

June 12, 2015

Ms. Sharon Gong
Dept. of Conservation and Development
Contra Costa County
30 Muir Road
Martinez CA 94553



Subject: Unitarian Universalist Church
1 Lawson Road

Dear Ms. Gong:

The Unitarian Universalist Church of Berkeley is located at the subject address in Kensington CA. The Church has applied for a permit to remove approximately 87 Monterey pine (*Pinus radiata*) trees. The application was supported by a report prepared by Tim Ghiradelli, consulting arborist (dated January 20, 2015). You requested that I prepare a peer review of the report.

I visited the Church property on June 10 where I met with Larry Nagel and David Rockhold. Both men are members of the Church's Building Projects Management Team.

This letter summarizes my observations and assessment.

Background and Ghiradelli report

Mr. Nagel and Mr. Rockhold provided some background to the application. The Church moved to the Lawson Road property in the early 1960s. A troop of Boy Scouts planted the Monterey pines currently present at the site, making the trees 50 to 55 years old. They noted that in the past 9 trees, the Church has removed approximately 27 trees due to poor health and/or structure.

Mr. Ghiradelli assessed 80 Monterey pines in December 2014. He concluded that "the Monterey pine trees surveyed are "nearing their useful life expectancy. Tree health is increasingly diminishing and risks of limb and tree failure are increasing." He concluded "the most effective tree management would consist of systematic tree removal with a selected tree replacement program." He recommended that the pines be removed over a 3 year time period. A tree location map was included in Mr. Ghiradelli's report.

I reviewed Mr. Ghiradelli's tree survey information. Trunk diameters ranged from 11" to 52". The vast majority of pines were between 11" and 30". He observed tree health/vigor to be generally poor. Only pine #119 (44") was noted as "fair/good" but the tree also had a significant defect in structure: poorly attached codominant stems high in the crown.

Mr. Ghiradelli also observed that numerous young coast live oak (*Quercus agrifolia*) trees had grown adjacent to, and within, the plantings of pine. Oaks were generally large shrubs with foliage extending to the ground.

Observations at the Site.

My observations of trees at the site were consistent with Mr. Ghiradelli's. The Monterey pines were relatively close together and were mature in development (Photo 1). Tree canopies were often high due to competition. Large diameter dominant trees were adjacent to small diameter trees that had been overtopped and suppressed.



Photo 1. One of the groves of Monterey pine.

Trees were typical of mature Monterey pines in the East Bay. I observed the presence of red turpentine beetle (an insect pest) and pine pitch canker (a fungal disease). Both are prevalent in the region and have killed thousands of trees in the last decade.

Coast live oak trees were present in and around the groves.

Summary and Recommendations

Mr. Ghiradelli's report accurately reflected the size and overall condition of the Monterey pines located on the church grounds. Trees were mature in development but quite variable in size and form. Over time, some pines became suppressed in development. At the same time, many trees developed significant defects in structure. Insect and disease problems prevalent in the East Bay were present at the site.

The Monterey pines were typical for this species, tree age and history of care. Trees were initially planted at close spacings and allowed to develop into dense groves. Over time, coast live oak trees seeded into and along the edge of the groves.

I concur with Mr. Ghiradelli's recommendation to remove the trees and allow the small oaks to fill-in the gaps created when the pines are gone. The oaks could be supplemented with planting of other species that are drought-tolerant and compatible with the growing conditions required by the region's native oaks.

In summary, removing the mature pines over a short period of time, or even all at once, is a prudent management decision that reflects the species composition and growing conditions. Monterey pines can be expected to continue to decline in the near future. Rather than remove them piecemeal, I recommend the trees be removed at one time.

Thanks very much. If you have any questions, please feel free to contact me. I look forward to hearing from you.

Sincerely,

James R. Clark
Consulting Arborist