



August 28, 2013

Mr. Mark Basili  
Flatiron-Kiewit  
2100 Goodyear Road  
Benicia CA 94510

Subject: **Revised Armistead Rd. Altered Stand Assessment  
Presidio of San Francisco, CA**

Dear Mr. Basili:

HortScience, Inc. is under contract with Flatiron-Kiewit to help coordinate the tree removal and preservation effort for the P3 portion of the Doyle Dr. construction project. As part of the approval process for removal of trees in the Armistead Rd. area, the Presidio Trust (the Trust) requested that I assess the potential impacts on the trees to remain in the lee of those removed.

***Background and Methods***

As part of the improvements to Doyle Dr., the on-ramp from north-bound 19<sup>th</sup> Ave. to Hwy 101 will be widened. The proposed improvements would require the removal of trees between Armistead Rd. and Highway 101 (Photo 1, following page).

The area between Highway 101 and Hoffman St. to the north is a closed canopy forest dominated by blue gum (*Eucalyptus globulus*). Monterey cypress (*Cupressus macrocarpa*), Monterey pine (*Pinus radiata*) and blackwood acacia (*Acacia melanoxylon*) were also present in relatively low numbers. Trees in this stand were mature in form and development, and their overall condition was fair.

The stand between Armistead and Highway 101 have developed in response to winds coming off the ocean. As a result, trees in the area of Ramsel Ct. (to the north) were protected from the wind by those closer to Hwy. 101. Removal of the trees between Armistead Rd. and Hwy. 101 will remove the leading edge of the forest. Trees on the new edge will be exposed to higher wind velocities than previously, which can result in a greater rate of failure. This is especially true during the first few years, until the trees can acclimate to the new conditions.

Based on input from the Trust, I was asked to assess all of the trees with a target between Armistead Rd. to the south, Hoffman St. to the north and Lendrum Ct. to the east. Many of the trees located in these areas are growing in yards and landscape areas between apartment buildings, around roads, parking and children's play structures.



**Photo 1:** Aerial image showing the Armistead neighborhood, with dominant wind direction is indicated by arrows. Approximate area of proposed tree removal in the Armistead neighborhood is outlined in red and area of mitigation pruning is outlined in yellow.

In performing the assessment, I considered the following for each tree:

- If the removal of the trees along Armistead Rd. would result in increased wind velocities. This was based on the trees proximity to the new edge or other topographic or man-made feature that may accelerate the wind, such as Ramsel Ct.
- If I felt the tree would experience increased wind velocities, I rated the risk for failure associated with the tree under the anticipated wind forces following tree removal.
- Risk was rated using the 12 point system, as described in *A Photographic Guide to Hazard Trees in Urban Areas* (Matheny and Clark, 2<sup>nd</sup> Edition, 1994, International Society of Arboriculture). This method has been employed by HortScience in the 3 previous assessments of trees at the Presidio.
- What management action would help reduce the potential for the tree or one of its parts from failing as a result of the anticipated wind forces.

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**Results and Recommendations**

Trees were assessed on April 22, May 5, and July 24, 2013. Results of individual tree assessments are provided in the **Tree Assessment Form** and locations are shown on the **Tree Assessment Map** (see attachments).

I assessed 136 trees between Armistead Rd., Hoffman St. and Lendrum Ct. with the potential to hit a target. Seventy-six (76) of the trees were far enough from the new edge or Ramsel Ct. that no impacts from increased wind speeds are anticipated and no management action was recommended.

Sixty (60) trees were identified as being close enough to either the new edge or Ramsel Ct. to be impacted by the increased wind speeds and require pruning or removal. Following is a brief summary of the recommendations for action. Management recommendations for each tree requiring pruning or removal are provided in Table 1 (following page), as well as in the **Tree Assessment Form** (see Attachments).

- Forty-eight (48) of the trees are recommended for pruning. This group includes 16 trees requiring crown cleaning to remove dead wood greater than 2" in diameter, 36 trees requiring end-weight reduction associated with lateral limbs over the target, and three (3) trees requiring branch removal. Seven (7) of the trees require a combination of crown cleaning and end-weight reduction.
- Twelve (12) trees were identified for removal based on declining health, lean and the presence of decay: #5659, 5669, 5673, 5679, 5709, 5715, 5716, 5722, 5726, 5736, 5737 and 5743.

Please contact me if you have any questions regarding my observations or recommendations.

Sincerely,



John Leffingwell  
Board Certified Master Arborist WE-3966B  
Registered Consulting Arborist #442

**Attached:      *Tree Assessment Form***

***Tree Assessment Map***

**Table 1: Recommendations for Action**  
**Armistead Altered Stand Assessment, Presidio San Francisco**

Tree #	Species	Size (in)	Condition (1-5)	Recommendation
5649	Blackwood acacia	22	2	Remove hazard beam E.
5651	Blue gum	27	3	Reduce lateral E. over bldg. 1253
5653	Blue gum	21	3	Reduce lateral W.
5654	Blue gum	22	4	Reduce end weight S.
5657	Blue gum	28	3	Reduce lateral S. further
5658	Blue gum	30	4	Reduce laterals over bldg. 1251
5659	Blue gum	21	2	<b>Remove</b>
5660	Blue gum	32	4	Reduce end weight N.
5661	Blue gum	24	3	Reduce laterals over bldg. 1251
5662	Blue gum	23	3	Reduce lateral over bldg. 1251
5665	Blue gum	21	3	Prune dead wood
5668	Blue gum	25	3	Prune dead wood
5669	Blue gum	20	3	<b>Remove</b>
5672	Blue gum	27	3	Prune dead wood
5673	Blue gum	11	1	<b>Remove</b>
5675	Blue gum	26,26	3	Reduce end weight over Ramsel
5679	Blue gum	33	4	<b>Remove</b>
5682	Blue gum	18	3	Reduce stem over sidewalk
5683	Blue gum	29	4	Reduce laterals over bldg. 1251
5684	Blue gum	16	2	Prune dead wood
5685	Blue gum	30,25,21	3	Reduce end weight over bldg. 1255
5686	Blue gum	22,15,9	2	Remove dead stems
5687	Monterey pine	23	3	Reduce laterals over bldg. 1255
5688	Blue gum	12	2	Reduce laterals over bldg. 1254
5689	Blue gum	18	3	Reduce laterals over bldg. 1255
5690	Blue gum	18	2	Reduce laterals over bldg. 1255
5695	Blue gum	18	4	Reduce laterals over bldg. 1255
5696	Blue gum	26	3	Reduce lateral S.
5707	Blue gum	30	4	Prune dead wood & reduce end weight over Ramsel
5708	Blue gum	21,20,18	3	Prune dead wood
5709	Blue gum	24	2	<b>Remove</b>
5710	Blue gum	25	3	Prune dead wood
5711	Blue gum	20	2	Reduce lateral & prune deadwood over bldg. 1211
5712	Blue gum	19	3	Prune dead wood
5713	Blue gum	18	3	Prune dead wood
5714	Blue gum	37	4	Prune dead wood and lateral over bldg. 1211
5715	Blue gum	18	2	<b>Remove</b>
5716	Blue gum	15	2	<b>Remove</b>

(Continued, following page)

**Table 1: Recommendations for Action, continued**  
**Armistead Altered Stand Assessment, Presidio San Francisco**

Tree #	Species	Size (in)	Condition (1-5)	Recommendation
5717	Blue gum	28	3	Prune dead wood
5718	Blue gum	26	3	Reduce lateral N.
5721	Blue gum	33	3	Reduce lateral at 40'
5722	Blue gum	22	2	<b>Remove</b>
5723	Blue gum	31	3	Prune dead wood & reduce laterals N.
5724	Blue gum	28	3	Reduce lateral N.
5725	Blue gum	23	3	Remove 6" laterals N & E
5726	Blackwood acacia	12	3	<b>Remove</b>
5727	Blue gum	65	3	Reduce end weight over bldg. 1234
5730	Blue gum	25	4	Prune dead wood & reduce end weight over Ramsel
5731	Blue gum	28	4	Reduce end weight over bldg. 1234
5732	Blue gum	30	4	Prune dead wood & reduce end weight over parking
5735	Blue gum	22	4	Prune dead wood & reduce end weight over Ramsel
5736	Blue gum	33	2	<b>Remove</b>
5737	Blue gum	20	2	<b>Remove</b>
5738	Blue gum	28	3	Reduce end weight over bldg. 1236
5739	Blue gum	34	3	Reduce end weight over bldg. 1236
5741	Blue gum	30	3	Reduce end weight over bldgs. 1235 & 1236
5742	Blue gum	35	4	Reduce end weight over bldg. 1235
5743	Blackwood acacia	15	2	<b>Remove</b>
5746	Blue gum	27,25	3	Prune dead wood & reduce end weight over Ramsel
7758	Blue gum	20	2	Reduce lateral S.

# Tree Assessment Form

**Armistead Altered Stand Trees**  
 Presidio of San Francisco, California  
 May 2013



TREE No.	SPECIES	TRUNK DIAMETER (in.)	CONDITION 0=dead 1=poor 5=excellent	COMMENTS	RISK ASSESSMENT						Recommendations
					Most likely failure	Target	Failure potential	Size of part	Target Rating	Rating	
5611	Monterey cypress	17,15	4	Codominant trunks @ base; slight separation.	Branch	Landscape	2	1	1	4	No action required
5612	Monterey cypress	18,14	4	Codominant trunks @ base; downhill toward Hoffman; 14" separating to SW.	14" stem	Landscape	3	2	1	6	No action required
5613	Monterey cypress	25,24,22,15	4	Multiple attachments @ base; generally sweep upright. 2012: cracked @ base.	Stem	Play area	3	3	4	10	No action required
5616	Canary Island pine	14	5	Good tree.	Branch	Sidewalk	2	1	2	5	No action required
5618	Blue gum	35	2	Codominant trunks @ 7'; one stem topped @ 30'.	Stem	Yard	3	2	2	6	No action required
5619	Blue gum	15	2	Suppressed with high narrow crown; sparse.	Branch	Sidewalk	2	1	2	5	No action required
5620	Blue gum	22	3	High narrow, asymmetric crown.	Branch	Landscape	2	2	1	5	No action required
5621	Blue gum	38	4	Good form; heavy lateral limb over 1238.	Branch	Bldg. 1238	2	2	4	8	No action required
5622	Blue gum	38	2	Lost leader; heavy lateral limb to lawn area.	Branch	Lawn	2	2	1	6	No action required
5623	Blue gum	30	2	One stem S. and bowed N. to playground.	Branch	Lawn	2	2	1	6	No action required
5624	Blue gum	13	2	High narrow crown; leans N.; suppressed formed.	Whole tree	Lawn	3	2	1	6	No action required

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					Most likely failure	Target	Failure potential	Size of part	Target Rating	Rating	
5625	Blue gum	22	2	No tag; crook @ 20'; lost central leader.	Branch	Lawn	2	2	1	5	No action required
5626	Blue gum	20	2	No tag; crook @ 18'; lost central leader.	Whole tree	Lawn	2	2	1	5	No action required
5627	Blue gum	32	3	Codominant trunks @ 10'; one stem vertical; second stem bowed N.	N. stem	Table	2	1	3	6	No action required
5628	Blue gum	17	2	Suppressed; asymmetric crown; heavy lateral.	Branch	Landscape	2	1	1	4	No action required
5629	Blue gum	24	4	Codominant trunks @ 18'; one-sided toward lawn.	Heavy lateral	Landscape	2	2	1	5	No action required
5630	Blue gum	50	4	Codominant trunks @ 10'; one-sided toward 1282; low lateral over yard.	Branch	Bldg. 1282	2	1	4	7	No action required
5632	Monterey pine	50	2	One-sided and leans E.; engulfed in ivy; lost central leader.	Whole tree	Parking	2	3	3	8	No action required
5633	Blue gum	14	2	Suppressed; heavy lateral over parking; in ivy.	Branch	Parking	2	2	3	7	No action required
5634	Monterey pine	13	1	All but dead; suppressed & leaning.	Whole tree	Landscape	3	2	1	6	No action required
5635	Monterey pine	40	2	Codominant trunks @ 15' and high in crown; one-sided E.; slight separation.	Whole tree	Sidewalk	2	4	2	8	No action required

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					Most likely failure	Target	Failure potential	Size of part	Target Rating		
5636	Toyon	10,7	2	Codominant trunks @ 1'; suppressed; heavy over path.	Stem	Sidewalk	2	2	2	6	No action required
5637	Red flowering gum	26	3	Multiple attachments @ 7'; stem E. leans N. to yard; trunk wounds.	Branch	Yard	2	2	2	6	No action required
5638	Mexican fan palm	17	4	20' of clear trunk; close to house.	Fron	Yard	2	1	2	5	No action required
5639	Canary Island pine	35	4	Lost central leader; low laterals sweep upright.	S. stem	Bldg. 1257	2	2	4	8	No action required
5640	Monterey pine	26	4	Multiple attachments @ 7'; weak attachment but upright; planted in island.	Stem	Lendrum	2	2	2	6	No action required
5641	Red flowering gum	15,7,5,5,5,4,4	2	Multiple attachments @ base; decay in 15" stem; suckers from base; decay column in main stem.	15" stem	Yard	2	2	2	6	No action required
5642	Canary Island pine	22	4	Upright laterals; hazard beam on S.	S. stem	Yard	2	2	2	6	No action required
5644	Blackwood acacia	18	3	Strong lean S.; history of branch failure; lateral over Armistead Rd.	Whole tree	Armistead	3	2	2	7	No action required
5645	Myoporum	13,7,6,6	2	Multiple attachments @ base separated; trunk wound; over sidewalk..	Stem	Sidewalk	2	1	2	5	No action required



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					Most likely failure	Target	Failure potential	Size of part	Target Rating		
5646	Blackwood acacia	14	2	Leans E...low lateral over Armistead; history of branch failure.	Branch	Armistead	3	1	2	6	No action required
5648	Blackwood acacia	12,9	3	Growing close to house.	Whole tree	Sidewalk	2	2	2	6	No action required
5649	Blackwood acacia	22	2	Multiple attachments @ 7'; poor form & structure; attachments splitting; history of branch failure; hazard beam E.	Branch	Landscape	4	2	1	7	Remove hazard beam E.
5650	Blue gum	18	2	Suppressed; topped for power lines.	Branch	Sidewalk	2	1	2	5	No action required
5651	Blue gum	27	3	Crook @ 20'; weight over 1253; history of branch failure; thin crown.	Branch	Bldg. 1253	3	2	2	8	Reduce lateral E. over bldg. 1253
5652	Toyon	6,4,4,3	3	Multiple attachments @ base; suppressed.	Stem	Landscape	2	2	1	5	No action required
5653	Blue gum	21	3	High narrow crown; twig & branch dieback; lateral over overhead utilities.	Branch	Utilities	3	2	3	8	Reduce lateral W.
5654	Blue gum	22	4	Codominant trunks @ 25'; dead branches; high crown.	Branch	Landscape	2	1	2	5	Reduce end weight S.
5655	Toyon	12,10,8	3	Multiple attachments @ base; suppressed	Stem	Landscape	2	2	1	5	No action required

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					Most likely failure	Target	Failure potential	Size of part	Target Rating	Rating	
5656	Blue gum	17	2	Multiple attachments @ 7'; poor form & structure; leans E.	Branch	Sidewalk	2	2	2	6	No action required
5657	Blue gum	28	3	Codominant trunks @ 10'; lateral already reduced.	Branch	Sidewalk	2	2	2	6	Reduce lateral S. further
5658	Blue gum	30	4	Nice tree but for lost central leader; codominant trunks @ 10'; lateral limb over 1251 & parking.	Branch	Bldg. 1251	3	1	4	8	Reduce laterals over bldg. 1251
5659	Blue gum	21	2	Was codominant trunks @ 20'; entirely over Ramsel.	Branch	Utilities	3	2	3	8	<b>Remove</b>
5660	Blue gum	32	4	High vase-shaped crown.	Branch	Yard	2	1	2	5	Reduce end weight N.
5661	Blue gum	24	3	High crown; laterals over 1251.	Branch	Bldg. 1251	3	1	4	8	Reduce laterals over bldg. 1251
5662	Blue gum	23	3	High crown.	Branch	Bldg. 1251	2	1	4	7	Reduce lateral over bldg. 1251
5663	Blue gum	18	3	Below canopy.	Branch	Yard	2	2	2	6	No action required
5665	Blue gum	21	3	Topped @ 20'; upright.	Dead wood	Landscape	3	1	1	6	Prune dead wood
5666	Blue gum	23	2	Codominant trunks @ 6' and 10'; sparse.	Branch	Bldg. 1251	2	2	4	8	No action required
5668	Blue gum	25	3	Codominant trunks @ 5'; high narrow crown.	Branch	Sidewalk	3	1	2	6	Prune dead wood
5669	Blue gum	20	3	High narrow crown.	Branch	Landscape	3	2	1	6	<b>Remove</b>

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					Most likely failure	Target	Failure potential	Size of part	Target Rating		
5670	Blue gum	21	3	High crown.	Branch	Landscape	3	1	1	5	No action required
5671	Blue gum	28	3	Topped @ 35'; poor form & structure; low laterals.	Branch	Landscape	2	1	1	4	No action required
5672	Blue gum	27	3	Codominant trunks @ 7'; high narrow crown.	Branch	Landscape	3	2	1	6	Prune dead wood
5673	Blue gum	11	1	Suppressed form; all but dead; trunk wounds; leans N.	Whole tree	Ramsel	3	2	2	7	<b>Remove</b>
5674	Blue gum	15	3	Codominant trunks @ 20'; high narrow crown.	Branch	Landscape	2	1	1	4	No action required
5675	Blue gum	26,26	3	Codominant trunks @ 4' and 20'; one stem topped @ 30'; one-sided to Ramsel.	Branch	Ramsel	3	2	2	7	Reduce end weight over Ramsel
5676	Blue gum	24	2	Codominant trunks @ 20'; poor form & structure.	Stem	Ramsel	2	2	2	6	No action required
5677	Blue gum	25	2	Codominant trunks @ 5'; narrow attachment; high narrow crown.	Stem	Landscape	2	2	1	5	No action required
5678	Blue gum	24,15	2	Codominant trunks @ base & 7'; one stem with seam & leans to Ramsel.	Stem	Ramsel	2	2	2	6	No action required
5679	Blue gum	33	4	Leans & one-sided to 1238; topped @ 40'; heavy lateral limb.	Stem	Parking	3	3	3	9	<b>Remove</b>

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					Most likely failure	Target	Failure potential	Size of part	Target Rating	Rating	
5680	Blue gum	25	4	Nice tree; high vase shaped crown; engulfed in ivy.	Branch	Sidewalk	2	1	2	5	No action required
5681	Blue gum	25,22	3	Codominant trunks @ 2'; stems topped @ 15'; engulfed in ivy	Branch	Sidewalk	2	1	2	5	No action required
5682	Blue gum	18	3	Codominant trunks @ 14'.	Branch	Sidewalk	2	1	2	5	Reduce stem over sidewalk
5683	Blue gum	29	4	Nice tree; low laterals; ivy.	Branch	Bldg. 1251	2	1	4	7	Reduce laterals over bldg. 1251
5684	Blue gum	16	2	Poor form & structure; dead branches.	Dead wood	Bldg. 1251	4	1	4	9	Prune dead wood
5685	Blue gum	30,25,21	3	Multiple attachments at base; one-sided; 25" stem leans S. between 1253 & 1254; reduced.	Branch	Bldg. 1255	3	1	4	8	Reduce end weight over bldg. 1255
5686	Blue gum	22,15,9	2	Multiple attachments @ base; stump sprout; one-sided & bowed; 15" stem all but dead.	15" stem	Yard	3	2	2	7	Remove dead stems
5687	Monterey pine	23	3	High crown; history of branch failure.	Branch	Bldg. 1255	3	1	4	8	Reduce laterals over bldg. 1255
5688	Blue gum	12	2	Lost leader; suppressed with weight over 1255.	Branch	Yard	2	2	2	6	Reduce laterals over bldg. 1255
5689	Blue gum	18	3	Narrow crown; codominant trunks @ 15'.	Branch	Bldg. 1255	3	1	4	7	Reduce laterals over bldg. 1255

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					Most likely failure	Target	Failure potential	Size of part	Target Rating	Rating	
5690	Blue gum	18	2	Narrow crown; low lateral over yard.	Branch	Bldg. 1254	2	2	4	8	Reduce laterals over bldg. 1254
5692	Blue gum	20	3	Narrow form.	Branch	Yard	2	1	2	5	No action required
5695	Blue gum	18	4	One-sided S. to 1255; lost leader; dead branches.	Branch	Bldg. 1255	2	1	4	7	Reduce laterals over bldg. 1255
5696	Blue gum	26	3	One-sided E.; heavy lateral limb to NE.	Branch	Bldg. 1255	2	2	4	8	Reduce lateral S.
5699	Monterey pine	24	3	One-sided S. to 1255; history of branch failure.	Branch	Yard	2	1	2	5	No action required
5700	Monterey pine	15	2	Suppressed with upper crown bowed over yard.	Stem	Yard	2	2	2	6	No action required
5701	Monterey pine	21	2	High crown; low live crown ratio.	Whole tree	Bldg. 1255	2	2	4	8	No action required
5704	Monterey pine	20	2	Suppressed; one-sided with low live crown ratio.	Branch	Lawn	2	1	1	4	No action required
5706	Sweetgum	7	2	Suppressed; poor form & structure.	Branch	Yard	2	1	2	5	No action required
5707	Blue gum	30	4	Codominant trunks @ 6'; upright; one-sided to Ramsel.	Branch	Ramsel	3	1	2	6	Prune dead wood & reduce end weight over Ramsel
5708	Blue gum	21,20,18	3	Multiple attachments @ 2'; upright; dead branches over Armistead.	Branch	Armistead	3	1	2	6	Prune dead wood
5709	Blue gum	24	2	Leans to parking; very one-sided.	Whole tree	Parking	3	3	3	9	<b>Remove</b>

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					Most likely failure	Target	Failure potential	Size of part	Target Rating		
5710	Blue gum	25	3	Codominant trunks @ 7'; dead branch; one-sided to 1211.	Branch	Yard	3	1	1	5	Prune dead wood
5711	Blue gum	20	2	Narrow crown, lateral over 1211; deadwood to 2".	Branch	Bldg. 1211	3	1	2	6	Reduce lateral & prune deadwood over bldg. 1211
5712	Blue gum	19	3	One-sided with dead branches over 1211.	Branch	Bldg. 1211	3	1	4	8	Prune dead wood
5713	Blue gum	18	3	One-sided over Armistead; dead wood to 4"	Branch	Armistead	3	1	2	6	Prune dead wood
5714	Blue gum	37	4	Codominant trunks @ 6'; vase-shaped; dead wood over Armistead, lateral over 1211.	Branch	Bldg. 1211	3	2	4	9	Prune dead wood and lateral over bldg. 1211
5715	Blue gum	18	2	High narrow crown; intermediate.	Branch	Armistead	3	1	2	6	<b>Remove</b>
5716	Blue gum	15	2	Intermediate; small crown, trunk wound.	Stem	Armistead	3	1	2	6	<b>Remove</b>
5717	Blue gum	28	3	High, narrow crown; twig and branch dieback.	Branch	Armistead	2	1	2	5	Prune dead wood
5718	Blue gum	26	3	One stem W.; heavy lateral limb over corner of Armistead & Hoffman.	Branch	Armistead	3	2	2	7	Reduce lateral N.
5719	Blue gum	15	2	High narrow crown; lost leader.	Branch	Landscape	2	1	1	4	No action required

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					Most likely failure	Target	Failure potential	Size of part	Target Rating	Rating	
5720	Blue gum	25	3	Codominant trunks @ 15'; high crown.	Branch	Armistead	2	1	2	5	No action required
5721	Blue gum	33	3	One-sided E. towards 1211; branch E. @ 40.	Stem	Bldg. 1211	2	2	4	8	Reduce lateral at 40'
5722	Blue gum	22	2	One-sided E. towards 1211; leaning; checking bark.	Whole tree	Bldg. 1211	3	3	4	9	<b>Remove</b>
5723	Blue gum	31	3	High vase-shaped crown; dead wood to 6"	Branch	Landscape	3	2	1	6	Prune dead wood & reduce laterals N.
5724	Blue gum	28	3	One-sided N.; lateral N. from attachment.	Branch	Landscape	2	2	1	6	Reduce lateral N.
5725	Blue gum	23	3	Codominant trunks @ 8'; one-sided E. towards 1211; included bark; small lateral E. & N.	Branch	Yard	3	1	2	6	Remove 6" laterals N & E
5726	Blackwood acacia	12	3	Between buildings.	Whole tree	Bldg. 1234	2	2	4	8	<b>Remove</b>
5727	Blue gum	65	3	Multiple attachments @ 6'; upright; spreading crown with lateral over 1234.	Branch	Bldg. 1234	3	2	4	9	Reduce end weight over bldg. 1234
5728	Tawhiwhi	16,12	3	Codominant trunks @ 2'; weak attachment; weight over garage.	Stem	Garage	2	2	3	7	No action required
5729	Blue gum	25	4	Good tree; spreading crown.	Branch	Bldg. 1234	2	1	4	7	No action required

# Tree Assessment Form

**Armistead Altered Stand Trees**  
 Presidio of San Francisco, California  
 May 2013



TREE No.	SPECIES	TRUNK DIAMETER (in.)	CONDITION 0=dead 1=poor 5=excellent	COMMENTS	RISK ASSESSMENT					Recommendations	
					Most likely failure	Target	Failure potential	Size of part	Target Rating		
5730	Blue gum	25	4	One stem N.; laterals over Ramsel Ct.	Branch	Ramsel	3	2	3	8	Prune dead wood & reduce end weight over Ramsel
5731	Blue gum	28	4	Codom at 30'; high vase shaped crown.	Branch	Bldg. 1234	3	2	4	9	Reduce end weight over bldg. 1234
5732	Blue gum	30	4	Codominant trunks @ 22'; high vase shaped crown.	Dead wood	Utilities	3	1	3	7	Prune dead wood & reduce end weight over parking
5735	Blue gum	22	4	High crown; twig & branch dieback.	Branch	Ramsel	3	1	2	6	Prune dead wood & reduce end weight over Ramsel
5736	Blue gum	33	2	Very one-sided; bowed NE. over parking.	Branch	Parking	3	1	3	7	<b>Remove</b>
5737	Blue gum	20	2	Codom at 26'; sparse; poor form & structure.	Branch	Ramsel	3	1	2	6	<b>Remove</b>
5738	Blue gum	28	3	Codominant trunks @ 15'; high crown; intertwined branches.	Branch	Sidewalk	2	2	2	6	Reduce end weight over bldg. 1236
5739	Blue gum	34	3	One-sided to E. towards 1236; branch wound.	Branch	Bldg. 1236	2	2	4	8	Reduce end weight over bldg. 1236
5740	Blue gum	21	3	High narrow crown; dead branches over path.	Branch	Sidewalk	2	2	2	6	No action required
5741	Blue gum	30	3	Codominant trunks @ 20'; one stem NE.; laterals over 1236.	Branch	Bldg. 1236	2	2	4	8	Reduce end weight over bldgs. 1235 & 1236



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 May 2013



TREE No.	SPECIES	TRUNK DIAMETER (in.)	CONDITION 0=dead 1=poor 5=excellent	COMMENTS	RISK ASSESSMENT						Recommendations
					Most likely failure	Target	Failure potential	Size of part	Target Rating	Rating	
5742	Blue gum	35	4	One-sided to N. over 1235; surface root damage.	Branch	Bldg. 1235	2	2	4	8	Reduce end weight over bldg. 1235
5743	Blackwood acacia	15	2	Codominant trunks @ 7'; <i>Ganoderma</i> conk @ base.	Whole tree	Parking	3	2	3	8	<b>Remove</b>
5744	Blue gum	26	3	One-sided to N.; high crown; history of branch failure.	Branch	Bldg. 1235	2	2	4	8	No action required
5745	Blue gum	25	3	Codominant trunks @ 20'; high crown; slight bow E.	Branch	Parking	2	2	3	7	No action required
5746	Blue gum	27,25	3	Codominant trunks @ 3'; narrow attachment; one stem S.	Branch	Parking	3	2	3	8	Prune dead wood & reduce end weight over Ramsel
5747	Blue gum	27	3	Heavy lateral limb over garage.	Branch	Garage	2	1	3	6	No action required
5748	Blue gum	38	4	Big crown with heavy lateral limb over garage.	Branch	Garage	2	2	3	7	No action required
5749	Blue gum	18,8	2	Suppressed; poor form & structure.	Branch	Landscape	2	1	1	4	No action required
5750	Blue gum	30	4	Codominant trunks @ 30'; history of branch failure; high crown; one stem N.	Branch	Sidewalk	2	1	2	5	No action required

# Tree Assessment Form

**Armistead Altered Stand Trees**  
 Presidio of San Francisco, California  
 May 2013



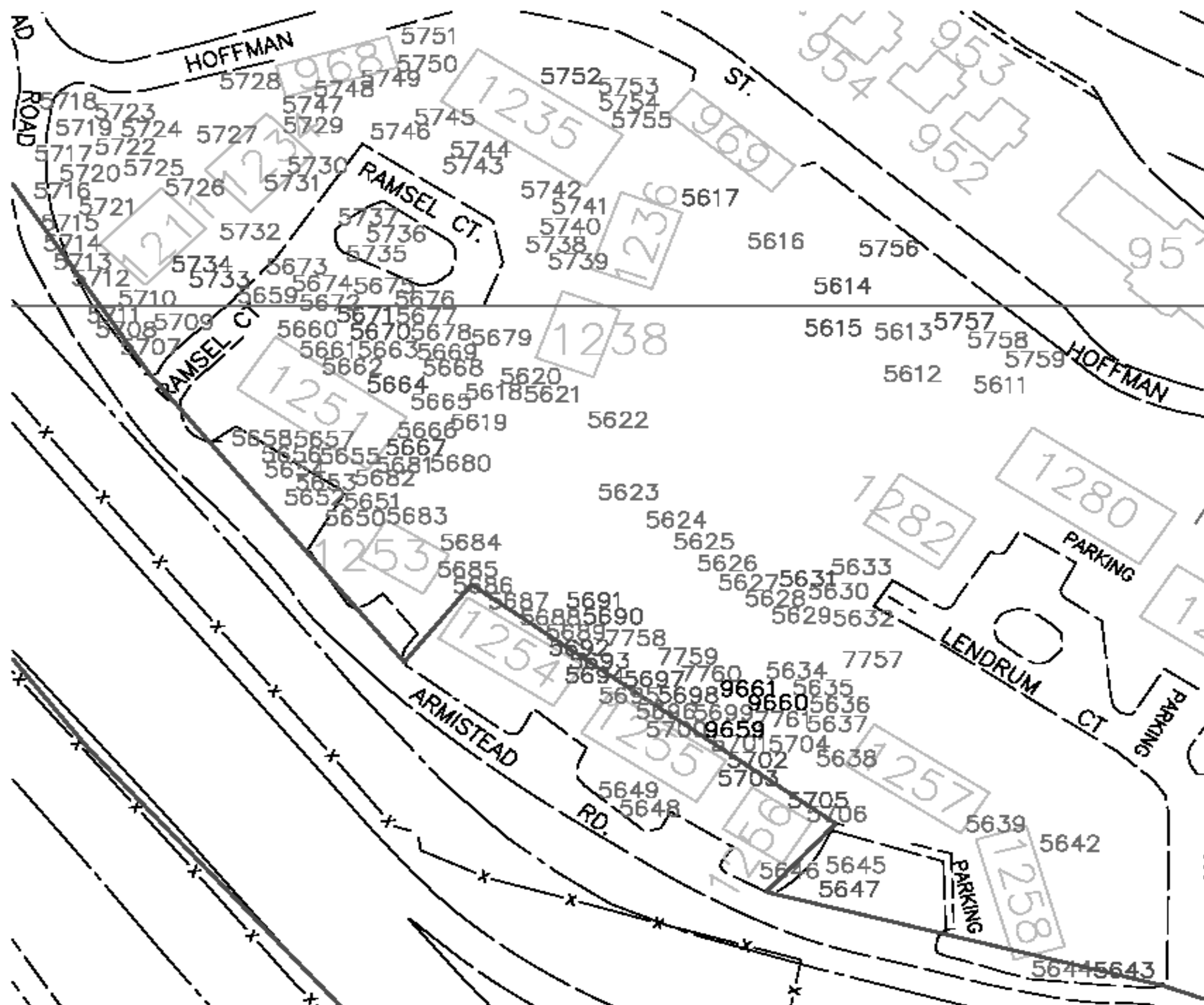
TREE No.	SPECIES	TRUNK DIAMETER (in.)	CONDITION 0=dead 1=poor 5=excellent	COMMENTS	RISK ASSESSMENT						Recommendations
					Most likely failure	Target	Failure potential	Size of part	Target Rating	Rating	
5751	Monterey cypress	63	4	Multiple attachments @ 5'; big full crown; laterals over path, Hoffmann St. & garage.	Branch	Bldg. 1235	2	2	4	8	No action required
5753	Manna gum	22	2	Codominant trunks @ 15'; separated; history of stem failure; wide attachment.	Stem	Sidewalk	2	2	2	6	No action required
5754	Manna gum	37	2	Codominant trunks @ 6'; one-sided to N.; history of branch failure.	Branch	Landscape	3	2	1	6	No action required
5755	Manna gum	26	2	Edge; leans E. over path; crook.	Whole tree	Sidewalk	3	3	2	8	No action required
5758	Monterey cypress	15	5	Good young tree.	Branch	Hoffman	1	1	2	4	No action required
5759	Monterey pine	15	2	History of whole tree failure in area; leaning on slope in wet soil.	Whole tree	Hoffman	3	2	2	7	No action required
7222	Monterey pine	18	2	Between #3295 & #3296; failing @ base to E.	Whole tree	Landscape	4	3	1	8	No action required
7758	Blue gum	20	2	Near #5692; suppressed; heavy lateral to yard; large basal wound on SE.	Heavy lateral	Yard	3	2	2	7	Reduce lateral S.
7759	Blue gum	15,13	3	Near #5692; codominant trunks @ 1'; high narrow crown.	Branch	Yard	2	1	2	5	No action required

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TREE No.	SPECIES	TRUNK DIAMETER (in.)	CONDITION 0=dead 1=poor 5=excellent	COMMENTS	RISK ASSESSMENT					Recommendations	
					Most likely failure	Target	Failure potential	Size of part	Target Rating		
7760	Blue gum	14	3	Near #5692; high narrow crown.	Branch	Yard	2	1	2	5	No action required
7761	Monterey pine	22	2	Near #5704; codominant trunks @10'; poor form & structure. 2012: leans E.	Whole tree	Bldg. 1257	3	1	4	8	No action required
9659	Monterey pine	17	2	Behind #5701; small high crown; bowed E.	Whole tree	Yard	2	2	2	6	No action required
9660	Monterey pine	14	2	Behind #5701; very high crown.	Whole tree	Yard	2	2	2	6	No action required
9661	Monterey pine	12	2	Behind #5701; very high crown.	Whole tree	Yard	2	2	2	6	No action required

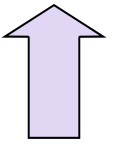


## Tree Assessment Map

**Armistead Altered Stand Assessment Area**  
 Presidio of San Francisco, CA

*Prepared for:*  
 Flatiron-Kiewit  
 Benicia, CA

May 2013



No Scale

### Notes

- Base map provided by: Presidio Trust
- Numbered tree locations are approximate.



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