

Exhibit D

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Frank Ono
International Society of Arboriculture
Certified Arborist # 536
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March 2, 2017

Monterey Bay Builders
 Mr. Eric Barstad
 P.O. Box 366
 Carmel Valley, CA 93924

RE: 220 Upper Walden Road -Dead Monterey Pines

APN: 241-241-011-000

Mr. Barstad;

A visual tree assessment (VTA) was requested for several unstable trees at the above referenced property due to liquefaction of the soils. Trees are failing on this property and other adjacent properties; they are falling over without any root disturbance. The VTA determined there are three trees with tree hazard evaluation form (THEF) scores of 10 or higher which need immediate removal (trees that rate a score of 12 present the most likelihood of failure). The THEF score rates the relative hazard of trees based upon the criteria of probability of failure, size of failure part, and target from the Photographic Guide to the Evaluation of Hazard Trees in Urban Areas (Mattheny and Clarke). This letter and the accompanying THEF score sheet may be submitted with other required documents as part of an application for tree removal by the property owner (or their designated representative). The report (and photos which must be submitted in color) is background information for use by the County of Monterey to determine under what circumstances a permit may be issued.

Tree Risk (Hazard) Evaluation Score

The tree(s) assessed for hazard risk are identified as follows:

- Tree #28 is a 36" diameter Monterey pine located along the south property line. The tree is falling over. It is uprooting due to moisture in the soils and heavy wind load. The tree has a THEF score of 11.
- Tree #41 is a 26" diameter tree located near the building. The tree has poor structure and dying; it also will fall over soon due to the saturated soils. The tree has a THEF score of 11
- Tree #47 is a 22" diameter Monterey pine dying from bark beetle attack. The tree has a THEF score of 10.

Assessment

The soils on this property are water logged and unstable. Considerable subterranean water has emerged to the surface and has caused a number of trees to become unstable. Significant damage to adjacent areas will occur when failure occurs. Target ratings factored into the THEF score include new structures and adjacent properties. Removal of the trees will not significantly alter air movement, contribute to erosion, or create a significant impact to wildlife; no active bird or animal nesting sites were observed at the time of assessment.

Tree Removal

After proper authorization, the trees shall be removed by a licensed insured professional tree service. No surrounding tree protection is necessary when the tree drop zone is clear of vegetation. Tree removal shall be consistent with safe arboricultural work practices utilizing removal of trees and their parts in smaller manageable pieces and roped down carefully so as not to damage any surrounding trees or plants. The use of specialized equipment may be authorized if it can be shown that no damage to surrounding ecosystem will be sustained. At no time shall the trees be dropped in one piece so as to damage any surrounding trees or property. Tree wood and clippings are to be disposed of consistent with current California Department of Forestry guidelines which would include stockpiling of material on site or disposal at an approved refuse site. When the listed trees are removed, other immediately remaining trees adjacent to these should be inspected for potential for pruning (utilizing current arboricultural standards) and deadwood removal.

Replanting

The County of Monterey through the Carmel Area Land Use plan has tree replacement conditions as part of a tree removal permit when sufficient space exists to replant that does not create an overcrowded vegetated situation. The County requires a 2:1 replacement for removed trees which measure 24" or larger in diameter at breast height and/or a 1:1 ratio replacement for trees measuring less than 24" in diameter. It is therefore recommended replanting be with six (6) five-gallon size Monterey pines in locations near or adjacent where the trees are removed (if five gallon is unavailable, smaller sizes may be substituted). In addition, the County also requires independent monitoring of replanted trees to insure replanting is successful (the term of monitoring is at County discretion, typically one –three years dependent on the type of permit).

Disclosure Statement

Use of report: This letter and the THEF score sheet are to be considered and used as background information for the current tree removal application process implemented by the County of Monterey. The report is prepared to assist the County, along with other required documents, in determining if and under what circumstances a permit may be issued.

Inspection limitations: The inspection of the tree consisted solely of a visual inspection from the ground. While more thorough techniques are available for inspection and evaluation, they were neither requested nor considered necessary or appropriate at this time. This report is based on a visual inspection of tree condition and for obvious defects. It is not intended to constitute a complete health and hazard evaluation. Further investigation would be required to more definitively evaluate the health and hazards posed by the subject trees, some of

which may not be disclosed by visual inspections. Investigations include but are not limited to core samples, root crown excavation, and visual inspection of the entire trees by climbing. Please be advised that healthy trees and/or limbs may fail under certain conditions, and that the above recommendations are based on industry standards of tree care.


Urban Foresters/Arborists are tree specialists who use their education, knowledge training and experience to examine trees, recommend measures to enhance their health and beauty and to attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist or to seek additional advice. Trees and other plant life are living, changing organisms affected by innumerable factors beyond our control. Trees fail in ways and because of conditions we do not fully understand.

Urban Foresters/Arborists cannot detect or anticipate every condition or event that could possibly lead to the structural failure of a tree. Conditions are often hidden within the trees and below ground. Urban Foresters/Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, for any specific period or when a tree or its parts may fail. Further, remedial treatments, as with any treatment or therapy, cannot be guaranteed. Treatment, pruning, bracing and removal of trees may involve considerations beyond the scope of the arborists skills and usual services such as the boundaries of properties, property ownership, site lines, neighbor disputes and agreements and other issues. Therefore, urban forester/arborists cannot consider such issues unless complete and accurate information is disclosed in a timely fashion. Then, the urban forester/arborist can be expected, reasonably, to rely upon the completeness and accuracy of the information provided. Trees can be managed but not controlled. To live near trees, regardless of their condition, is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

Hazard/hazard potential: For the purposes of this evaluation and/report, a tree or tree part that presents a threat to humans, livestock, vehicles, structures, landscape features or other entity of civilization from uprooting, falling, breaking or growth development (e.g., roots). While all large landscape trees in proximity to such targets present some degree of hazard regardless of their condition, such inherent hazard is not intended as within this definition and its usage in this evaluation and report. As trees and other plant life are living, changing organisms effected by innumerable factors beyond our control, F. O. Consulting and its personnel offer no guarantees, stated or implied, as to tree, plant or general landscape safety, health, condition or improvement, beyond that specifically stated in writing in accepted contracts.

Thank you very much and please feel free to call if there are any questions or if I can be of further assistance.

Sincerely,



Frank Ono

Certified Arborist #536

This report is based on a visual inspection of tree condition and for obvious defects. It is not intended to constitute a complete health and hazard evaluation. Further investigation would be required to more definitively evaluate the health and hazards posed by the subject trees, some of which may not be disclosed by visual inspections. Investigations may include but are not limited to core samples, root crown excavation, and visual inspection of the entire tree or trees by climbing. Please be advised that healthy trees and/or limbs may fail under certain conditions, and that the above recommendations are based on industry standards of tree care. This report is made with the understanding that no representations or warranties, either expressed or implied are made that any trees referred to in the report or located on or adjacent to the subject property are sound or safe.

PHOTOGRAPHS



Tree #28 is listing over and uprooting; the tree was standing straight up several weeks ago and has moved several degrees to the south



Tree #47 is dying and unstable in the soils; it will be compromised once tree #46 is removed (permitted due to construction).



Tree #41 is standing but shifting in the saturated soil. The tree has poor structure and will fall or break apart due to its poor branch attachment.

PLANNING INFO.

- PROPERTY OWNER:
IAN AND AMY TROSKY
POST OFFICE BOX 3108
CAMEL HIGHLANDS, CA 94004
PH: (831) 624-7948
- PROJECT ADDRESS:
220 UPPER WALDEN ROAD
CAMEL HIGHLANDS, CA
- PROJECT SCOPE: TROSKY FAMILY DWELLING WITH A NEW TWO-CAR ATTACHED GARAGE.
- OCCUPANCY: R-3, U
- CONST. TYPE: V-B
- A.P.N.: 241-241-004
- LEGAL DESC.: LOT: BLOCK:
- ZONE: LDR/1(CZ)
- STORIES: TWO
- MAX BLDG. HT: 30 FT
- GRADING: X CY
- TREE REMOVAL: ONE (1)
- TOPOGRAPHY: SLOPING
- PROJECT CODE COMPLIANCE:
1. 2007 CBC, CMC, CPC, CFC, CEC, &
1-24 CALIFORNIA ENERGY CODE
- ENERGY METHOD: MCGPAP V7.1, ENERGY PRO 4.0
- LOT AREA: 95,629.2 SF (2.2 Ac.)
- LOT COVERAGE CALCULATIONS:

PROPOSED	2,770
BUILDINGS	47
COVERED ENTRY	830
EXTRUSIONS	3,647
TOTAL	5,277

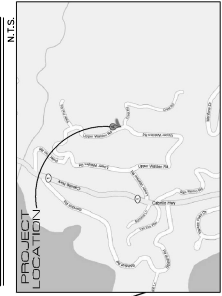
LOT COVERAGE ALLOWED: 14,344.4 SF (15%)
LOT COVERAGE PROPOSED: 3,647 SF (3.8%)

F.A.R. CALCULATIONS

PROPOSED	2,770
MAIN BUILDING	2,705.9
MAIN FLOOR	1,427.5
GARAGE/SHOP	4,197.5
TOTAL	4,197.5

F.A.R. ALLOWED: 19,125.8 SF (20%)
F.A.R. PROPOSED: 4,197.5 SF (4.4%)

VICINITY MAP



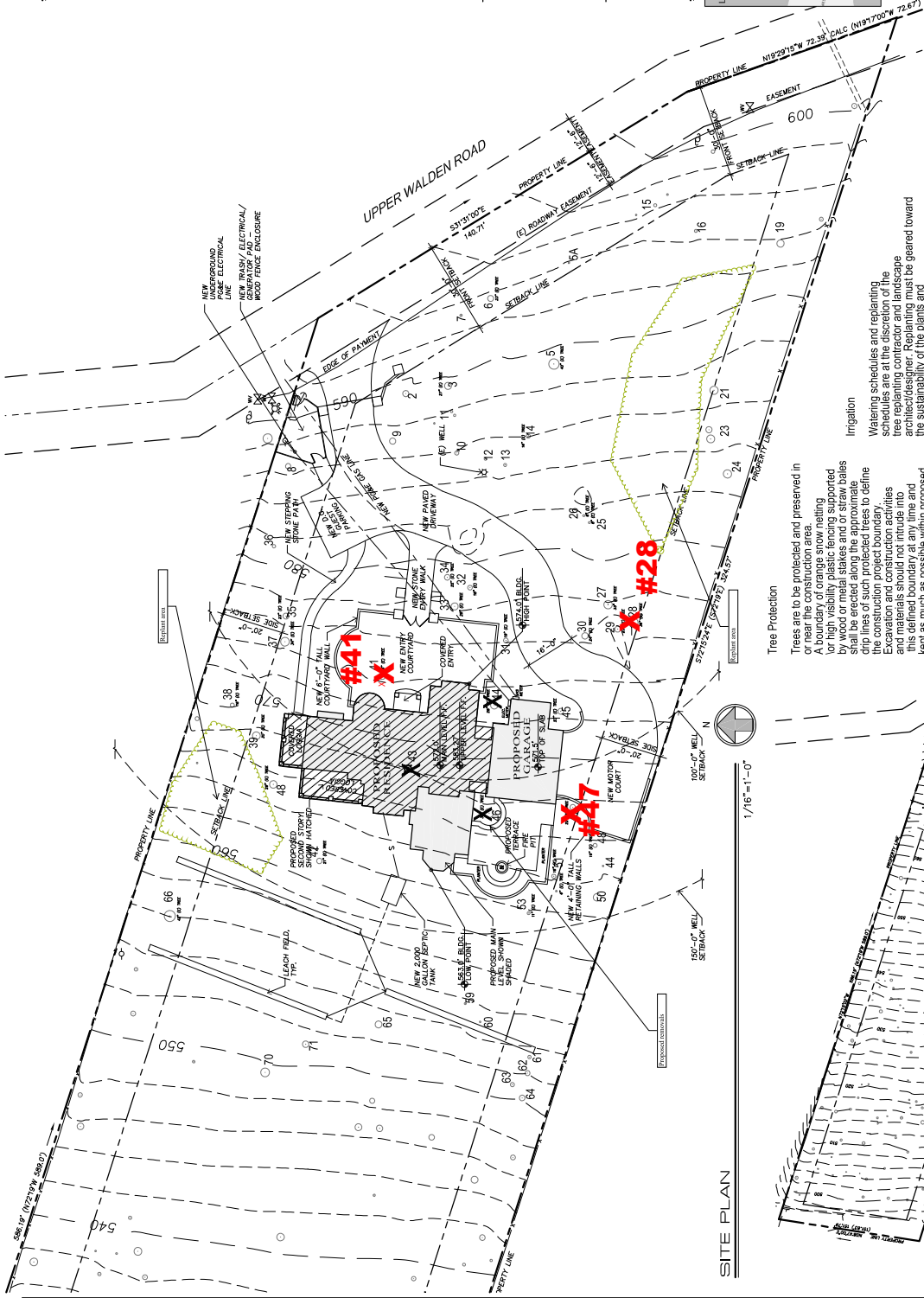
SITE PLAN

DATE: 11-21-08
PREP: APP: SUBMITTAL

REVISIONS:

1	
2	
3	
4	
5	

SHEET NO. **A1.0**



Tree Protection

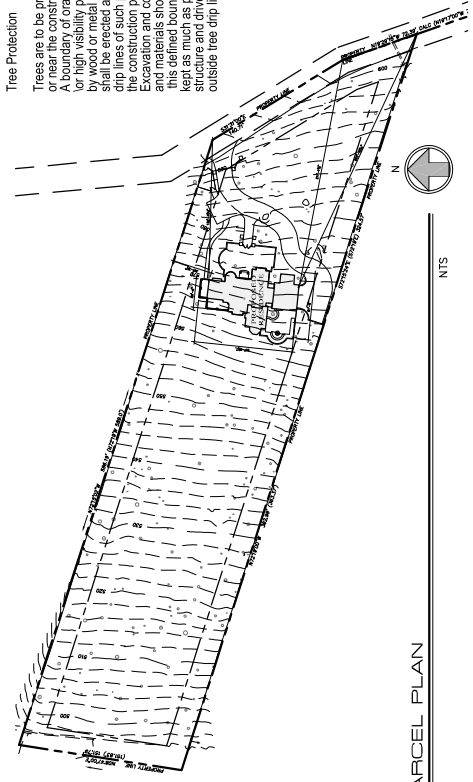
Trees are to be protected and preserved in accordance with the following:

- A boundary of orange snow netting or high visibility plastic fencing supported by wood or metal stakes and or straw bales shall be erected along the approximate drip lines of such protected trees to define the tree protection zone.
- Excavation and construction activities and materials should not intrude into this defined boundary at any time and kept as much as possible within proposed structure and driveway footprints or outside tree drip lines in the treeless areas.

Irrigation

Watering schedules and replanting schedules are at the discretion of the tree replanting contractor and landscape architect/designer. Replanting must be geared toward the sustainability of the plants and consist of daily to weekly watering initially. After establishment watering schedule will transition to occasional deep watering (more than two weeks apart) during the late spring, summer, and fall months. Irrigation may consist of any combination of hand watering, overhead irrigation, or drip irrigation to accomplish sustaining plantings until plants become established.

SITE PLAN



PARCEL PLAN

Prepared by Frank Ono
December 14, 2008
Society of American Forester S.A.F. #48004
& I.S.A. Certified Arborist # 536

#28



A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM 2nd Edition

Site/Address: 220 UPPER WALDEN
 Map/Location: NW 1/4 S. FENCE LANE
 Owner: public ☐ private ☒ unknown ☐ other ☐
 Date: 3/2/17 Inspector: OND
 Date of last inspection: _____

HAZARD RATING:

<u>4</u>	+	<u>4</u>	+	<u>3</u>	=	<u>11</u>
Failure Potential		Size of part		Target Rating		Hazard Rating
_____ Immediate action needed						
_____ Needs further inspection						
_____ Dead tree						

TREE CHARACTERISTICS

Tree #: 28 Species: M. Pine
 DBH: 36 # of trunks: 1 Height: 85 Spread: 30
 Form: ☒ generally symmetric ☐ minor asymmetry ☐ major asymmetry ☐ stump sprout ☐ stag-headed
 Crown class: ☐ dominant ☐ co-dominant ☐ intermediate ☐ suppressed
 Live crown ratio: 25 % Age class: ☐ young ☐ semi-mature ☐ mature ☒ over-mature/senescent
 Pruning history: ☐ crown cleaned ☐ excessively thinned ☐ topped ☐ crown raised ☐ pollarded ☐ crown reduced ☐ flush cuts ☐ cabled/braced
☐ none ☒ multiple pruning events Approx. dates: _____
 Special Value: ☐ specimen ☐ heritage/historic ☐ wildlife ☐ unusual ☐ street tree ☐ screen ☐ shade ☐ indigenous ☒ protected by gov. agency

TREE HEALTH

Foliage color: ☒ normal ☐ chlorotic ☐ necrotic Epicormics? Y ☒ N
 Foliage density: ☒ normal ☐ sparse Leaf size: ☒ normal ☐ small
 Annual shoot growth: ☐ excellent ☒ average ☐ poor Twig Dieback? Y ☒ N
 Woundwood development: ☐ excellent ☒ average ☐ poor ☐ none
 Vigor class: ☐ excellent ☐ average ☒ fair ☐ poor
 Major pests/diseases: _____

Growth obstructions:

☐ stakes ☐ wire/ties ☐ signs ☐ cables
☐ curb/pavement ☐ guards
☐ other _____

SITE CONDITIONS

Site Character: ☒ residence ☐ commercial ☐ industrial ☐ park ☐ open space ☐ natural ☐ woodland/forest
 Landscape type: ☐ parkway ☐ raised bed ☐ container ☐ mound ☐ lawn ☒ shrub border ☐ wind break
 Irrigation: ☒ none ☐ adequate ☐ inadequate ☐ excessive ☐ trunk wetted
 Recent site disturbance? Y ☒ N ☐ construction ☐ soil disturbance ☐ grade change ☐ line clearing ☐ site clearing
 % dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y ☒ N
 % dripline w/ till soil: 0% 10-25% 25-50% 50-75% 75-100%
 % dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%
 Soil problems: ☒ drainage ☐ shallow ☐ compacted ☐ droughty ☐ saline ☐ alkaline ☐ acidic ☐ small volume ☐ disease center ☒ history of fail
☐ clay ☐ expansive ☐ slope _____° aspect: _____
 Obstructions: ☐ lights ☐ signage ☐ line-of-sight ☐ view ☐ overhead lines ☐ underground utilities ☐ traffic ☐ adjacent veg. ☐ _____
 Exposure to wind: ☐ single tree ☐ below canopy ☐ above canopy ☐ recently exposed ☐ windward, canopy edge ☒ area prone to windthrow
 Prevailing wind direction: _____ Occurrence of snow/ice storms ☐ never ☐ seldom ☐ regularly

TARGET

Use Under Tree: ☒ building ☐ parking ☐ traffic ☐ pedestrian ☐ recreation ☐ landscape ☐ hardscape ☐ small features ☐ utility lines
 Can target be moved? Y ☒ N ☐ Can use be restricted? Y ☒ N ☐
 Occupancy: ☐ occasional use ☐ intermittent use ☐ frequent use ☒ constant use

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TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: Y N Mushroom/conk/bracket present: Y N ID: _____Exposed roots: ☐ severe ☐ moderate ☒ low Undersided: ☐ severe ☐ moderate ☒ lowRoot pruned: _____ distance from trunk Root area affected: _____ % Buttress wounded: Y N When: _____Restricted root area: ☐ severe ☐ moderate ☒ low Potential for root failure: ☒ severe ☐ moderate ☐ lowLEAN: 20 deg. from vertical ☐ natural ☒ unnatural ☐ self-corrected Soil heaving: Y NDecay in plane of lean: Y N Roots broken Y N Soil cracking: Y NCompounding factors: _____ Lean severity: ☐ severe ☐ moderate ☐ low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep				
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark				
Nesting hole/bee hive				
Deadwood/stubs				
Borers/termites/ants				
Cankers/galls/burls				
Previous failure				

HAZARD RATING

Tree part most likely to fail: ROOTS

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

4 + 4 + 3 = 11

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);

3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

Target rating: 1 - occasional use; 2 intermittent use;

3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: ☐ remove defective part ☐ reduce end weight ☐ crown clean ☐ thin ☐ raise canopy ☐ crown reduce ☐ restructure ☐ shapeCable/Brace: _____ Inspect further: ☐ root crown ☐ decay ☐ aerial ☐ monitorRemove tree: Y N Replace: Y N Move target: Y N Other: _____Effect on adjacent trees: ☒ none ☐ evaluateNotification: ☒ owner ☐ manager ☐ governing agency Date: 3/2/17

COMMENTS

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A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM 2nd Edition

Site/Address: 220 UPPER WALDEN
 Map/Location: NEAR FRONT ENTRANCE
 Owner: public ☐ private ☒ unknown ☐ other ☐
 Date: 3/2/17 Inspector: OND
 Date of last inspection: _____

HAZARD RATING:

<u>4</u>	+	<u>3</u>	+	<u>4</u>	=	<u>11</u>
Failure Potential		Size of part		Target Rating		Hazard Rating
<input type="checkbox"/> Immediate action needed <input type="checkbox"/> Needs further inspection <input type="checkbox"/> Dead tree						

TREE CHARACTERISTICS

Tree #: 41 Species: M. PINE
 DBH: 26 # of trunks: 1 Height: 80 Spread: 30
 Form: ☐ generally symmetric ☒ minor asymmetry ☐ major asymmetry ☐ stump sprout ☐ stag-headed
 Crown class: ☒ dominant ☐ co-dominant ☐ intermediate ☐ suppressed
 Live crown ratio: 10 % Age class: ☐ young ☐ semi-mature ☐ mature ☒ over-mature/senescent
 Pruning history: ☐ crown cleaned ☒ excessively thinned ☐ topped ☐ crown raised ☐ pollarded ☐ crown reduced ☐ flush cuts ☐ cabled/braced
☐ none ☒ multiple pruning events Approx. dates: UNKNOWN
 Special Value: ☐ specimen ☐ heritage/historic ☐ wildlife ☐ unusual ☐ street tree ☐ screen ☐ shade ☐ indigenous ☒ protected by gov. agency

TREE HEALTH

Foliage color: ☐ normal ☐ chlorotic ☒ necrotic Epicormics? Y N
 Foliage density: ☐ normal ☒ sparse Leaf size: ☐ normal ☒ small
 Annual shoot growth: ☐ excellent ☐ average ☒ poor Twig Dieback? Y N
 Woundwood development: ☐ excellent ☐ average ☐ poor ☒ none
 Vigor class: ☐ excellent ☐ average ☐ fair ☒ poor
 Major pests/diseases: BEETLES

SITE CONDITIONS

Site Character: ☒ residence ☐ commercial ☐ industrial ☐ park ☐ open space ☐ natural ☐ woodland/forest
 Landscape type: ☐ parkway ☐ raised bed ☐ container ☐ mound ☐ lawn ☐ shrub border ☐ wind break
 Irrigation: ☒ none ☐ adequate ☐ inadequate ☐ excessive ☐ trunk wetted
 Recent site disturbance? Y N ☒ construction ☐ soil disturbance ☐ grade change ☐ line clearing ☐ site clearing
 % dripline paved: 0 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y N
 % dripline w/ fill soil: 0 10-25% 25-50% 50-75% 75-100%
 % dripline grade lowered: 0 10-25% 25-50% 50-75% 75-100%
 Soil problems: ☐ drainage ☒ shallow ☐ compacted ☐ droughty ☐ saline ☐ alkaline ☐ acidic ☐ small volume ☐ disease center ☒ history of fail
☐ clay ☐ expansive ☐ slope _____° aspect: _____
 Obstructions: ☐ lights ☐ signage ☐ line-of-sight ☐ view ☐ overhead lines ☐ underground utilities ☐ traffic ☐ adjacent veg. ☐ _____
 Exposure to wind: ☐ single tree ☐ below canopy ☐ above canopy ☐ recently exposed ☐ windward, canopy edge ☐ area prone to windthrow
 Prevailing wind direction: NW Occurrence of snow/ice storms ☒ never ☐ seldom ☐ regularly

TARGET

Use Under Tree: ☒ building ☐ parking ☐ traffic ☐ pedestrian ☐ recreation ☐ landscape ☐ hardscape ☐ small features ☐ utility lines
 Can target be moved? Y N Can use be restricted? Y N
 Occupancy: ☐ occasional use ☐ intermittent use ☐ frequent use ☒ constant use

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TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: ☒ Y ☐ N Mushroom/conk/bracket present: ☒ Y ☐ N ID: _____Exposed roots: ☐ severe ☐ moderate ☒ low Undersided: ☐ severe ☐ moderate ☒ lowRoot pruned: _____ distance from trunk Root area affected: _____ % Buttress wounded: ☒ Y ☐ N When: _____Restricted root area: ☐ severe ☐ moderate ☒ low Potential for root failure: ☒ severe ☐ moderate ☐ lowLEAN: _____ deg. from vertical ☐ natural ☐ unnatural ☐ self-corrected Soil heaving: ☒ Y ☐ NDecay in plane of lean: ☒ Y ☐ N Roots broken: ☒ Y ☐ N Soil cracking: ☒ Y ☐ NCompounding factors: TREE IS DYING Lean severity: ☐ severe ☒ moderate ☐ low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep				
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark				
Nesting hole/bee hive				
Deadwood/stubs				
Borers/termites/ants	s	s	s	s
Cankers/galls/burls				
Previous failure				

HAZARD RATING

Tree part most likely to fail: ROOTS

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

4 + 3 + 4 = 11

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);
3 - 18-30" (45-75 cm); 4 - >30" (75 cm)Target rating: 1 - occasional use; 2 - intermittent use;
3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: ☐ remove defective part ☐ reduce end weight ☐ crown clean ☐ thin ☐ raise canopy ☐ crown reduce ☐ restructure ☐ shapeCable/Brace: _____ Inspect further: ☐ root crown ☐ decay ☐ aerial ☐ monitorRemove tree: ☒ Y ☐ N Replace? ☒ Y ☐ N Move target: ☒ Y ☐ N Other: _____Effect on adjacent trees: ☐ none ☐ evaluateNotification: ☒ owner ☒ manager ☐ governing agency Date: 3/2/17

COMMENTS

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A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM

2nd Edition

Site/Address: 220 UPPER WALDEN
 Map/Location: SOUTH PROPERTY LINE
 Owner: public ☐ private ☒ unknown ☐ other ☐
 Date: 3/2/17 Inspector: OWD
 Date of last inspection: _____

HAZARD RATING:

Failure Potential	+	Size of part	+	Target Rating	=	Hazard Rating
3	+	3	+	4	=	10
<input type="checkbox"/> Immediate action needed <input type="checkbox"/> Needs further inspection <input type="checkbox"/> Dead tree						

TREE CHARACTERISTICS

Tree #: 47 Species: M. Pine
 DBH: 22 # of trunks: 1 Height: 70 Spread: 25
 Form: ☐ generally symmetric ☒ minor asymmetry ☐ major asymmetry ☐ stump sprout ☐ stag-headed
 Crown class: ☐ dominant ☒ co-dominant ☐ intermediate ☐ suppressed
 Live crown ratio: 20% Age class: ☐ young ☐ semi-mature ☐ mature ☒ over-mature/senescent
 Pruning history: ☐ crown cleaned ☐ excessively thinned ☐ topped ☐ crown raised ☐ pollarded ☐ crown reduced ☐ flush cuts ☐ cabled/braced
☐ none ☒ multiple pruning events Approx. dates: _____
 Special Value: ☐ specimen ☐ heritage/historic ☐ wildlife ☐ unusual ☐ street tree ☐ screen ☐ shade ☐ indigenous ☒ protected by gov. agency

TREE HEALTH

Foliage color: ☐ normal ☒ chlorotic ☒ necrotic Epicormics? Y ☒ N
 Foliage density: ☐ normal ☒ sparse Leaf size: ☐ normal ☒ small
 Annual shoot growth: ☐ excellent ☐ average ☒ poor Twig Dieback? Y ☒ N
 Woundwood development: ☐ excellent ☐ average ☐ poor ☒ none
 Vigor class: ☐ excellent ☐ average ☐ fair ☒ poor
 Major pests/diseases: BEETLES

SITE CONDITIONS

Site Character: ☒ residence ☐ commercial ☐ industrial ☐ park ☐ open space ☐ natural ☐ woodland/forest
 Landscape type: ☐ parkway ☐ raised bed ☐ container ☐ mound ☐ lawn ☒ shrub border ☐ wind break
 Irrigation: ☒ none ☐ adequate ☐ inadequate ☐ excessive ☐ trunk wetted
 Recent site disturbance? Y ☒ N ☐ construction ☐ soil disturbance ☐ grade change ☐ line clearing ☐ site clearing
 % dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y ☒ N
 % dripline w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%
 % dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%
 Soil problems: ☒ drainage ☒ shallow ☐ compacted ☐ droughty ☐ saline ☐ alkaline ☐ acidic ☐ small volume ☐ disease center ☒ history of fail
☐ clay ☐ expansive ☐ slope _____° aspect: _____
 Obstructions: ☐ lights ☒ signage ☐ line-of-sight ☐ view ☐ overhead lines ☐ underground utilities ☐ traffic ☐ adjacent veg. ☐ _____
 Exposure to wind: ☐ single tree ☐ below canopy ☐ above canopy ☐ recently exposed ☐ windward, canopy edge ☐ area prone to windthrow
 Prevailing wind direction: NW Occurrence of snow/ice storms ☒ never ☐ seldom ☐ regularly

TARGET

Use Under Tree: ☒ building ☐ parking ☐ traffic ☐ pedestrian ☐ recreation ☐ landscape ☐ hardscape ☐ small features ☐ utility lines
 Can target be moved? Y ☒ N ☐ Can use be restricted? Y ☒ N ☐
 Occupancy: ☐ occasional use ☐ intermittent use ☐ frequent use ☒ constant use

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TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: ☒ Y ☐ N Mushroom/conk/bracket present: ☒ Y ☐ N ID: _____

Exposed roots: ☐ severe ☐ moderate ☒ low Undersided: ☐ severe ☐ moderate ☒ low

Root pruned: _____ distance from trunk Root area affected: _____ % Buttress wounded: Y ☒ N When: _____

Restricted root area: ☐ severe ☐ moderate ☒ low Potential for root failure: ☒ severe ☐ moderate ☐ low

LEAN: _____ deg. from vertical ☐ natural ☐ unnatural ☐ self-corrected Soil heaving: ☒ Y ☐ N

Decay in plane of lean: Y ☐ N Roots broken Y ☐ N Soil cracking: ☒ Y ☐ N

Compounding factors: TRCB IS DYING Lean severity: ☐ severe ☒ moderate ☐ low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep				
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark				
Nesting hole/bee hive				
Deadwood/stubs				
Borers/termites/ants				
Cankers/galls/burls				
Previous failure				

HAZARD RATING

Tree part most likely to fail: 100% S

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

3 + 3 + 4 = 10

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);
3 - 18-30" (45-75 cm); 4 - >30" (75 cm)Target rating: 1 - occasional use; 2 intermittent use;
3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: ☐ remove defective part ☐ reduce end weight ☐ crown clean ☐ thin ☐ raise canopy ☐ crown reduce ☐ restructure ☐ shapeCable/Brace: _____ Inspect further: ☐ root crown ☐ decay ☐ aerial ☐ monitorRemove tree: ☒ Y ☐ N Replace? ☒ Y ☐ N Move target: ☒ Y ☐ N Other: _____Effect on adjacent trees: ☒ none ☐ evaluateNotification: ☒ owner ☒ manager ☐ governing agency Date: 3/2/17

COMMENTS

Frank Ono
International Society of Arboriculture
Certified Arborist # 536
Society of American Foresters Professional Member 48004
1213 Miles Avenue
Pacific Grove CA, 93950
Telephone (831) 373-7086
Cellular (831) 594-2291

April 27, 2017

Monterey Bay Builders
Mr. Eric Barstad
P.O. Box 366
Carmel Valley, CA 93924

RE: 220 Upper Walden Road -Dead Monterey Pines
APN: 241-241-011-000

Mr. Barstad;

A visual tree assessment (VTA) was requested for several Monterey pine trees at the above referenced property needing removal due to instability and their deteriorating condition. The VTA determined the four trees with tree hazard evaluation form (THEF) scores of 10 (trees that rate a score of 12 present the most likelihood of failure). The THEF score rates the relative hazard of trees based upon the criteria of probability of failure, size of failure part, and target from the Photographic Guide to the Evaluation of Hazard Trees in Urban Areas (Mattheny and Clarke). This letter and the accompanying THEF score sheet may be submitted with other required documents as part of an application for tree removal by the property owner (or their designated representative). The report is background information for use by the County of Monterey to determine under what circumstances a permit may be issued.

Tree Risk (Hazard) Evaluation Score Assessment

The tree(s) assessed for hazard risk are identified as follows:

ID#	Diameter	Species	Reason for Removal	THEF Rating
31	20	Monterey pine	Beetles	10
32	20	Monterey pine	Beetles	10
33	30	Monterey pine	Beetles	10
34	24	Monterey pine	Beetles	10

The listed trees in the above chart are unstable and diseased, as evidenced by their thinning and dying crowns; they are capable of failure to fall onto the structure being built. Removal of the tree(s) will not significantly alter air movement, contribute to erosion, or create a significant impact to wildlife; no active bird or animal nesting sites were observed at the time of assessment.

Tree Removal

After proper authorization, the trees shall be removed by a licensed insured professional tree service. No surrounding tree protection is necessary when the tree drop zone is clear of vegetation. Tree removal shall be consistent with safe arboricultural work practices utilizing removal of trees and their parts in smaller manageable pieces and roped down carefully so as not to damage any surrounding trees or plants. The use of specialized equipment may be authorized if it can be shown that no damage to surrounding ecosystem will be sustained. At no time shall the trees be dropped in one piece so as to damage any surrounding trees or property. Tree wood and clippings are to be disposed of consistent with current California Department of Forestry guidelines which would include stockpiling of material on site or disposal at an approved refuse site. When the listed trees are removed, other immediately remaining trees adjacent these should be inspected for potential for pruning (utilizing current arboricultural standards) and deadwood removal.

Replanting

The County of Monterey through the Carmel Area Land Use plan has tree replacement conditions as part of a tree removal permit when sufficient space exists to replant that does not create an overcrowded vegetated situation. The County requires a 2:1 replacement for removed trees which measure 24" or larger in diameter at breast height and/or a 1:1 ratio replacement for trees measuring less than 24" in diameter. It is therefore recommended replanting be with six (6) five-gallon size Monterey pines in the location near or adjacent each removed tree (if five gallon is unavailable, smaller sizes may be substituted). In addition, the County also requires independent monitoring of replanted trees to insure replanting is successful (the term of monitoring is at County discretion, typically one –three years dependent on the type of permit).

Disclosure Statement

Use of report: This letter and the THEF score sheet are to be considered and used as background information for the current tree removal application process implemented by the County of Monterey. The report is prepared to assist the County, along with other required documents, in determining if and under what circumstances a permit may be issued.

Inspection limitations: The inspection of the tree consisted solely of a visual inspection from the ground. While more thorough techniques are available for inspection and evaluation, they were neither requested nor considered necessary or appropriate at this time. This report is based on a visual inspection of tree condition and for obvious defects. It is not intended to constitute a complete health and hazard evaluation. Further investigation would be required to more definitively evaluate the health and hazards posed by the subject trees, some of which may not be disclosed by visual inspections. Investigations include but are not limited to core samples, root crown excavation, and visual inspection of the entire trees by climbing. Please be advised that healthy trees and/or limbs may fail under certain conditions, and that the above recommendations are based on industry standards of tree care.

Urban Foresters/Arborists are tree specialists who use their education, knowledge training and experience to examine trees, recommend measures to enhance their health and beauty and to attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist or to seek additional advice. Trees and other plant life are living, changing organisms affected by innumerable factors beyond our control. Trees fail in ways and because of conditions we do not fully understand.

Urban Foresters/Arborists cannot detect or anticipate every condition or event that could possibly lead to the structural failure of a tree. Conditions are often hidden within the trees and below ground. Urban Foresters/Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, for any specific period or when a tree or its parts may fail. Further, remedial treatments, as with any treatment or therapy, cannot be guaranteed. Treatment, pruning, bracing and removal of trees may involve considerations beyond the scope of the arborists skills and usual services such as the boundaries of properties, property ownership, site lines, neighbor disputes and agreements and other issues. Therefore, urban forester/arborists cannot consider such issues unless complete and accurate information is disclosed in a timely fashion. Then, the urban forester/arborist can be expected, reasonably, to rely upon the completeness and accuracy of the information provided. Trees can be managed but not controlled. To live near trees, regardless of their condition, is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

Hazard/hazard potential: For the purposes of this evaluation and/report, a tree or tree part that presents a threat to humans, livestock, vehicles, structures, landscape features or other entity of civilization from uprooting, falling, breaking or growth development (e.g., roots). While all large landscape trees in proximity to such targets present some degree of hazard regardless of their condition, such inherent hazard is not intended as within this definition and its usage in this evaluation and report. As trees and other plant life are living, changing organisms effected by innumerable factors beyond our control, F. O. Consulting and its personnel offer no guarantees, stated or implied, as to tree, plant or general landscape safety, health, condition or improvement, beyond that specifically stated in writing in accepted contracts.

Thank you very much and please feel free to call if there are any questions or if I can be of further assistance.

Sincerely,



Frank Ono

Certified Arborist #536

This report is based on a visual inspection of tree condition and for obvious defects. It is not intended to constitute a complete health and hazard evaluation. Further investigation would be required to more definitively evaluate the health and hazards posed by the subject trees, some of which may not be disclosed by visual inspections. Investigations may include but are not limited to core samples, root crown excavation, and visual inspection of the entire tree or trees by climbing. Please be advised that healthy trees and/or limbs may fail under certain conditions, and that the above recommendations are based on industry standards of tree care. This report is made with the understanding that no representations or warranties, either expressed or implied are made that any trees referred to in the report or located on or adjacent to the subject property are sound or safe.

PHOTOGRAPHS



#34, #33, #32, and #31



Tree #31, #32, #33, #34

#31

201241011000



A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM

2nd Edition

Site/Address: 220 UPPER WALDEN
 Map/Location: EAST SIDE OF BUILDING
 Owner: public ☐ private ☒ unknown ☐ other ☐
 Date: 4-27-17 Inspector: ONU
 Date of last inspection: _____

HAZARD RATING:

3 + 3 + 4 = 10
 Failure Potential + Size of part + Target Rating = Hazard Rating

_____ Immediate action needed
 _____ Needs further inspection
 _____ Dead tree

TREE CHARACTERISTICS

Tree #: 31 Species: M. PINE
 DBH: 20 # of trunks: 1 Height: 80 Spread: 15
 Form: ☒ generally symmetric ☐ minor asymmetry ☐ major asymmetry ☐ stump sprout ☐ stag-headed
 Crown class: ☐ dominant ☒ co-dominant ☐ intermediate ☐ suppressed
 Live crown ratio: 10 % Age class: ☐ young ☐ semi-mature ☒ mature ☐ over-mature/senescent
 Pruning history: ☐ crown cleaned ☐ excessively thinned ☐ topped ☐ crown raised ☐ pollarded ☐ crown reduced ☐ flush cuts ☐ cabled/braced
☐ none ☐ multiple pruning events Approx. dates: _____
 Special Value: ☐ specimen ☐ heritage/historic ☐ wildlife ☐ unusual ☐ street tree ☐ screen ☐ shade ☐ indigenous ☒ protected by gov. agency

TREE HEALTH

Foliage color: ☒ normal ☐ chlorotic ☐ necrotic Epicormics? Y N
 Foliage density: ☐ normal ☒ sparse Leaf size: ☒ normal ☐ small
 Annual shoot growth: ☐ excellent ☐ average ☒ poor Twig Dieback? Y N
 Woundwood development: ☐ excellent ☐ average ☒ poor ☐ none
 Vigor class: ☐ excellent ☐ average ☒ fair ☐ poor
 Major pests/diseases: BEETLES

Growth obstructions:

☐ stakes ☐ wire/ties ☐ signs ☐ cables
☐ curb/pavement ☐ guards
☐ other _____

SITE CONDITIONS

Site Character: ☒ residence ☐ commercial ☐ industrial ☐ park ☐ open space ☐ natural ☐ woodland/forest
 Landscape type: ☐ parkway ☐ raised bed ☐ container ☐ mound ☐ lawn ☒ shrub border ☐ wind break
 Irrigation: ☒ none ☐ adequate ☐ inadequate ☐ excessive ☐ trunk wetted
 Recent site disturbance? Y N ☐ construction ☐ soil disturbance ☒ grade change ☐ line clearing ☐ site clearing
 % dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y N
 % dripline w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%
 % dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%
 Soil problems: ☐ drainage ☒ shallow ☐ compacted ☐ droughty ☐ saline ☐ alkaline ☐ acidic ☐ small volume ☐ disease center ☐ history of fail
☐ clay ☐ expansive ☐ slope _____° aspect: _____
 Obstructions: ☐ lights ☐ signage ☐ line-of-sight ☐ view ☐ overhead lines ☐ underground utilities ☐ traffic ☐ adjacent veg. ☐ _____
 Exposure to wind: ☒ single tree ☐ below canopy ☐ above canopy ☐ recently exposed ☐ windward, canopy edge ☐ area prone to windthrow
 Prevailing wind direction: NW Occurrence of snow/ice storms ☒ never ☐ seldom ☐ regularly

TARGET

Use Under Tree: ☒ building ☐ parking ☐ traffic ☐ pedestrian ☐ recreation ☐ landscape ☐ hardscape ☐ small features ☐ utility lines
 Can target be moved? Y N Can use be restricted? Y N
 Occupancy: ☐ occasional use ☐ intermittent use ☐ frequent use ☒ constant use

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pg 1

31

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: ☒ Y ☐ N Mushroom/conk/bracket present: Y ☒ N ID: _____Exposed roots: ☒ severe ☐ moderate ☐ low Underscored: ☐ severe ☐ moderate ☒ lowRoot pruned: 4 ft distance from trunk Root area affected: 25-50 % Buttress wounded: Y ☒ N When: _____Restricted root area: ☐ severe ☐ moderate ☒ low Potential for root failure: ☒ severe ☐ moderate ☐ lowLEAN: _____ deg. from vertical ☐ natural ☐ unnatural ☐ self-corrected Soil heaving: Y ☒ NDecay in plane of lean: Y ☒ N Roots broken Y ☒ N Soil cracking: Y ☒ NCompounding factors: _____ Lean severity: ☐ severe ☐ moderate ☐ low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep				
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark				
Nesting hole/bee hive				
Deadwood/stubs				
Borers/termites/ants	s	s	s	s
Cankers/galls/burls				
Previous failure			s	s

HAZARD RATING

Tree part most likely to fail: ROOTS & STOM

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

3 + 3 + 4 = 10

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);

3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

Target rating: 1 - occasional use; 2 intermittent use;

3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: ☐ remove defective part ☐ reduce end weight ☐ crown clean ☐ thin ☐ raise canopy ☐ crown reduce ☐ restructure ☐ shapeCable/Brace: _____ Inspect further: ☐ root crown ☐ decay ☐ aerial ☐ monitorRemove tree: ☒ Y ☐ N Replace? ☒ Y ☐ N Move target: Y ☒ N Other: _____Effect on adjacent trees: ☒ none ☐ evaluateNotification: ☒ owner ☐ manager ☐ governing agency Date: 4-27-17

COMMENTS

#32



A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM 2nd Edition

Site/Address: 220 UPPER WALDEN
 Map/Location: EAST SIDE OF BUILDING
 Owner: public ☐ private ☒ unknown ☐ other ☐
 Date: 4-27-17 Inspector: OND
 Date of last inspection: _____

HAZARD RATING:

<u>3</u>	+	<u>3</u>	+	<u>4</u>	=	<u>10</u>
Failure Potential		Size of part		Target Rating		Hazard Rating

____ Immediate action needed
 ____ Needs further inspection
 ____ Dead tree

TREE CHARACTERISTICS

Tree #: 32 Species: M. PINE
 DBH: 20 # of trunks: 1 Height: 80 Spread: 12
 Form: ☒ generally symmetric ☐ minor asymmetry ☐ major asymmetry ☐ stump sprout ☐ stag-headed
 Crown class: ☐ dominant ☒ co-dominant ☐ intermediate ☐ suppressed
 Live crown ratio: 20 % Age class: ☐ young ☐ semi-mature ☒ mature ☐ over-mature/senescent
 Pruning history: ☐ crown cleaned ☐ excessively thinned ☐ topped ☐ crown raised ☐ pollarded ☐ crown reduced ☐ flush cuts ☐ cabled/braced
☒ none ☐ multiple pruning events Approx. dates: _____
 Special Value: ☐ specimen ☐ heritage/historic ☐ wildlife ☐ unusual ☐ street tree ☐ screen ☐ shade ☐ indigenous ☒ protected by gov. agency

TREE HEALTH

Foliage color: ☒ normal ☐ chlorotic ☐ necrotic Epicormics? Y ☒ N
 Foliage density: ☐ normal ☒ sparse Leaf size: ☒ normal ☐ small
 Annual shoot growth: ☐ excellent ☐ average ☒ poor Twig Dieback? Y ☒ N
 Woundwood development: ☐ excellent ☐ average ☐ poor ☒ none
 Vigor class: ☐ excellent ☐ average ☐ fair ☒ poor
 Major pests/diseases: BEETLES

Growth obstructions:

☐ stakes ☐ wire/ties ☐ signs ☐ cables
☐ curb/pavement ☐ guards
☐ other _____

SITE CONDITIONS

Site Character: ☒ residence ☐ commercial ☐ industrial ☐ park ☐ open space ☐ natural ☐ woodland/forest
 Landscape type: ☐ parkway ☐ raised bed ☐ container ☐ mound ☐ lawn ☒ shrub border ☐ wind break
 Irrigation: ☒ none ☐ adequate ☐ inadequate ☐ excessive ☐ trunk wetted
 Recent site disturbance? Y ☒ N ☐ construction ☐ soil disturbance ☐ grade change ☐ line clearing ☐ site clearing
 % dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y ☒ N
 % dripline w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%
 % dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%
 Soil problems: ☐ drainage ☒ shallow ☐ compacted ☐ droughty ☐ saline ☐ alkaline ☐ acidic ☐ small volume ☐ disease center ☐ history of fail
☐ clay ☐ expansive ☐ slope _____° aspect: _____
 Obstructions: ☐ lights ☐ signage ☐ line-of-sight ☐ view ☐ overhead lines ☐ underground utilities ☐ traffic ☐ adjacent veg. ☐ _____
 Exposure to wind: ☒ single tree ☐ below canopy ☐ above canopy ☐ recently exposed ☐ windward, canopy edge ☐ area prone to windthrow
 Prevailing wind direction: NW Occurrence of snow/ice storms ☒ never ☐ seldom ☐ regularly

TARGET

Use Under Tree: ☒ building ☐ parking ☐ traffic ☐ pedestrian ☐ recreation ☐ landscape ☐ hardscape ☐ small features ☐ utility lines
 Can target be moved? Y ☒ N Can use be restricted? Y ☒ N
 Occupancy: ☐ occasional use ☐ intermittent use ☐ frequent use ☒ constant use

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pg 1

#32

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: Y (N) Mushroom/conk/bracket present: Y (N) ID: _____

Exposed roots: ☐ severe ☐ moderate ☒ low Underscored: ☐ severe ☐ moderate ☒ low

Root pruned: _____ distance from trunk Root area affected: _____% Buttress wounded: Y (N) When: _____

Restricted root area: ☐ severe ☐ moderate ☒ low Potential for root failure: ☐ severe ☒ moderate ☐ lowLEAN: _____ deg. from vertical ☐ natural ☐ unnatural ☐ self-corrected Soil heaving: Y (N)

Decay in plane of lean: Y (N) Roots broken Y (N) Soil cracking: Y (N)

Compounding factors: _____ Lean severity: ☐ severe ☐ moderate ☐ low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep		S		
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark		S		
Nesting hole/bee hive				
Deadwood/stubs			S	
Borers/termites/ants	S	S	S	S
Cankers/galls/burls				
Previous failure				

HAZARD RATING

Tree part most likely to fail: ROOTS & STEM

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

3 + 3 + 4 = 10

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);

3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

Target rating: 1 - occasional use; 2 intermittent use;

3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: ☐ remove defective part ☐ reduce end weight ☐ crown clean ☐ thin ☐ raise canopy ☐ crown reduce ☐ restructure ☐ shapeCable/Brace: _____ Inspect further: ☐ root crown ☐ decay ☐ aerial ☐ monitor

Remove tree: Y (N) Replace? Y (N) Move target: Y (N) Other: _____

Effect on adjacent trees: ☒ none ☐ evaluateNotification: ☒ owner ☐ manager ☐ governing agency Date: 4-27-17

COMMENTS

33



A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM 2nd Edition

Site/Address: 220 UPPER WALDEN
 Map/Location: EAST SIDE OF BUILDING
 Owner: public _____ private ☒ unknown _____ other _____
 Date: 4-27-17 Inspector: ON/O
 Date of last inspection: _____

HAZARD RATING:

3 + 3 + 4 = 10
 Failure Potential + Size of part + Target Rating = Hazard Rating

_____ Immediate action needed
 _____ Needs further inspection
 _____ Dead tree

TREE CHARACTERISTICS

Tree #: 33 Species: M. PINE
 DBH: 30 # of trunks: 1 Height: 80 Spread: 40
 Form: ☒ generally symmetric ☐ minor asymmetry ☐ major asymmetry ☐ stump sprout ☐ stag-headed
 Crown class: ☐ dominant ☒ co-dominant ☐ intermediate ☐ suppressed
 Live crown ratio: 20 % Age class: ☐ young ☐ semi-mature ☒ mature ☐ over-mature/senescent
 Pruning history: ☐ crown cleaned ☒ excessively thinned ☐ topped ☐ crown raised ☐ pollarded ☐ crown reduced ☐ flush cuts ☐ cabled/braced
☐ none ☒ multiple pruning events Approx. dates: UNKNOWN
 Special Value: ☐ specimen ☐ heritage/historic ☐ wildlife ☐ unusual ☐ street tree ☐ screen ☐ shade ☐ indigenous ☒ protected by gov. agency

TREE HEALTH

Foliage color: ☒ normal ☐ chlorotic ☐ necrotic Epicormics? Y (N)
 Foliage density: ☐ normal ☒ sparse Leaf size: ☒ normal ☐ small
 Annual shoot growth: ☐ excellent ☐ average ☒ poor Twig Dieback? Y (N)
 Woundwood development: ☐ excellent ☐ average ☐ poor ☒ none
 Vigor class: ☐ excellent ☐ average ☐ fair ☒ poor
 Major pests/diseases: BEETLES

Growth obstructions:

☐ stakes ☐ wire/ties ☐ signs ☐ cables
☐ curb/pavement ☐ guards
☐ other _____

SITE CONDITIONS

Site Character: ☒ residence ☐ commercial ☐ industrial ☐ park ☐ open space ☐ natural ☐ woodland/forest
 Landscape type: ☐ parkway ☐ raised bed ☐ container ☐ mound ☐ lawn ☒ shrub border ☐ wind break
 Irrigation: ☒ none ☐ adequate ☐ inadequate ☐ excessive ☐ trunk wetted
 Recent site disturbance? Y (N) ☒ construction ☐ soil disturbance ☒ grade change ☐ line clearing ☐ site clearing
 % dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y (N)
 % dripline w/ till soil: 0% 10-25% 25-50% 50-75% 75-100%
 % dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%
 Soil problems: ☐ drainage ☒ shallow ☐ compacted ☐ droughty ☐ saline ☐ alkaline ☐ acidic ☐ small volume ☐ disease center ☐ history of fail
☐ clay ☐ expansive ☐ slope _____° aspect: _____
 Obstructions: ☐ lights ☐ signage ☐ line-of-sight ☐ view ☐ overhead lines ☐ underground utilities ☐ traffic ☐ adjacent veg. ☐ _____
 Exposure to wind: ☒ single tree ☐ below canopy ☐ above canopy ☐ recently exposed ☐ windward, canopy edge ☐ area prone to windthrow
 Prevailing wind direction: NW Occurrence of snow/ice storms ☒ never ☐ seldom ☐ regularly

TARGET

Use Under Tree: ☒ building ☐ parking ☐ traffic ☐ pedestrian ☐ recreation ☐ landscape ☐ hardscape ☐ small features ☐ utility lines
 Can target be moved? Y (N) Can use be restricted? Y (N)
 Occupancy: ☐ occasional use ☐ intermittent use ☐ frequent use ☒ constant use

The International Society of Arboriculture assumes no responsibility for conclusions or recommendations derived from use of this form.

pg 1

33

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: ☒ Y ☐ N Mushroom/conk/bracket present: ☒ Y ☐ N ID: _____Exposed roots: ☒ severe ☐ moderate ☐ low Undersided: ☐ severe ☐ moderate ☒ lowRoot pruned: SFT distance from trunk Root area affected: 25-50 % Buttress wounded: ☒ Y ☐ N When: _____Restricted root area: ☐ severe ☐ moderate ☒ low Potential for root failure: ☒ severe ☐ moderate ☐ lowLEAN: _____ deg. from vertical ☐ natural ☐ unnatural ☐ self-corrected Soil heaving: ☒ Y ☐ NDecay in plane of lean: ☒ Y ☐ N Roots broken: ☒ Y ☐ N Soil cracking: ☒ Y ☐ NCompounding factors: _____ Lean severity: ☐ severe ☐ moderate ☐ low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep				
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark				
Nesting hole/bee hive				
Deadwood/slubs				
Borers/termites/ants	3	3	3	3
Cankers/galls/burls				
Previous failure			3	3

HAZARD RATING

Tree part most likely to fail: ROOTS & STEM

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

3 + 3 + 4 = 10

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);

3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

Target rating: 1 - occasional use; 2 intermittent use;

3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: ☐ remove defective part ☐ reduce end weight ☐ crown clean ☐ thin ☐ raise canopy ☐ crown reduce ☐ restructure ☐ shapeCable/Brace: _____ Inspect further: ☐ root crown ☐ decay ☐ aerial ☐ monitorRemove tree: ☒ Y ☐ N Replace? ☒ Y ☐ N Move target: ☒ Y ☐ N Other: _____Effect on adjacent trees: ☒ none ☐ evaluateNotification: ☒ owner ☐ manager ☐ governing agency Date: 4-27-17

COMMENTS

#34



A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM 2nd Edition

Site/Address: 220 UPPER WALDEN
 Map/Location: EAST SIDE OF BUILDING
 Owner: public ☐ private ☒ unknown ☐ other ☐
 Date: 4-27-17 Inspector: OND
 Date of last inspection: _____

HAZARD RATING:

Failure Potential	3	+	Size of part	3	+	Target Rating	4	=	Hazard Rating	10
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____ Immediate action needed
 ____ Needs further inspection
 ____ Dead tree

TREE CHARACTERISTICS

Tree #: 34 Species: M. PINE
 DBH: 24 # of trunks: 1 Height: 75 Spread: 15
 Form: ☒ generally symmetric ☐ minor asymmetry ☐ major asymmetry ☐ stump sprout ☐ stag-headed
 Crown class: ☐ dominant ☒ co-dominant ☐ intermediate ☐ suppressed
 Live crown ratio: 15 % Age class: ☐ young ☐ semi-mature ☒ mature ☐ over-mature/senescent
 Pruning history: ☐ crown cleaned ☐ excessively thinned ☒ topped ☐ crown raised ☐ pollarded ☐ crown reduced ☐ flush cuts ☐ cabled/braced
☐ none ☒ multiple pruning events Approx. dates: UNKNOWN
 Special Value: ☐ specimen ☐ heritage/historic ☐ wildlife ☐ unusual ☐ street tree ☐ screen ☐ shade ☐ indigenous ☒ protected by gov. agency

TREE HEALTH

Foliage color: ☒ normal ☐ chlorotic ☐ necrotic Epicormics? Y (N)
 Foliage density: ☐ normal ☒ sparse Leaf size: ☒ normal ☐ small
 Annual shoot growth: ☐ excellent ☐ average ☒ poor Twig Dieback? Y (N)
 Woundwood development: ☐ excellent ☐ average ☐ poor ☒ none
 Vigor class: ☐ excellent ☐ average ☐ fair ☒ poor
 Major pests/diseases: BEETLES

Growth obstructions:

☐ stakes ☐ wire/ties ☐ signs ☐ cables
☐ curb/pavement ☐ guards
☐ other _____

SITE CONDITIONS

Site Character: ☒ residence ☐ commercial ☐ industrial ☐ park ☐ open space ☐ natural ☐ woodland/forest
 Landscape type: ☐ parkway ☐ raised bed ☐ container ☐ mound ☐ lawn ☒ shrub border ☐ wind break
 Irrigation: ☒ none ☐ adequate ☐ inadequate ☐ excessive ☐ trunk wetted
 Recent site disturbance? Y (N) ☐ construction ☐ soil disturbance ☒ grade change ☐ line clearing ☐ site clearing
 % dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y (N)
 % dripline w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%
 % dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%
 Soil problems: ☐ drainage ☒ shallow ☐ compacted ☐ droughty ☐ saline ☐ alkaline ☐ acidic ☐ small volume ☐ disease center ☐ history of fail
☐ clay ☐ expansive ☐ slope _____° aspect: _____
 Obstructions: ☐ lights ☐ signage ☐ line-of-sight ☐ view ☐ overhead lines ☐ underground utilities ☐ traffic ☐ adjacent veg. ☐ _____
 Exposure to wind: ☒ single tree ☐ below canopy ☐ above canopy ☐ recently exposed ☐ windward, canopy edge ☐ area prone to windthrow
 Prevailing wind direction: NW Occurrence of snow/ice storms: ☒ never ☐ seldom ☐ regularly

TARGET

Use Under Tree: ☒ building ☐ parking ☐ traffic ☐ pedestrian ☐ recreation ☐ landscape ☐ hardscape ☐ small features ☐ utility lines
 Can target be moved? Y (N) Can use be restricted? Y (N)
 Occupancy: ☐ occasional use ☐ intermittent use ☐ frequent use ☒ constant use

The International Society of Arboriculture assumes no responsibility for conclusions or recommendations derived from use of this form.

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TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: ☒ Y ☐ N Mushroom/conk/bracket present: ☒ Y ☐ N ID: _____Exposed roots: ☒ severe ☐ moderate ☐ low Underscored: ☐ severe ☐ moderate ☒ lowRoot pruned: 5 ft distance from trunk Root area affected: 25-50% Buttress wounded: ☒ Y ☐ N When: _____Restricted root area: ☐ severe ☐ moderate ☒ low Potential for root failure: ☒ severe ☐ moderate ☐ lowLEAN: _____ deg. from vertical ☐ natural ☐ unnatural ☐ self-corrected Soil heaving: ☒ Y ☐ NDecay in plane of lean: ☒ Y ☐ N Roots broken: ☒ Y ☐ N Soil cracking: ☒ Y ☐ NCompounding factors: _____ Lean severity: ☐ severe ☐ moderate ☐ low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep				
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark				
Nesting hole/bee hive				
Deadwood/stubs				
Borers/termites/ants	3	5	5	5
Cankers/galls/burrs				
Previous failure				

HAZARD RATING

Tree part most likely to fail: ROOTS & STEM

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

3 + 3 + 4 = 10

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);

3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

Target rating: 1 - occasional use; 2 intermittent use;

3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: ☐ remove defective part ☐ reduce end weight ☐ crown clean ☐ thin ☐ raise canopy ☐ crown reduce ☐ restructure ☐ shapeCable/Brace: _____ Inspect further: ☐ root crown ☐ decay ☐ aerial ☐ monitorRemove tree: ☒ Y ☐ N Replace? ☒ Y ☐ N Move target: ☒ Y ☐ N Other: _____Effect on adjacent trees: ☒ none ☐ evaluateNotification: ☒ owner ☐ manager ☐ governing agency Date: 4-27-17

COMMENTS

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