NATIONAL PARK SERVICE
MISSION CRITICAL TREE PRUNING and DEAD WOOD REMOVAL for PUBLIC SAFETY AND FIRE PREVENTION
at WHISKEYTOWN NATIONAL RECREATION AREA

PART 1: PROJECT DESCRIPTION

Whiskeytown National Recreation Area requires the pruning and removal of deadwood from fifteen (N=15) oak trees and one (N = 1) Oregon Ash tree in the Tower House Historic District (THHD), located in the Back Field and Tenant House Barn areas of the district. This work constitutes mission critical work for public life, health, and safety.

PART 2: GENERAL PROVISIONS

2.01 QUALITY ASSURANCE:

Professional Qualifications:

A. The CONTRACTOR shall provide a full-time Arborist(s) supervisor, who is certified by the International Society of Arboriculture (ISA, https://www.isa-arbor.com/) and who possesses verifiable experience as a full-time direct supervisor of shade tree maintenance and climbing work crews. Verifiable experience and technical competence in tree physiology, identification, diagnosis of disorders, and current tree care and safety practices in accordance with accepted industry standards is also required.

B. All CONTRACTORS shall, through related training and on-the-job experience, be familiar with the technical aspects and hazards of tree maintenance work and equipment used in such operations. The CONTRACTOR shall abide by the code of ethics or professional conduct established by the National Arborist Association and the International Society of Arboriculture (https://www.isa-arbor.com/Credentials/ISA-Ethics-and-Integrity/Code-of-Ethics).

2.01.2 EQUIPMENT REQUIREMENTS:

A. The CONTRACTOR shall furnish all equipment and sufficient personnel for selected maintenance (i.e. tree pruning and dead wood removal) and all related support work as in accordance with the unit prices and specifications stated herein.

B. All CONTRACTOR equipment shall meet all federal OSHA, state and local safety requirements and shall be properly licensed. This includes equipment such as bucket trucks, aerial lifts, chipper trucks, wood trucks, sprayers, etc. which may be needed to correctly perform tree pruning and deadwood removal in accordance with the specifications stated herein.

C. All CONTRACTOR equipment entering the park requires inspection by NPS inspectors prior to park entry. Inspections shall be scheduled in

advance of equipment arrival. It is recommended that all equipment be pressure or steam washed to remove non-native seeds, soils, grease, oils, etc. Any equipment that does not pass inspection is prohibited from use under this contract.

2.02 SCHEDULING AND COORDINATION:

A. It is recommended that the CONTRACTOR will conduct a site walk with the NPS COR or NPS Project Inspector prior to implementation. The trees subject to this contract will be marked with polka-dot flagging and UTM coordinates provided for each tree.

B. The CONTRACTOR shall commence work within 30 days of receiving a delivery order. The CONTRACTOR shall notify the COR 48 hours prior to beginning any work on a delivery order to schedule equipment inspections. Work shall be performed between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday, Federal holidays excluded, unless authorized in writing by the COR.

C. Period of Performance: Work should occur between October 1st and March 31st, however, dead wood removal activities may occur during any time within the performance period excluding periods of high fire danger.

2.03 ADDITIONAL REQUIREMENTS:

A. All work shall be conducted in accordance with ANSI Z133.1-2017 or Z133-2025 (when released), American National Standard for Arboricultural Operations – Safety Requirements and all federal OSHA, state, and local safety requirements.

B. Any incident or accident involving the CONTRACTOR, or the CONTRACTOR and the public, must be immediately reported to the COR.

C. Smoking: Smoking is not permitted in the park outside of designated areas (ie. Parking lots). Under no circumstances is smoking permitted during the period of performance if mandated Fire Restrictions are in place. All smoking filters (butts) will be properly disposed of in an approved refuse receptacle.

D. Food Storage: When not in use food, garbage, containers, and equipment used to cook or store food must be contained within bear-resistant food storage lockers (where provided). Bear-resistant refuse containers should be stored out of sight in a hard-sided vehicle or vehicle trunk by persons camping or picnicking in areas authorized for access by motor vehicle.

E. Garbage and Sewage: Garbage and food residue shall be always made unavailable to wildlife. Garbage and food residue must be kept inside bear proof garbage cans or closed vehicles. Non-combustible refuse must be removed daily. These rules also apply to lunchtime garbage, which include fruit peelings, apple cores, nut shells, or excess food. If camping, cooking utensils must be promptly cleaned and stored after use. Exposure of any food or residues, which may attract bears, is strictly prohibited.

F. Communications: CONTRACTOR shall furnish a serviceable cellular telephone number or other appropriate contact mechanism while on-site to communicate with the COR/NPS Project Inspector and to provide for the safety of the CONTRACTOR'S employees.

G. Damages: The CONTRACTOR shall avoid impacts to all cultural resources, natural resources, and facilities including existing vegetation, structures, and artifacts within and adjacent to the work area. Any form of ground disturbance not specifically described in this scope of work or approved by the COR, such as blading, and off-road vehicle travel are prohibited. If the COR determines that the Contractor's activities have resulted in damage to Park Resources, the CONTRACTOR shall incur all expense associated with damage assessment, damage repair, and monitoring.

H. Weapons: The use of weapons by the CONTRACTOR is prohibited.

I. Cultural Resources: The archaeological resources in Whiskeytown National Recreation Area are a valuable record of human history of this area. In addition, such resources (including arrowheads, chert or obsidian chips, mortars, pestles, old homesteading, or logging equipment, old glass, etc.) are protected by federal legislation (16 U.S.C. §§470aa470mm). Removal or displacement of any cultural resource is prohibited.

- Ground disturbance is prohibited without prior written approval from the COR.

2.04 WARNING SIGNS AND BARRICADES

A. All roadways and trails shall remain open to the public unless approved in writing by the COR. Public access shall not be encumbered or any unusual traffic situations created by reason of operations under this contract without approval of the COR.

B. Work may impact public trail access within the THHD. If the CONTRACTOR determines that work will require temporary use and access restrictions to trails within the historic district, control measures may be implemented in coordination with the COR to ensure worker and public safety, the CONTRACTOR is solely responsible for providing the appropriate public access control services to complete the work.

2.05 WORK AREA:

A. CONTRACTOR shall confine the work, the storage of materials and equipment, the parking of vehicles, and all other operations in connection with this contract to the specified hours and work areas approved by the COR. The CONTRACTOR shall not permit heavy equipment or vehicles or the stock piling of heavy materials off hard surface roads without the expressed permission of the COR. The Tower House Historic District is an archeologically sensitive zone. Any travel by heavy equipment or vehicles must be on routes approved by the COR.

B. Limited activity may take place within the root protection area with the permission of the COR or Project Inspector in areas determined to be safe from excessive damage. The root protection area is defined as an area equal to a radius of 1.5 feet for each inch of diameter at breast height (DBH) (i.e.: a 10-inch DBH tree will have a root protection area equal to 15 feet from the main trunk in all directions). All damage resulting from such operations shall be repaired to its original condition or to the satisfaction of the COR at no additional cost to the Government.

C. Access is limited in the back field due to existing infrastructure and landscape features, including vegetation. The backfield includes a fenced orchard area with an 8-foot vehicle gate on the north and south sides. The Back Field is also ringed by a loop trail that leads from Willow Creek Bridge to the Tower Grave Trail to the Camden Water Ditch Trail. The Tower Grave trail may be used for limited equipment access with approval from the COR. The CONTRACOR is responsible for all trail damage and repairs. All motorized equipment shall be rubber tracked.

2.06 RESPONSIBILITY REGARDING EXISTING STRUCTURES, UTILITIES, EXISTING PLANT MATERIAL AND OTHER LANDSCAPE FEATURES:

A. The CONTRACTOR is responsible for any damages to, and for protection of existing trails, fences or historic features. Materials and methods shall conform to the current standards for the area damaged, match existing on-site materials, shall meet the approval of the NPS and the COR. All damaged areas shall be repaired without additional expense to the government.

B. The CONTRACTOR shall preserve and protect all existing vegetation such as trees, shrubs, and grass on or adjacent to the tree subject to the requirement which do not reasonably interfere with work.

C. The CONTRACTOR shall be responsible for all unauthorized cutting or damage to trees and shrubs, including damage due to careless operation of equipment and/or vehicles, or stockpiling of materials. Such damaged areas or materials shall be restored, repaired, or replaced by the CONTRACTOR, as directed by the COR, at no additional cost to the government.

D. Unauthorized cutting or damage to trees will be subject to liquidated damages utilizing recommendations provided in the *Guide for Plant Appraisal* (10th edition, Revised 2020) authored by the Council of Tree and Landscape Appraisers and the Mid-Atlantic Tree Species Rating Guide developed by the Mid-Atlantic Chapter of International Society of Arboriculture (2021).

2.07 CLEANUP AND RESTORATION:

The CONTRACTOR shall furnish all labor, materials, and equipment for daily cleanup and restoration of all disturbed areas within the work area.

2.08 ENVIRONMENTAL CONTROLS

A. The CONTRACTOR shall take all necessary measures to prevent air and water pollution by any material and/or equipment used during the project in accordance with state and federal regulations. All chain saws and other power equipment shall be refueled over a hard contained surface or on an absorbent hazardous materials pad to avoid spillage or containment thereof.

B. Equipment with hydraulic, fuel, or oil leaks shall immediately be removed from service and repaired before being returned to service. The CONTRACTOR shall contain any leaks or ruptures and clean up any environmentally hazardous spills before resuming work. Any spills shall be reported immediately to the COR.

PART 3: EXECUTION

3.01 PRUNING:

3.01.1 Scope:

1. Pruning: The work to be performed under this section shall include pruning of 14 oak trees and one Oregon Ash tree in accordance with the American National Standard for Tree Care Operations - Tree, Shrub, and Other Woody Plant Maintenance - Standard Practices, ANSI A300 (Part 1) -2023 Pruning. The focus of the pruning will be to remove dead and dying limbs and to conduct retrenchment pruning of the crown which results to a 25% reduction in the crown.

2. Deadwood Removal: The work to be performed shall include removing all dead limbs larger than two (2) inches DBH throughout the canopy to enhance tree health and reduce hazard risk. Deadwood removal will be performed under the guidance and in accordance with ANSI A300 (Part 1) standards to ensure proper wound closure and minimize decay progression.

3. Priority 1 Tree Pruning: The work performed on this tree shall include prescriptions identified under Part 3, Section 3.01.1 (1) and 3.01.1 (2) and remove limbs sufficient to reduce or eliminate the fall hazard to the Tenant House Barn.

4. Removal: Tree 15. If removal is recommended after inspection by the ISA certified arborist over other proposed actions due to overall tree health, condition, or safety concerns, then removal is authorized with written approval from the COR.

3.01.2 General Requirements:

A. On the same day a tree is pruned the CONTRACTOR shall remove all wood, debris, and chips from the site, unless other arrangements are made with the COR. Removal and disposal shall be the responsibility of the CONTRACTOR. There shall be no sale of wood on government property.

B. No more than one-fourth (1/4) of the foliage on a mature tree shall be removed

during a pruning maintenance. The CONTRACTOR shall contact the COR prior to pruning any tree specified as Maintenance Pruning if the tree pruning will reduce the surface area of the tree by more than one-fourth.

C. Proper reduction cuts must be performed to reduce the length of selected limbs by no more than 25% of their total length. These cuts shall be made back to a lateral branch that is at least one-third the diameter of the limb being pruned, as anything less than one-third will result in a heading or topping cut, which is strictly prohibited. Additionally, when removing a dead branch, the final cut shall be made just outside the collar of live tissue. If the collar has grown along the branch stub, only the dead stub should be removed, ensuring that the live collar remains intact and uninjured.

D. Branches shall be removed in such a manner to not cause damage to other parts of the tree. Where necessary, to prevent ground disturbance, tree or property damage, branches or portions of branches shall be lowered to the ground by ropes or equipment. “Precut" means that the branch shall be removed using the three-cut method to prevent splitting or tearing of the bark by first undercutting the branch before making a second cut from the top of the branch, followed by the final third cut just outside of the bark-branch collar.

E. Old injuries are to be inspected. Those not closing properly and where callus growth is not already completely established should be traced. Only damaged or loose bark should be removed, disturbing a minimal amount of live tissue.

F. Wounding paint shall not be used.

G. Climbing spurs or hooks shall not be worn.

3.01.3 Pruning Specifications:

All trees shall be pruned to maintain and/or improve health and structure and shall include each of the following pruning types:

1. Hazard Reduction: Shall consist of the removal of all visible hazards with potential for damage to property or personal injury. Removal shall include, but is not limited to dead wood, heavy or weak horizontal branches and weak crotches. Weak crotches are defined as split or rotted wood between two trunks of limbs that may break and fall during high wind.

2. 25% Retrenchment/Crown Cleaning and Reduction: Work shall consist of the removal of dead, dying, diseased, interfering, objectionable weakly attached, low vigor branches, and waterspouts on the main trunk as well as those within the leaf area two inches in diameter and greater. All dead wood greater than four feet in length shall be removed regardless of diameter. Reduction in the overall crown of each tree by 25% is the goal.

PART 4: ACCEPTANCE, MEASUREMENT AND PAYMENT

4.01 Acceptance:

1. The National Park Service reserves the right to conduct any testing or inspection it requires prior to payment in order to assure that all work conforms to the work requirement.

2. The CONTRACTOR shall include with all invoices for payment an Acceptance Report signed by the Contractor's Certified Arborist and the COR or NPS Inspector that all work partially or completely performed conforms to contract requirements. If the COR or NPS Inspector and the CONTRACTOR disagree on work completed and accepted, his or her comments shall be noted thereon or attached thereto. The Acceptance Report will serve to document in writing completed work and/or deficiencies and to determine whether the provisions for the deduction clause applies.

3. Failure of the CONTRACTOR to obtain signed inspection and acceptance reports will release the Government from any obligation to pay for services claimed but not documented by a signed inspection and acceptance report.

4.02 Payment:

Pursuant to FAR requirements, the NPS will make payments within 14 days of final approval of the submitted invoice.

Appended: Tree Prescription Table, Photos, and Area Map subject to requirement.

Table 1. Tower House Historic District Tree Pruning Prescription.

Priority Order	Species/Comments	UTMs	DBH (inches)	Height (feet)
1	Valley Oak (Behind Barn) Reduce hazard to barn. Reduce tip weight, crown reduction. Note large cavity in canopy, rot in root zone and lean/unbalanced.	N 4501309 E 530715	40”	70+
2	Valley Oak	N 4501647 E 530590	30”	65+
3	Oregon Ash Remove/select epicormic shoots.	N 4501686 E 530530	21”	58+
4	Valley Oak Reduce tip weight to balance canopy.	N 4501686 E 530530	24”	80+
5	Valley Oak Reduce strike zone of grave site.	N 4501701 E 530509	46	100+
6	Black Oak Reduce hazard to grave/trail. Remove codominant leader.	N 4501674 E 530496	38”	65+
7	Valley Oak Reduce tip weight on included bark.	N 4501682 E 530517	20”	85+
8	Valley Oak	N 4501679 E 530524	19”	85+
9	Valley Oak	N 4501693 E 530531	23”	100+
10	Valley Oak Reduce tip weight on included bark codominant leader.	N 4501575 E 530590	46”	90+
11	Valley Oak	N 4501622 E 530633	27”	85+
12	Valley Oak	N 4501513 E 530697	20”	67+
13	Valley Oak	N 4501505 E 530608	26”	70+
14	Valley Oak	N 4501541 E 530594	20”	45+
15	Valley Oak Reduce risk at included bark. Possible removal.	N 4501586 E 530583	15”	60+
16	Valley Oak	N 4501513 E 530606	23	75+

Work Areas and Access

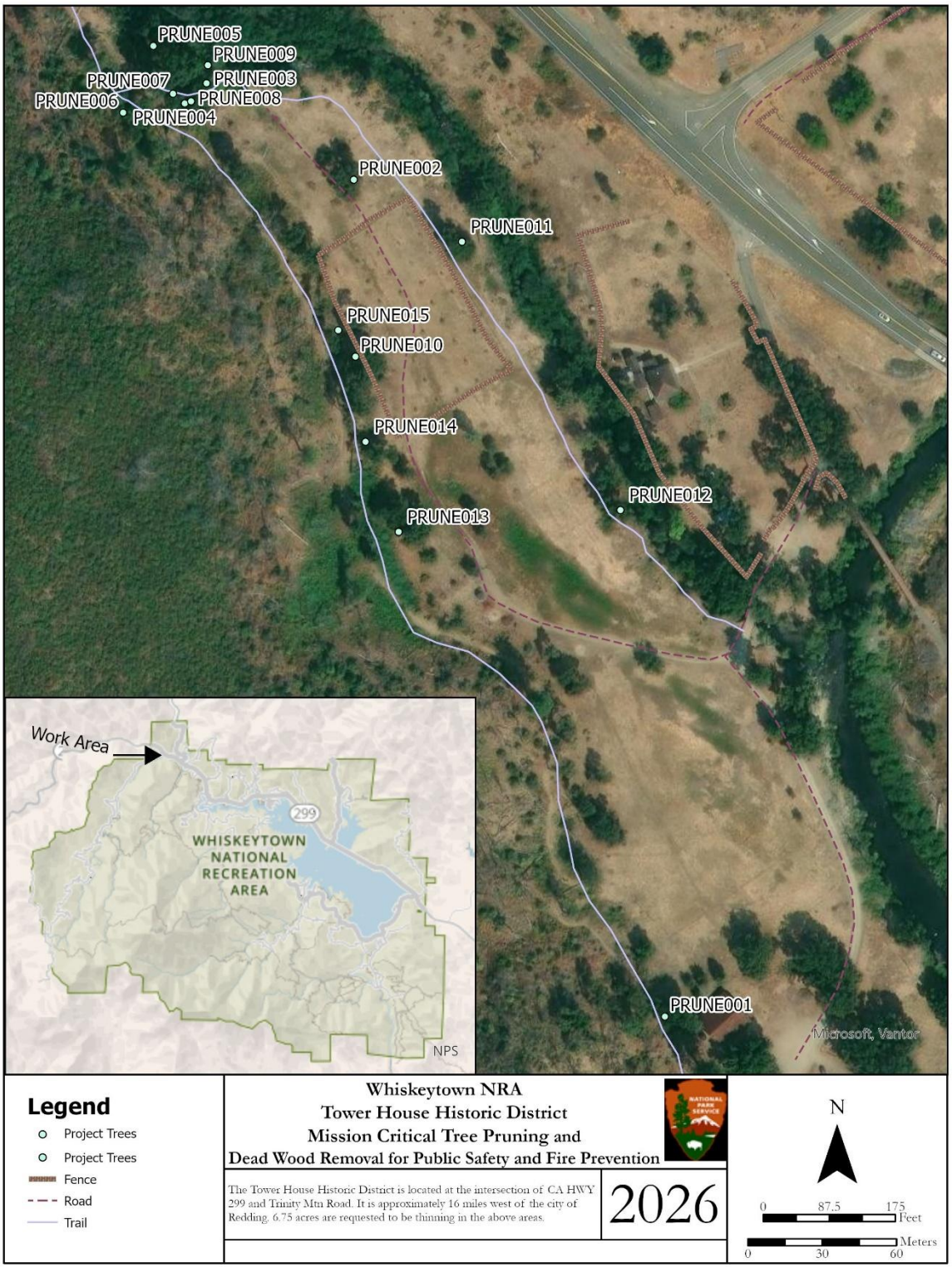

Figure 1. Work Area Map

Figure 2. View of Backfield Orchard 8-Foot Gate, south entrance.

Figures 3 & 4. Tree 1, located behind the barn.

Figures 5 & 6. Tree 1, located behind the barn.

Figure 7. Tree 1, located behind the barn.

Figures 8 & 9. Tree 2.

Figure 10. Tree 2.

Figure 12. Tower Grave Grove, Trees 3-9.

Figure 13. Tower Grave Grove, Tree 6.

Figures 14 & 15. Tree 10, located on the west side of the fenced orchard.

Figures 16 & 17. Tree 11, located along the Tower Grave Trail.

Figures 18& 19. Tree 12, located along the Tower Grave Trail.

Figure 20. Tree 13.

Figures 21. Tree 14.

Figure 22. Tree 15. Reduce risk at included bark. Possible removal.