# Appendix B

# Natural Area Vegetation Management Description of Work

## Section 1. GENERAL

The following appendix is a description of all possible areas of work. Estuary Partnership shall contact Contractor when Contractor has been selected for work. Contractor shall not proceed with any work until a contract governing the parties' relationship is fully executed. Contractor shall complete the Work detailed in either the scope of work or work order, whichever is applicable, under a fully executed contract.

Estuary Partnership reserves the right to award project work to other contractors that may or may not have executed a contract with Estuary Partnership under this solicitation.

## Section 2. SUBJECT MATTER OF WORK

Work shall include tasks described in detail in Section 6 below. Tasks are organized into the following categories:

- Category 1: Manual Site Preparation and Maintenance
- Category 2: Planting
- Category 3: Mechanical Site Preparation, Seeding, and Maintenance
- Category 4: Forest Stand Management
- Category 5: Plant Materials Purchase
- Category 6: Project Management

Herbicide application work requires Contractor to provide proof of compliance with all applicable Oregon and/or Washington license requirements. For work in categories 1, 2, 3 and 4 listed above, unless specifically exempted under applicable State law, Contractor is required to have a Farm and Forest Labor Contractor License (F/FLC License) from the State of Oregon and/or Washington prior to signing the Contract. For work in Category 4 listed above, Contractor is also required to have a Construction Contractor License for Oregon and/or Washington. Contractor shall provide copy of its licenses to Estuary Partnership upon execution of the Contract. Most project sites are accessible by all-weather roads; however, Contractor may need to drive, walk, or boat equipment and materials into project sites. Contractor is responsible for all labor, materials, tools equipment, transportation, and other items necessary to supply Estuary Partnership with the specified vegetation management services.

## Section 3. SCOPE OF WORK

A. Scopes of Work and/or Work Orders shall include detailed work instructions. Instructions shall include at a minimum: the work site location, a description of the tasks, an estimated project cost, any special instructions and

work completion deadlines. Estuary Partnership may require Contractor to attend a pre-work meeting at the project site to determine the prescription and anticipated cost.

B. Project-specific contractor selection shall promote efficient use of resources. Estuary Partnership may consider factors that include but are not limited to Contractor's unique skills, experience or equipment, familiarity with a site, capacity compared to the size or complexity of a project, amount of work and past performance on Estuary Partnership projects, unit rate costs and availability when making its selection. Estuary Partnership may also consider Contractor's ranking in the initial selection process.

## Section 4. UNIT PRICES, HOURLY RATES AND COST PLUS PURCHASES

- A. Contractor shall complete work at the unit prices or hourly rates contained in the Contractor's response to this RFQ, unless amended in contract. For projects that rely on unit prices, estimated quantities shall be multiplied by the unit prices, resulting in a total estimated price for each line item. The total unit prices shall then be added together, resulting in a total project cost estimate. Hourly rates are included for certain activities. Under any project specific instructions, Estuary Partnership may elect to pay Contractor for work on an hourly basis. Contractor shall be reimbursed for herbicide and surfactants at cost plus 10% and reimbursed for plant materials purchased on behalf of the Estuary Partnership, plus an additional agreed upon cost-plus percentage. Contractor shall not be entitled to reimbursement for other expenses incurred in providing the services unless specified in a written Contract with Scope of Work.
- B. Estuary Partnership shall calculate project acreage to the closest tenth of an acre using a horizontal plane and without regard to slope. The minimum project size for unit pricing payment purposes shall be one acre.
- C. Contractor's unit prices and hourly rates shall remain fixed for the first year of the Contract. At the beginning of subsequent calendar year, Contractor may increase prices by a rate not to exceed the average change in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for All Items in the West. Revised pricing will not be effective until the parties enter into an Amendment to the Contract.

## Section 5. ITEMS APPROVED BY ESTUARY PARTNERSHIP

Prior to implementation, Estuary Partnership shall approve the source of all plants and use of plant protection materials, mulch, seed, straw, and other project materials. Additional specific requirements applicable to Contractor's work are set forth in Description of Work – Section 6 Work Task Descriptions below.

## Section 6. WORK TASK DESCRIPTIONS

# **CATEGORY 1: MANUAL SITE PREPARATION AND MAINTENANCE**

## Site Prep - Backpack Spot or Area Spray (acre)

Contractor shall apply an Estuary Partnership approved herbicide in a volume sufficient to adequately cover all target vegetation at the site and in conformance with all applicable pesticide label requirements. Estuary Partnership must approve the chemical concentration and surfactant to be used; Contractor shall use sufficient dye in the tank mix such that sprayed areas are easily visible to the Estuary Partnership. Target vegetation shall be determined by Estuary Partnership on a site by site basis. Contractor is responsible for recognizing and preventing damage to existing native or non-target vegetation.

## Site Prep - Hack and Squirt (hourly)

Contractor shall treat target woody plants by making cuts totaling not less than sixty (60) percent of the plant's circumference through the bark and cambium layers and injecting or spraying (at low pressure) an Estuary Partnership approved herbicide and concentration into cuts.

## Site Prep – Cut Stump (hourly)

Contractor shall treat target woody plants by cutting the plant to the ground and immediately applying an Estuary Partnership-approved herbicide and concentration to the entire cut portion of the stump. Brush generated by felling the woody plant shall be cut down to a maximum height of one foot above grade.

## Site Prep - Hand Mow/Cut (for work assignment >3 acres) (acre)

Contractor shall cut target vegetation using hand held sawing, shearing, weed whipping or other cutting equipment to the specified height. Target vegetation shall be determined by Estuary Partnership on a site by site basis. Contractor is responsible for recognizing and preventing damage to existing native or non-target vegetation. This Task refers to site preparation mowing or cutting where the total acreage assigned for the distinct work activity or work order at a project site is greater than 3 acres in size.

## Site Prep - Hand Mow/Cut (for work assignment of 3 acres or less) (acre)

Contractor shall cut target vegetation using hand held sawing, shearing, weed whipping or other cutting equipment to the specified height. Target vegetation shall be determined by Estuary Partnership on a site by site basis. Contractor is responsible for recognizing and preventing damage to existing native or non-target vegetation. This Task refers to site preparation mowing or cutting where the total acreage assigned for the distinct work activity or work order task at a project site is 3 acres or less in size (with a minimum charge of 1 acre at the unit pricing rate).

## Site Prep - Push Mow (acre)

Contractor shall cut target vegetation using manually-powered pedestrian equipment (DR, Billy-goat or similar equipment) to the specified height. Target vegetation shall be determined by Estuary Partnership on a site by site basis. Contractor is responsible for recognizing and preventing damage to existing native or non-target vegetation.

## Site Prep - Cut Blackberry/Brush (acre)

Contractor shall cut Himalayan blackberry (*Rubus armeniacus*), evergreen blackberry (*R. laciniatus*) and other target brush to the ground and shall cut stems to less than 24 inches in length aboveground level using manual or mechanical means. This category of work shall be used when blackberry comprises >50% of the vegetation community. Contractor is responsible for recognizing and preventing damage to existing native or non-target vegetation.

## Maintenance - Hand Mow/Cut (acre) (for work assignment >3 acres) (acre)

Contractor shall cut target vegetation in planted project sites using handheld equipment (e.g., saws, shears, trimmers, etc.). Target vegetation shall be determined by Estuary Partnership on a site by site basis and could include cutting around plantings. Contractor is responsible for recognizing and preventing damage to previously planted material and existing native non-target vegetation. This Task refers to maintenance mowing or cutting where the total acreage assigned for the distinct work activity or work order at a project site is greater than 3 acres in size.

## Maintenance - Hand Mow/Cut (for work assignment of 3 acres or less) (acre)

Contractor shall cut target vegetation using hand held sawing, shearing, weed whipping or other cutting equipment to the specified height. Target vegetation shall be determined by Estuary Partnership on a site by site basis. Contractor is responsible for recognizing and preventing damage to existing native or non-target vegetation. This Task refers to maintenance mowing or cutting where the total acreage assigned for the distinct work activity or work order task at a project site is 3 acres or less in size (with a minimum charge of 1 acre at the unit pricing rate).

#### Maintenance - Backpack Spot or Area Spray (acre)

Contractor shall apply an Estuary Partnership approved herbicide in a volume sufficient to adequately cover all target vegetation at the site so that it is wet but not dripping. Estuary Partnership must approve the chemical concentration and surfactant to be used; Contractor shall use sufficient dye in the tank mix such that sprayed areas are easily visible to the Estuary Partnership. Target vegetation shall be determined on a site by site basis by Estuary Partnership. Contractor is responsible for recognizing and preventing damage to previously planted material and existing native non-target vegetation.

## Maintenance - Backpack Ring or Row Spray (acre)

Contractor shall apply an Estuary Partnership approved herbicide in a volume sufficient to adequately cover all target vegetation within a circle of planted and naturally recruited native vegetation so that it is wet but not dripping. Estuary Partnership must approve the chemical concentration and surfactant to be used; Contractor shall use sufficient dye in the tank mix such that sprayed areas are easily visible to the Estuary Partnership. Estuary Partnership shall specify whether the work is a circle or line spray and shall specify circle size (if applicable) prior to work start. Contractor is responsible for recognizing and preventing damage to previously planted material and existing native non-target vegetation.

## **Hourly Spray**

Estuary Partnership may elect to pay hourly for combinations of Backpack Spot, Area, Ring or Row Spray work tasks or hire hourly work on projects where measurements of acreage are impractical or impossible, or the vegetation at the site requires herbicide spray techniques that are not consistent with typical per acre work.

## **Hourly Cut**

Estuary Partnership may elect to pay hourly for combinations of Mow/Cut, Cut Stump, and Push Mow work tasks or hire hourly work on projects where measurements of acreage are impractical or impossible, or the vegetation at the site requires cutting techniques that are not consistent with typical per acre work.

## **Hourly Labor**

Estuary Partnership may elect to pay hourly labor for activities not specifically described in this Description of Work. Activities may include but shall not be limited to carrying materials, piling debris, fire watchman, watering plants, constructing and/or installing wire plant cages and pulling fence posts.

## **Apprentice Labor – Hourly labor**

Estuary Partnership may elect a laborer apprentice to work on a variety of tasks at a reduced hourly rate. A laborer apprentice is an entry-level worker who is learning the necessary skills of a revegetation contractor crew member. All apprentices shall be directly supervised by a Contractor crew leader.

# **CATEGORY 2: PLANTING**

## **Planting - Scalp**

Contractor shall prepare individual planting spots by scraping away all live and dead vegetation, roots and rhizomes from a 16-inch diameter circle, and to a depth of approximately 2 inches, unless otherwise specified. Where the slope of the ground is greater than 20 percent, Contractor shall also construct a flat planting area.

## **Planting - Hand or Crank Broadcast Seed**

Contractor shall apply native seed mixed with or without cracked corn or other spreader to project sites by hand or using hand crank spreaders at a rate specified by Estuary Partnership (typically between five (5) and twenty-five (25) pounds per acre).

## **Planting - Harvest Seed**

Contractor shall harvest native seed from sites indicated by Estuary Partnership. Upon harvest, Contractor shall place seed in Estuary Partnership approved bags or buckets. Seed shall be kept covered with light colored tarps and in a cool dry place until the Contractor delivers the plant materials to the Estuary Partnership or an Estuary Partnership approved location.

## Planting – Install Small Bare Root Plants

Contractor shall plant one-year old and two-year old bare root plants (Typically ranging from twelve (12) inches to twenty-four (24) inches height above the root crown) in row or random arrangements or as directed by Estuary Partnership. Contractor shall be responsible for transporting plant material from approved source to the project site.

## Planting – Install Large Bare Root Plants

Contractor shall plant three-year old and older bare root plants (typically greater than twenty-four (24) inches tall above the root crown) in row or random arrangements or as directed by Estuary Partnership. Contractor shall be responsible for transporting plant material from approved source to the project site.

Contractor shall transport, protect, handle and install small and large bare root plants as follows:

• Protection of Plant Materials during Transport. Contractor shall be responsible for transporting plant material from approved plant source locations to the project site either in fully-enclosed trailers or trucks with canopies. Open-bed trucks may be used only if Contractor covers plant materials with insulating blankets or tarps to protect plant materials from wind damage and freezing. Plant material shall not be transported in heated crew vehicles.

- Protection of Plant Materials on Project Site. Contractor shall keep plants covered at all times using either light colored or white tarps or insulating blankets and shall protect all plant material from loss, destruction or damage of any kind, including physical injury, freezing, heating or drying. Contractor shall be responsible for all loss, destruction or damage to plant material that occurs from the time Contractor takes possession of the plant material until the plant material is planted. Contractor is responsible for inspecting plants/bags upon pickup to verify plants are in good health.
- Handling of Plant Materials during Planting. Contractor shall ensure that plant root systems are in a dripping wet state prior to installation. If necessary, Contractor shall dip the entire root system of all plants in water upon removing the plants from the nursery bag, and shall then place plants directly into a planting bag. Plant material shall be carried into planting areas only in Estuary Partnership approved planting bags. The quantity of seedlings placed in a planting bag shall be limited to that which allows the removal of individual seedlings without damage to tops or roots. Contractor shall remove only one seedling at a time from a planting bag only after the planting hole has been prepared. Contractor shall not cull plant material or prune roots or stems unless directed by Estuary Partnership.
- Plant Placement. Contractor shall plant bare root plant material at various planting densities as directed by Estuary Partnership or as indicated in any Scope of Work that addresses the project. Estuary Partnership may also specify where certain plant species or associations of plant species are to be planted within each project area. Plant material planted in inappropriate places shall be subject to rejection by Estuary Partnership during inspections. Inappropriate planting locations are places where there is insufficient soil to provide a proper planting hole, including buried logs, woodchips, slash greater than 18 inches in depth, rock outcrops, cobble, gravel, standing water or other media prevent planting tools from making an acceptable planting hole. When an inappropriate place is encountered, Contractor shall plant the plant material in the nearest appropriate location.
- *Planting Technique.* Contractor shall prepare a planting hole that is wide and deep enough to fully suspend the roots of the plant material. Contractor shall suspend the root system near the center of the planting hole, with roots in a near-natural arrangement, at a depth at which the root collar is exposed and the entire root system is covered by soil after filling, packing and leveling. A "near-natural arrangement" means that roots approximate the position they would have when growing in nature, and are not twisted, tangled, compacted, curled, or bent within the planting hole. Each plant shall be set firmly in the ground, with moist soil filled in and placed firmly around the roots.
- There shall be no air pockets adjacent to or near the roots. Contractor shall level the soil near the plant after planting and gently firming so that there are no depressions or mounds near the stem.
- Estuary Partnership's Right to Suspend Planting. Estuary Partnership may suspend planting work if Estuary Partnership determines that weather conditions could damage plant material even if the material is handled in accordance with this Contract. Estuary Partnership may also suspend planting work at any time if Estuary Partnership determines that Contractor is not handling plants or planting in accordance with this Contract.

## **Planting - Install Container Plants**

Contractor shall plant either one gallon or similarly sized container plants from a source approved by Estuary Partnership in row or other arrangement as directed. Contractor shall be responsible for transporting plant material from approved source location, referenced in Description of Work – Section 5 Items Approved by Estuary Partnership, to the project site.

Contractor shall transport, protect, handle and install plants as follows:

- *Protection of Plant Materials.* Contractor shall protect all plant material from loss, destruction or damage of any kind, including physical injury, freezing, heating or drying. Plant materials shall not be transported in heated crew vehicles. Contractor shall be responsible for all loss, destruction or damage to plant material that occurs from the time Contractor takes possession of the plant material until the plant material is planted.
- *Handling of Plant Materials during Planting.* Contractor shall carry plants by their containers to project site without damaging stems or leaves. Contractor shall not prune roots (except circling roots) or stems.
- Plant Placement. Contractor shall plant container plants at various planting densities as directed by
  Estuary Partnership or as indicated in any Scope of Work that addresses the project. Estuary Partnership
  may also specify where certain plant species or associations of plant species are to be planted within each
  project area. Plant material planted in inappropriate places shall be subject to rejection by Estuary
  Partnership during inspections. Inappropriate planting locations are places where there is insufficient soil
  to provide a proper planting hole, including buried logs, woodchips, slash greater than 18 inches in depth,
  rock outcrops, cobble, gravel, standing water or other media prevent planting tools from making an
  acceptable planting hole. When an inappropriate place is encountered, Contractor shall plant the plant
  material in the nearest appropriate location.
- *Planting Technique*. Contractor shall prepare a planting hole that is twice as wide and the same depth as the plant root ball. If root system is bound, Contractor shall break up and loosen root system also eliminating any circling roots prior to planting. Circling roots shall be cleanly cut with pruning shears. Each plant shall be set firmly in the ground, with moist soil filled in and placed firmly around the roots. There shall be no air pockets adjacent to or near the roots. Contractor shall level the soil near the plant after planting and firming so that there are no depressions or mounds near the stem.
- *Estuary Partnership's Right to Suspend Planting.* Estuary Partnership may suspend planting work if Estuary Partnership determines that weather conditions could damage plant material even if the material is handled in accordance with this Contract. Estuary Partnership may also suspend planting work at any time if Estuary Partnership determines that Contractor is not handling plants or planting in accordance with this Contract.

## Planting – Install Plugs

Contractor shall plant herbaceous plugs using picks, dibble bars, or bare-root planting shovels. Estuary Partnership shall specify the planting density at the time of the planting. Contractor shall be responsible for transporting plant

material from the Estuary Partnership approved source pick up locations, referenced in section 5 of this document, to the project site.

## **Planting - Harvest Small Willow Cuttings**

Contractor shall harvest 18 to 24-inch-long willow cuttings with a minimum diameter of 0.5 inches at the small end, from sites indicated by Estuary Partnership. Upon harvest, Contractor shall arrange cuttings so that the bottoms and tops are in the same direction and place cuttings bottom end first in bundles of 100 in buckets with water. Cuttings shall be kept on site and covered with light colored tarps and in water at all times until they are planted. Any cuttings that are allowed to dry out shall be discarded and will not be accepted. Contractor shall harvest no more than one-third of the donor plant's branches.

## **Planting - Harvest Large Willow Cuttings**

Contractor shall harvest 24 to 48-inch-long willow cuttings from sites indicated by Estuary Partnership. Upon harvest, Contractor shall arrange cuttings so that the bottoms and tops are in the same direction and place cuttings bottom end first in bundles of 100 in buckets with water. Cuttings shall be kept on site and covered with light colored tarps and in water at all times until they are planted. Any pole cuttings that are allowed to dry out shall be discarded and will not be accepted.

## **Planting - Harvest Large Pole Cuttings**

Contractor shall harvest 7 ft minimum length cottonwood pole cuttings with a minimum diameter of 1.5 inches at the small end, from sites indicated by Estuary Partnership. The Estuary Partnership harvest sites are located within 25 miles of the project site. Upon harvest, Contractor shall arrange cuttings so that the bottoms and tops are in the same direction, tie bundles in groups of 50 cuttings and denote species of each bundle. Contractor shall be responsible for transporting cuttings from the harvest site(s) to the project site. Cuttings shall be kept wet and sheltered from wind and freezing temperatures from time of harvest to delivery to the project site. Cuttings shall be kept on site and covered with light colored tarps and in water at all times until they are planted. Any pole cuttings that are allowed to dry out shall be discarded and will not be accepted.

## Planting – Install Small Willow Cuttings

Contractor shall plant 18 to 24-inch-long willow cuttings at density indicated by Estuary Partnership. Contractor shall insert a pole cutting into the ground to a depth equal to two-thirds of its total length. Estuary Partnership may direct Contractor to install the cuttings vertically, perpendicular to the ground surface, or at another angle. Small pole cuttings shall be planted bottom end first. Contractor shall remove and replace any cuttings that are broken, skinned during planting, installed upside down, and/or not installed to the proper depth.

## Planting – Install Large Willow Cuttings

Contractor shall plant 24 to 48-inch-long willow cuttings at density indicated by Estuary Partnership.

Contractor shall insert pole cuttings into the ground to a minimum depth of 18 inches. Estuary Partnership may direct Contractor to install the cuttings vertically, perpendicular to the ground surface, or at another angle. Pole cuttings shall be planted bottom end first. Contractor shall remove and replace any cuttings that are broken, skinned during planting, installed upside down, and/or not installed to the proper depth.

## **Install Large Pole Cuttings**

Contractor shall plant minimum 7ft long cottonwood pole cuttings with 6 in maximum diameter at density indicated by Estuary Partnership. Contractor shall insert pole cuttings into the ground to a minimum depth of 24 inches. Estuary Partnership may direct Contractor to install the cuttings vertically, perpendicular to the ground surface, or at another angle. Pole cuttings shall be planted bottom end first. Contractor shall use best practices to install pole cuttings while minimizing damage to woody tissue, and shall tamp the soil around the base of each pole after planting to remove any air pockets. Contractor shall remove and replace any cuttings that are broken, skinned during planting, installed upside down, and/or not installed to the proper depth.

## Planting – Apply Mulch with Vehicle Access

Contractor shall apply mulch in the form of wood chips or shavings around each planted plant. Mulch shall be spread in a 16-inch diameter circle to a depth of three (3) inches. Mulch shall be placed so that it does not touch the plant stem. Estuary Partnership may change the quantity and kind of mulch material when warranted by site conditions.

## Planting – Mark Plants with Bamboo Stakes

Contractor shall install a 48" tall bamboo stake adjacent to planted trees and shrubs. Stakes shall be driven vertically into the ground at a location four (4) inches from the base of the plant, and to a minimum depth of nine (9) inches. Bamboo stakes shall be installed with the larger diameter end in the ground. Contractor shall be responsible for transporting bamboo stakes to the project site. All debris and any extra materials shall be removed from the work site at the end of each day.

## Planting – Mark Plants with Flagging Tape

Contractor shall tie a 6-inch piece of flagging to planted trees and shrubs. Flagging tape shall be tied to a lateral branch near the top of the plant. Type and color of flagging will be specified by the Estuary Partnership.

#### Planting – Install Vexar or Equivalent Tube and Bamboo Stakes

Contractor shall position the bottom end of the tube so that it is in full contact with the ground. Contractor shall anchor each plant tube to the ground using two bamboo stakes. Contractor shall weave a vertical stake 48 inches in length through the tube webbing a minimum of four (4) times and insert it into the ground to a minimum depth of nine (9) inches. Bamboo stakes shall be on the inside of the bottom of the tube and installed with the larger diameter end in the ground. Contractor shall further secure the tube using a 24-inch long stake placed diagonally

to a depth of six (6) inches and woven twice between the tube and vertical stake. The tube shall be centered on the plant, and shall be installed so that it remains in full contact with the ground when subjected to a moderate upward tug. The maximum allowed lean of the tube is two (2) inches from vertical, measured from the top of the tube.

Contractor shall not damage the plant during tube installation and, if necessary, shall reach into the tube to ensure that branches are in a natural position. Plants with skinned bark, a broken terminal leader, a curled leader inside the tube, or a leader protruding through the side of the tube shall be subject to rejection by Estuary Partnership. Contractor shall discard and replace stakes broken during installation. Where rocky ground prevents driving the stakes to the full depth on the first attempt, the stake shall be moved to a location where the tube can be driven to the required depth.

If soil conditions prevent proper stake installation on many plants throughout a planting site, Contractor shall notify Estuary Partnership. Contractor shall be responsible for transporting bamboo stakes and Vexar tubes to the project site. All debris and any extra materials shall be removed from the work site at the end of each day.

## **Planting - Hourly Planting**

Estuary Partnership may elect to pay hourly for combinations of planting work tasks or hire hourly work on projects where measurements of units are impractical or impossible, or the project requires special planting techniques that are not consistent with typical planting unit pricing. Additional hourly planting tasks may include but shall not be limited to spreading of straw, or installation of specialized planting tubes.

## Planting – Additional Delivery Lump Sum Rate

At the request of the Estuary Partnership, Contractor shall pick up and deliver additional plant materials to the project site. The lump sum rate shall represent the cost for one person to drive (no more than 40 miles round trip) to the specified location, load the materials and return to the project site. Contractor shall transport, protect, handle and install small and large bare root plants as described above.

# **CATEGORY 3: MECHANICAL SITE PREPARATION, SEEDING AND MAINTENANCE**

## Planting - Machine Broadcast and/or No Till Drill Seed

Contractor shall apply native seed to project sites using machine seed spreaders or no till drills at a rate determined by Estuary Partnership (typically between five (5) and 25 pounds per acre). The seeding equipment shall be subject to the equipment cleaning requirements in Section 15 of this document.

#### Site Prep - Boom Spray

Contractor shall apply an Estuary Partnership approved herbicide using a tractor, mule, ATV or other equipment in a volume sufficient to adequately cover all target vegetation at the site, and in conformance with all applicable pesticide label requirements. Estuary Partnership must approve the application rate and surfactant prior to work start. Target vegetation shall be determined by Estuary Partnership on a site by site basis. Contractor shall be responsible for recognizing and preventing damage to existing non-target/native vegetation and any vegetation on adjacent property

## Site Prep - Field Flail or Mow

Contractor shall flail or mow target vegetation using a tractor, Bobcat, billy goat or other mowing equipment. Contractor is responsible for recognizing and preventing damage to existing native vegetation. Mowing shall not be performed when the soil conditions result in rutting or potential for erosion. The mowing equipment shall be subject to the equipment cleaning requirements.

#### Site Prep - Field tilling or disc harrow

Contractor shall till or disc using standard farm equipment. Estuary Partnership shall indicate depth of till or disc prior to work beginning.

#### **Maintenance – Water Plants**

Contractor shall water individual plantings using contractor-supplied equipment including tank truck or trailer, necessary pump and hoses (to reach plants up to 500ft away from tank) and ability to refill tank from both onsite and offsite water sources.

## Maintenance - Field Mowing Between Planting Rows or Clusters of Plants

Contractor shall flail or mow target vegetation using a tractor, Bobcat, billy goat or other mowing equipment between six (6) and nine (9) foot planting rows or plantings in clusters in a field. Contractor shall mow to within one (1) foot of edge of cluster plantings or individual plants. Contractor is responsible for recognizing and preventing damage to existing native vegetation. Mowing shall not be performed when the soil conditions result in rutting or potential for erosion. The mowing equipment shall be subject to the equipment cleaning requirements in Section 18 of this document.

# **CATEGORY 4: FOREST STAND MANAGEMENT**

## **Maintenance - Tree Cutting**

Contractor shall provide a qualified tree feller to cut and fall trees marked by the Estuary Partnership. Tree feller shall use appropriate devices such as wedges, levers or ropes placed in trees to directionally fell the tree so as to avoid damaging "leave" trees. Unless directed otherwise the following specifications shall apply.

- *Stump height*. Stumps of all felled trees shall typically be cut to a height of no more than four (4) inches height above ground surface on the uphill side. In certain circumstances, Estuary Partnership may require stumps to be flush cut, to further reduce tripping hazards. To minimize soil disturbance, tree stumps shall not be grubbed or otherwise removed.
- Leave trees. Damage to "leave" trees is prohibited. Damage may include barking the trunk, breaking limbs or damaging the top. In the event that a leave tree is damaged during the course of project operations, Contractor shall notify the Estuary Partnership. Damage to leave trees shall result in a suspension of operations until adequate precautions and measures are taken to prevent additional damage. The contractor shall be responsible for removing or otherwise repairing any damaged leave trees to the satisfaction of the Estuary Partnership.
- *Limbing or bucking.* Estuary Partnership shall direct the contractor to limb branches on fallen trees and buck trees to specific length to prepare the material for use on the site or slash piling.

## Maintenance - Tree and Brush Chipping with Portable Chipper

As directed by Estuary Partnership a portable chipper shall be temporarily housed on-site to chip felled trees or to mulch slash for removal from the site. The chipper must be capable of blowing chipped material directly into a dumpster or trailer for hauling. The chipper must be capable of chipping logs up to 10 inches in diameter. The chipper shall be subject to the equipment cleaning requirements in Section 15 of this Document. Temporary siting of the portable chipper must be approved by the Estuary Partnership. Equipment contracted under this agreement shall be subject to the fueling and equipment repair restrictions described in Section 17 of this document.

## Maintenance – Hauling Trees, Slash or Chips

As directed by Estuary Partnership, Contractor shall provide a vehicle to transport logs, slash, or chips generated from forest stand management activities to locations approved by Estuary Partnership. Vehicles may include dump trucks, self-loading log trucks, trucks with dumpsters, or similar equipment. Vehicles shall only operate on haul roads marked by the Estuary Partnership and speed shall not exceed 15 miles per hour on any gravel access drives or private drives. Equipment contracted under this agreement shall be subject to the fueling and equipment repair restrictions described in Section 17 of this document.

# **CATEGORY 5: PLANT MATERIALS PURCHASE**

#### **Purchase Seed**

Contractor shall purchase seed at the request of the Estuary Partnership. Estuary Partnership will provide a list of species (common name and scientific name) and the percentage of each species in the mix on a per pound basis, as well as a total quantity needed. Contractor will source the seed from regional suppliers, with an emphasis on purchasing seed that is from genetic sources that are as near to the project site as possible. Contractor shall provide the seed labels that include the germination rate and purity. Contractor shall also provide the original purchase receipt upon which the cost-plus percentage payment will be determined. Contractor shall be responsible for ordering, storing and delivering seed to the project site on an as needed basis. The Estuary Partnership will work with the contractor to provide sufficient lead time to procure the seed prior to planting.

#### **Purchase Bare Root Plants**

Contractor shall purchase bare root plants at the request of the Estuary Partnership. This request may include any size and number of bare root plants. Species requested will be native species that are typically found in Columbia River estuary riparian habitats. The number of plants will vary from thousands to tens of thousands. Estuary Partnership will provide a list of species (common name and scientific name), the number of plants of each species, and the various sizes requested. Substitutions are not allowed unless authorized by the Estuary Partnership. Contractor will source the plants from regional suppliers, with an emphasis on purchasing plants grown from seed that is from genetic sources that are as near to the project site as possible. Wild harvested plants are not acceptable. Plant bundles, packages or containers will be properly marked with the plant scientific name. Plants delivered to the project site will be inspected by Estuary Partnership to ensure that plants are healthy with no evidence of disease and having minimal damage to roots or stems. Contractor shall provide the original purchase receipt upon which the cost-plus percentage payment will be determined. Contractor shall be responsible for ordering, storing and delivering healthy bare root plants to the project site on an as needed basis. The Estuary Partnership will work with the contractor to provide sufficient lead time to procure the plant materials.

## **Purchase Potted Plants**

Contractor shall purchase potted plants at the request of the Estuary Partnership. This request may include any size and number of potted plants; however, they will generally be #1 or #2 size containers. Species requested will be native species that are typically found in Columbia River estuary riparian habitats. The number of plants will vary from thousands to tens of thousands. Estuary Partnership will provide a list of species (common name and scientific name), the number of plants of each species, and the various sizes requested. Substitutions are not allowed unless authorized by the Estuary Partnership. Contractor will source the plants from regional suppliers, with an emphasis on purchasing plants grown from seed that is from genetic sources that are as near to the project site as possible. Wild harvested plants are not acceptable. Potted plants will be tagged by species sufficient for Estuary Partnership and planting crews to identify. Plants delivered to the project site will be inspected by Estuary Partnership to ensure that pots are sufficiently rooted but do not include circling roots; are healthy and with no evidence of disease. Contractor shall provide the original purchase receipt upon which the cost-plus percentage payment will be determined. Contractor shall be responsible for ordering, storing and

delivering healthy potted plants to the project site on an as needed basis. The Estuary Partnership will work with the contractor to provide sufficient lead time to procure the plant materials.

## **Purchase Large or Small Pole Cuttings**

Contractor shall purchase large or small pole cuttings at the request of the Estuary Partnership. This request may include any size; however, they will generally be a minimum of 2.0 ft in length, having a minimum diameter no smaller than 0.5 inches; and, a maximum of 10 ft. in length, having a minimum diameter of no less than 2 inches. Quantities requested may be from one to tens of thousands. Estuary Partnership will provide a list of species (common name and scientific name), the number of plants of each species, and the various sizes requested. Species requested will be native species that are typically found in Columbia River estuary riparian habitats. Substitutions are not allowed unless authorized by the Estuary Partnership. The Contractor shall ensure that all plant material comes from local genetic sources and that plants are labeled as to species, with at least one tag per bundle of 50 live stakes/poles. The live stakes/poles are to be harvested from healthy plant stock during the dormant season (November 1 to March 15). The bottom of each live stake shall be cut at a 45-degree angle and the top shall be cut perpendicular to the long axis of the stem. The contractor shall be responsible for ordering, storing and delivering healthy pole cuttings to the project site on an as needed basis. Upon delivery to the site the live stakes/poles shall be stored in a cool, moist location and be protected from drying out. Contractor shall provide the original purchase receipt upon which the cost-plus percentage payment will be determined. The Estuary Partnership will work with the contractor to provide sufficient lead time to procure the plant materials.

## Purchase Plugs, Tubers and Root Stock

Contractor shall purchase plugs, tubers or root stock at the request of the Estuary Partnership. This request may include any size and number of plants; however, plugs will generally be herbaceous species that are 5 cubic inch or 10 cubic inch containers. Species requested will be native species that are typically found in Columbia River estuary riparian habitats. The number of plants will vary from hundreds to thousands. Estuary Partnership will provide a list of species (common name and scientific name), the number of plants of each species, and the various sizes requested. Substitutions are not allowed unless authorized by the Estuary Partnership. Wild harvested plants are not acceptable. Flats of plugs, tubers and root cuttings will be tagged by species sufficient for Estuary Partnership and planting crews to identify. Plants delivered to the project site will be inspected by Estuary Partnership to ensure that plugs are sufficiently rooted, and tubers and root stock are healthy with no evidence of disease or undue damage from improper storage. Contractor shall provide the original purchase receipt upon which the cost-plus percentage payment will be determined. Contractor shall be responsible for ordering, storing and delivering healthy plugs, tubers or root stock to the project site on an as needed basis. The Estuary Partnership will work with the contractor to provide sufficient lead time to procure the plant materials.

## **Purchase Plant Protection or Marking Supplies**

Contractor shall purchase plant protection or plant marking supplies at the request of the Estuary Partnership. This request may include specified sizes of vexar tubes, bamboo stakes or flagging material. Estuary Partnership will provide a list of supplies needed, the quantities, and the various sizes requested. Substitutions are not allowed unless authorized by the Estuary Partnership. Contractor shall provide the original purchase receipt upon which the cost-plus percentage payment will be determined. Contractor shall be responsible for ordering, storing and delivering the supplies to the project site on an as needed basis. The Estuary Partnership will work with the contractor to provide sufficient lead time to procure the supplies.

#### Purchase Compost, Soil or Mulch

Contractor shall purchase compost, soil, or mulch at the request of the Estuary Partnership. This request may include specific types of compost, soil or mulch materials and quantities. Estuary Partnership will provide a list of the materials needed and the quantities. Substitutions are not allowed unless authorized by the Estuary Partnership. Contractor shall provide the original purchase receipt upon which the cost-plus percentage payment will be determined. Contractor shall be responsible for ordering, storing and delivering the supplies to the project site on an as needed basis. The Estuary Partnership will work with the contractor to provide sufficient lead time to procure the supplies.

# **CATEGORY 6: PROJECT-RELATED SUPPORT SERVICES**

#### **Project Management**

Project Management includes those services requested by Estuary Partnership that are above and beyond the management of work tasks described in Categories 1 through 5, above. Examples of Project Management include additional "out of scope" services such as site visit meetings with Estuary Partnership staff, developing prescriptions for treatments, site conditions monitoring, landowner outreach, securing water use permits for watering, and photo monitoring. Project Management does not include time spent invoicing, leading crews to complete the work tasks, completing spray records and any other activities associated with standard scheduling and implementation of work tasks.

#### Loading and Hauling with Watercraft

Contractor will provide watercraft, proper safety gear (including PFDs for all occupants) and experienced operator(s) to navigate contractor personnel and work equipment to and from project sites accessed by water. Watercraft shall meet all applicable state watercraft licensing requirements including an Oregon Waterway Access Permit and/or Washington Aquatic Invasive Species Permit depending on the project location. The Estuary Partnership may request the use of non-motorized boats such as rafts, canoes, and inflatable kayaks. Hours billed shall only include time spent loading and operating watercraft. Watercraft selection shall be approved by Estuary Partnership prior to implementation. Examples include, but are not limited to hauling restoration crew members, Estuary Partnership employees, supplies, herbicides, restoration activities and conducting weed management surveys. Hauling of herbicide protocols is detailed in *Section 7. Use of Herbicide* and contractor will follow specific invasive species prevention protocols detailed for watercraft in *Section 15: Invasive Species Prevention and Cleaning*.

# **SECTION 7: USE OF HERBICIDE**

The specific amount of herbicide used shall be in accordance with the label and permit requirements. Unless otherwise directed by Estuary Partnership, herbicides shall not be applied when wind speed is greater than five (5) mph or when the National Weather Service forecast calls for precipitation within 24 hours. There shall be no over-spray of herbicides onto native vegetation. Where necessary, Contractor shall manually or mechanically clear target vegetation away from native vegetation to protect native vegetation during spraying. Unless otherwise directed by Estuary Partnership, the spray mixture shall contain a colorant in the amount of one (1) percent or greater of the mixture. When required by label or Estuary Partnership, Contractor shall post Estuary Partnership approved public notice signs with legal re-entry periods at all public access points prior to spraying and leave signs on-site until re-entry periods are satisfied. Contractor shall remove signs when re-entry periods are satisfied. Contractor shall remove signs when re-entry periods are satisfied. Contractor shall remove signs when re-entry periods are satisfied. Contractor shall protective equipment and a spill kit readily available. In addition, any herbicide mixing or loading that must be done over open ground will require contractor to use a spill pan, sorbent pad, or tarp to be placed below the mixing and loading location. Estuary Partnership requires spray equipment to be functional and non-leaking. Excessive leakage will be a basis for issuing an immediate shutdown of the operation.

When transporting herbicide in watercraft, contractor will place herbicide containers into dry bags or waterproof totes for transport. Backpack sprayers will be transported empty and in heavy duty garbage bags. Clean boots will be worn for loading and unloading watercraft. Cost of all herbicide, surfactants, and indicator dye used in herbicide application work tasks must be established as a separate cost in each contract scope of work and cited as a separate task line item on invoices. Contractor shall submit copies of herbicide application records for all herbicide work with each invoice to Estuary Partnership.

Contractor shall maintain appropriate licensing and shall present copies of operator, applicator, and trainee licenses at Estuary Partnership's request. Estuary Partnership is not responsible for payment to Contractor in the event that Contractor fails to provide documentation upon request.

## **SECTION 8: DISPOSAL OF WASTE MATERIAL**

At the conclusion of work each day, Contractor shall police the work site and gather and lawfully dispose of all empty boxes, bags, damaged containers and plug trays, garbage, and other waste material.

## SECTION 9: INSPECTION OF WORK/ACCEPTANCE

The Estuary Partnership shall perform inspection surveys for compliance with all specifications on all work items as a basis for acceptance, payment, and recommendations for adjustment in work quality. Inspected units of work must comply with all applicable specifications.

Inspections shall identify any deviations from the specifications. Any such deviation shall be corrected immediately. Inspections shall primarily be visual. When the site does not appear to meet contract specifications, inspection data shall be gathered from well-distributed, randomly selected plots of various sizes with a total sample size of at least one (1) percent of each item in every project area.

Estuary Partnership shall also inspect project sites, typically between 21 days and 42 days following herbicide application, to check for effectiveness and damage to non-target vegetation. Estuary Partnership may, at their discretion, inspect project areas as a whole after they are completed. Contractor is encouraged to observe these inspections while they are underway.

A. Satisfactory Work Quality:

For all items on each project area, Estuary Partnership shall assess a work quality percentage by dividing acceptable units inspected by total work units inspected. A minimum work quality standard of 90 percent is required for all work items.

B. Unsatisfactory Work Quality:

Work quality below 90 percent shall be considered unsatisfactory. Based on inspection results, if work quality is determined to be unsatisfactory, Contractor shall be required to rework the unit of work until satisfactory work quality is achieved. Once 90 percent work quality is attained, full payment shall be made. Based on inspection results, if the work quality percentage falls below 90 percent, Estuary Partnership shall immediately notify Contractor in writing and instruct Contractor to improve the quality of the work is not raised to a satisfactory and acceptable level within two (2) consecutive workdays after written notification, Estuary Partnership may cancel the contract amendment scope of work for that project. If the work is seriously or chronically deficient, Contractor recognizes that Estuary Partnership may elect to terminate the Contract.

# SECTION 10: NOTIFICATION OF SUBCONTRACTING

Contractor shall request approval from the Estuary Partnership prior to entering into any subcontracting arrangement. This request shall include at a minimum:

- 1. Name, address, telephone number of subcontractor;
- 2. Rationale for using a subcontractor
- 3. Date upon which the subcontract would be established and its duration;
- 4. List of tasks that would be subcontracted;
- Copies of subcontractor's representative authority (i.e. Oregon and/or Washington Farm/Forestry/Landscape Contractor's License, Farm Labor Contractor Certificate of Registration) and liability insurance certificate(s); and
- 6. Copies of Oregon and/or Washington Commercial Operator License, Commercial Applicator License, and Trainee Licenses, if applicable.

# SECTION 11: DAMAGES TO NATIVE VEGETATION

Contractor acknowledges that when native vegetation is damaged or destroyed, Contractor hereby agrees to pay fixed, agreed, and liquidated damages at the rate of \$6.75 per plant for every native plant destroyed by Contractor in excess of five (5) percent of the native plants within the project area plots inspected under Section 9 of this document.

# **SECTION 12: DAMAGE TO REAL PROPERTY**

In the event Contractor causes damage to Estuary Partnership property, work site, or neighboring properties while engaging in activities allowed under contract with Estuary Partnership, Contractor shall be responsible for all mitigation or corrective actions.

## **SECTION 13: WORK HOURS**

All field work shall be performed Monday through Friday during daylight hours unless Estuary Partnership grants permission to do otherwise. Contractor shall obey all applicable noise ordinances in completion of work.

## SECTION 14: NATIVE PLANT MATERIAL COLLECTION

Contractor shall not collect plant materials from the project site unless contracted to do so, or written permission has been granted by Estuary Partnership. Ownership of all plant materials collected under this Contract is the property of the Estuary Partnership.

# SECTION 15: INVASIVE SPECIES PREVENTION AND EQUIPMENT CLEANING

To prevent the spread and introduction of invasive species, the Estuary Partnership requires cleaning of vehicles, mechanical equipment, boots, waders, tools, and watercraft before entering a work site. Inspections may be required by the Estuary Partnership and conducted at a location not on the project area that is mutually agreed to by the Estuary Partnership and the Contractor. The Estuary Partnership project manager, upon inspection and the discovery of what they deem to be unsatisfactory condition of equipment, vehicles, watercraft, boots, wader or

clothing may, at their discretion, require work stoppage and removal of offending items without compensation until the problem is remediated. Specific invasive species prevention requirements include:

- A. **Vehicles:** All contractor vehicles shall be free of mud and other organic debris inside and outside of the vehicle before entering work site. Vehicles must stay on approved travel routes designated by the Estuary Partnership.
- **B.** Mechanical Equipment: All mechanized equipment shall be cleaned (pressure washed or blown clean with pressurized air) before moving into the work site to reduce the risk of spreading noxious weed seeds and soil pathogens. Examples of mechanized equipment include but are not limited to tractors and their implements, ATV's, UTV's, trailers, specialized forestry equipment and more. At no time will equipment or personnel arrive at a work site with mud, dirt, debris, or plant materials present.
- **C.** Worker's clothing, boots, waders, and hand/gas powered tools: The contractor personnel shall check and clean all clothing, boots, and tools for weed seed, dirt, and plant fragments before entering work site or traveling between work sites. Contractor must clean these items before leaving the site at the end of each workday. Wading gear (*except for felt-soled boots*) must be visually inspected and scrubbed or pressure-washed to remove all traces of mud, sand, and plant material before entering another body of water. For felt-soled boots, freeze overnight. If needed sooner, soak in hot water (>140°F) for at least 5 minutes or soak for at least 5 minutes in a 20% solution of household bleach and 80% water. Rinse equipment to remove chemical residues after chemical treatments. Hand and gas-powered tools shall be brushed clean of all dirt and plant materials before entering the site and before leaving the site.
- D. Watercraft: All watercraft including but not limited to: rubber rafts, kayaks, and canoes including their trailers, must be properly cleaned and dried for 5 full days before entering any body of water at a work site. They must be clean of any visible plants, animals, fish, mussels, or mud before entering the water or boat launching facilities. Estuary Partnership may inspect the boat on the day of its use. If not clean the boat and crew will be turned away without compensation. When the project is completed, the contractor will properly clean the boat before its next use. Boats used in known quagga and zebra mussel infested waters will <u>not</u> be allowed. Estuary Partnership reserves the right to prohibit the use of any vessel if they have determined that the boat has been used in waters with a known high priority invasive species.
- E. **Moving from one unit to another unit on a site or from one site to another site.** When moving between units on one particular property during a workday, the contractor personnel will check and clean all clothing, boots, and tools for weed seeds and plant fragments. Cleaning of equipment may be required by the project manager between units on a single property. Moving between work sites requires full cleaning of the equipment, workers clothing, boots, tools and other equipment.
- F. Invasive weed disposal: It is preferred not to move material off site because of the risk of spread. If possible, the Estuary Partnership project manager will designate a weed mulching location site. These locations can be used repeatedly if needed. The location should be away from waterways and out of floodplain locations. If mulching on site is not feasible or recommended, then the Estuary Partnership project manager will determine an appropriate deposal site. All material will be transported in heavy duty garbage bags and covered with a tarp to secure the load. If a bag is torn it should be double bagged to prevent dispersal of seed.
- G. **Import of material:** When a contractor is required to purchase and haul in materials such as logs, trees, rocks, gravel, dirt, compost, bark dust, straw, and other supplies. The contractor must first talk with the Estuary Partnership project manager about the origin of the materials and if the location is appropriate for procurement. The Estuary Partnership project manager reserves the right to inspect the location from which the material is originating from in order to prevent the spread of invasive species. At least 3-week

notice should be given to Estuary Partnership project manager about the origin of materials. Estuary Partnership project manager reserves the right to refuse the use of any material and recommend an alternative source.

## **SECTION 16: FUELING AND EQUIPMENT REPAIR**

No fuel, motor oil, hydraulic fluid, grease, or any other petroleum- or chemically-based compounds associated with operating motor vehicles or mechanized equipment shall be stored on-site. These materials shall be transported to the site on an as-needed basis and contained on the bed of a truck or utility trailer. For any refueling that must be done over open ground, a spill pan or sorbent pad shall be placed below the fueling location. No refueling or maintenance shall take place in or near on-site wetlands, wet prairie, intermittent stream channels, or open water. All used sorbent pads or spill pans must be removed from the site at the end of each day. Maintenance shall only occur within the staging areas designated by the Estuary Partnership. Equipment furnished shall be inspected for any leakage of petroleum products. Excessive leakage shall be a basis for issuing an immediate shutdown of the operation.

# **SECTION 17: FIRE PROTECTION REQUIREMENTS**

During the closed fire season, Contractor completing work tasks under this Contract shall adhere to all State Forest Law and Administrative Rules for fire protection. In the event a Fire Watch is required Contractor shall be limited to invoicing for one person at an hourly labor rate, for the hours required for the fire watch. If a fire occurs, the Contractor shall promptly report the fire to 911 and cooperate in the control and suppression of the fire.