

## **ATTACHMENT G**

**Written Communications (Public)  
October 18, 2016 CAC Meeting**

Name Gary Lindgren

Subject Energy

Message

Reduce the electrical load wherever possible. Replace light switches with dimming switches. Incandescent light bulbs last much much longer on dimming circuits as the light bulbs are seldom at full power. Living rooms, family rooms, TV rooms, kitchens, and bathrooms are all good candidates for dimming circuits. Replace incandescent light bulbs with LEDs. Make sure the LED package says "dimmable" if it's on a dimming circuit. There are even LED replacements for 4 foot fluorescent tubes. Replace the fluorescent lights in city hall and parking garages with LED tubes. Promote conversion of of wood burning fireplaces to natural gas burning fireplace inserts. They can be very efficient and be controlled by the regular house thermostat. The fireplace insert can be used to heat most homes on all but the coldest days in December. Now most important, don't require any conversion of natural gas appliances to electrical equivalents, including heat pumps on both new and existing buildings. Conversion to electrical appliances from gas water heaters and gas furnaces will only increase the electrical load and double the users monthly heating bill. See <http://www.paloaltoenergy.org> for more details.

**From:** Terry Andre  
**Sent:** Wednesday, October 12, 2016 12:10 PM  
**Subject:** Comment for Planning element Urban Forest

I was unable to post these on the PeakDemocracy site due to security issues. Took me a while to get them worded carefully, so I just want to get them in now and someone at the City suggested I send them to you. You may use my name on them. Terry Andre, Barron Park resident.

Comment 1:

Trees take several years to die; and many of the trees in our City currently appear are on their way to death. (Dead branches, smaller canopies, sparse needles or leaves, early leaf drop. etc). While the City counts the number of trees and replaces based on number of trees removed, that measure does not encompass the years it takes to reach a size that provides the services we expect from trees. Often we see that another landowner or neighbor has been granted permission to remove or severely prune a large or heritage tree. We need an additional measure that will illustrate the true loss of services. Any easy way to get at this it to measure the volume of trees that we lose each year and report on that amount each year so we know if we are losing or maintaining the services from the trees, especially the large trees. This can be easily obtained by not simply counting trees, but also recording the chest-height diameter and variety of every tree removed. Additional information can be gained by having cutters report on branches over 6" diameter reported. Annual reports then contain a true reflection of the service capacity of our canopy.

Comment 2: Secondly, we need to take a look at whether it is wise to remove live, healthy, fully leafed-out branches. Last fall, as our trees were beginning to show the multi-year drought stress, City crews were "pruning" healthy branches from trees, before the winter weather. I am concerned that we are removing the ability of trees to provide their own resilience to the drought. (How much water was removed from the tree by removing healthy branches and leaves?) Here is an example: A few years ago, an six-foot-diameter Coast Live Oak died of disease near my home. Barrie Coates, renowned Arborist visited the tree shortly before removal, and described the slow death of the tree was NOT due to the leaky sap an infection – but was caused by increased susceptibility to pathological organisms due to lack of nutrients. The tree was no longer able to produce the amount of sugars in its leaves needed to fend off pathogens, because it had been over pruned, and starved because the urban area had been built up over the trees roots.

## **Safety and Sustainability Considerations for Basement Construction**

Basements can have many impacts, both during and after construction. Here, I will try to summarize some of the safety and some sustainability issues of basements that you might have heard of before.

The two main issues with safety as regards to basements are personal and community safety. It is only very recently that it has been recognized that groundwater levels will rise in proportion to sea level rise. To adapt to this consequence of climate change, the USGS recommends avoiding building underground where the current groundwater level is less than 4m (13 feet) as with groundwater level rise these underground structures are expected to flood.

Underground construction diminishes the amount of soil available to retain storm water and changes the paths of below ground water flows. This increases the chance of street flooding. The larger the basements and the greater the number of basements, the greater this effect. When we think of underground development, we should consider both, **single site and cumulative impacts**.

There are other safety issues to consider: concurrent dewatering on properties within 500 Ft. of each other is likely to have a greater effect (cracks on slabs and foundations, cracked windows, dying trees, etc.) on neighboring properties than a single site dewatering and should not be allowed.

Another resident has made the point that in a power outage, toilet (and sump) up flow pumps will not work, potentially leading to "raw sewage in flood water".

With regard to sustainability, dewatering, which is the practice of pumping out groundwater for construction in areas with a high water table is not sustainable. So far this year Palo Alto has managed to use less than 2% of the water that is pumped during dewatering. The rest of this water flows via the storm drain system to the Bay where it contributes to sea level rise.

Additionally, underground construction contributes more than above ground construction to greenhouse gases and thus to climate change because of its energy intensive demands and all the concrete and steel involved in making sure that the structure is safe. Post construction, basements that are more than one story deep rely on mechanical ventilation, artificial lighting and, likely, pumping of groundwater and/or sewer water thus significantly increasing the energy demands of the building. For sustainable design and minimizing operational energy use, basements should be limited to one story.

I have no first-hand experience of the building industry. These are some best practices other cities are following or considering.

Thank you for your attention,

Esther Nigenda  
9/27/2016