November 23, 2020

Brian Fiorio
City of Pleasanton
PO Box 520
Pleasanton CA 94566

Subject: American elm Assessment
Civic Park, Pleasanton

Dear Mr. Fiorio:

A group of American elms (*Ulmus americana*) growing in the Civic Park are showing signs of Dutch elm disease (DED). You requested that HortScience | Bartlett Consulting, Divisions of the F.A. Bartlett Tree Expert Company, visit the park to assess the trees and provide management recommendations, as appropriate.

I met you at the park visited the on November 6, 2020. This letter summarizes my observations and assessment.

Description of Trees
Four (4) American elm trees were located at the south end of the Civic Park, with 2 near the sidewalk along Bernal Ave. and 2 along the old railroad corridor. Descriptions of trees are provided in the ***Tree Assessment Form*** and locations are shown on Figure 1 (below)

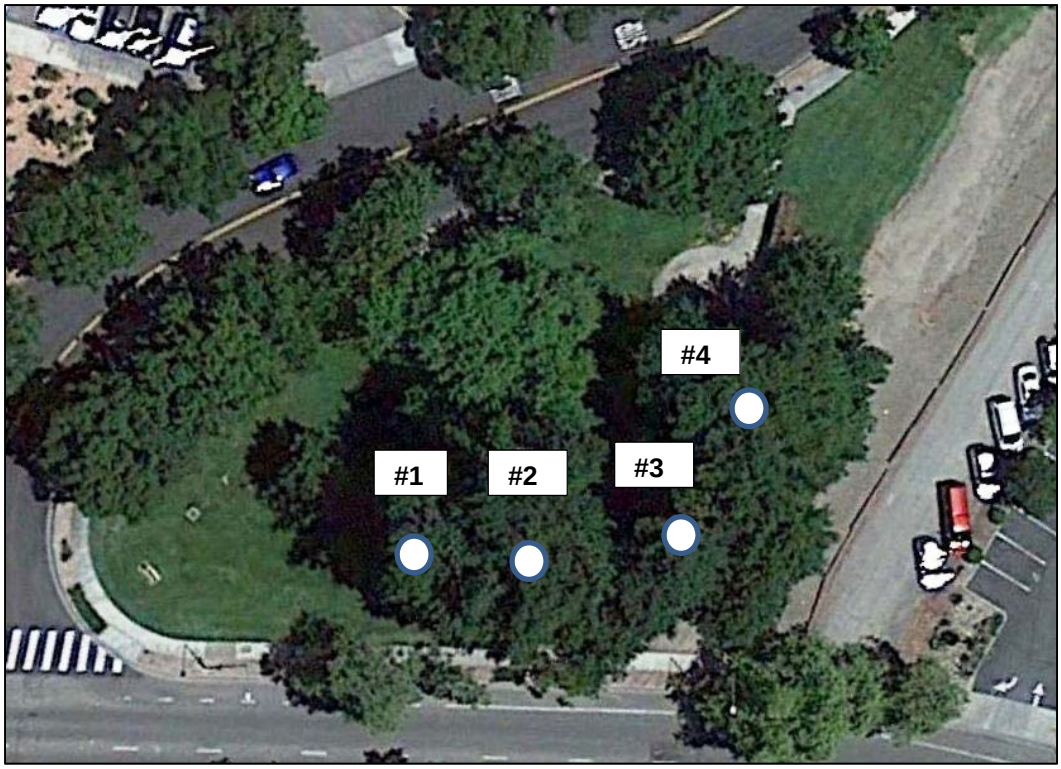


Figure 1: Aerial image showing approximate locations of American elms #1-4 in Civic Park. Image provided by Google Earth

All of the American elms assessed in Civic Park were mature in form and development, with trunk diameters between 34" and 43". Form and structure of the trees was generally good, with all of the trees having an upright form and well balanced, vase-shaped crowns.

All of the American elms showed damage by elm leaf beetles and flagging (branch dieback) associated with Dutch elm disease (DED). Dutch elm disease involves the fungi *Ophiostoma novoulmi* and *O. ulmi*, which are primarily vectored by two species of bark beetles. These beetles wound the trees as they feed on plant parts and breed under the bark, spreading fungal spores and infecting trees along the way. In addition, the disease can be spread from tree to tree through root grafts and un-sterilized equipment.

I rated the current condition of the trees as poor for trees #1-3, all of which showed between 70% and 95% dead leaves (Photo 1). American elm #4 was in fair condition, with more elm leaf beetle damage than flagging of branches (Photo 2).

Based on my assessment and discussions with you, all of the American elms had been pruned last year to reduce branches extending over areas where people may congregate, such as along Bernal Ave. and sidewalk. I saw no limbs or large tree parts that were at risk of failure in the immediate future.

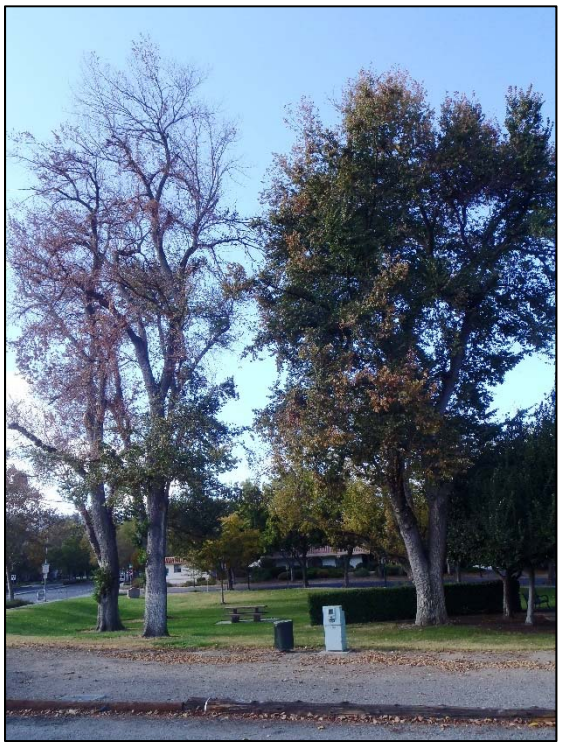


Photo 1 (L) – Looking east at trees #1-3 (foreground to background). Browning of the canopy is consistent with typical symptoms of DED. Tree #1 showed ~70% flagging of branches (with more on the south side of the crown), while #2 showed ~95% flagging.

Photo 2 (R) – Looking west at trees #3 and 4 (L to R). Tree #3 showed ~80% flagging of branches, while #4 showed ~20% flagging, most of which was in the upper crown.

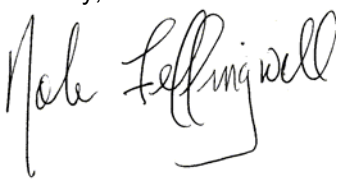
Recommendations
The current assessment reflects the apparent condition of the trees based on elm leaf beetle damage and flagging of branches associated with DED. This can be deceiving, as it is difficult to assess from the ground if and how much of the twigs and branches have actually died.

Since I do not believe the trees pose any immediate threat to the public, I recommend the following actions for management of the American elms in Civic Park:

- Monitor the trees in the spring of 2021 following leaf emergence to assess what parts and how much of the crowns are actually dead.
- Consider removing trees showing 50% or more dieback, especially if dieback has extended to branches measuring 4" and larger in diameter.
- Treat any trees the City wants to retain for elm leaf beetle and DED. Consult with a Registered Pesticide Applicator on the best methods for treatment s, but this typically involves a foliar spray or soil drench of an insecticide prior to leaf emergence to suppress elm leaf beetle and a systemic injection of fungicide in late summer to suppress DED.
- Prune trees to be retained to remove dead branches and improve form and aesthetics.
- Anticipate that all of the American elms in Civic Park will eventually succumb to DED and plan accordingly. Consider replacing trees either with another species or with a DED resistant variety of American elm.

Please feel free to contact me with any questions. I look forward to hearing from you.

Sincerely,



John Leffingwell
Consulting Arborist.

Attachments: ***Tree Assessment Form***

Tree Assessment

Civic Park American elms
Pleasanton, California
November 2020

HORT SCIENCE
BARTLETT CONSULTING

TREE No.	SPECIES	SIZE DIAMETER (in inches)	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1	American elm	42	2	Low	70% leaf loss, mostly on S. side; elm leaf beetle damage; basal sprouts.
2	American elm	42	1	Low	95% leaf loss; only sprouts below 8' remain.
3	American elm	34	2	Low	80% defoliated, mostly in upper crown; elm leaf beetle damage; lowest branches still green.
4	American elm	43	3	Moderate	Some flagging in upper crown; primarily elm leaf beetle damage.