to those in the electrical distribution systems. However, there are millions of transmitters in the electrical power system that are the equivalent of Marconi's transmitter, and the power distribution wires are the antennas and grounds that couple these noiselike signals to humans. An inexpensive hand held AM radio receiver will detect these signals. Tune the receiver to the lowest frequency on the dial (about 500 kilohertz) which is below the lowest frequency broadcast station, turn up the volume, and you will hear a noise. As the receiver comes closer to a transmitter, the noise becomes louder. Try it near dimmer switches at various settings, personal computer displays and keyboards, fax machines, microwave ovens, electronic telephones, high efficiency fluorescent lamp bulbs, video tape recorders, and hand held hair dryers. The effects on humans depend on the path the currents produced by these fields takes through the humans, on the sensitivity of the individual, and on the amplitude, waveform, and duration of the fields. There is strong evidence that these currents may cause cancers, but this report is concerned with reducing the symptoms that humans can directly observe in themselves, such as poor short-term memory, chronic fatigue, depression, nausea, and rashes.

The Marconi Transmitters may be there because of the customer, or they may be there because of the utility. Some of the transmitters belonging to the customer are

- Hair dryers
- Dimmer switches
- Electronic transformers in low voltage halogen reading lamps
- Loose electrical connections
- High efficiency electronic systems

Some transmitters belonging to the utility are

- Switches controlling the power factor correction capacitors
- Tap switches on transformers for voltage regulation
- Deteriorated wires and connectors

There are transmitters which belong to other customers that are connected by the utility distribution system to your house. One such case is the strobe lights located on radio towers for aircraft warning purposes. The signals generated by these transmitters can travel considerable distances. The electric fields produced by these noise voltages between the power wires in a home can be reduced by lowering the impedance between the wires. Connecting a large capacitance between the wires has been effective in many cases in reducing the symptoms experienced by the occupants of the home. The capacitances used in these tests were about 200 microfarads across each 120 Volt circuit in the usual 240 Volt utility distribution system. In most cases these were installed at the main distribution in the home by a licensed electrician. Appendix A describes how an individual can evaluate the effectiveness of this mitigation technique on their symptoms.

APPENDIX A

An individual can install a capacitor across the 120 Volt circuit by electrically connecting it to a plug that is inserted into a 120 Volt electrical outlet, which is the type used in homes for appliances such as lamps, television sets, toasters, etc. A good arrangements for individuals is to plug in ten to twenty 20 microfarad motor run AC capacitors into a number of different outlets. Suppliers of these capacitors can be found in the telephone yellow pages under electric motors and/or electrical supplies. The newer A.C. dry film capacitors in epoxy cases are better for this use by nonprofessionals than the older style oil filled capacitors in metal cases, but either will mitigate the pollution. The mitigation is somewhat more effective if the capacitors are plugged into outlets used for appliances that individuals are close to for extended periods of time, such as reading lamps, radios and television receivers, and kitchen appliances. Particular attention should be paid to safety.

- There should be no exposed electrical conductors.
- The components should be in a enclosure that prevents children from tampering with the device.
- Whenever a capacitor is disconnected from the outlet, it may have energy stored in it which will remain there for hours. A 27 kilohm 2 watt resistor permanently connected directly across the 20-microfarad capacitor will remove the stored energy within a few seconds without wasting appreciable power while the capacitor is connected to the outlet. Some sparking may occur at the plug when the capacitor is connected. This is normal.

The danger from EMF radiation is real. The studies referenced in the DEIR indicate the dangers. We would like to reference the conclusions of another study on the dangers of EMF radiation published by Dr. Neil Cherry, titled "Evidence that Electromagnetic Radiation is Genotoxic: The implications for the epidemiology of cancer and cardiac, neurological and reproductive effects", published June 2000. Dr. Cherry cited the results of a number of other studies on the effects of EMF radiation in his report.

Many multiple independent laboratories have shown the ELF and RF/MW radiation causes chromosome aberrations and DNA single- and double-strand damage. These include many dose response relationships and extremely low RF/MW exposure levels including cell phone radiation. Multiple studies also show significantly altered proto oncogenes expression and activity with ELF and RF/MW exposure. This also includes cell phone radiation. Several studies show impairment of the immune system health.

Since calcium ion efflux and melatonin reduction are established biological effects of EMR exposure from ELF to RF/MW, impair immune systems should be observed in EMR exposures. Multiple independent evidence is available for RF exposures, down to extremely low chronic mean levels, and many dose response relationships are established to prove that these biological effects from EMR exposure is genotoxic. Significant DNA strand breakage has been observed down to 1 μ W/cm^2, Phillips et al. (1998), with elevated DNA damage below this. Therefore there is extremely strong evidence that EMR across the spectrum is genotoxic, even at very low exposure levels found in the vicinity of cell sites, Figure 45.

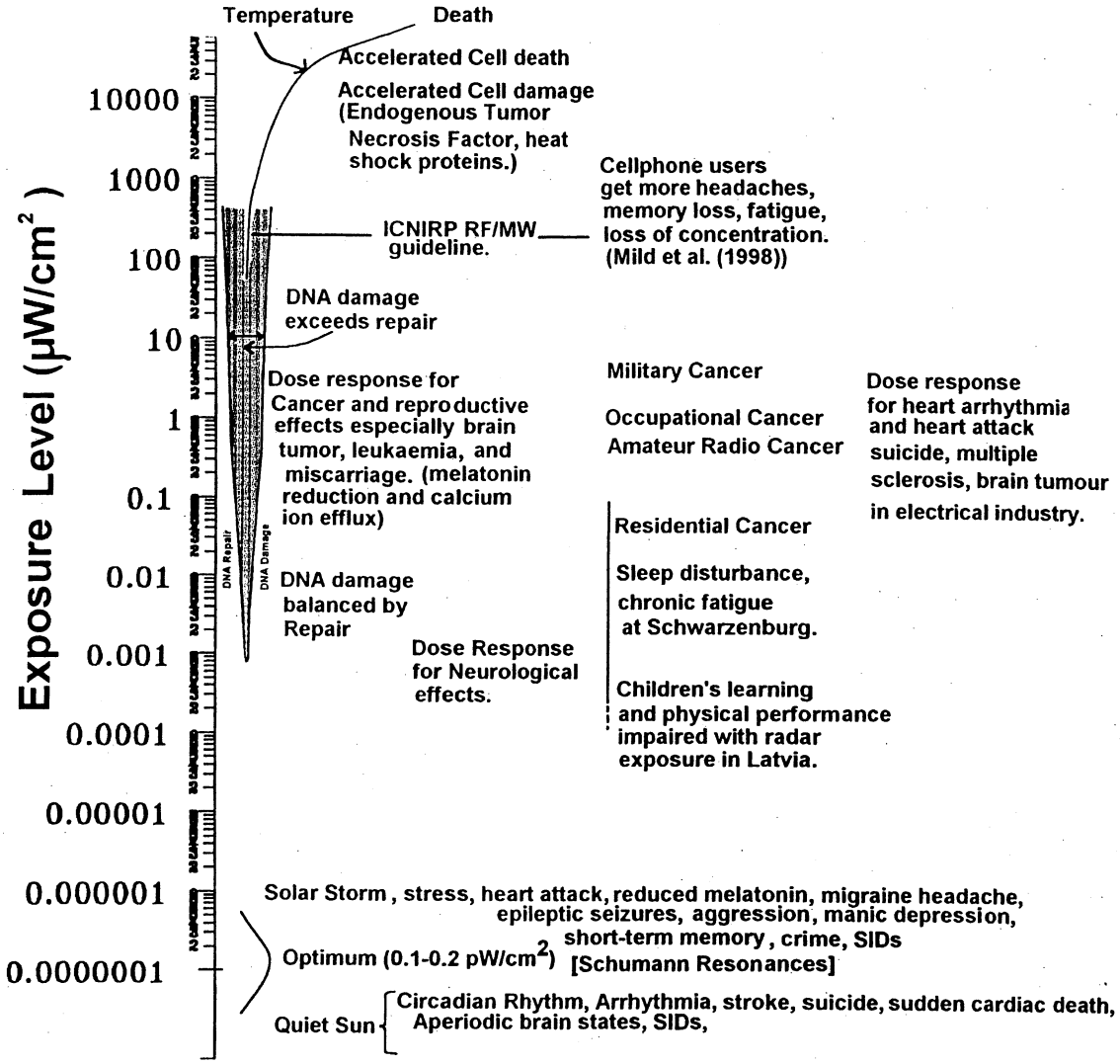

Figure 45: Summary of observed effects, and the mean levels of the exposure for human studies of exposure to electromagnetic radiation. All epidemiological studies occur below the ICNIRP and New Zealand Standard of allowable exposure.

These genotoxic biological mechanisms strongly support the large number of epidemiological studies that show significant increases of cancer, neurological, cardiac and reproductive health effects from ELF and RF/MW exposure in military, occupation, and residents studies. Altogether they show a causal relationship from EMR exposure and wide-spread adverse health effects. All of these adverse health effects are shown to be significantly increased in multiple epidemiological studies, including many with significant dose-response relationships. This data puts the situation in a very clear light. There are causal relationships between extremely low mean EMR exposures across the spectrum and a wide range of serious adverse health effects.

If the EIR does not recommend that all lots whose dwelling or yard areas would be 150' or less from the Edison transmission lines in Development Area A not be built or developed, then the EIR must indicated that the mitigation measures recommended do not reduce the level of impact to a less than significant level. Mitigation measures needed to be recommended for workers who will have prolonged exposure to the electrical fields generated by the Edison transmission lines on the project site.

Section IV. N AESTHETICS

The EIR must include mitigation measures designed to protect the Scenic Highway designation in the Community Plan. The Community Plan incorporates La Tuna Canyon Road and the Foothill Freeway as Scenic Highways. All new projects must take these into account when a development is proposed near these scenic corridors. We have included sections from the Community Plan.

SPECIAL AND UNIQUE DESIGN FEATURES

SCENIC HIGHWAYS The Plan designates scenic highways which merit special controls for protection and enhancement of scenic resources. Stonehurst Avenue, La Tuna Canyon Road, Lopez Canyon Road, Wentworth Street, Big Tujunga Canyon Road, Sunland Boulevard and the Foothill Freeway are designated as Scenic Highways on the City's Scenic Highways Plan. These highways offer views of the San Gabriel Mountains, the Verdugo Mountains, the Tujunga Wash, Hansen Dam, and horse ranches.

The preservation and protection of these scenic corridors should be an integral part of the design of buildings and structures that are concentrated adjacent to or near these highways in order to maintain their existing, panoramic scenic views. Height restrictions, landscaping buffers, special landscape treatments, tree height limits, and sign controls may need to be imposed by discretionary land use decision-makers and by the Department of Building and Safety in order to maintain the integrity of these scenic highways.

Plans for development of the Scenic Corridors indicated in this Plan should also be prepared and implemented. These plans should include:

1. Roadway design.
2. Location and development of view sites and recreational areas.
3. Controls on use and intensity of use of lands within and/or adjacent to the Scenic Corridor.
4. Prohibition and/or control of signs and billboards.
5. Location of other necessary public facilities.

The impact on the views from the scenic corridors will be significant and cannot be mitigated. The EIR must reflect this impact.

The EIR must also discuss the project's compliance with the new Scenic Plan. The San Gabriel/Verdugo Mountains Scenic Preservation Specific Plan says,

Scenic Highway Corridor. The area extending 500 feet on either side of the centerline of the roadway of each of the Scenic Highways.

Scenic Highways. Highways within the City of Los Angeles, which merit special controls for protection and enhancement of scenic resources, as designated by the Transportation Element of the General Plan (Adopted September 8, 1999), the Sunland-Tujunga-Lake View Terrace-Shadow Hills-East La Tuna Canyon Community Plan, and the Sun Valley-La Tuna Canyon Community Plan (land use elements of the City's General Plan, adopted March 23, 1999 and March 15, 2000, respectively), as shown on Map No. 1 of this Specific Plan as listed below:

(a) Big Tujunga Canyon Road (Oro Vista Avenue to City Limits)

(b) Foothill Boulevard (Wentworth Street to Osborne Street)

(c) Foothill (210) Freeway (Osborne Street to City Limits)

(d) La Tuna Canyon Road (Sunland Boulevard to City Limits)

(e) Sunland Boulevard (La Tuna Canyon Road to Foothill (210) Freeway)

(f) Wentworth Street (Foothill Boulevard to Sheldon Street);

Sec. 9. **SCENIC HIGHWAY CORRIDORS VIEWSHED PROTECTION.** The following regulations shall apply to all new Projects located within a Scenic Highway Corridor. Where only a portion of a lot or parcel is located within a Scenic Highway Corridor, these regulations shall apply to that portion. Application of the following scenic corridor viewshed protection measures to a Project shall be determined by the Director of Planning or the Advisory Agency.

A. Building Height. The maximum height of any new building or structure, including additions, that is Visible from the ROW of a Scenic Highway shall be 30 feet as defined in LAMC Section 12.03. However, in no circumstances, shall the building height exceed that allowed by the existing Height District.

The project's impact on the Scenic Corridor must be discussed in the EIR. The EIR must discuss any mitigation measures that will be required to bring the project in compliance with the Scenic Plan.

Also, we recommend that the following provision of Section 9 of the Scenic Plan be implemented. Even though the project may have private streets, they must be treated the same as public right of ways. This provision says,

D. Improvements to City-Owned Public Rights-of-Way. As part of any future street improvement program, to the extent it is physically and financially feasible, two Vista Points shall be constructed as designated on Map No.1 of this Specific Plan in the vicinity of La

Tuna Canyon Road on the north side approximately ½ mile west of its under-crossing with the Foothill (210) Freeway and on Wheatland Avenue at the base of the off-ramp from the eastbound Foothill (210) Freeway.

Vista Points shall be improved consistent with this subsection. The Vista Points shall be landscaped with native plant materials irrigated by drip system and contain a trash receptacle (smooth finish concrete, earth-tone color) and an interpretive sign that is permanently installed on a stone base and illustrates and describes points of interest including any relevant archaeological, cultural, or ecological characteristics of the area.

This would be helpful to show that the developer is sensitive to the community needs and is interested in doing something that might be considered environmentally sensitive.

Also, project landscaping must comply with the provisions of the new scenic plan. These must be proposed as mitigation measures for project areas that will be landscaped. This must be discussed in the EIR. The developer as a mitigation measure must pay for all landscape restoration costs. The costs of the landscape restoration are not discussed in the EIR and must be discussed. If the developer is not required to do the landscape restoration, it will not be done. Also, all the photosimulations with landscape restorations will be meaningless if there is no intention by the developer to restore landscape to land forms that have been altered during the development process.

Section 8 C. Prohibited Plant Materials. The following plant materials shall be prohibited within the Plan area for all new Projects (as defined in Section 4):

Acacia	Green Wattle
Ailanthus altissima	Tree of Heaven
Arundinaria pygmatea	
Arundo donax	Giant Reed
Atriplex semibaccata	Australia Saltbush
Avena sp.	Wild Oats
Brassica spp. (Non-native)	Mustard
Bromus rubens	Red Brome
Centranthus ruber	Jupiter's Beard
Cortaderia jubata	Pampas Grass
Cortaderia sellowiana	Pampas Grass
Cytisus canariensis	Canary Island Broom
Cytisus scoparius	Scotch Broom
Cytisus spachianus (Genista racemosa)	Broom
Erodium botrys	Storksbill
Erodium cicutarium	Storksbill
Erodium cygnonum	Storksbill
Erodium malacoides	Storksbill
Erodium moschatum	Storksbill
Eucalytpus globulus	Blue Gum

Lolium Perenne	Perennial Ryegrass
Malva parvifolia	Cheeseweed
Pennisetum setaceum	Fountain Grass
Ricinus communis	Castor Bean
Robinia pseudoacacia	Black Locust
Schinus molle	California Pepper
Schinus terebinthefolius	Brazilian Pepper
Spartium junceum	Spanish Broom
Tamarix sp.	
Vulpia megalura	Foxtail Fescue
	Palm
	Italian Cypress

The EIR must discuss the types of plants that will be used as landscaping for disturbed areas. Depending on the types of plants used, it could create new habitat areas that are different from existing areas. These new habitats or ecosystems that the project will create with planting of new vegetation must be discussed in the EIR. These new ecosystems will impact the existing ecosystems. These impacts must be discussed in this section or the section on Biology.

The EIR consultants did not visit the residential community on La Tuna Canyon Road to the west of Development Area B to properly analyze whether those residents would see any portion of the proposed development. The EIR says "Furthermore, due to intervening topography and dense vegetation, it is unlikely that any of these homes have substantial views of the Development Area B". It is clear from this text, the EIR consultants do not know the impact of this development on those resident's aesthetics. A visual simulation and analysis must be done to determine what impact will occur to these residents.

On Page IV.N-3, in the paragraph titled "Existing Views of the Project Site", the EIR says that a discussion will follow on description of the views of the project site from four perspectives, Interstate 210, La Tuna Canyon Road, public parkland and existing adjacent residential communities. Pages IV.N-7 thru N-11 describe the views from Interstate 210, La Tuna Canyon Road and existing adjacent residential communities but fail to describe the views from the public parkland. Parts of the public parkland south of Development Area B will see all of Development Area B and all of Development Area A. This error must be corrected and this discussion of the views from public parkland must be included in this part of the EIR.

On Page IV.N-13, the EIR says that "clustering provides the opportunity to maximize open space on the project site. Clustering also permits the project design to minimize impacts to the most sensitive resources. For example, of the 1,309 coast live oak trees on the project site, the design preserves, 1,077 trees or 82 percent". When this project is compared to the alternatives that are described in the EIR, the amount of tree loss is about the same. Only in an environmentally sensitive development will it result in minimizing impacts to sensitive resources. The statement contained in the EIR is misleading as there are many ways to minimize impacts to the sensitive species and not do mass gradings of up to 5,500,000 cubic yards of fill. This is a massive

amount of grading and will be very noticeable by all traveling by or living in the area.

The EIR must discuss in further depth the exact landform changes proposed. It is critical to discuss how all the impacted ridgelines will be cut, how impacted canyons would be filled, and the extent of the other landform modifications. These landform modifications will be seen. It is important to determine what residents, vehicle corridor users, or parkland users will see at different vantage points. This is an important impact that has been omitted.

Photosimulations must be done of what different areas will look like before and after landform changes during construction. Normal developments remove all vegetation in and near the grading areas. Other developments in Los Angeles denuded vegetation during the construction phase that lasted a very long time. This must be mentioned and shown in the visual resources to be meaningful to those on city council and the public. These visual simulations must show construction equipment that would present on site during the construction period. This would be a noticeable visual impact and must be shown in visuals.

Mitigation measures must include landscaping and soil stabilization with plants with 90 days of completion of grading. Though the applicant expects the total buildout period only to be 5 years, it is expected to take longer that the applicant reports. We have discussed that the grading will take substantially longer than the planned 19 months. We have also indicated in previous sections that lots could remain vacant for 20 or more years. Houses priced in excess of $1 million do not sell quickly as it does take buyers with households in excess of $250,000 per year to afford such homes.

Construction time estimates are completely unreliable because there are a number of factors, outside the developer's control, that will impact the build-out rate. If you look at nearby Glendale, Oakmont IV is a comparable hillside project. It was built on steep terrain. These were sold as expense hillside lots. Oakmont IV grading was started in 1985 and completed in 1988. There were 197 lots in that development. It is now 15 years later and still not all the lots are built out. The some lots there are still vacant and are a significant visual impact. This is why it is important to landscape within 90 days of the completion of grading to mitigate the impacts of the project on the area aesthetics.

The EIR must contain additional computer simulations of the areas of the project (Figures IV.N-6 to N-11) that can be seen from the Foothill Freeway in both directions. The observation points are unevenly spaced from each other and create "viewing gaps". An observer on the Freeway would be able to continuously see different parts of the project as he/she travels on the freeway. The observer would not jump from one point to the other at different intervals. We recommend that the observation points be spaced at least every 1/3 of a mile in each direction of travel.

In Figures IV.N-6 to N-11, there are 6 observation points. It is unclear where observation point #1 is exactly, if it is a view of the project from the eastbound lanes of the Freeway or possibly the view from the center of the freeway. A few feet difference in the observation point can mean a big difference in the viewing area. It is unclear where observation point #2 is exactly, if it is a view of the project from the westbound lanes of the Freeway or possibly the view from the center of the

freeway.
It is unclear where observation point #3 is exactly, if it is a view of the project from the eastbound lanes of the Freeway or possibly the view from the center of the freeway. It is unclear where observation point #5 is exactly, if it is a view of the project from the eastbound lanes of the Freeway or possibly the view from the center of the freeway. The EIR must clarify where these observation points are located for each expected computer simulation view. Again, a few feet difference in the observation point can mean a big difference in the viewing area.

Photosimulations 1-8, Figures IV.N-13 to N-20. A third photosimulation must be added to each figure. This will show the project without the landscaped vegetation. It is misleading to show all these photosimulations with landscaped vegetation because the development may not look like that for 40 or more years after construction starts. So, the view depicted in the photosimulations will be views that we never see in our lifetime. We have mentioned previously in our comment on the EIR that we believe that it may take between 15 to 20 years at minimum to develop the property and build all the homes on the project site. Homes that sell for more that $1 million in this area are going to take along time to sell and build on these lots. So, the development may take 20 years before there are no longer are bare, graded lots that are throughout the project. It also may take anywhere from 15-30 years for the landscaping to look like it does in the photosimulations. It is more likely that we will see lots of bare graded area with possibly small amount of greenery after quite a few years.

A good example of where there is very little landscaped vegetation after 15-20 years is the Oakmont III and Oakmont IV developments in Glendale. There is very little landscaped vegetation that is visible from the freeways (Glendale and Foothill). This is after 15-20 years after construction of the lots started and many of the homes have been completed. There are still vacant lots, where there is no landscaping. You just see bare, graded earth in those areas.

The EIR must discuss the landscaping plans for the development in this section or the tree portion of the Biology section in greater detail. For example, in Table IV.D-16, the EIR indicates that 515 Coast Live Oaks will be planted on the road right of ways in the project. However, if you look at Photosimulation 1, Figure IV.N-13, the trees on the road right of ways look like some type of Pine trees. Now, pine trees are not trees that are supposed to be planted as part of the tree mitigation plan. Also, I count 54 trees in that photosimulation on the street right of way (not counting the trees on the house lot property and in the driveways). From this Photosimulation 1 vantage point, I see only a small portion of road, maybe 1/3 mile of roadway, in Development Area B. This means that there are too many trees in this photosimulation for the length of the road or some other street areas in the development will have few or no trees. Therefore, the EIR must discuss the landscaping plans in greater detail as either the photosimulations are wrong or the landscaping mitigation measures are inadequate or both.

Also, in the same Photosimulation 1, the number of trees depicted on the lots for the houses is erroneous. There are too many trees in this photo. They also appear to be pines which are not supposed to be there. In Table IV.D-16, the EIR indicates that in the entire project area (Areas A & B), only 250 Coast Live Oaks will be planted on private lots. With 280 homes in the

development, this averages less than 1 tree per house lot. However, if you look at the photosimulation, each house has from about 7 to 12 trees per lot including driveways. This averages about 10 times the number of trees that are planned to be planted as a mitigation measure by the developer. The project residents are under no obligation to plant trees on their property. There is nothing in the CC&Rs that would require residents to plant trees or as many trees portrayed in the simulations. Even if residents were required to plant trees, they could always vote to change the CC&Rs. The photosimulations must be changed to remove excess vegetation. The depiction of the number of trees on the photosimulation is speculative at best and there is only a remote probability that the development will be landscaped with as many trees as there are in these simulations.

This means that the photosimulations are inaccurate and misleading. These lots will not be as green as they are portrayed in the photosimulations. Again, the photosimulations must be corrected and the tree mitigation in Table IV.D-16 must be revised if the applicant does want to do more tree mitigation by planting more trees. If these photosimulations are not revised, they will be useless as they will be too misleading.

In Photosimulations 1 and 5, Figures IV.N-17 and N-13, it appears that after construction a peak will be cutoff. On the Burbank USGS 7.5" quadrangle, this peak is marked on the topographic map as 1,814' in height located in Development Area B. It is located .4 miles due north of Boundary Monument 1347 that is located on La Tuna Canyon Road. However, on the Temporary and Permanent Impact Map, Figure IV.D-4, this peak is not shown as being graded. There seems to be a discrepancy on what is planned to be graded and what will actually be graded. These discrepancies must be corrected. Also, the peak may be part of a primary ridgeline that might be protected. Certainly, cutting off the top of a peak will be an impact to the area aesthetics. We question why this peak even needs to be cut as there is no house that is planned to be built there.

In Photosimulation 1, the 3 slope areas that will be cut in the development creation are smaller in the photosimulation than they will be in reality. According to the Development footprint map in Figure IV.D-4, the 3 cut slopes that would be visible at that vantage point are much bigger and more pronounced that they are actually shown. This must be corrected to conform with the other information about the project contained in the EIR. Also, it is unknown how this cut will be engineered. In this photosimulation, it needs to show how it will be after engineering and whether terracing or crib walls will be built there to stabilize the hillside area. The vegetation depicted that is growing back in these 3 cut areas is inaccurate. Depending on how the cut is made, the vegetation does not grow back to its former natural state. Sometimes very little vegetation will grow back even after 50 years if it is a cut in bedrock.

In Photosimulation 2, Figure IV.N-14, the number of trees depicted on the lots for the houses is erroneous. There are too many trees in this photo. In Table IV.D-16, the EIR indicates that in the entire project area (Areas A & B), only 250 Coast Live Oaks will be planted on private lots. With 280 homes in the development, this averages less than 1 tree per house lot. However, if you look at the photosimulation, each house has from about 7 to 12 trees per lot including

driveways. This averages about 10 times the number of trees that are planned to be planted as a mitigation measure by the developer. The project residents are under no obligation to plant trees on their property. There is nothing in the CC&Rs that would require residents to plant trees or as many trees portrayed in the simulations. Even if residents were required to plant trees, they could always vote to change the CC&Rs. The depiction of the number of trees on the photosimulation is speculative at best and there is only a remote probability that the development will be landscaped with as many trees as there are in these simulations. Also, nearly all the trees are situated too close to the houses because of the fire danger. Fire regulations in high fire danger areas such as these require that vegetation not be situated too close to buildings. It looks like some trees in the photosimulations are only about 10 feet from the houses. The photosimulations must be changed to remove excess vegetation and correct errors in it.

There are other errors in Photosimulation 2. The cut slope depicted in the foreground is inaccurate. According to the Development footprint map in Figure IV.D-4, the cut slope grading should extend further left of the center, eliminating the little miniature canyon with the two or three toyon trees that are almost in the center of the photo directly below the large house in the center of the picture. Also, it is unknown how this cut will be engineered. The photo needs to show how it will be after engineering and whether terracing or crib walls will be built there to stabilize the hillside area. The vegetation depicted that is growing back in the cut area is inaccurate. Depending on how the cut is made, the vegetation does not grow back to its former natural state. Sometimes very little vegetation will grow back even after 50 years if it is a cut in bedrock. These errors or omissions in Photosimulation 2 must be corrected.

In Photosimulation 3, Figure IV.N-15, the number of trees depicted on the lots for the houses is erroneous. There are too many trees in this photo. In Table IV.D-16, the EIR indicates that in the entire project area (Areas A & B), only 250 Coast Live Oaks will be planted on private lots. With 280 homes in the development, this averages less than 1 tree per house lot. However, if you look at the photosimulation, each house has from about 7 to 12 trees per lot including driveways. This averages about 10 times the number of trees that are planned to be planted as a mitigation measure by the developer. The project residents are under no obligation to plant trees on their property. There is nothing in the CC&Rs that would require residents to plant trees or as many trees portrayed in the simulations. Even if residents were required to plant trees, they could always vote to change the CC&Rs. The depiction of the number of trees on the photosimulation is speculative at best and there is only a remote probability that the development will be landscaped with as many trees as there are in these simulations. Also, nearly all the trees are situated too close to the houses because of the fire danger. Fire regulations in high fire danger areas such as these require that vegetation not be situated too close to buildings. It looks like some trees in the photosimulations are only about 10 feet from the houses. The photosimulations must be changed to remove excess vegetation and correct errors in it.

Part of the sound wall that you should see in Photosimulation 3 is missing. Figure IV.E-2 in the noise section has diagrams of the proposed sound walls. Part of sound wall B5 should be visible in the photosimulation.