## DRAFT COOPERATIVE AGREEMENT BY AND BETWEEN BOLINAS COMMUNITY PUBLIC UTILITY DISTRICT AND THE COUNTY OF MARIN

This Agreement is made thisday of	, 2025 ("Effective Date") by and between
the Bolinas Community Public Utility District	(hereafter "BCPUD") and the County of Marin
(hereafter "COUNTY").	

#### **RECITALS**

- A. To address its need for professional tree assessment services, BCPUD retained Urban Forestry Associates, Inc. ("UFA") to provide services including the preparation of a tree assessment study ("Study") as described in that certain Proposal for Tree Failure Risk Assessment, dated July 23, 2025, herein incorporated and attached hereto as Exhibit A.
- B. Through the Study, UFA proposes to conduct an assessment of existing trees, within an area that includes portions of the COUNTY's right of way, for the purpose of assessing risks including tree failure.
- C. BCPUD procured the services of UFA through a contract with UFA ("UFA Contract") according to their approved procurement policies.
- D. BCPUD and COUNTY have mutually agreed to share the costs of the services identified in the scope of the services within the contract between BCPUD and UFA.

#### **AGREEMENT**

NOW, THEREFORE, BCPUD and COUNTY mutually agree as follows:

- 1. COUNTY agrees that it shall:
  - a. Reimburse BCPUD for the costs allocated to the County in the attached Exhibit B.
- 2. BCPUD agrees that it shall:
  - a. Serve as lead agency on Study; and
  - b. Manage all Study coordination and logistics with UFA; and
  - c. Interface directly with private property owners, as necessary, to enable access and facilitate completion of the assessment; and
  - d. Serve as the primary point of contact for all fieldwork and communications with UFA; and
  - e. Provide COUNTY'S Department of Public Works with a copy of the final deliverables, including the completed report and relevant documentation upon receipt from UFA; and
  - f. Promptly notify COUNTY of any change order requests that may result in increased shared costs, and
- 3. By entering into this Agreement, BCPUD and COUNTY mutually understand and agree to the following:
  - a. The final costs allocated to the parties will be determined by the actual costs of UFA's work under the UFA Contract; and
  - b. BCPUD will submit a final invoice following acceptance of the Study.
- 4. This Agreement shall terminate upon final payment of all costs associated with UFA's work under UFA contract, or upon 30 days' written notice by either party, except that the parties' respective indemnity obligations shall survive any termination of this contract.
  - This Agreement constitutes the entire Agreement, supersedes all prior written or oral understandings, and may not be extended past the aforementioned term or amended without written consent from both parties.
- 5. Nothing herein reflects any obligation by either party with respect to any tree]
- 6. Dispute Resolution: Any dispute or claim in law or equity between BCPUD and COUNTY arising out of this Agreement shall be resolved by negotiation between the

parties. If no resolution is achieved, the parties agree to formal negotiations by a mediator mutually chosen and paid for equally by both parties.

[SIGNATURES ON THE NEXT PAGE]

IN WITNESS WHEREOF, the Parties hereby have executed this Agreement on the first date written above.

COUNTY OF MARIN	Bolinas Community Public Utility District
Director of Public Works	General Manager
Date:	Date:
APPROVED AS TO FORM	APPROVED AS TO FORM
Attorney for the County	BCPUD Attorney

## **Exhibits**

A: Urban Forestry Associates, Inc., July 23, 2025, Proposal for Tree Failure Risk Assessment.

B: Cost Sharing Itemization

Georgia Woods, General Manager Bolinas Public Utility Dist. 270 Elm Road Bolinas, CA 94924 (415) 868 1224 bcpud@bcpud.org



PMB 101 157 N. McDowell Blvd, Petaluma, CA 94954 Cell: 415 606 1729 Desk: 415 454 4214 Email: ray@urbanforestryassociates.com

## Proposal for Tree Failure Risk Assessment

#### PROPOSAL:

Ray Moritz, Senior Urban Forestry Consultant for Urban Forestry Associates (UFA), was contacted by Georgia Woods, General Manager of the Bolinas Community Public Utility District and George Krakauer, Bolinas Fire Protection District Fire Chief to inspect several forested roadside sites along Lower Mesa Road and Olema-Bolinas Road for potential risks to travel, emergency access/egress, utility disruption, vehicle and utility caused wildfire ignition potential, associated tree failures. Ray Moritz is a 1995 SAF Certified Forester #241, 2011 NW ISA Certified Tree Risk and 2015 ISA Tree Risk Assessor Qualified (TRAQ).

#### SITES:

- 1. Forested areas of Olema-Bolinas Road north and south of Mesa Road on both designated public and Private properties (See Figure 1 Bolinas Fire Department Map, cropped for use in this proposal).
- 2. East Mesa Road BCPUD eucalyptus grove (See Figures 1 & 2)



Figure 1 – No trees located more than 100 feet from the paved travel lane edge will be assessed.



Figure 2 – This figure includes the roadway assessment limits. No trees, or targets (trails or roadways) will be assessed outside these limits.

#### TREE RISK ASSESSMENT:

Risk assessment is the analysis of the likelihood of a failure event and the severity of potential consequences. Tree risk assessment combines the likelihood of a tree failure and impacting a target with the severity of its associated consequences (personal injury, property damage, or disruption of activities). All trees or tree parts have some level of risk is they are likely to impact a target of significant value. Where there is no target of significant value, there is no risk. The level of risk aversion of the tree owner or property manager determines what action, if any, is taken. The manager also decides what trees are to be assessed and the level of assessment. The role tree risk assessor is to identify, analyze and evaluate tree risk, and recommend mitigation or abatement practices. Recommendations may also include target management practices.

Levels of Risk Assessment (as defined by the ANSI A300 Standards for Tree Care Operations)

- Level 1 Limited Visual: A limited visual risk assessment is sometimes referred to as a *walk by* or a *drive by* assessment. It is most common in urban forest scenarios where trees are abundant and resources for inspection are relatively scarce. A limited visual is not necessarily a complete 360-degree inspection and may be employed in situations where access is limited. Professionals conducting a limited visual assessment identify high-risk trees that are mitigation priorities. This level of assessment is the most common level used by cities, government agencies and large forested property owners. This level assessment may include recommendations for higher assessment levels for specific trees.
- Level 2 Basic Visual: A basic visual assessment is a 360-degree inspection from the ground that is more thorough and typically includes height and diameter measurements. An assessor may use binoculars for crown inspections, a mallet for sounding hollows, a probe for inspecting cavities, and other common tools to conduct the inspection. This is the most common level used on residential properties.

• Level 3 – Advance Assessment: An advanced assessment can be an aerial assessment or an assessment that includes quantitative decay detection, health evaluation, wind load assessment, and static load assessment. Given the more advanced tools and methodologies employed, this service is often offered at a premium to the customer and typically reserved for heritage or high value trees.

The recommended level for this assessment was a Level 1 inspection, but in practice a Level 2 inspections are performed on trees with serious defects targeting sites with moderate or frequent occupancy, potentially medium to high impacts, with potentially significant to severe consequences. (See Figure below)

#### **Target Occupancy Rates**:

- 1. Constant: Target(s) is or are constantly present or a steady stream of mobile targets in the target zone.
- 2. <u>Frequent</u>: A target that is occupied during a large portion of the day or week. A target zone with moderate volumes of traffic such as a suburban street, playgrounds or sidewalks in shopping areas.
- 3. <u>Occasional</u>: Sites infrequently occupied by targets of value, such as country roads, low-use foot paths, or low-use sections of parks.
- 4. <u>Rare</u>: Rarely used trails or roads, remote areas of parks, areas with low mobile occupancy resident time for only part of the day, such as a low-use trail or country road with virtually no use at night.

Risk Categorization																							
er			Likelihood					Consequences															
qun				Ge	number			Failu	ıre			lmp	act			ure 8			Coi	nseq	uen	ces	5:1
Condition number	Tree part	Conditions of concern	Part size	Fall distance	Target nu	Target protection	Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	Risk rating of part (from Matrix 2)
1																							
2							_												_				
_							$\vdash$												L				
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3							$\vdash$					-											<u> </u>
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4							-	-			-								-				

#### Matrix I. Likelihood matrix.

Likelihood	Likelihood of Impacting Target							
of Failure	Very low	Low	Medium	High				
Imminent Unlikely		Somewhat likely	Likely	Very likely				
Probable Unlikely		Unlikely	Somewhat likely	Likely				
Possible Unlikely		Unlikely	Unlikely	Somewhat likely				
Improbable Unlikely		Unlikely	Unlikely	Unlikely				

Matrix 2. Risk rating matrix.

Likelihood of	Consequences of Failure								
Failure & Impact	Negligible	Minor	Significant	Severe					
Very likely	Low	Moderate	High	Extreme					
Likely	Low	Moderate	High	High					
Somewhat likely	Low	Low	Moderate	Moderate					
Unlikely	Low	Low	Low	Low					

#### **Target Occupancy rates:**

- 1. 70 Mesa Road to Olema Bolinas Road and from the south end of 73 to the south extent of 16 Olema Bolinas Road: Frequent use by mobile targets with partially protected people. Occasional use by pedestrians during the day, rare use by pedestrians and occasional to rare use late night to early morning by mobile targets with partially protected people.
- 2. "Zone 5" east Mesa and south Olema Bolinas Roads Eucalyptus Grove.

## **Disruption of Activities:**

- 1. Travel along east Mesa Road, from 70 Mesa Road to Olema Bolinas Road: Highly Significant disruption.
- 2. Olema Bolinas Road from Mesa from 73 to 16 Olema Bolinas Road: Highly Significant disruption.
- 3. Emergency access/egress: Highly significant disruption and delays.

#### LEVEL ONE RISK ASSESSMENT – walking visual ISA TRAQ assessment

- 1. East Mesa Road / Olema-Bolinas Road /target interface
- 2. Tag high risk (hazard) trees with a target(s) of value, trees with high risk to interrupt activity (emergency access/egress, etc.) and high risk of causing a wildfire ignition.
- 3. Provide a comprehensive report addressing all assessed trees equal to or greater than 18" Diameter Breast Height (DBH = 4.5 ft. above grade). It is estimated that between 800 and 1,000 trees will be assessed.
- 4. Other trees less than 18" DBH that pose an imminent risk may be assessed, particularly when they pose and unexpectable risk to people, travel, and utilities, or domino effect involving other tree failures.

#### TREE FIELD DATA SHALL INCLUDE:

Species:

Common name (genus and specific epithet)

Locations:

GPS location and geo-tagged photographs entered onto Google Earth

Condition:

Structural Failure potential (tree or tree parts with high likelihood of impacting specified targets)

Target:

Vehicles and their passengers, travel ways, Utilities, and/or activities.

**Conclusion:** Failure risk to people, property, activities, utilities and wildfire ignition.

Recommendation: Safety prune<sup>1</sup>, remove or recommendation for a Level 2 or Level 3 risk assessment.

<sup>1</sup> "Safety Pruning" may include crown reduction, branch reduction, thinning, or branch removal.

#### PROJECT FIXED ESTIMATE (3 LINE ITEMS):

#1) Tree assessments along/within BCPUD property boundary (blue line) #2) Tree assessments along/within Private property boundaries (yellow lines)

\$10,680.00

#3) Analysis and Report Preparation

\$16,020.00 \$ 4,500.00

\$31,200.00

#### SCOPE OF WORK AND LIMITATIONS

All observations regarding trees in this report shall be made by UFA, independently, based on our education and experience. All determinations of health condition, structural condition, or hazard potential of a tree or trees at issue are based on our best professional judgment. The health and hazard assessments in this report are limited by the visual nature of the assessment. Defects may be obscured by soil, brush, vines, aerial foliage, branches, multiple trunks or other trees. Even structurally sound, healthy trees are wind thrown during severe storms or fail due to other weather conditions. Consequently, the conclusion that a tree does not require corrective surgery, or removal is not a guarantee of no risk, hazard, or sound health.

Information regarding property boundaries, landownership, and tree ownership shall be provided by the client.

### TREE WORK STANDARDS AND QUALIFICATION

All tree work, removal, pruning, planting, should be performed according to industry standards as established by the International Society of Arboriculture best management practices, and applicable ANSI 300 standards. Contractors must have a State of California Contractors License for Tree Service (C61-D49) with general liability, professional liability, worker's compensation, and commercial auto/equipment insurance.

Contractor standards of workmanship shall adhere to current Best Management Practices (<u>where possible</u>) of the International Society of Arboriculture (ISA) and the American National Standards Institute (ANSI) for tree pruning, fertilization and safety (ANSI A300 and Z133.1). Safety is the primary goal.

Ray Moritz, 1995 SAF Certified Forester #241

2011 NW ISA Certified Tree Risk Assessor 2015 ISA Tree Risk Assessment Qualified

# Exhibit B Cost Sharing Itemization

The total fixed cost for the services described in Exhibit A is \$31,200, itemized as follows:

Line Item	Description	Responsible Party	Amount
#1	Tree assessments within BCPUD property boundaries (blue line)	BCPUD	\$10,680.00
#2	Tree assessments in area in and adjacent to the right-of-way boundaries (yellow lines)	DPW	\$16,020.00
#3	Analysis and Report Preparation	BCPUD: 50% DPW: 50%	\$2,250.00 each

BCPUD will pay Urban Forestry Associates, Inc. directly for the full cost of the project (\$31,200.00). Marin County DPW agrees to reimburse BCPUD in the amount of \$18,270.00, representing the sum total of Line Item #2 and its share of Line Item #3. Reimbursement shall be made within 30 days following submission of invoice and documentation from BCPUD.