ATTACHMENT # 1 '

'

STATEMENT OF WORK '

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SPECIFICATIONS APPLICABLE TO RED TREE VOLE SURVEYS

1.0 GENERAL

1.1 Description of Work

1.1.1 The Bureau of Land Management (BLM) and Forest Service (FS) are acquiring red tree vole surveys on selected sites on the BLM Medford District and FS Rogue River – Siskiyou National Forest lands. The work consists of collecting field data on red tree voles on sites primarily located in southwestern Oregon.

1.1.2 This is an Indefinite Delivery/Indefinite Quantities (ID/IQ) contract. The amount of acres to be surveyed will vary year to year depending on need and annual funding. The indefinite quantities feature of this contract provides the ability to order additional acres of surveys or trees to be climbed up to the maximum specified dollar amount of the contract through the issuance of task orders.

1.1.3 All work shall be done as directed in the latest version of the current survey protocol Survey Protocol for the Red Tree Vole *Arborimus longicaudus (= Phenacomys longicaudus)* Version 2.1 in the Record of Decision of the Northwest Forest Plan, Version 2.1 Revision, October 2002 (BLM Instruction Memorandum No OR-2003-003 and attachment) which incorporates Version 2.0 (dated February 18, 2000) by reference. Version 2.0 of the Protocol is available on the internet at http://www1.or.blm.gov/surveyandmanage/SP/RedTreeVole/rtv2.pdf. Guidance for use of Version 2.1 can be found at http://www.blm.gov/or/plans/surveyandmanage/SP/RedTreeVole/200210/IM_OR_2003_003.htm. Version 2.1 of the Protocol can be viewed at http://www.blm.gov/or/plans/surveyandmanage/SP/RedTreeVole/200210/RTV%20protocol%20revision-V.2.1-final.pdf.

1.1.4 Field forms shall be completed by the Contractor using the Field Guide to the Forested Plant Associations of Southwestern Oregon. It is available on the internet at http://www.fs.fed.us/r6/rogue-siskiyou/publications/plant-associations.shtml

1.2 Location of Work - Field surveys shall be performed primarily in southwestern Oregon, within 100 miles of the Medford District office. Survey area boundaries are not physically marked. Maps and aerial photos of survey areas will be provided.

1.3 Access

1.3.1 Some areas do not have direct road access and walk-ins shall be required. A four-wheel-drive vehicle may be needed to gain access to some of the survey areas. Much

of the terrain is steep, has dense brush, and can be very difficult to walk through. Some units will require walking in more than ¼ mile, and some projects may be in roadless areas.

1.3.2 Contractors accessing project areas via private land shall obtain permission from the landowner to travel over private lands before proceeding to start work on any project unit accessed through private land. The Contractor shall provide the Government a written statement or written documentation of verbal approval given by a named person on a stated date and time, from whom the Contractor has been granted legal permission to travel over private lands.

1.3.3 Locked gates restricting access are noted on the project maps. Keys to locked BLM and FS gates restricting access will be issued to the Contractor. All gate keys for each task order shall be returned before the final payment for that task order is made. The Contractor shall be responsible for the cost of replacement gate keys and locks if keys are not returned.

1.4 Prework Conference - The Contracting Officer's Representative (COR) will arrange a prework conference after the contract is awarded to ensure a clear understanding of the scope of the contract, documentation requirements, and inspection and payment schedules.

2.0 DEFINITIONS

Base (reference, control) Station: A GPS receiver set up at a known location; that is, a point whose Universe Transverse Mercator (UTM) coordinates and elevation is known.

CEP (circular error probable, two-dimensional): Statistical measure of accuracy. It implies the probability that 50% of the positions obtained will fall within a circle of the specified radius.

Data Dictionary: An attribute table of information associated with the GPS coordinate.

GPS: Global Positioning System

PDOP (Position Dilution of Precision): PDOP is an indicator of the satellite's geometry in relation to the user's GPS receiver location. The smaller the number, the better the geometry and therefore, the more accurate the position.

Survey Protocol: Specific instructions explaining how to perform standardized species field searches and data collection.

3.0 CONTRACTOR-FURNISHED PROPERTY AND SERVICES

3.1 The Contractor shall furnish all labor, equipment, crew supervision, transportation, supplies (except those designated as Government-furnished) and incidentals, and perform all work necessary to conduct red tree vole surveys and climb Government-designated trees, in compliance with the terms, specifications, conditions, and provisions of this contract.

3.2 Specifically, but not necessarily all inclusive, furnish:

a. Protective covering for aerial photos (large heavy gauge "zip loc" freezer bags).
b. Wide-tip permanent marking pens for marking flagging and baggies.
c. Hand lens (minimum magnification 10 X).
d. Plastic zip-lock baggies for the collection of resin ducts.
e. GPS capable of sub 30-meter CEP.
f. Flagging for transects (white with red polka dot flagging) and marking nest trees ("green glo", fluorescent yellowish-green flagging for nests of unknown species, and pink and black diagonal striped flagging for red tree vole nest trees).
g. Hammer and three-inch aluminum nails
h. Aluminum tree tags, at least four by four inches.
i. Compasses.
j. Clinometers.
k. Binoculars.
l. Red Tree Vole survey training (Contractor shall provide this training).
m. Climbing gear (for climbing trees).
n. Diameter at Breast Height (DBH) tape.
o. PC capable of using MS Word, Microsoft Access or Excel. Note: Software compatible with the programs listed may be substituted.

4.0 GOVERNMENT-FURNISHED PROPERTY AND SERVICES

4.1 For each task order, the Government will furnish to the Contractor the following materials, supplies, property or services:

a. Transportation maps of Medford BLM Resource Areas and "Fireman's maps" of FS Ranger Districts showing roads and boundaries (two copies).
b. Copies of aerial photos showing project areas needing surveys.
c. Vicinity maps (1:12,000 scale) showing project areas and topographic maps (approximately 1:3,000) of each unit showing survey area (one copy each).
d. Keys for government gates.
e. RTV Tree tags (Tyvek)

4.2 The Contractor shall be liable for all loss or damage of such Government-furnished property until completion and final acceptance of work. Unless otherwise specified, all items will be available during normal working hours 8 am - 4:30 pm, Monday through Thursday, from the COR at the Grants Pass Interagency Office, 2164 NE Spalding, Grants Pass, OR 97526.

5.0 SPECIFIC TASKS

5.1 Subitem A - Red Tree Vole Ground Surveys

5.1.1 Field Work

a. Project areas shall be surveyed for red tree voles using the "Line Transect Survey Method" as described in the latest version of the Protocol. One complete protocol visit is required to each survey area identified in maps provided in each task order. All field work shall be completed by September 30, 2015.

b. Project boundaries will not be physically identified on the ground. Areas to be surveyed without on-ground identification shall be surveyed by approximating the boundary location from Government-provided maps and photos.

c. All survey area entry points and routes shall be flagged. Flagging shall be hung inter-visibly. Each flag shall be at least two feet in length and must be easily visible from the previous and following flags, along the survey transect lines with a maximum distance of 40 feet between flags. Routes shall be marked with white with red-polka dot flagging. Start and end transect points shall be double flagged, and all road crossings flagged. Flagging identifying take-off points, start and end of transects, shall be clearly marked with a permanent marker, the type of survey ("RTV survey"), date, and surveyor initials. Record compass bearings on start of transect flags.

d. Trees with nests of unidentified species will be hung with "green glo" (fluorescent yellowish green) flagging and tagged with a four-inch aluminum tag, labeled as an unknown nest, numbered, and mapped. Trees previously marked with "green glo" flagging that are later confirmed to be red tree vole nest trees will have the "green glo" flagging replaced by the pink and black diagonal striped flagging.

e. When evidence of a red tree vole nest is found, the nest tree or nearest presumed nest tree shall be tagged with an aluminum tag approximately five feet above ground. The tags shall have "RTV", the survey date, surveyor initials, the tree identification number clearly inscribed on it; and be nailed to the tree with three-inch aluminum nails. The tree will also be marked approximately 5 feet above ground with two orange Tyvek "RTV" labels, one on the uphill and one on the downhill side of the tree, and with pink and black diagonal striped flagging. Provide GPS locations collected with a GPS unit capable of 30 meter CEP for all red tree vole nests.

f. When evidence of a red tree vole nest is found, collect and submit a sample of the resin ducts. Resin ducts shall be collected in a plastic zip-lock baggie. The baggie shall be clearly labeled with date, location (tree ID#), and surveyor initials. These samples of resin ducts shall be submitted to the COR with completed survey forms and maps. See 5.1.2.e.

g. When fresh resin ducts associated with an active red tree vole nest or other evidence indicating that a nest is currently active are observed, the word "Active" will be written in wide-tip permanent marker on the orange Tyvek RTV labels on that tree. If after climbing the tree, the climber concludes the nest is inactive, the word "Inactive" will be written on the tree labels.

h. Along transects, distance and bearing to red tree vole nest trees and located unknown nest trees, shall be written on "green glo" (fluorescent yellowish green) flagging, and double-tied with the white with red polka dot transect flagging. The information for the nest tree will be written with permanent, wide-tip marker on the flagging.

i. Surveys shall not be conducted under inclement weather conditions such as precipitation, fog, and snow which would reduce the visibility of nests or resin ducts. Surveys shall not be done at times of day when low light conditions reduce visibility into and through the tree canopy.

5.1.2 Documentation

a. All red tree vole surveys shall be recorded on protocol survey forms. See sample protocol forms in the Protocol. Survey data shall be recorded for every survey area, and survey forms completed even if evidence of red tree voles is not found.

b. Locations of red tree vole nests or resin ducts, and unknown nests, corresponding tree number, and survey routes shall be accurately mapped on 20-foot contour maps with sufficient detail to allow BLM to locate the sites. If the Project Inspector (PI) finds that the red tree vole nest location was not accurately mapped or GPSed, the Contractor shall return to the site and correct the error.

c. Accuracy of GPS locations shall be sub 30 meter CEP. Submitted data shall be in an electronic format (ESRI shapefiles) and be collected as follows:

Coordinates -	UTM
Datum -	NAD83
Units -	Meters
Set Log DOP -	Yes
Coordinate System -	UTM Zone-10 Datum-NAD83 Coordinate Units - meters Altitude Units - meters

d. A minimum 20-minute attempt shall be made to try to achieve sub 30 meter accuracy. If after 20 minutes, an accurate GPS point at plot center cannot be achieved, attempt an offset reading with distance and compass bearing. Offsets

will be discussed at the prework conference. Coordinates shall be generated from the offset, and included in the GPS data.

e. At two-week intervals for the duration of the task order, provide the COR with a progress report that contains 1) what units have been ground surveyed and completed, 2) shapefiles containing the location of any nests confirmed as RTV from ground surveys and 3) resin duct samples collected during ground surveys. All data entries recording the presence of resin ducts shall have a corresponding sample. A designated time and location for submissions will be established during the prework conference.

f. Bi-weekly progress reports are not required during periods of time when no activity is occurring under a given task order. Provide a proposed schedule of work to the COR at least one week prior to re-commencing activities under the task order.

g. Upon completion of the task order, the contractor shall provide a final survey package within 1 week after the last work day of the task order to the COR. The final package shall include:
1) Completed data forms (form 1 and form 2 see 5.2.2.a) for all units surveyed,
2) A summary sheet that depicts the accomplishments of the task order, including the units surveyed the total number of unidentified and RTV nests (including status) located in each unit during ground surveys,
3) Maps of each unit depicting survey transect locations and tree locations,
4) A final shapefile that contains all tree locations collected during surveys and the nest status of these trees.

h. For information recorded on survey forms or submitted in summary documents, a consistent format shall be used to represent legal location information and unit numbers. The precise format will be will be established during the prework conference.

i. All reports and maps shall be clear and reproducible on a black-and-white copy machine. All submittals shall be reviewed by the Contractor to ensure completeness, legibility and consistency in style before submitting to the COR.

j. Document State or Federally listed, sensitive, assessment or protected wildlife, or any other survey and manage species on wildlife observation forms or archaeological sites, as encountered with locations shown on an attached survey map.

5.2 Subitem B – Tree Climbing - Individual Nest Inspection

5.2.1 <u>Field Work</u>

a. Climbing shall be performed after project area(s) surveys have been completed and accepted under Subitem A, or as a separate, stand-alone project for areas previously surveyed by Government survey crews. All tree climbing shall be completed by September 30, 2015.

b. The COR will select which "unknown nests" shall be climbed. This could be any arrangement of nests, from all to none of those identified during ground surveys.

c. The Contractor shall climb the designated tree and locate the nest identified from ground surveys. If the nest exhibits evidence of a red tree vole, collect a sample of the resin ducts in a plastic zip-lock baggie. The baggie shall be clearly labeled with date, location (tree identification number), nest tree activity status and surveyor initials. Samples of any other nest material that may define species occupation shall be collected in a labeled zip-lock baggie. These samples of resin ducts and nest material shall be submitted to the COR with a completed Form No. 3 (see 5.2.2.a). The tree shall be marked as "RTV" using the orange Tyvek labels or "CAOS" (confirmed as other species) may be written on the tree's aluminum tag and GPS location taken as described in 5.1.1.d. If a GPS location is unable to be collected, an accurate location shall be generated in an Arcmap shapefile by offsetting from reliable field locations.

d. Care shall be taken to minimize disturbance of all nests found, whether they are mammals or birds.

e. Hang a white with red polka dot flag that is easily visible from the ground, near the inspected nest, or on the lower branches of the tree if no nest is observed to document climbed trees and inspected nests.

f. If a climber finds a designated tree unsafe to climb, the appropriate alternative action is to document in detail in the comments section of that tree's form 3, the reason it is unsafe; and to climb a nearby tree such that the climber may make his/her best judgment of the status of the designated nest.

5.2.2 Documentation

a. The latest version of "Red Tree Vole Nest Tree and Nest Data Protocol Form" (See Protocol Form #3 in the Protocol) shall be completed for each tree climbed, to include observation notes, even if evidence of red tree voles is not found. Observation notes may include nest structures observed in other surrounding trees and nest status determinations made by the observer. See Protocol Form No. 2 in the Protocol.

b. At two-week intervals for the duration of the task order, provide the COR with a progress report that contains:

1) The total number of trees that have been climbed within each unit,

2) Shapefiles containing the location of any nests confirmed as RTV during climbing, and
3) Resin duct samples collected during ground surveys.

All data entries recording the presence of resin ducts shall have a corresponding sample. A designated time and location for submissions will be established during the prework conference.

c. Bi-weekly progress reports are not required during periods of time when no activity is occurring under a given task order. Provide a proposed schedule of work to the COR at least one week prior to re-commencing activities under the task order.

d. Upon completion of the task order, the contractor shall provide a final survey package within 1 week after the last work day of the task order to the COR. The final package will include:
1) Completed data forms for all units surveyed and all trees climbed (revised form 1 and 2 for each unit and one form 3 for each tree see 5.2.2.a),
2) A summary sheet that depicts the accomplishments of the task order, including the units surveyed, the total number of nests determined to be CTOS, inactive RTV nests and active RTV nests from tree climbing,
3) Maps of each unit depicting the location of all active and inactive RTVnest tree locations,
4) A final shapefile that contains all tree locations collected during surveys and the nest status of these trees.

e. For information recorded on survey forms or submitted in summary documents, a consistent format shall be used to represent legal location information and unit numbers. The precise format will be will be established during the prework conference.

f. All reports and maps shall be clear and reproducible on a black-and-white copy machine. All submittals shall be reviewed by the Contractor to ensure completeness, legibility and consistency in style before submitting to the COR.

g. Document State or Federally listed, sensitive, assessment or protected wildlife, or any other survey and manage species on wildlife observation forms or archaeological sites, as encountered with locations shown on an attached survey map.

5.3 Subitem C – Tree Climbing - Complete Tree Search

5.3.1 Field Work

a. A complete tree search is defined as any tree without a nest visible from the ground, at least 100’ in height, and at least 30” DBH or greater, for which resin