5$  KHz deviation)
- Spread Spectrum
- Other: \_\_\_\_\_

4. What will the effective radiated power (ERP) be when all channels at your proposed site are radiating?  
1,200 watts
5. Will the site be in compliance with current ANSI radiation health standards?  Yes  No
6. What horizontal radiation pattern is planned for this project?  
 Omnidirectional  
 Sected  
 Directional (provide half power beam width) \_\_\_\_\_
7. What will the vertical radiation angle (half power beam width) be for your proposed antenna(s)?  
15°
8. How high above the local terrain (e.g., surrounding structures) will the center of radiation of your proposed antenna(s) be? 38 feet feet
9. How close to your proposed project is the nearest roadway .11 miles feet/miles and, if elevated, what is the roadway's height above the local terrain? N/A feet
10. How close to your proposed project is the nearest regularly occupied building and how high is the top floor above local terrain? 121 feet, floor at grade
11. What is the distance to the nearest existing radio communications or broadcast antenna(s) if less than 1/2 mile? .42 feet/miles. If known, identify owner/operator: Verizon Wireless  
current site that they must vacate
12. What is the status of your FCC license grant? Current  
 (Include a \*copy of the license with submittal of this questionnaire.)

**NOTE:** The below listed items are required by the applicant as part of this submittal if required to go to the Telecommunications Commission:

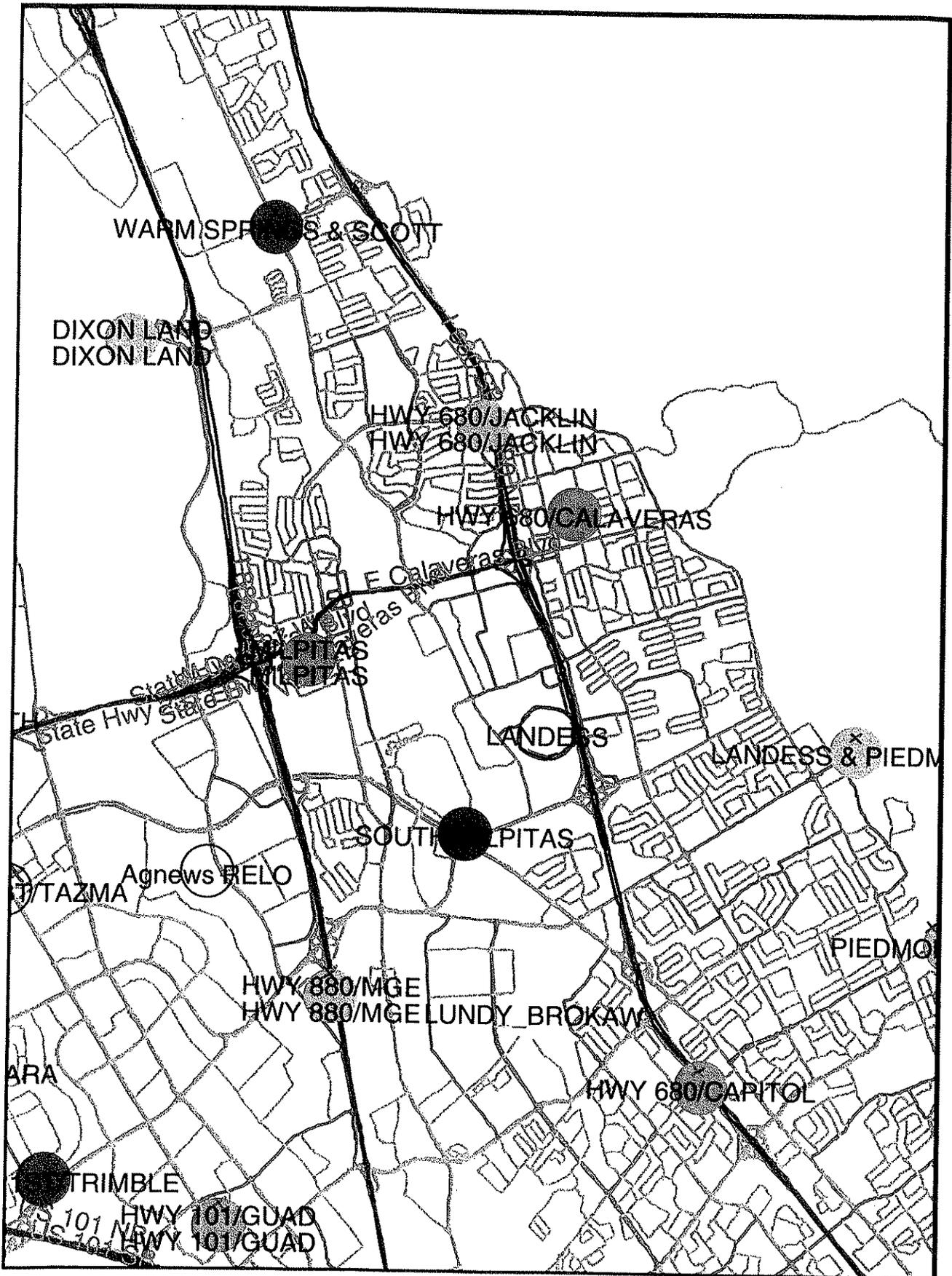
- a) Provider's build-out map\* showing all sites anticipated within Milpitas (see question no. 2)
- b) Photo simulations\*\* of antenna(s) as viewed from at least three surrounding view points. Show "worst case" vantage points.
- c) List of all sites that were investigated\*\* for a particular search ring and the reasons why they were discarded. Include names and phone numbers of persons contacted regarding potential sites.
- d) Copy of applicants Power Density Study\* (see item no. 4).

\* 20 copies (Telecommunication Commission)

\*\* 35 copies (Telecommunication Commission & Planning Commission)

Back of  
Telecommunication Questionnaire

'Build out map



Milpitas Cell sites

Existing:

Milpitas	200 Serra Way.
Hwy 680 Jacklin	996 Jacklin Rd.
Landess	1010 Ames Ave.
Dixon Landing	1601 Dixon Landing Rd.
South Milpitas	341 Great Mall Parkway
Hwy 680 Calaveras	1325 E Calaveras Blvd.

Proposed:

Agnews Relo	1501 McCarthy Blvd.
-------------	---------------------

**Alternative Site Analysis**  
**Application UP08-0047, Verizon Wireless McCarthy Blvd.**

Verizon is proposing this temporary site because Agnew Development Center, State Hospital, is for sale and they have asked Verizon to move from that site. The site is needed to provide current consumers wireless phone and data services on the road, and throughout the office park. Wireless devices have become a vital safety tool for customers who may need their phone to dial and stay connected with 9-1-1 in an emergency. This site will comply with the FCC guidelines limiting public exposure to radio frequency energy and, therefore will not cause a significant impact on the surrounding area.

**Facts about the New Facility**

- This facility has been designed to meet the established guidelines established for the City of Milpitas Wireless Telecommunication Facilities.
- In order to provide Verizon Wireless coverage in the area we have explored many options. This site will meet our coverage needs while not creating an impact on the area.

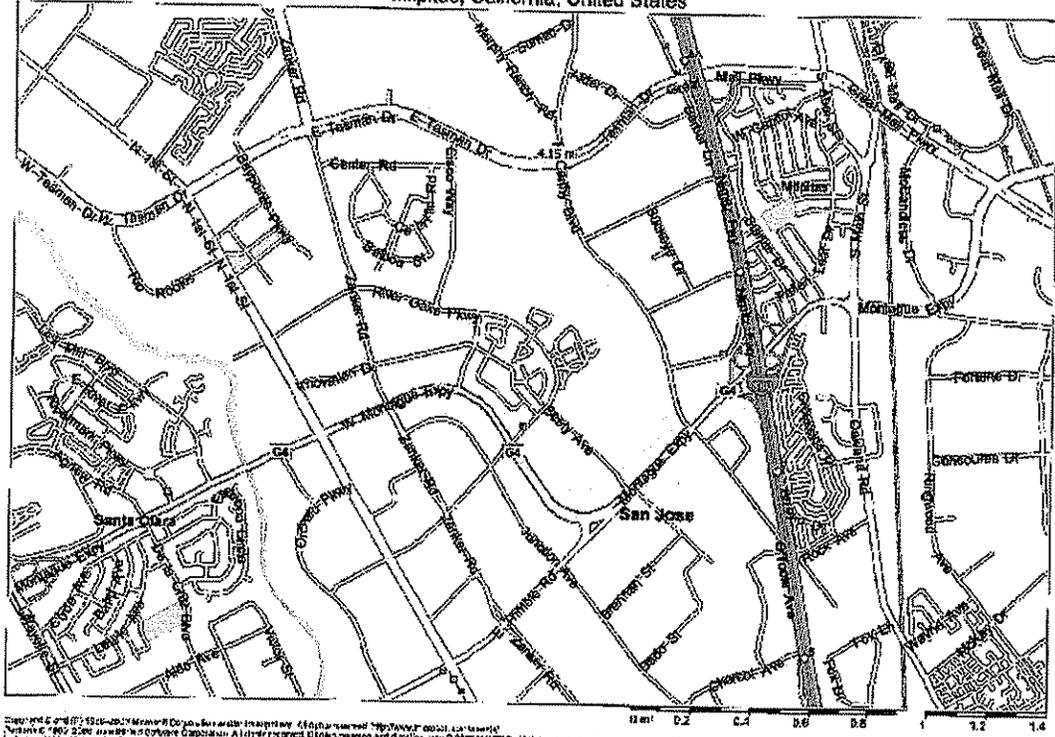
Verizon's coverage needs are between Zanker Rd. and McCarthy Blvd.

**The Alternative Candidates contacted and researched;**

1. TMO colo at 1525 McCarthy Blvd - not adequate space for equipment given set-backs.
2. Cisco – any of their buildings – carriers (AT&T) have been trying to get on for a few years now, and can not reach agreement for equipment location, we are still working on this.
3. 501 Sycamore St. (Vacant) – LL not returning calls
4. Crown Plaza Hotel at 777 Bellow Dr., Milpitas. – too close to another existing site
5. Ulferts Furniture at 668 Barber Ln. – colo with TMO and Sprint – rooftop will not support Verizon equipment.
6. Spectra Laboratories at 525 Sycamore – LL not interested in giving up any space for Verizon.
7. 510, 516, 520, 530, 540 Alder Dr. – LL not returning calls.

Please see coverage objective map below;

Milpitas, California, United States



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**Federal Communications Commission  
Wireless Telecommunications Bureau**

**Radio Station Authorization (Reference Copy)**

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.

Licensee: GTE MOBILNET OF CALIFORNIA LIMITED PARTNERSHIP

ATTN Regulatory  
GTE MOBILNET OF CALIFORNIA LIMITED PARTNERSHIP  
1120 Sanctuary Pkwy, #150 GASA5REG  
ALPHARETTA, GA 30004

FCC Registration Number (FRN): 0003579380	
Call Sign: KNKA211	File Number: 0002139365
Radio Service: CL - Cellular	
Market Number CMA027	Channel Block B
Sub-Market Designator 0	

Market Name San Jose, CA
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Grant Date 06/20/2005	Effective Date 01/15/2008	Expiration Date 05/15/2015	Five Yr Build-Out Date 01/23/2000	Print Date 03/11/2008
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Site Information

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
1	37-06-37.5 N	121-50-37.4 W	1146.0	64.6	1014625
Address		City	County	State	Construction Deadline
TOP OF LOMA PRIETA MOUNTAIN (Loma Prieta 2 #8088)		Los Gatos	SANTA CLARA	CA	

Antenna: 2 Azimuth (degrees from true north)	0°	45°	90°	135°	180°	225°	270°	315°
Antenna Height AAT (meters)	996.2	961.8	915.7	573.7	830.4	921.6	740.4	507.4
Transmitting ERP (watts)	2.410	0.150	0.150	0.960	6.870	15.360	19.050	10.940

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
7	37-26-55.8 N	122-09-32.9 W	14.6	67.1	
Address		City	County	State	Construction Deadline
525 University Avenue, Room A83		Palo Alto	SANTA CLARA	CA	

**Verizon Wireless • Proposed Base Station (Site No. 117274 “Agnew”)  
1501 McCarthy Boulevard • Milpitas, California**

**Statement of Hammett & Edison, Inc., Consulting Engineers**

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate the base station (Site No. 117274 “Agnew”) proposed to be located at 1501 McCarthy Boulevard in Milpitas, 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 standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, “Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” includes similar 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 FCC limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

<u>Personal Wireless Service</u>	<u>Approx. Frequency</u>	<u>Occupational Limit</u>	<u>Public Limit</u>
Broadband Radio (“BRS”)	2,600 MHz	5.00 mW/cm <sup>2</sup>	1.00 mW/cm <sup>2</sup>
Advanced Wireless (“AWS”)	2,100	5.00	1.00
Personal Communication (“PCS”)	1,950	5.00	1.00
Cellular Telephone	870	2.90	0.58
Specialized Mobile Radio (“SMR”)	855	2.85	0.57
Long Term Evolution (“LTE”)	700	2.15	0.43
[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 “channels”) 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



**Verizon Wireless • Proposed Base Station (Site No. 117274 “Agnew”)  
1501 McCarthy Boulevard • Milpitas, California**

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 at greater distances 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 Wireless, including zoning drawings by JES Engineering, Inc., dated November 13, 2008, it is proposed to install three Antel Model BXD-63406380/CF dualband directional panel antennas on a 60-foot pole to be sited temporarily in a parking lot adjacent to a one-story commercial building located at 1501 McCarthy Boulevard in Milpitas. The antennas would be mounted at an effective height of about 58 feet above ground and would be oriented separately toward 80°T, 230°T, and 330°T. The maximum effective radiated power in any direction would be 1,200 watts, representing the simultaneous operation of three cellular and three PCS channels at 200 watts each. There are reported similar antennas for use by Sprint Nextel, another wireless telecommunications carrier, at a nearby site located about 350 feet away.

**Study Results**

For a person anywhere at ground, the maximum ambient RF exposure level due to the proposed Verizon operation by itself is calculated to be 0.0017 mW/cm<sup>2</sup>, which is 0.24% of the applicable public exposure limit. Due to the physical separation of the Verizon antennas from those of the other carrier, and due to the antenna directivities employed, the additive effect of the proposed Verizon operation on those of the other carrier, and vice versa, is negligible. The highest cumulative exposure level in publicly accessible areas resulting from the simultaneous operation of all the carriers is expected to be many times below the allowable limit. The maximum calculated level at the roof of the



**Verizon Wireless • Proposed Base Station (Site No. 117274 "Agnew")  
1501 McCarthy Boulevard • Milpitas, California**

adjacent building is 0.41% of the public exposure limit; the maximum calculated level at the second-floor elevation of any nearby building\* is 0.22% 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.

**No Recommended Mitigation Measures**

Due to their mounting location, the Verizon antennas are not accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. It is presumed that Verizon will, as an FCC licensee, take adequate steps to ensure that its employees or contractors comply with FCC occupational exposure guidelines whenever work is required near the antennas themselves.

**Conclusion**

Based on the information and analysis above, it is the undersigned's professional opinion that the base station proposed by Verizon Wireless at 1501 McCarthy Boulevard in Milpitas, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will 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.

**Authorship**

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2009. 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.



*William F. Hammett*  
William F. Hammett, P.E.

January 2, 2009

\* Located at least 110 feet away, based on aerial photographs from Google Maps.

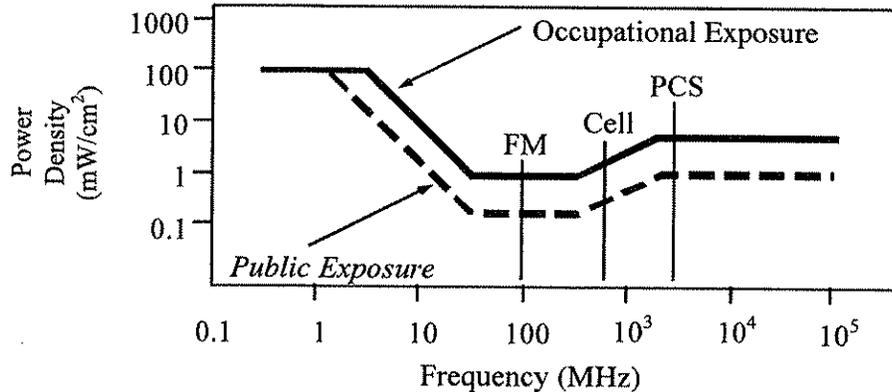


## FCC Radio Frequency Protection Guide

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 (“NCRP”). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, “Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” includes similar limits. 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/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm <sup>2</sup> )	
0.3 – 1.34	614	<i>614</i>	1.63	<i>1.63</i>	100	<i>100</i>
1.34 – 3.0	614	<i>823.8/f</i>	1.63	<i>2.19/f</i>	100	<i>180/f<sup>2</sup></i>
3.0 – 30	1842/f	<i>823.8/f</i>	4.89/f	<i>2.19/f</i>	900/f <sup>2</sup>	<i>180/f<sup>2</sup></i>
30 – 300	61.4	<i>27.5</i>	0.163	<i>0.0729</i>	1.0	<i>0.2</i>
300 – 1,500	3.54√f	<i>1.59√f</i>	√f/106	<i>√f/238</i>	f/300	<i>f/1500</i>
1,500 – 100,000	137	<i>61.4</i>	0.364	<i>0.163</i>	5.0	<i>1.0</i>



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 base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density  $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$ , in mW/cm<sup>2</sup>,

and for an aperture antenna, maximum power density  $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$ , in mW/cm<sup>2</sup>,

- where  $\theta_{BW}$  = half-power beamwidth of the antenna, in degrees, and  
 $P_{net}$  = net power input to the antenna, in watts,  
 $D$  = distance from antenna, in meters,  
 $h$  = aperture height of the antenna, in meters, and  
 $\eta$  = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

#### Far Field.

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

power density  $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$ , in mW/cm<sup>2</sup>,

- 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.



# Photosimulation of view looking south around the back of the building.

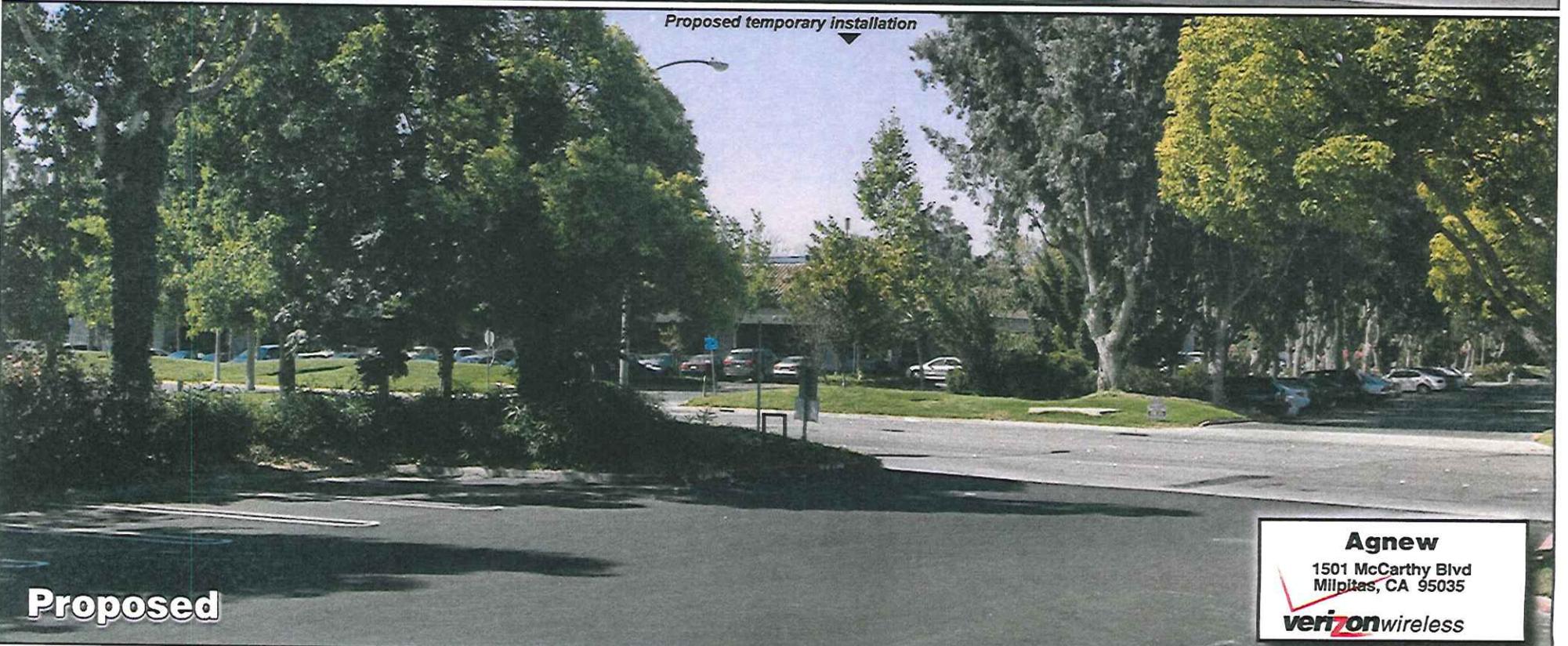


Proposed temporary installation



**Agnew**  
1501 McCarthy Blvd  
Milpitas, CA 95035  


# Photosimulation of view looking southwest from across the street.



**Agnew**  
1501 McCarthy Blvd  
Milpitas, CA 95035  
**verizon**wireless

# Photosimulation of view looking northwest from the end of Sycamore Drive.



**Existing**

*Proposed temporary installation*



**Proposed**

**Agnew**  
1501 McCarthy Blvd  
Milpitas, CA 95035  
 **verizon**wireless