

# CLIMATE ACTION PLAN CHECKLIST

**PUD-87, P13-1981, P13-2065**  
VINTAGE – Auf der Maur/Rickenbach

**Project Name:** Auf der Maur **Project Address:** 3150 Bernal Avenue

**6 /18/13**

EXHIBIT B

**Case No.:** PUD-87 **Residential Units:** 345

**39000 +/-**

Project Aspects that reduce Greenhouse Gas (GHG) Emissions	Yes	No	N/A	Comments
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**LU1: Support Infill and High Density Development**

LU1-2	Project is infill development within the existing urban fabric that helps complete, reinforce, and repair the surrounding area.	X			Project is within Urban Growth Boundary
LU1-3	Project is mixed-use development which incorporates higher density and affordable residential units consistent and with the Downtown Specific Plan with easy access to activity areas. (Applies to projects in the downtown area only).			X	Project not in downtown area
LU1-4	Project is transit-oriented development near BART station, along transportation corridors, in business parks, and/or in the downtown area.			X	Project not near BART
LU1-5	Project is high density development near and/or around transportation hubs and employment centers.	X			Project within 1 mile of downtown
LU1-6	Project is TOD (transit oriented development): located within 1/4 mile of commuter rail, BART, and other transportation hubs.			X	Project not located near BART
LU1-7	Project incorporates affordable housing on a vacant infill site.	X			Project incorporates affordable housing

**LU2: Support Mixed-use Infill and New Development near Local-serving Commercial Areas**

LU2-1	Project is located within convenient walking distance to work, residences, and services.	X			Retail center next to apartments
LU2-2	Project provides new housing and/or new employment located within ½-mile walking/biking proximity of complementary land uses, including retail, employment, institutional, or recreational.	X			Retail center next to apartments
LU2-4	Project reconnects streets and adds streets; minimizes parking to below code requirements; and includes attractive and functional urban plazas. (Applies to development near Pleasanton BART station in Hacienda and development near West Pleasanton BART)			X	Not applicable
LU2-9	Project includes live-work units.			X	Not applicable
LU2-10	Project incorporates elements of LEED for Neighborhood Development (LEED ND)	X			Project does incorporate some elements of LEED for Neighborhood Development

**LU3: Improve Transportation Efficiency through Design Improvements**

LU3-1	Project provides key services within a ½-mile walking distance of residential clusters or areas. (Applies to non-residential projects)	X			
LU3-2	Project provides building, landscape, and streetscape development design features that encourage transit, bicycle, and pedestrian access.	X			
LU3-3	Project encourages transit use and provides pedestrian and bicycle facilities.	X			382 bike storage spaces and bike self repair shop will be provide on site.
LU3-4	Project provides infrastructure to facilitate 'NextBus' technologies for tracking buses and predicting arrival times. (Applies to projects that include two or more bus shelters.)	X			NextBus technologies infrastructure will be provided at 2 adjacent LAVTA bus stops if requested by LAVTA
LU3-5	Project provides street improvements that meet the municipal street standards and AB 1358 Complete Streets and increase the safety, convenience, and efficiency of pedestrians, bicyclists, motorists, and transit riders.	X			
LU3-6	Project includes pedestrian and bicycle access through cul-de-sacs in new projects, except where prohibited by topography.			X	No cul de sacs proposed
LU3-7	Project includes neighborhood traffic calming to slow traffic speeds, reduce cut-through traffic and traffic-related noise, improve the aesthetics of the street, and increase safety for pedestrians, bicyclists, and vehicles.	X			

**TR1: Improve and Increase Transit Ridership with Incentives, Partnerships, and Related Investments**

TR1-6	The project offers discounted transit passes as part of HOA amenities, payable through the HOA dues. (Applies to residential development within 1/2 mile of transit.)	X			Discount LAVTA tickets to be provided to residents.
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Project Aspects that reduce Greenhouse Gas (GHG) Emissions		Yes	No	N/A	Comments
TR1-9	The project includes a condition of approval to limit diesel vehicle idling. (Applies to projects with associated bus or truck traffic.)	X			

**NM1: Enhance and Maintain a Safe, Convenient, and Effective System for Pedestrians and Bicyclists**

NM1-1	Project provides a community trail, bike lane, staging area or other facility consistent with the Community Trails Master Plan or the Pedestrian and Bicycle Master Plan.	X			Access gate to Arroyo del Valle creek trail
NM1-4	Project provides bicycle-related improvements (i.e., work-place provision for showers, bicycle storage, bicycle lanes, etc.).	X			Bike lane on Stanley Road
NM1-5	Project provides bike parking. (Applies to non-residential and multi-family projects.)	X			Bike parking provided
NM1-7	Project provides bicycle detection at signalized intersections.	X			To be provided at Utah and Bernal Road at traffic signal
NM1-8	Project provides safe and convenient bike racks. (Applies to private schools, business and office projects.)			X	Only applies to private schools, business and office projects
NM1-9	Project completes a section of the Iron Horse Trail. (Applies to developments adjacent to the trail location.)			X	Iron Horse trail anticipated to go through East Pleasanton Specific Plan
NM1-10	Project contributes to the bicycle/pedestrian underpass at 580/680 interchange (Johnson Drive canal) for connection to Dublin. (Applies to new projects in the immediate vicinity.)			X	Not in immediate vicinity

**TDM1: Use Parking Policy/Pricing to Discourage Single Occupancy Vehicle (SOV) Travel**

TDM1-1	Project shares parking with adjacent use to reduce paved areas that contribute to urban heat islands and reduce storm water infiltration.	X			Residents will walk to retail center
TDM1-2	Project separates fee-based parking from home rents/purchase prices or office leases. (Applies to projects within 1/2 mile of BART stations to increase housing and office affordability for those without a car or cars.)			X	Not within 1/2 mile of BART station
TDM1-3	Project tenants will participate in the City's TSM program to reduce auto trips. (Applies to non-residential projects.)			X	Employer sizes too small
TDM1-5	Project will participate in a parking demand management program.	X			
TDM1-6	Project provides one or more electric charging stations for plug-in vehicles.	X			
TDM1-7	Project provides motorcycle or scooter parking. (Applies to projects located in Downtown.)			X	Not located downtown

**TDM2: Promote Alternatives to Work and School Commutes**

TDM2-4	Project provides a neighborhood telecommuting center.	X			In Business Center
TDM2-7	Project provides transit passes or other transit use incentives for an interim period to establish transit use patterns for employees. (Applies to new non-residential projects of more than 20,000 sf within 1/4 mile of transit)			X	Not located within 1/2 mile of BART
TDM2-10	Project provides dedicated parking spaces for carpool, vanpool, alternative-fuel, and car-share vehicles.	X			
TDM2-11	Project incorporates a car-sharing service.			X	We will provide a parking space for a car share company if a car share company wants to locate on the property.

**EC1: Use City Codes, Ordinances and Permitting to Enhance Green Building, Energy Efficiency, and Energy Conservation**

EC1-1	Project meets LEED <i>Certified</i> rating level and achieves 25% above T-24, and incorporates new requirements for shade trees, cool roofs and landscape lighting. (Applies to civic projects and commercial projects over 20,000 s.f.)			X	No commercial/office/civic use
EC1-2	Project meets the City's residential green rating standard, including 25% above T-24, and incorporates new requirements for shade trees, cool roofs and landscape lighting. (Applies to residential projects.)	X			City will meet residential standards and be designed to be LEED certified. Many of our projects have been more than 25% more efficient than T 24 but we can not commit to this level of efficiency until after Design Development is complete

Project Aspects that reduce Greenhouse Gas (GHG) Emissions		Yes	No	N/A	Comments
EC1-3	Project provides light-colored paving material for roads and parking areas, as well as parking lot shade trees.	X			In limited locations per the plans

**EC4: Develop Programs to Increase Energy Efficiency and Conservation**

EC4-4	Project incorporates solar tubes, skylights, and other daylighting systems within the design .	X			These will be included in the retail community. The residential apartments will have windows and the rooms are not deep enough to require skylights.
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**ER1: Implement Local Ordinances and Permitting Processes to Support Renewable Energy**

ER1-1	Project provides residential renewable energy installations (e.g., wind turbines). (Applies to residential projects.)			X	Not feasible at this project site
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**ER2: Develop Programs to Promote On-Site Renewable Energy in the Community**

ER2-3	Project incorporates distributed generation, especially PV, solar thermal, solar hot water, and solar cooling, and/or providing bloom box or other fuel cell technologies.	X			Although PV will not be initially installed we will prep for PV
ER2-5	Project includes a solar grid to power one or more EV charging stations.			X	Per climate action plan appendix D page D2-5 this will be considered during design development

**SW2: Increase Recycling, Organics Diversion, and Waste Reduction Associated with the Entire Community**

SW2-12	Project provides adequate space and logistics for handling of recyclable and compostable materials. (Applies to commercial and multifamily residential projects.)	X			
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**WA1: Conserve Community Water through Building and Landscape Design and Improvements**

WA 1-7	Project incorporates a water-saving landscape plan that includes xeriscaping and drought-resistant planting in lieu of lawns.	X			Project will incorporate drought resistant planting throughout and xeriscaping including artificial grass in limited areas
WA 1-8	Project limits lawn areas to designated play areas.	X			Lawn area is limited and artificial grass is proposed on podium

**WA3: Increase or Establish use of Reclaimed/Grey Water Systems**

WA3-2	Project utilizes reclaimed wastewater.			X	No City reclaimed water line in vicinity
WA3-4	Project incorporates rain harvesting.	X			Biotention areas will collect rainwater for groundwater recharge.

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VINTAGE – Auf der Maur/Rickenbach

**EXHIBIT B**



June 6, 2013

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RE: Evaluation of Electric and Magnetic Fields at Pleasanton Development Site  
(Bernal & Stanley)

Dear Mr. Busch:

Power-frequency electric and magnetic field measurements were conducted by Enertech Consultants within the proposed development site on Tuesday, January 29, 2013. The purpose of these measurements was to characterize existing electric and magnetic field levels within the site due to the presence of the existing PG&E Vineyard Substation and associated overhead electrical power lines. Spot magnetic field measurements were performed for two different characterization methods:

1. Continuous measurements along the entire perimeter of the proposed development site, and
2. Lateral profile measurements within the development site to characterize the field influence from the nearby electric facilities.

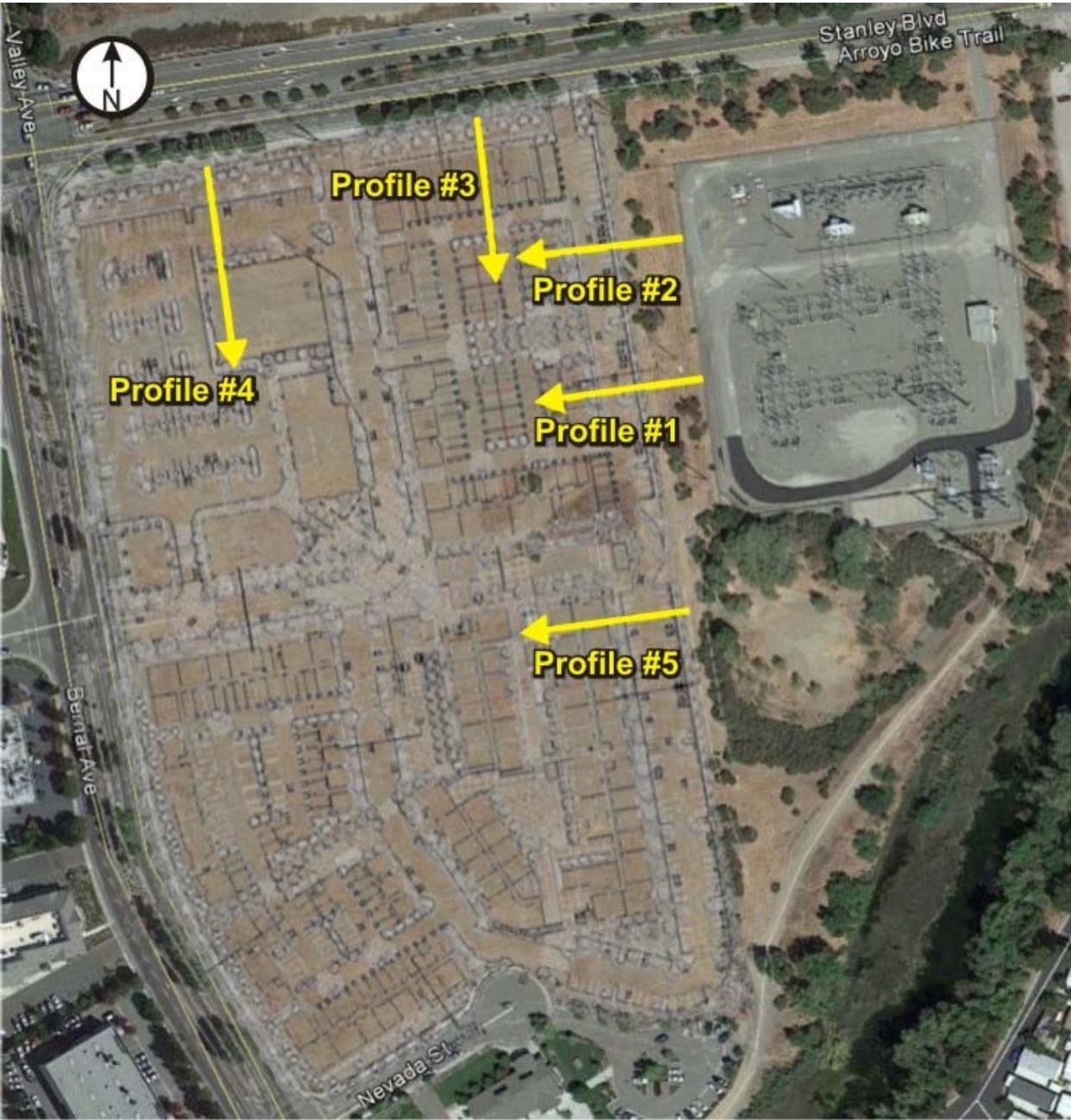
Continuous electric and magnetic field measurements were conducted along the entire perimeter of the proposed development site. Electric fields along the perimeter of the site ranged from as low as 0.000 kV/m to 0.295 kV/m. Magnetic fields along the perimeter of the site ranged from as low as 1.9 mG to 112.7 mG.

Several different lateral profile measurements were performed across portions of the development site to characterize existing electric and magnetic field levels. Electric field profile values ranged from as low as 0.005 kV/m to 0.257 kV/m. Magnetic field profile values ranged from as low as 0.9 mG to 88.2 mG.

Table 1 presents a summary of the overall measurement results. Figure 1 presents the locations where lateral profile measurements were conducted.

**Table 1. Summary of Electric and Magnetic Field Measurements at the Pleasanton Development Site**

<b>Location/Description</b>	<b>Electric Field (kV/m)</b>	<b>Magnetic Field (mG)</b>
Minimum Measured Field Along Perimeter	0.000	1.9
Maximum Measured Field Along Perimeter	0.295	112.7
Minimum Measured Field Along Profile #1 (Near the Center of Substation)	0.005	0.9
Maximum Measured Field Along Profile #1 (Near the Center of Substation)	0.133	22.2
Minimum Measured Field Along Profile #2 (Near NW Corner of Substation)	0.005	1.2
Maximum Measured Field Along Profile #2 (Near NW Corner of Substation)	0.257	23.0
Minimum Measured Field Along Profile #3 (Near NE Corner of Site Away from Stanley Blvd)	0.016	1.3
Maximum Measured Field Along Profile #3 (Near NE Corner of Site Away from Stanley Blvd)	0.075	15.2
Minimum Measured Field Along Profile #4 (Near NW Corner of Site Away from Stanley Blvd)	0.005	0.9
Maximum Measured Field Along Profile #4 (Near NW Corner of Site Away from Stanley Blvd)	0.058	10.2
Minimum Measured Field Along Profile #5 (Eastern Side of Site South of the Substation)	N/A	0.9
Maximum Measured Field Along Profile #5 (Eastern Side of Site South of the Substation)	N/A	88.2



**Figure 1. Diagram of the Lateral Profile Measurement Locations within the Proposed Development Site (With Development Overlay)**

## **POWER-FREQUENCY ELECTRIC AND MAGNETIC FIELD STANDARDS**

Presently, due to a lack of scientific evidence establishing health effects resulting from power-frequency electric and magnetic field exposure, there are no California state or federal health-based standards for limiting exposure to those fields. The state of California has considered this subject but did not find a basis for setting numerical standards or guidelines. After a careful review of research on EMF, the California Public Utility Commission (CPUC) stated in its conclusion of law (CPUC Decision 93-11-013): “It is not appropriate to adopt any specific numerical standard in association with EMFs until we have a firm scientific basis for adopting any particular value”.

However, exposure limits have been established or recommended by several different organizations. These address both electrical field and magnetic field exposure for a variety of conditions, and in some cases, exposure limits for workers with implanted medical devices.

In the “Threshold Limit Values” published by the American Conference of Governmental Industrial Hygienists (ACGIH 2012), recommended occupational exposures should not exceed 25 kV/m for AC electric fields and 10,000 mG for AC magnetic fields. Above 15 kV/m, the ACGIH recommends the use of protective clothing. For workers with cardiac pacemakers, recommended exposures should not exceed 1 kV/m for AC electric fields and 1,000 mG for AC magnetic fields. Table 2 presents a summary of the ACGIH guidelines for AC electric and magnetic fields.

The International Commission on Non-Ionizing Radiation Protection (ICNIRP 2010) has also developed guidelines for AC electric and magnetic fields. Table 3 presents a summary of the ICNIRP guidelines for AC electric and magnetic fields.

The Institute of Electrical and Electronics Engineers (IEEE 2002) also provides recommendations for electric and magnetic fields. These recommendations are specified for both the general public and in controlled environments.<sup>1</sup> Table 4 presents a summary of the IEEE guidelines for AC electric and magnetic fields.

The International Committee on Electromagnetic Safety (ICES 2002) published a guideline recommending AC magnetic field levels below 9,040 mG, based on the IEEE general public exposure value. Some implanted medical device manufacturers have also reported recommendations for their equipment which are comparable to the ACGIH limits for magnetic fields and higher limits for electric fields (for example, 6 kV/m for 60 Hz electric fields and 1 Gauss for 60 Hz magnetic fields).

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<sup>1</sup> Controlled Environment is defined by the IEEE as “An area that is accessible to those who are aware of the potential for exposure as a concomitant of employment, to individuals cognizant of exposure and potential adverse effects, or where exposure is the incidental result of passage through areas posted with warnings, or where the environment is not accessible to the general public and those individuals having access are aware of the potential for adverse effects.” (IEEE 2002)

**Table 2. ACGIH – Occupational Threshold Limit for 60-Hertz Electric and Magnetic Field Exposure**

Exposure	AC Electric Field	AC Magnetic Field
Occupational exposures should not exceed	25 kV/m (from 0 Hz to 100 Hz)	10 Gauss (10,000 mG)
For workers with cardiac pacemakers or similar medical electronic devices, maintain exposure at or below	1 kV/m (1,000 V/m)	1 Gauss (1,000 mG)

**Table 3. ICNIRP – Reference Levels for Time-Varying 60-Hertz Electric and Magnetic Fields**

Exposure (60 Hz)	Electric Field	Magnetic Field
Occupational	8.333 kV/m	10 G (10,000 mG)
General Public	4.167 kV/m	2 G (2,000 mG)

Reference levels are intended to be spatially distributed over the entire body of the exposed individual, but with the important proviso that the basic restrictions on localized exposure are not exceeded.

**Table 4. IEEE – AC Electric and Magnetic Field Maximum Permissible Exposure**

Exposure (60 Hz)	Electric Field	Magnetic Field
General Public	5 kV/m (5,000 V/m) <sup>a, d</sup> (from 1 Hz to 368 Hz) <sup>c</sup>	9.04 G (9,040 mG) (from 20 Hz to 759 Hz)
Controlled Environment	20 kV/m (20,000 V/m) <sup>b, e</sup> (from 1 Hz to 272 Hz) <sup>c</sup>	27.1 G (27,100 mG) (from 20 Hz to 759 Hz)

a – Within power line rights-of-way, the MPE for the general public is 10 kV/m under normal load conditions.

b – Painful discharges are readily encountered at 20 kV/m and are possible at 5 – 10 kV/m without protective measures.

c – Limits below 1 Hz are not less than those specified at 1 Hz.

d – At 5 kV/m induced spark discharges will be painful to approximately 7% of adults (well-insulated individual touching ground).

e – The limit of 20,000 V/m may be exceeded in the controlled environment when a worker is not within reach of a grounded conducting object. A specific limit is not provided for this standard.

**The electric and magnetic field strengths measured at the proposed development site are well below the levels cited in these guidelines.**

## **CONCLUSIONS**

Based upon these characterization measurements, the following conclusions were reached:

- Measured electric fields reached 0.257 kV/m underneath of the overhead 60 kV subtransmission line by itself along the eastern perimeter of the development site near the substation. Along the northern perimeter, measured electric fields reached 0.075 kV/m underneath of the overhead 60 kV sub-transmission line with the 12 kV distribution underbuild. Electric fields decreased with distance away from the overhead power lines and into the proposed development site.
- Measured magnetic fields reached 23 mG underneath of the overhead 60 kV subtransmission line along the eastern perimeter of the development site near the substation. Along the northern perimeter, measured magnetic fields reached 15.2 mG underneath of the overhead 60 kV sub-transmission line with the 12 kV distribution underbuild. Magnetic fields decreased with distance away from the overhead and underground power lines into the proposed development site.
- Presently there are no health-based EMF standards for the state of California or for the United States. Although there are no federal health standards in the United States specifically for 60 Hertz magnetic fields, several organizations have developed guidelines. Some organizations have developed human exposure safety guidelines, including the International Commission on Non-Ionizing Radiation Protection, the American Conference of Governmental Industrial Hygienists, and the Institute of Electrical and Electronics Engineers. **Guidelines from these organizations establish electric and magnetic field thresholds which are much higher than measured levels found within the proposed development site.**

This report was prepared by Eneritech Consultants of Santa Clara County, Inc. as an account of work sponsored by the Sares Regis Group of Northern California, LLC. Neither the Sares Regis Group of Northern California, LLC, Eneritech Consultants, nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information, apparatus, method, or process disclosed in this report or that such use may not infringe privately owned rights; or (b) assumes any liabilities with respect to the use of or for damages resulting from the use of any information, apparatus, method, or process disclosed in this report.