#### SECTION 1000

#### **SPECIAL PROVISIONS**

#### SP-01 GENERAL

This Section of the Contract Documents describes the Work required as shown on the Drawings.

## **SP-02 INCORPORATION OF THE MPWSS**

All provisions of the Montana Public Works Standard Specifications, Sixth Edition, April 2010, hereafter collectively referred to as the MPWSS, apply to the Project, except where portions of the MPWSS are modified or replaced by the Contract Documents. Each Section of the MPWSS that has been modified is listed in the Table of Contents of Section 00950 Standard Modifications to MPWSS. The entire Section from the MPWS has not been rewritten for these modifications. Instead, modifications are indicated for a specific subsection, paragraph, sentence or drawing.

Where a Standard Modification to MPWSS does not exist for a particular Section of MPWSS, the Work will be completed in accordance with the appropriate MPWSS Section. When a Standard Modification to MPWSS does exist the requirements of that modification supersede the related MPWSS requirement. Where paragraphs are specifically deleted or modified, or new paragraphs added, all other parts of the MPWSS will remain in effect unless otherwise modified by the Project Manual in accordance with the order of governance as specified in "Summary of Work". Forms included in the Project Manual will be used in lieu of similarly titled forms in the MPWSS. Where Technical Specifications follow the Modifications in later Divisions of the Project Manual, those Specifications replace same numbered specifications in the MPWSS.

## SP-03 DESCRIPTION OF INDIVIDUAL BASE BID ITEMS

The Base Bid Work, methods of measurement, and methods of payment for each Bid Item are stated in this section. Some Drawings and Technical Specifications apply to all Bid Items. Contractor will complete all Work under this Base Bid in accordance with the Drawings, Special Provisions, and Technical Specifications in their entirety. Estimated Quantities for each Bid Item are shown on the Bid Form. Contractor will comply with all applicable Federal and State laws, regulations, and requirements in performing the Work.

#### SP-03 Bid Item No. 1 – MOBILIZATION

# **Applicable Drawings:**

Sheet 2, Site Overview Sheet 3, Demo/Staging Plan

## **Applicable Technical Specifications:**

None

Work Description: Contractor will perform all actions and operations necessary for the movement of personnel, equipment, supplies and incidentals to and from the Project Site, the establishment of all

SECTION 1000 SPECIAL PROVISIONS PAGE 1 OF 19 necessary facilities, bonds, and insurance, submitting and obtaining approval for all pre-construction submittals, royalties, and all other actions and operations which must be performed, or costs incurred, prior to beginning all Work not described in this Bid Item. The Bid price amount for this Bid Item must not exceed 10% of the Total Bid Price shown on the Bid Form. Any Bid for which this Bid Item exceeds 10% of the Total Bid Price may be wholly rejected by Owner.

<u>Directions to the site</u>: From White Sulphur Springs, MT, head west on Highway 360/Fort Logan Road for 15.3 miles. Turn right onto Smith River Road, continue for 9.2 miles. Turn left, follow signs for Smith River State Park Camp Baker, continue for 1.1 miles. Slight right after Smith River bridge crossing, continue for 0.6 miles. Arrive at Smith River State Park Camp Baker.

#### **Work Included:**

- 1. Movement to and from the Site of all personnel, equipment, supplies and incidentals necessary to complete the Work
- 2. Establishment of all facilities necessary for the Work
- 3. Provide, maintain, and remove sanitation facilities
- 4. Provide, maintain, and remove trash receptacles
- 5. Dispose all trash, garbage, and other waste materials generated by Contractor
- 6. Repair all property damage caused by Contractor
- 7. Clean up site
- 8. All Site reclamation
- 9. All other Work which must be performed, or costs incurred, prior to beginning other elements of the Work.

**Measurement:** No Measurement for Bid Item 1 – MOBILIZATION will be made.

**Payment:** Payment for Bid Item 1 – MOBILIZATION will be made according to the lump sum bid price on the Bid Form in the Contract Documents. Fifty percent (50%) payment for this Bid Item will be allowed once Contractor submits Bonds and Insurance Certificates, fully mobilizes to the Site, and obtains approval for all submittals required prior to beginning the Work. Full payment for this Bid Item will be allowed after Contractor completes the Work, completes final cleanup, and fully demobilizes equipment and materials.

#### SP-03 Bid Item No. 2 – WATER MANAGEMENT AND EROSION CONTROL

## **Applicable Drawings:**

Sheet 4, Streambank Plan

Work Description: This Bid Item includes installation, maintenance and removal of 230 linear feet of erosion control to protect aquatic resources and comply with permit conditions. Work site isolation will be required for the work to reduce the potential for increased turbidity in the river. The isolated area is not anticipated to require dewatering. Work site isolation aimed to reduce sediment delivery to the river will include installation of four (4) foot high silt fence placed in front of the streambank at the approximate location shown on Sheet 4 of the Drawings to create a barrier between the work and flowing water. The exact location of the silt fence will depend on flow conditions at the time of work but is expected to be approximately three (3) feet in front of the staked streambank location. Silt fence should be secured to steel t-posts anchored into the streambed. Steel t-posts shall have a minimum weight of 1.33 pounds per linear foot and a minimum length of five (5) feet. T-posts shall be spaced a maximum of 10 feet apart. T-post spacing will be reduced as necessary to resists forces from flowing water. Silt fence

SECTION 1000 SPECIAL PROVISIONS PAGE 2 OF 19 should be attached on the streambank side of the t-posts and the bottom one (1) foot of the silt fence should overlap with the streambed and cobbles from the streambed placed on the overlap to seal the fabric to the streambed. A minimum of eighteen (18) inches of silt fence should extend above the water surface. If needed, overlaps shall be made at T-post locations with each segment secured to the T-post. Water depths along the downstream 50 feet of the work site may preclude silt fence installation. In these locations the following methods to reduce sediment will be used: 1) toe construction methods that leave toe material in place to function as a coffer dam between excavation and flowing water; or 2) construction of a gravel coffer dam in front of the work area. Alternate methods of work site isolation and sediment control may be proposed by Contractor for approval by Engineer.

The geogrid comprising the silt fence shall comply with the requirements of ASTM D4439 and shall consist of polymeric filaments, which are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least eighty five (85) percent by weight of ester, propylene, or amide and shall contain stabilizers and/or inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life at a temperature range of 0 to 120 degrees F.

Contractor must provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work as specified.

#### **SUBMITTAL NO. 1 – SILT FENCE MATERIAL SPECIFICATION**

Contractor shall submit the product name, name of supplier and name and phone number of a contact person for proposed silt fence material.

**Measurement:** Measurement for Bid Item 2 – SEDIMENT CONTROL will be by linear foot of erosion control installed.

**Payment**: Payment for Bid Item 2 – SEDIMENT CONTROL be made according to the linear foot price on the Bid Form in the Contract Documents.

#### SP-03 Bid Item No. 3 – REMOVE BOAT RAMP AND RIPRAP

## **Applicable Drawings:**

Sheet 2, Site Overview Sheet 3, Demo/Staging Plan Sheet 4, Streambank Plan

**Work Description:** This Bid Item consists of removing the boat ramp and riprap as shown on the Drawings. Boat ramp concrete blocks should be removed in a manner that they can be stockpiled and reused. Blocks should be stacked in a manner that minimizes the stockpiled footprint while providing a stable stockpile, behind FWP Shop location shown on Sheet 3 of the Drawings. Damaged blocks should be disposed of offsite by Contractor. Geotextile fabric should be removed and disposed of off site by Contractor.

Remove existing riprap (estimated to be 40 pieces, ranging in 24-36" diameter rocks) from locations shown on Sheet 2 and Sheet 3 of the drawings. Riprap should be sorted and 24" rocks stockpiled separately. 24" rock will be used for Bid Item No. 6. Larger riprap will be placed in locations near the work area as directed by the Engineer. Placement locations will be within 300 feet of the removal area.

SECTION 1000 SPECIAL PROVISIONS PAGE 3 OF 19 Contractor must provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work as specified.

**Measurement:** No measurement for Bid Item 3 – REMOVE BOAT RAMP AND RIPRAP will be made.

**Payment**: Payment for Bid Item 3 – REMOVE BOAT RAMP AND RIPRAP will be made according to the lump sum bid price on the Bid Form in the Contract Documents.

# **SP-03 Bid Item No. 4 – REMOVE FENCE**

#### **Applicable Drawings:**

Sheet 2, Site Overview Sheet 3, Demo/Staging Plan Sheet 4, Streambank Plan

**Work Description:** This Bid Item consists of removing 440 linear feet of existing fence as shown on the Drawings. Contractor will dispose of fence wire, wooden posts, and damaged t-posts off site. Undamaged t-posts will be stacked behind FWP Shop location shown on Sheet 3 of the Drawings Existing brace panels should be preserved where shown on Sheet 3 of the Drawings.

Contractor must provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

**Measurement:** Measurement for Bid Item 4 – REMOVE FENCE will be by linear foot of fence removed, as measured by Engineer.

**Payment**: Payment for Bid Item 4 – REMOVE FENCE will be made according to the linear foot bid price on the Bid Form in the Contract Documents.

#### SP-03 Bid Item No. 5 – BUILD STREAMBANK TOE

# **Applicable Drawings:**

Sheet 4, Streambank Plan Sheet 5, Streambank Details

**Work Description:** This Bid Item consists of constructing 230 linear feet of streambank toe using approximately 50 cubic yards of streambank toe material furnished under Bid Item No. 13 – FURNISH STREAMBANK TOE MATERIAL and as shown on the Drawings. The existing streambank toe will be preserved to the extent possible as show on Sheet 5 of the Drawings. Construction of streambank toe is required where gravel and cobbles are not encountered at or within six (6) inches of the level of the base of the lowest lift of the treatment. If no gravel and cobbles or other competent toe material is encountered at this level, Contractor shall continue to excavate until gravel and cobbles are encountered similar to gradation provided in Table 4.1 on Sheet 4 of the Drawings. The extent of streambank toe construction will be determined by the Engineer in the field. This bid item includes excavation required to construct the streambank treatment trench as shown on Sheet 5 of the Drawings and as directed by the Engineer.

Upon completion of toe excavation, Contractor will place streambank toe material imported to the site under Bid Item No. 13 – FURNISH STREAMBANK TOE MATERIAL. Toe material will be placed to the dimensions and elevations shown on Sheets 5, 7 and 8 of the Drawings. Engineer will verify that design elevations have been met in the field. Machine compact placed material in one (1) foot lifts as approved by Engineer.

Contractor must provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

**Measurement:** Measurement for Bid Item 5 – BUILD STREAMBANK TOE will be by quantity of imported streambank toe material used as measured by Engineer.

**Payment**: Payment for Bid Item 5 – BUILD STREAMBANK TOE will be made according to the cubic yard bid price on the Bid Form in the Contract Documents.

#### SP-03 Bid Item No. 6 – BUILD UPSTREAM STREAMBANK TOE ALTERNATIVE

## **Applicable Drawings:**

Sheet 4, Streambank Plan Sheet 5, Streambank Details

**Work Description:** This Bid Item consists of building approximately 50 feet of upstream streambank toe alternative at locations shown on the Drawings. This Bid Item includes integrating 24-inch riprap salvaged under Bid Item 3 – REMOVE BOAT RAMP AND RIPRAP into Bid Item 5 – BUILD STREAMBANK TOE. Toe subgrade excavation and construction are part of Bid Item 5 – BUILD STREAMBANK TOE. This bid item only includes placement of 24-inch rocks. 24-inch rocks shall be integrated into the streambank toe material as directed by Engineer and shall be placed in a manner that allows streambank toe material to effectively fill voids.

Contractor must provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

**Measurement:** Measurement for Bid Item 6 – BUILD UPSTREAM STREAMBANK TOE ALTERNATIVE will be by linear foot constructed, as measured by Engineer.

**Payment**: Payment for Bid Item 6 – BUILD UPSTREAM STREAMBANK TOE ALTERNATIVE will be made according to the linear foot bid price on the Bid Form in the Contract Documents.

## SP-03 Bid Item No. 7 – BUILD DOWNSTREAM STREAMBANK TOE ALTERNATIVE

#### **Applicable Drawings:**

Sheet 4, Streambank Plan Sheet 5, Streambank Details

**Work Description:** This Bid Item consists of building approximately 50 feet of downstream streambank toe alternative at locations and according to Details shown on the Drawings. This Bid Item includes integrating whole conifer trees into Bid Item 5 – BUILD STREAMBANK TOE. Approximately four (4), 20-30 foot tall trees would be used. Conifer trees will be collected under Bid Item 14 – FURNISH

SECTION 1000 SPECIAL PROVISIONS PAGE 5 OF 19 CONIFER TREES. Toe subgrade excavation and construction are part of Bid Item 2 – BUILD STREAMBANK TOE. This bid item only includes placement of conifer trees into toe as directed by Engineer. Conifer trees shall be integrated into the streambank toe material as directed by Engineer, and shall be placed in a manner that allows streambank toe material to effectively fill voids.

Contractor must provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

**Measurement:** Measurement for Bid Item 7 – BUILD DOWNSTREAM STREAMBANK TOE ALTERNATIVE will be by linear foot constructed, as measured by Engineer.

**Payment**: Payment for Bid Item 7 – BUILD DOWNSTREAM STREAMBANK TOE ALTERNATIVE will be made according to the linear foot bid price on the Bid Form in the Contract Documents.

# SP-03 Bid Item No. 8 – CONSTRUCT STREAMBANK TREATMENT

# **Applicable Drawings:**

Sheet 4, Streambank Plan Sheet 5, Streambank Details Sheets 7-8, Cross Sections

**Work Description:** This Bid Item includes installation of approximately 230 linear feet of streambank treatment at locations shown on the Drawings. Engineer will stake exact location of streambank treatment in the field. Streambank treatment includes construction of two coir wrapped soil lifts and installation of live willow cuttings, as described in Bid Item No. 12- FURNISH WILLOW CUTTING, and according to the details provided in the Drawings. Subgrade excavation and toe construction are included in Bid Items 5, 6 and 7. Streambank backfill material will consist of a mix of gravel material excavated during subgrade excavation and material generated during Bid Item No. 9a- EARTHWORK (CUT/FILL).

Contractor will construct streambank treatment according to the details provided on Sheet 5 of the Drawings and the following guidelines:

- Unroll outer fabric parallel to channel and centered on staked bankline.
- Unroll inner fabric parallel to channel and centered on outer fabric.
- If more than one roll of fabric is required, fabric ends should overlap a minimum of 3 feet with the upstream roll of fabric on top of downstream roll of fabric.
- Place coir logs on inner fabric at staked bankline.
- Place mixture of gravel and soil to height of coir log. Extend fill even with coir log for approximately 12 inches and then taper fill down to bottom of excavated trench.
- Pull fabric in front of coir log over coir log and fill and tension. Secure fabric with 18" wedge stakes at a spacing of 1 stake pre 3 linear feet. Fold fabric at upstream and downstream end of lift in a manner that holds fill material in lift with folds oriented with the direction of flow. Fabric ends will be staked with a minimum of 3 stakes.
- Place willow cuttings on constructed lift at a spacing of 5 per linear/feet ensuring that a cut ends are placed at the bottom of excavated trench. Backfill cuttings with 3" of soil.
- Construct top soil lift as above but with no coir log. Fill front edge of lift with 0.5 feet of mixture of gravel and soil to a height of 0.5 feet. Extend fill at the elevation for approximately 12 inches and then taper fill down to bottom of trench.

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- Pull fabric over fill and tension. Secure fabric with 18" wedge stakes at a spacing of 1 stake pre 3 linear feet.
- Place willow cuttings on top lift at a spacing of 5 per linear/feet ensuring that a cut ends are placed at the bottom of excavated trench.
- Backfill soil lift trench to finish grade elevations. Ensure backfill blends smoothly into upstream and downstream existing ground.
- During backfill install willow cuttings at 5 per linear foot in rows perpendicular to streambank treatment and spaced every 5 feet along length of streambank treatment. The cut base end of each cutting should extend to the bottom of excavated trench.

Contractor will provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

Contractor shall supply the following materials:

#### Coir Logs

Coir logs are rolls made of coir fiber densely packed into an outer coir twine netting. Coir logs shall meet the following specifications:

- 1. Coir logs shall be twelve (12) in. diameter by ten (10) ft. long.
- 2. Coir logs shall weigh 7.0 lbs/ cu. ft. (minimum weight).
- 3. Inner coir shall be 100% unsorted, well-cleaned coir fiber uniformly distributed along the length of the log.
- 4. Outer netting shall be constructed from three (3) ply high-strength coir twine or yarn. Netting shall have two (2) in. by two (2) in. rhombic openings with hand knotted junctions. Coir twine or yarn shall have an average breaking strength of at least ninety (90) lbs.

## Coir Outer Fabric

Coir outer fabric is a woven coir mat made from high strength coconut fabric and shall meet the following specifications:

- 1. Width 13.1 ft. by 80 ft.
- 2. Thickness 0.30 in.
- 3. Weight per unit area 26 oz./sq. yd.
- 4. Dry tensile strength machine direction (ASTM D 4595) 1968 lb/ft.
- 5. Dry tensile strength cross direction (ASTM D 4595) 1160 lb/ft.
- 6. Wet tensile strength machine direction (ASTM D 4595) 1260 lb/ft.
- 7. Wet tensile strength cross direction (ASTM D 4595) 768 lb/ft.
- 8. Open area (plus or minus 5%) 39%.

#### Inner Fabric

Inner fabric is a tightly woven, biodegradable fabric made of coir, jute or burlap. It is intended to retain soil particles within the vegetated soil lifts and shall meet the following specification:

- 1. Tightly woven biodegradable material such as coir, jute or burlap.
- 2. Weight per unit area 7 oz/sq. yd.

Wooden Wedge Stakes 2" x 4" x 18".

6-8 ft. Willow Cuttings: see Bid Item No. 12 – FURNISH WILLOW CUTTINGS

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SPECIAL PROVISIONS

#### **SUBMITTAL NO. 2 – STREAMBANK TREATMENT MATERIALS:**

Provide the following information:

- 1. Material samples, test data, and cut sheets for coir fabrics.
- 2. Test data and cut sheet for coir logs.
- 3. Name of the supplier and name and phone number of contact person.

Submit information to Engineer at least ten (10) days prior to installation.

**Measurement:** Measurement for Bid Item 8 – CONSTRUCT STREAMBANK TREATMENT will be by linear foot constructed, as measured by Engineer.

**Payment**: Payment for Bid Item 8 – CONSTRUCT STREAMBANK TREATMENT will be made according to the linear foot bid price on the Bid Form in the Contract Documents.

#### SP-03 Bid Item No. 9 – EARTHWORK

# **Applicable Drawings:**

Sheet 3, Demo/Staging Plan Sheet 4, Streambank Plan Sheet 5, Streambank Details Sheets 7-8, Cross Sections

#### **Work Description:**

Bid Item 9a – EARTHWORK (CUT/FILL). This Bid Item includes approximately 110 cubic yards of cut and 38 cubic yards of fill to achieve design elevations. Earthwork includes excavation, backfilling and grading per the cross sections provided on Sheet 7 and Sheet 8 of the Drawings. This bid item also includes excavating furrows and ridges on the streambank treatment slope surface after achieving final grade. Furrows and ridges will be approximately 6 inches above and below final grade and cover the entire surface. Work also includes incorporating conifer limbs and branches into the finish grade surface at a spacing of 5 feet on center and partially buried into the finished grade surface. Conifer branches will be approximately 2 to 3 inches in diameter and 8 to 10 feet in length. Finished surface will also have shrubs transplanted into it (see Bid Item No. 11 – SHRUB TRANSPLANT) and seeded with broadcast seeded (see Bid Item No. 14 – BROADCAST SEED). Excavation and backfill for streambank toe and streambank treatment are not included in this bid item.

Bid Item 9b- EARTHWORK (EXCESS MATERIAL). Approximately 72 cubic yards of surplus material will be generated from activities associated with Bid Item 9a. Surplus material is to be placed at the approximate location shown on Sheet 3 of the Drawings and regraded to blend into existing ground elevations as directed by the Engineer. The material shall be placed in one (1) foot lifts and placed in a manner that conforms to natural topographic features, is aesthetically pleasing, and provides for positive drainage. Excavation and backfill for streambank toe and streambank treatment are not included in this bid item.

Contractor will provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

**Measurement:** Measurement for Bid Item 9a – EARTHWORK (cut/fill) will be by cubic yards of material moved, as measured by Engineer through survey data comparing pre-construction surface area with post construction surface area.

Measurement for Bid Item 9a – EARTHWORK (cut/fill) will be by cubic yards of material worked, as measured by Engineer.

**Payment**: Payment for Bid Item 9b – EARTHWORK (excess material placement) will be made according to the cubic yard bid price on the Bid Form in the Contract Documents.

Measurement for Bid Item 9b – EARTHWORK (excess material placement) will be by cubic yards placed, as measured by Engineer through survey data.

#### SP-03 Bid Item No. 10 -FURNISH AND INSTALL FENCE

## **Applicable Drawings:**

Sheet 4, Streambank Plan Sheet 6, Fencing Details

**Work Description:** This Bid Item includes furnishing and installing 550 linear feet of fencing at locations shown on the Drawings. Fence details are shown on Sheet 6 of the Drawings. Contractor shall procure and transport materials to the project site.

Contractor will provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

**Measurement:** Measurement for Bid Item 10 – FURNISH AND INSTALL FENCE will be by linear foot of fence installed, as measured by Engineer.

**Payment**: Payment for Bid Item 10 – FURNISH AND INSTALL FENCE will be made according to the linear foot bid price on the Bid Form in the Contract Documents.

## SP-03 Bid Item No. 11 –SHRUB TRANSPLANT

## **Applicable Drawings:**

Sheet 3, Demo/Staging Plan Sheet 5, Streambank Details

**Work Description:** This Bid Item consists of harvesting shrubs from the location specified on the Drawings. Engineer will flag exact shrubs for harvest. Harvested shrubs will be transplanted into slope behind streambank treatment at locations identified by Engineer.

Contractor shall harvest and transplant shrubs in accordance with the following guidelines:

- 1) Harvest shrubs in a manner that ensures the root ball remains intact. Shrubs will be approximately 4 to 8 feet tall.
- 2) Do not harvest shrubs until the streambank slope has been constructed to finish grade elevations and shrubs can be directly transplanted to final locations.

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- 3) Dig transplant holes at least two times the size of the rootball prior to placement. Place shrubs gently in holes, ensuring shrubs are upright. Backfill around each shrub rootball and gently compact. Water each root ball with one excavator bucket of water.
- 4) Fill and/or blend holes left after shrubs are harvested into existing ground and cover holes with organic matter and litter.

Contractor will provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

**Measurement:** Measurement for Bid Item 11 – SHRUB TRANSPLANT will be by each shrub transplanted, as measured by Engineer.

**Payment**: Payment for Bid Item 11 – SHRUB TRANSPLANT will be made according to the per unit bid price on the Bid Form in the Contract Documents.

## SP-03 Bid Item No. 12 -FURNISH WILLOW CUTTINGS

#### **Applicable Drawings:**

Sheet 4, Streambank Plan Sheet 5, Streambank Details

Work Description: This Bid Item consists of harvesting and transporting live willow cuttings needed to complete the work. Willow harvest locations have been approved by the State and are shown on Figures 1 and 2. No road construction will be allowed to access harvest sites. Willow cuttings will be 6 to 8 feet in length, and between ½ inch and 1 inch in diameter at the base of the cutting. Contractor is responsible for ensuring that cuttings are collected from disease-free plants within areas identified by the State for willow harvest.

Contractor will collect willow cuttings in accordance with the following guidelines:

- Cuttings will be collected during dormancy (October 15-April 1)
- Cuttings will be collected from second or third-year stems and taken from healthy plants showing no signs of disease, insect infestations, splits or deep furrows.
- No more than one-third of any individual plant will be removed for cuttings (unless otherwise directed by State).
- Proper tools and equipment will be used by Contractor to ensure the health and vigor of cuttings (i.e., all cuts shall be made with a sharp, clean tool to produce a clean, smooth cut and prevent disease transfer).
- Cuttings will be 6-8-foot from cut base to tip of stem (and not including current year's growth) with a diameter ranging from ½ to 1 inch at the base. The current year's growth (approximately the top 1-foot of new branches will be trimmed from cuttings.
- Cuttings will be bundled in increments of 50.

Contractor will transport cuttings in accordance with the following guidelines:

- Cuttings will be delivered in a disease- and weed-free condition.
- All plant material will be handled, stored, and transported with care and skill to prevent injury due to molding, rotting, drying, or other damage to cuttings.
- Cuttings will be kept out of direct sunlight and not stored in locations where they are likely to heat up.

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- Transporting cuttings in an open pickup or trailer will be avoided if heat build-up or wind desiccation is likely.
- Transport time will be minimized.
- Upon delivery to the project site, cuttings will be placed in designated on-site storage area, as directed by the Engineer.
- Contractor will ensure that cuttings are placed in on-site storage areas with a minimum of one-half of cutting bundle submerged in water.
- Cuttings will be delivered to the project site a minimum of 3 days prior to installation and a maximum of 7 days prior to installation.
- Contractor will cover cutting bundles with burlap or other approved material.

Contractor will provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

**Measurement:** Measurement for Bid Item 12 – FURNISH WILLOW CUTTINGS will be by each cutting delivered, as measured by Engineer..

**Payment**: Payment for Bid Item 12 – FURNISH WILLOW CUTTINGS will be made according to the per unit bid price on the Bid Form in the Contract Documents.

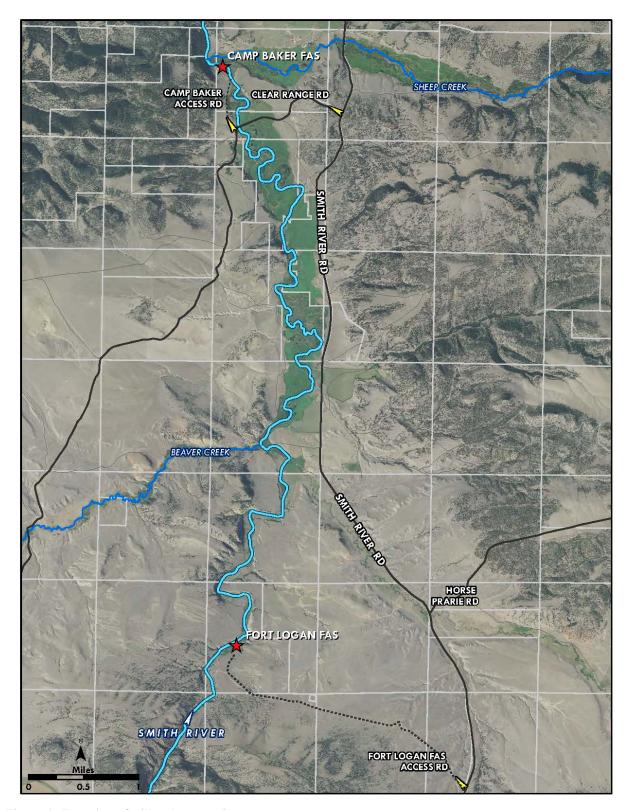
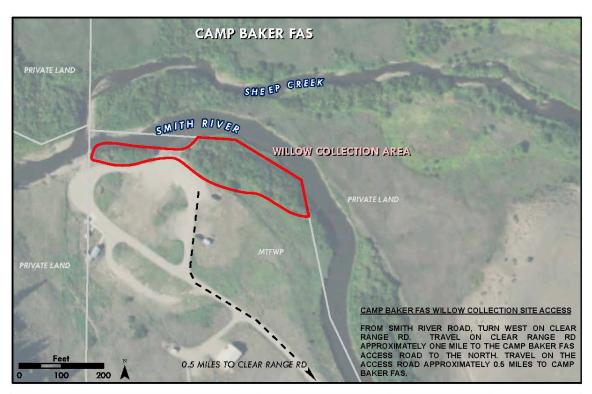


Figure 1. Location of willow harvest sites.

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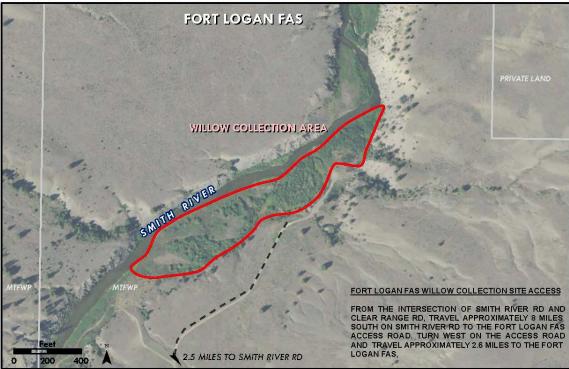


Figure 2. Approximate location of willow harvest areas at Camp Baker and Fort Logan.

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#### SP-03 Bid Item No. 13 – FURNISH STREAMBANK TOE MATERIAL

# **Applicable Drawings:**

Sheet 4, Streambank Plan Sheet 5, Streambank Details

**Work Description:** Streambank toe material will meet requirements of the following gradation:

Diameter (minmax., inches)	Percentage Passing By Weight
2-3	15%
4-7	50%
7-11	85%
11-17	100%

Contractor shall deliver approved streambank toe material to the designated Project staging area. Contractor shall provide information satisfactory to the Engineer that the material meets design requirements prior to delivering material to the site.

Contractor will provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

#### SUBMITTAL NO. 3 – STREAMBANK TOE MATERIAL SPECIFICATION

Contractor shall submit gradation of toe material to Engineer for approval. Submit information to Engineer at least ten (10) days prior to delivering to site.

**Measurement:** Measurement for Bid Item 13 - FURNISH STREAMANK TOE MATERIAL will be per cubic yard, as measured by Engineer.

**Payment**: Payment for Bid Item 13 - FURNISH STREAMBANK MATERIAL will be made according to the unit price per cubic yard on the Bid Form in the Contract Documents.

#### SP-03 Bid Item No. 14 – FURNISH CONIFER TREES

## **Applicable Drawings:**

Sheet 5, Streambank Details

Work Description: This Bid Item includes harvesting trees needed to construct Bid Item No. 7 — BUILD DOWNSTREAM STREAMBANK TOE ALTERNATIVE and to incorporate into the streambank treatment slope (see Bid Item No. 9 — EARTHWORK). Trees will be harvested near the work area and exact trees will be identified by the Engineer. Exact locations have not been determined. Contractor will up-root approximately four (4) whole live trees up to 40 feet in height. Contractor will smooth and bucket compact the surface of any holes left from up-rooting trees.

Contractor will provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

SECTION 1000 SPECIAL PROVISIONS PAGE 14 OF 19 **Measurement:** Measurement for Bid Item 14 – FURNISH TREES will be per tree, as measured by Engineer.

**Payment**: Payment for Bid Item 14 – FURNISH TREES will be made according to the per unit bid price on the Bid Form in the Contract Documents.

#### SP-03 Bid Item No. 15 –BROADCAST SEED

#### **Applicable Drawings:**

Sheet 5, Streambank Details

**Work Description:** This Bid Item includes application of seed to streambank slope as shown in the Drawings. Seed will be applied using the broadcast method where seed is spread on the soil surface. Seed will be supplied by the State. Application rate will be specified by the State. Contractor will calibrate seed application rate to ensure excess seed is not applied. State will provide 10% more seed than required to complete the work.

Contractor will provide all labor, tools, equipment, materials, and incidentals necessary to complete the Work.

**Measurement:** Measurement for Bid Item 14 – BROADCAST SEED will be by the square feet seeded, as measured by Engineer.

**Payment**: Payment for Bid Item 14 – BROADCAST SEED will be made according to the per unit bid price on the Bid Form in the Contract Documents.

#### SP-04 SPOIL

Contractor will be responsible for off-site hauling and disposal of all excess unsuitable materials, deleterious materials, trash and debris.

This Work is Incidental, and no additional payment will be allowed the Contractor. Refer to Section 01275: Measurement and Payment for more information.

#### SP-05 BEST MANAGEMENT PRACTICES

**Roads** –Contractor is solely responsible for keeping roads at Camp Baker FAS free from mud, gravel, cobbles or other contaminants generated as a result of construction activities.

Erosion Control Measures – Temporary erosion and sediment control measures includes the installation and maintenance of temporary structural control measures to reduce or eliminate the erosion of soil and transport of sediment offsite as result of construction activities. This may include, but not be limited to, silt fences, ditch checks, sediment basins, erosion control mats, stabilized construction entrance, temporary diversions, inlet protection, sediment traps, and slope drains. If erosion control measures are required, it will be the responsibility of the Contractor to install and maintain them throughout the construction. All costs incurred to meet erosion control requirements are incidental to other items of the Contract and no separate payment will be made.

**Dust Control** – Excessive dust generation from construction activities will not be allowed. The limits of excessive dust will ultimately be determined by the Owner and/or Engineer, but will generally be defined

as the level of dust that impacts vegetation and property not associated with the Project or with the Work being performed. All costs incurred to meet dust control requirements are incidental to other items of the Contract and no separate payment will be made.

**Noxious Weed Control** – Comply with the County Noxious Weed Management Act and all County and Contract noxious weed control requirements. Equipment and vehicles will be washed prior to entering the Project Site to remove vegetation to avoid the spread of weeds. All costs incurred to meet noxious weed control requirements are incidental to other items of the Contract and no separate payment will be made.

**Equipment Condition** - All equipment will be washed/cleaned and free of any leaks prior to entering the Site. Where possible, equipment will operate from the existing embankments.

**Failure to Provide Service** – If the Contractor fails to provide adequate service on the above listed items, the Owner reserves the right to contract these activities to a third party, the cost of which will be deducted from the Contract Price at the time of the next pay request.

# **SP-06** LANDOWNER ACCESS

At all times during construction, Contractor must afford private landowner and Montana Fish, Wildlife and Parks access to the Site property to the highest degree possible. Contractor must only access the private land portion of the work area via the access point shown on Sheet 3 of the Drawings. Contractor must coordinate fence removal work with the private landowner to ensure livestock are secure prior to fence removal.

# **SP-07** LANDSCAPED AREAS

Repair any landscaped or vegetated areas on private or public land that are scarred or destroyed during construction to an equal or better condition than that prior to the start of construction. This will include removing, replacing and grading topsoil. Replace all landscaped and/or grass areas disturbed during the construction process with a minimum 6-inches of topsoil. Reseed all disturbed areas, private or public, unless otherwise indicated.

All costs for this portion of the Work are incidental and no additional payment will be allowed to the Contractor.

# SP-08 REMOVAL AND REPLACEMENT OF FENCES, SIGNS, SIDEWALKS, CURBS, GUTTERS, POSTS, BARRICADES, ETC.

Culverts, fences, signs, decorative rocks, newspaper boxes, posts, sidewalks, curbs, gutters, propane tanks, satellite dishes, barricades, etc. may be encountered during construction that may hinder construction operations. Whether on private or public property, remove and replace these objects as necessary to conduct construction operations. Replace objects removed in as good a condition as previously existed and to the satisfaction of the Engineer.

It is the responsibility of the Contractor to coordinate with the Owner, prior to removing existing fences, to determine procedures, length of time fence may be removed, and requirements for temporary fencing until permanent fencing is complete.

This Work is incidental and no additional payment will be made.

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#### OWNER PERFORMED WORK ITEMS

The Owner will purchase and supply seed for broadcast seeding of the treatment area and supply wood for streambank construction. It is the responsibility of the Contractor to work in close coordination with the Owner and Landowner for construction sequencing and timing. All other Project materials required to complete the Work in accordance with the Contract Documents are the Contractor's responsibility.

# **SP-09 STAGING AREAS**

The Contractor will be allowed to stage equipment and materials at the Site in the location provided by the Landowner. Care should be taken to protect, preserve and/or replace objects and structures encountered within the confines of the staging areas and to restore all disturbed areas as close as possible to original condition unless otherwise dictated in these specifications. Storage of construction materials, equipment, and other items pertinent to the construction of the Project will be allowed in the staging areas. However, bulk storage of petroleum-based products stored in tanks will not be allowed. At all times, spill kits must be available on-site for any accidental spills of petroleum. No payment will be allowed to the Contractor for any Work necessary to use or restore the staging areas.

## **SP-10 CONFLICTS WITH UTILITIES**

Utilities may be in conflict with certain areas of the Project. Utilities and other appurtenances may include but are not limited to the following: culverts; propane or gas mains and services; television cables; telephone lines and pedestals; electrical boxes and lines; street lights; telephone and power poles; water mains and services; sanitary sewer mains and services; and storm drain pipes and inlets.

Utility locations are based on the available information which has been provided to or discovered by the Engineer. There is no guarantee as to the accuracy and completeness thereof is expressly disclaimed. As outlined in General Conditions Article 5.05.A.3, the Contractor must check with the Utilities Underground Location Center (800-424-5555) at least two full working days in advance of planned Work so that all utilities are located prior to digging.

The Contractor shall coordinate Work with all utility companies or private entities that may be affected by the Project. For utilities shown on the Drawings, the Contractor shall be responsible for any charges associated with relocating, removing, replacing, crossing, working around, or supporting utilities or otherwise addressing utility conflicts as necessary to conduct construction operations and properly construct the Project. The Contractor shall also be solely responsible for any damage to these utilities due to their operations. The Contractor shall work closely with the utilities to ensure their criteria are met and no problems result. For underground utilities not shown on the Drawings, the Contractor shall follow procedures outlined in Article 5.05: Underground Facilities of the General Conditions.

This Work is incidental and no separate payment will be made. Contractor shall figure the cost of such Work into other applicable bid items.

# **SP-11 DEWATERING**

The Contractor will be responsible for any dewatering operations which may be necessary to adequately remove water such that construction activities can be completed as specified. The Contractor will be responsible for conveyance and disposal of water to surface watercourses. Make all necessary arrangements for infringements across private property and obtain and adhere to any necessary discharge permits from the Montana DEQ.

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#### SP-12 QUALITY CONTROL TESTING OF MATERIALS

This Special Provision only applies to soil and concrete materials. Refer to other applicable sections of the specifications for quality control testing requirements of other materials.

Complete testing of all components of the project will be required to the satisfaction of the Owner and the Engineer. The Contractor is solely responsible for quality control (QC) testing. The Contractor may utilize quality assurance (QA) testing provided by the Owner or the Owner's representative as part of the Contractor's quality control program at the Contractor's risk. Use of Owner-provided quality assurance testing will not replace appropriate Contractor quality control testing or relieve the Contractor of any responsibility for quality control testing identified in the technical specifications.

# SP-13 STAKING

The Engineer will provide horizontal and vertical control for the project. Up to two staking visits by the Engineer will be completed prior to the start of construction to establish the channel alignment start and end points. All offset staking and supplemental staking is the Contractor's responsibility such that the Project may be completed in accordance with the Drawings and Specifications. The Contractor shall protect all control points during the course of the Work and replace any points damaged or removed by its activities. All survey monuments and stakes provided by the Contractor will be subject to inspection and verification by the Engineer.

#### **SP-14 PERMITS**

The Owner will obtain the following permits at no expense to the Contractor. The Contractor will be required to comply with all provisions of these permits as part of this Contract.

- 1. Montana Department of Fish, Wildlife, and Parks Montana Stream Protection Act (SPA124 Permit) and Montana Department of Environmental Quality 318 Authorization. This permit requires the Contractor to minimize the impact on fish, wildlife and riparian areas through proper construction practices and erosion control measures. The Contractor shall adhere to all requirements set forth in the permits obtained by the Owner
- 2. Army Corps of Engineers Clean Water Act Section 404 Nationwide Permit 27 (Aquatic Habitat Restoration, Enhancement, and Establishment Activities).
- 3. Montana Department of Environmental Quality 401 Water Quality Certification for Clean Water Act 2017 Nationwide Permits in Montana.

The Contractor is responsible for obtaining all other necessary permits, licenses, agreements, insurance, and approvals required by any government authority or agency for the performance of this Work at Contractor's expense.

# SP-15 EASEMENTS, CONSTRUCTION LIMITS, AND RIGHT-OF-WAY

The Project Site is located on private and public property. Contractor must take care to protect, preserve and/or replace objects and structures encountered within the project siteand restore all disturbed areas to their original condition unless noted otherwise.

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# **SP-16 WORKING HOURS**

Regular working hours are defined as an eight-hour period (plus 1 hour lunch allotment) within the bounds of 7:30 AM and 5:30 PM, five (5) days per week (Monday-Friday). Work during other hours may be permitted following written approval of the Owner. Contractor shall provide the Engineer a request at least three (3) days prior to working other hours, or in excess of 8 hours per day. Engineer shall provide a response to the request within 24 hours of receipt. Emergency work may be done without prior permission.

# **SP-17 CONTRACTOR EMERGENCY CONTACT**

Contractor must provide to Owner and Engineer a primary and secondary 24-hour, 7-day a week emergency contact.