TWO RIVERS PARK - SHORELINE STABILIZATION PROJECT

BONNER COUNTY, IDAHO

FHWA FP-24 SUPPLEMENTAL TECHNICAL SPECIFICATIONS

PREPARED FOR:

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December 23, 2025

PROJECT BID TABLE

Project Name: TWO RIVERS PARK - SHORELINE STABILIZATION PROJECT
Project Location: PRIEST RIVER, ID
Bidding Company: _____
Bid Date: _____

TWO RIVERS PARK - SHORELINE STABILIZATION (BASE BID ITEMS)						
ITEM NO.	SPEC REFERENCE*	DESCRIPTION	UNIT	QTY	UNIT BID PRICES	BASE BID AMOUNT
1	15101-0000	Mobilization/Demobilization	LPSM	1		
2	15101-1000	Site Control	LPSM	1		
3	15701-0000	Soil Erosion Control	LPSM	1		
4	20101-0000	Clearing and Grubbing	ACRE	3.4		
5	20301-2700	Removal of Piling	EACH	90		
6	20304-1000	Removal of Stormwater Structure	LPSM	1		
7	20402-0000	Subexcavation (Cut)	CY	10,100		
8	20402-0000	Subexcavation (Fill)	CY	800		
9	20435-1000	Backfill, Beach Sand	CY	760		
10	20470-0000	Boulder (Beach Breakwater)	EACH	88		
11	20472-1000	River Rock	CY	310		
12	20701-2000	Separation Geotextile, Non-woven	SY	4,480		
13	20703-1200	Geotextile Filter, Class 1, Non-woven	SY	10,550		
14	25101-0100	Placed Riprap, Method A, Class 1	CY	2,650		
15	25101-0200	Placed Riprap, Method A, Class 2	CY	2,640		
16	30103-0000	Aggregate Base (Riprap Filter Layer)	CY	1,240		
17	30103-2000	Aggregate base grading D (Haul Road Final Surface)	CY	790		
18	60103-0000	Concrete Headwall	EACH	1		
19	61102-4950	30-inch Waterline, Polyvinyl Chloride (PVC)	LF	60		
20	62403-0000	Providing and Placing Topsoil (Patch Repair)	CY	572		
21	62510-2000	Seeding, Hydraulic Method	ACRE	1		
22	62516-2000	Mulching, Hydraulic Method	ACRE	1		
23	62520-0000	Fertilizer	ACRE	1		
24	62604-1000	Cuttings, Alder	EACH	1,090		
25	62604-2000	Cuttings, Cottonwood Pole	EACH	1,090		
26	62604-3000	Cuttings, Red Osier Dogwood	EACH	1,090		
27	62604-4000	Cuttings, Willow Staking	EACH	1,090		
28	63501-0000	Temporary Traffic Control	LPSM	1		
					TOTAL BID	

TWO RIVERS PARK - SHORELINE STABILIZATION (BID ALTERNATE ITEMS)						
ITEM NO.	SPEC REFERENCE*	DESCRIPTION	UNIT	QTY	UNIT BID PRICES	BID TOTAL
1.A	15101-0000	Mobilization/Demobilization	LPSM	1		
2.A	15101-1000	Site Control	LPSM	1		
3.A	15701-0000	Soil Erosion Control	LPSM	1		
4.A	20101-0000	Clearing and Grubbing	ACRE	0.1		
5.A	20402-0000	Subexcavation (Cut)	CY	300		
6.A	20402-0000	Subexcavation (Fill)(Additional to Base)	CY	200		
7.A	20435-1000	Backfill, Beach Sand	CY	370		
8.A	20472-1000	River Rock	CY	120		
9.A	20701-2000	Separation Geotextile, Non-woven (Beach Area)	SY	1,800		
10.A	20703-1200	Geotextile Filter, Class 1, Non-woven	SY	130		
11.A	25101-0100	Placed Riprap, Method A, Class 1	CY	70		
12.A	30103-0000	Aggregate Base (Riprap Filter Layer)	CY	30		
					TOTAL BID	

UNITS

AC	Acre
CY	Cubic yard
EA	Each
HR	Hour
LF	Linear foot
LS	Lump sum
SF	Square feet
SY	Square yard
TON	Ton

DIVISION 100
GENERAL REQUIREMENTS

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Section 101. – TERMS, FORMAT, AND DEFINITIONS

101.04 Definitions

Delete these definitions and replace with the following:

Bid Schedule — The Schedule of Items.

Bridge — A structure, including supports, erected over a depression or an obstruction such as water along a road, a trail, or a railway and having a deck for carrying traffic or other loads.

Contractor — The individual or legal entity contracting with the Owner for performance of prescribed work.

Culvert — Any structure with a bottom, regardless of fill depth, depth of invert burial, or presence of horizontal driving surface, or any bottomless (natural channel) structure with footings that will not have wheel loads in direct contact with the top of the structure.

Drawings — (Public Works Contracts) Design sheets or fabrication, erection, or construction details submitted to the Engineer by the Contractor according to FAR Clause 52.236-21 Specifications and Drawings for Construction. Also refers to submissions and submittals.

Notice to Proceed — (Public Works Contracts) Written notice to the Contractor to begin the contract work.

Right-of-Way — A general term denoting (1) the privilege to pass over land in some particular line (including easement, lease, permit, or license to occupy, use, or traverse public or private lands), or (2) Real property necessary for the project, including roadway, buffer areas, access, and drainage areas.

Solicitation — (Public Works Contracts) The complete assembly of documents (whether attached or incorporated by reference) furnished to prospective bidders.

Add the following definitions:

Adjustment in Contract Price — "Equitable adjustment," as used in the Federal Acquisition Regulations.

Change — "Change" means "change order" as used in the Federal Acquisition Regulations.

Engineer — The licensed Professional Engineer or an authorized representative, firm, or agency engaged by the Agency or Owner to provide professional engineering services, including but not limited to, construction oversight, administration of the construction contract, review and approval of Contractor submittals, preparation and response to change orders, interpretation of contract documents, quality assurance, and overall project management to ensure compliance with the contract plans, specifications, and all applicable laws and regulations. The Engineer acts as the primary technical liaison between the Agency/Owner and the Contractor during the construction phase of the project.

Neat Line — A line defining the proposed or specified limits of an excavation or structure.

Utilization Standards — The minimum size and percent soundness of trees described in the specifications.

Section 102. – BID AWARD AND EXECUTION OF CONTRACT

Add the following above 102.01:

If the Owner elects to use separate contract documents to specify bid, award, and execution, those contract documents shall take precedence over these.

Section 103. – SCOPE OF WORK

Delete all subsections except 103.01 and replace with the following:

103.02 Description.

The work under this contract generally consists of, but is not limited to, the following major components, all to be performed in accordance with the contract plans, specifications, and all applicable federal, state, and local regulations. This project aims to enhance and stabilize shoreline areas, improve stormwater management, and provide recreational amenities. Zone 1 (Marina) includes additional recreational features (an additional public beach and two marina dock access points) as described in 103.03; construction/installation of marina docks are not included in this scope of work and will be constructed at a later date.

103.03 Work Items.

The Contractor shall furnish all labor, materials, equipment, and incidentals necessary to complete the following work:

(a) Shoreline Stabilization and Protection:

- **Grading:** Perform necessary earthwork and grading operations along the shoreline to prepare 2H:1V slope subgrade for subsequent gravel and riprap layers.
- **Geotextile Filter:** Placement of filter fabric over subgrade prior to gravel filter layer.
- **Gravel Filter Layer:** Placement of a 6-inch gravel filter layer prior to riprap install. The length of shoreline for gravel filter layer installation will be determined by the choice between the Base Bid or Bid Alternate.
    - **Base Bid Shoreline Length:** Approximately 2,970 Linear Feet
    - **Bid Alternate Shoreline length:** Approximately 2,670 feet
- **Riprap Armor:** Installation of riprap armor over the gravel filter layer. Riprap armor will vary in thickness and size (Class); install according to project plans. The length of shoreline for riprap armor installation will be determined by the choice between the Base Bid or Bid Alternate.
    - **Base Bid Shoreline Length:** Approximately 2,970 Linear Feet
    - **Bid Alternate Shoreline length:** Approximately 2,670 feet

- **Live Stakes:** Installation of live stakes within the riprap armor in select areas along the shoreline. Particular attention shall be given to the wetland area, which spans approximately 2,270 linear feet, for the placement of live stakes to aid in ecological restoration and stabilization.

(b) Recreational Area Development (Includes all Bid Alternate Items):

- **Base Bid and Bid Alternate White Sand Beaches and River Rock Swim Areas:** Installation of a public beach areas; white sand is to be placed above the summer pool elevation and river rock for swim areas is to be placed below the summer pool elevation.
    - **Zone 1 (Marina) Bid Alternate Shoreline Length:** Approximately 300 LF.
    - **Zone 2 (Beach) Base Bid Shoreline Length:** Approximately 380 LF.
- **Base Bid Boulder Breakwater:** Construction of a 380 linear feet boulder breakwater between white beach sand and river rock; included for Zone 2 (Beach) Base Bid only.
- **Bid Alternate Marina Access Points:** The Bid Alternate includes additional access points in Zone 1 (Marina) to facilitate future marina docks; marina docks are not included in this scope of work. Access points (or "peninsulas") will consist of additional grading, fill and riprap armoring to the same specifications as Zone 1 Base Bid riprap armor.

(c) Access and Restoration:

- **Haul Road/Trail Construction:** Installation of a temporary haul road, approximately 3,350 linear, above the bank to facilitate construction activities. The haul road includes geotextile separation fabric and an aggregate surface that will be repurposed as a permanent recreational trail post construction.

(d) Environmental Protection and Remediation:

- **SWPPP Implementation:** Implementation and maintenance of Stormwater Pollution Prevention Plan (SWPPP) Best Management Practices (BMPs) throughout the duration of the project. This includes, but is not limited to, the installation of silt fence, straw wattles, and stabilization of construction entrances and exits, all to satisfy the requirements of the General Permit.
- **Below Waterline Debris Removal:** Removal and proper disposal of existing pilings, cribs, and other debris located below the summer water line near the shore.

(e) Stormwater Outlet Replacement:

- **Stormwater Outlet Removal and Replacement:** Removal and disposal of approximately 60 linear feet of an existing wooden stormwater outlet structure.
- **New Stormwater Outlet Installation:** Installation of a new stormwater outlet; the outlet pipe will connect to an existing manhole. Materials include 60 linear feet of 30-inch High-Density Polyethylene (HDPE) pipe, a pre-cast headwall, and a riprap spillway to manage discharge and prevent erosion.

(f) Site Restoration:

- **Surface Repair and Hydroseeding:** Performance of surface repair, including final grading and preparation, followed by hydroseeding in all affected construction areas to promote vegetation growth and stabilize disturbed soils.

103.04 Coordination. The Contractor shall coordinate all work with the Engineer and relevant regulatory agencies to ensure compliance with all permits and environmental regulations.

Section 104. – CONTROL OF WORK

Delete subsections 104.01, 104.02, and 104.04.

Section 105. – CONTROL OF MATERIAL

Delete all subsections entirely and replace with the following:

105.01 Source of Supply and Quality Requirements.

The Contractor shall furnish all materials in accordance with the requirements of the contract documents. All materials proposed for incorporation into the work shall be subject to the approval of the Engineer. The Contractor shall, upon request, provide the Engineer with complete information regarding the origin, composition, and manufacture of all materials. The Engineer may require samples of materials for testing, and no material shall be used until it has been inspected, tested, and approved.

The Contractor shall only utilize materials from sources that have been approved by the Engineer. The Engineer reserves the right to reject materials from sources that have previously supplied defective or non-conforming materials.

105.02 Local Material Sources.

When the specifications permit the use of local material sources, the Contractor shall obtain any necessary rights or permissions for the use of such sources and for the processing of materials therefrom. The Contractor shall be responsible for all costs associated with obtaining, developing, and operating such sources, including any necessary restoration of the source site upon completion of material extraction. The use of local material sources shall not relieve the Contractor of the responsibility for furnishing materials that conform to all specified quality requirements.

105.03 Storage of Materials.

Materials shall be stored so as to ensure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located so as to facilitate prompt inspection. The portion of the right-of-way or adjacent property used for storing materials shall be kept neat and orderly. Materials shall be stored in a manner that prevents contamination, degradation, or damage from weather, moisture, or other elements.

105.04 Handling Materials.

All materials shall be handled in a manner that prevents segregation, loss, damage, or contamination. Materials shall be transported and placed using methods that maintain their specified properties and integrity.

105.05 Unacceptable Materials.

Materials not conforming to the requirements of the specifications or that have been damaged in handling or storage shall be considered unacceptable and shall not be incorporated into the work. Unacceptable materials, whether in place or not, shall be removed from the site by the Contractor at their own expense. No payment will be made for unacceptable materials. The prompt removal of rejected materials from the site or from the work is required unless otherwise permitted by the Engineer.

105.06 Contractor's Responsibility for Material.

The Contractor shall be solely responsible for the quality and acceptance of all materials furnished and incorporated into the work. Acceptance of materials by the Engineer shall not relieve the Contractor of their responsibility for any defects or non-conformities discovered after acceptance or incorporation, nor shall it be construed as a waiver of any of the provisions of the contract. The Contractor shall indemnify and hold harmless the City, its officers, agents, and employees from any claims, damages, or expenses arising from the use of defective or non-conforming materials.

Section 106. – ACCEPTANCE OF WORK

Replace the term Government with Engineer as it occurs in this section.

106.01 Conformity with Contract Requirements

Delete this subsection entirely and replace with the following:

Work performed and all materials furnished shall be subject to the inspection and testing of the Engineer for acceptance or rejection based on compliance with the contract documents. Such inspection and testing may be performed at the point of production, manufacture, or fabrication, or at the project site. The Engineer will provide reasonable notification to the Contractor when inspections are to be performed at locations other than the project site.

References to standard documents and test methods of AASHTO, ASTM, and other recognized standard authorities refer to the documents and methods in effect on the date of the Invitation for Bids or Request for Proposals.

Use approved forms for reporting materials test results unless otherwise approved. Use approved test methods in effect on the date of the Invitation for Bids or Request for Proposals for testing materials, when applicable.

Use ASTM E29, Absolute Method, for test results and related calculations.

Perform work to the lines, grades, cross-sections, dimensions, and processes or material requirements shown in the contract.

Incorporate manufactured material into the work according to the manufacturer's recommendations or to these specifications, whichever is stricter.

If standard manufactured items are specified (such as fence, wire, plates, rolled shapes, and pipe conduits that are identified by gauge, density, or section dimensions) the tolerances for masses or dimensions will be established manufacturing tolerances unless otherwise noted.

Plan dimensions and contract specification values are the values to be strived for and complied with as the design values from which deviations are allowed. Perform work and provide material that is uniform in character and reasonably close to the prescribed value or within the specified tolerance range. The purpose of a tolerance range is to accommodate occasional minor variations from the median zone that are unavoidable for practical reasons.

Perform process control testing as required. Do not rely on the availability of Engineer test results for process control.

The Engineer may inspect, sample, or test any work, at any time before acceptance of the entire work. If the Engineer tests work, copies of test reports will be provided to the Contractor upon request. Engineer tests may or may not be performed at the work site.

Work will be evaluated for conformance to contract requirements and will be designated as follows:

(a) Conforming work. Acceptable work conforming to the Contract will be paid for at the contract price per unit of measurement. Four methods of determining conformity and accepting work are described in Subsections 106.02 through 106.05. The primary method of acceptance is specified in the Acceptance Subsection of each Section, but work may be rejected if it is found not to comply with the contract.

(b) Nonconforming work. Remove, repair, or replace work at no additional cost to the City that does not conform to the contract or to prevailing industry standards where no specific contract requirements are noted. Provide temporary traffic control and perform other related work to correct nonconformities at no additional cost to the City.

As an alternative to removal and replacement, the Contractor may submit a written request for approval that includes the following:

(1) Alternatives. (a) Have the work accepted at a reduced price; or (b) Perform corrective measures to bring the work into conformity. (2) Supporting rationale and documentation. Include references or data justifying the proposal based on an evaluation of test results, effect on service life, value of material or work, quality, aesthetics, and other tangible engineering basis.

The Engineer will determine disposition of the nonconforming work.

106.02 Visual Inspection.

Acceptance is based on visual inspection of the work for compliance with the contract. Use prevailing industry standards in the absence of specific contract requirements or tolerances.

Material accepted by visual inspection may be sampled and tested for conformance.

106.03 Certification.

For material manufactured off site, use a manufacturer with an ISO 9000 certification or an approved testing and inspection system. Require the manufacturer to clearly mark the material or packaging with a unique product identification or specification standard to which it is produced.

When the Standard Specifications or Special Contract Requirements reference certifications, certificates, certified documents, equipment, or individuals; the references refer to documentation of non-regulatory, peripheral contract requirements that are required to be validated by an individual or organization having unique knowledge or qualifications to perform such validation, as may be required by applicable laws or regulations.

Check certifications before incorporating the material into the work to ensure that the requirements of the contract have been met. Mark the certifications with the following information: project number and name; pay item number and description; contractor's signature; and date.

Material accepted by certification may be sampled and tested for conformance.

Provide a commercial certification unless a production certification is identified in the Acceptance Subsection.

(a) Commercial certification. A commercial certification is a manufacturer's or Contractor's representation that the material complies with the contract. The representation may be labels, catalog data, stamped specification standards, or supplier's certifications indicating the material is produced to a commercial standard or specification.

Submit one commercial certification for similar material from the same manufacturer.

(b) Production certification. A production certification is a supplier's certification that the material has been produced to a specific standard and is accompanied by test data performed within the past 12 months and other information as described below to support that the material complies with the contract.

Submit a production certification from the manufacturer for each shipment of material. Include the following:

(1) Date and place of manufacture; (2) Lot number or other means of cross-referencing to the manufacturer's inspection and testing system; and (3) Substantiating evidence that the material conforms to the contract.

Section 107. – LEGAL RELATIONS AND RESPONSIBILTY TO THE PUBLIC

Replace the term "Government" with "Owner" in all occurrences of this section.

Section 108. – PROSECUTION AND PROGRESS

Conform to the prosecution and progress requirements specified in the Contract Documents supplied by the Owner as they shall take precedence over these.

Section 109. – MEASUREMENT AND PAYMENT

109.01 Measurement of Work

Add the following:

Prepare, sign, and submit electronic measurement notes (pay notes and supporting field documentation). Measurement notes will be reviewed by the CO. Unacceptable measurement notes will be electronically rejected and returned. Correct rejected measurement notes and resubmit electronically.

109.02 Measurement Terms and Definitions

Add the following to the end of 109.02 (b):

Contract quantities will be adjusted only when there are errors in the original design of 15% or more.

Delete 109.02 (c) and replace with the following:

(a) For slope removal, measure the solid volumes by pre- and post-construction survey of the removal action using a surface-to surface comparison method stamped by a Professional Land Surveyor (PLS) licensed in the state of Idaho as approved by the Engineer.

Add the following to 109.02 (o):

Do not measure overlaps. Measurement may be computed by a PLS based on surface survey information.

Delete Subsections 109.06, 109.07, 109.08, and 109.09 entirely.

DIVISION 150
PROJECT REQUIREMENTS

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Section 151. – MOBILIZATION

151.01 Description

Add the following:

This item includes demobilization from site after all work is completed.

Section 152. — CONSTRUCTION SURVEY AND STAKING

152.02 Qualifications.

Remove the word 'highway'.

152.04 General.

Delete the second paragraph and replace it with the following:

No horizontal or vertical control information will be provided.

Add the following to Subsection 152.04(c):

Use required stake dimensions and materials. Pre-paint the top 2 inches of all stakes and lath or mark them with plastic flagging. Use designated colors for painting or flagging. Mark all stakes with a stake pencil that leaves a legible imprint, or with waterproof ink.

Do not use aerosol spray paints.

Use moisture-resistant paper for survey notes. Keep notes in books with covers that will protect the contents and retain the pages in numerical sequence.

152.05 Survey and Staking Requirements.

Add the following to 152.05(c):

Most of the existing ground topographic information is LIDAR generated and shall be confirmed by ground survey.

Add the following:

Verify ground topographic information. Road profile may be field adjusted as approved by the CO to limit extra work. Submit proposed new profile information to the Engineer at least 14 days prior to anticipated construction. Do not begin embankment construction or excavation operations until the design and/or proposed profile has been verified.

Add the following to 152.05(d):

Delete (1) and (2) and substitute with the following:

Survey crew and supervisor may determine the methods of slope and road control and present the chosen method to the Engineer for approval. This includes the number and types of stakes needed.

Add the following to 152.05(e):

Mark the clearing limits with flagging or tags on trees to be left standing, or on lath. Make markings intervisible, and no more than 90 feet apart.

After establishing clearing limits, move the location line stake outside the clearing limits for station identification purposes, and mark it with horizontal distance to location line.

Delete (1) and (2) from 152.05(f) and substitute with the following:

Survey crew and supervisor may determine the methods of slope and road control and present the chosen method to the Engineer for approval. This includes the number and types of stakes needed.

Delete 152.05(g) entirely and substitute with the following:

Verify and set culvert locations based on channel grade, minimum culvert cover requirements, and minimum culvert slope requirements. Adjust inlet and outlet inverts to meet these requirements.

Replace Table 152-1 with the following:

Table 152-1 Construction Survey and Staking Tolerances

Table 152-1
Construction Survey and Staking Tolerances (1)

Staking Phase	Horizontal	Vertical
Control points set from existing control points- Tolerance Class A	±0.03 feet (±10 millimeters)	±0.01 feet × $\sqrt{N}$ (±3 millimeters × $\sqrt{N}$)(2)
Mapping, topography, and cross-section Points- Tolerance Class A	±0.16 feet (±50 millimeters)	±0.16 feet (±50 millimeters)
Centerline points (3) including (PC), (PT), (POT), (POC), and references- Tolerance Class A	±0.06 feet (±20 millimeters)	±0.06 feet (±20 millimeters)
Slope-stake and slope-stake references- Tolerance Class A (4)	±0.16 feet (±50 millimeters)	±0.16 feet ±50 millimeters)
Culverts, ditches, and minor drainage structures stakes- Tolerance Class A	±0.16 feet (±50 millimeters)	±0.06 feet (±20 millimeters)
Retaining walls stakes	±0.06 feet (±20 millimeters)	±0.03 feet (±10 millimeters)
Curb and gutter stakes	±0.06 feet (±20 millimeters)	±0.03 feet (±10 millimeters)
Bridge substructures stakes	±0.03 feet (±10 millimeters)(5)	±0.03 feet (±10 millimeters)
Bridge superstructures stakes	±0.03 feet (±10 millimeters)(5)	±0.03 feet (±10 millimeters)
Clearing and grubbing limit stakes- Tolerance Class A	±1.00 feet (±300 millimeters)	–
Roadway subgrade finish stakes- Tolerance Class A (6)	±0.16 feet (±50 millimeters)	±0.03 feet (±10 millimeters)
Roadway finish grade stakes (6)	±0.16 feet (±50 millimeters)	±0.03 feet (±10 millimeters)

Table 152-1
Construction Survey and Staking Tolerances (continued) (1)

Staking Phase	Horizontal	Vertical
Control points set from existing control points –Tolerance Class B (7)	±0.16 feet (±20 millimeters)	±0.16 feet × $\sqrt{N}$ (±20 millimeters × $\sqrt{N}$)(2)
Mapping, topography, and cross-section points–Tolerance Class B (7)	±1.00 feet (±300 millimeters)	±0.50 feet (±150 millimeters)
Centerline points including (PC), (PT), (POT), (POC), and references–Tolerance Class B (7)	±0.16 feet (±20 millimeters)	±0.16 feet (±20 millimeters)
Slope-stake and slope-stake references–Tolerance Class B (7)	±0.50 feet (±50 millimeters)	±0.16 feet ±50 millimeters)
Culverts, ditches, and minor drainage structures stakes–Tolerance Class B (7)	±0.50 feet (±150 millimeters)	±0.16 feet (±20 millimeters)
Clearing and grubbing limit stakes–Tolerance Class B (7)	±2.00 feet (±600 millimeters)	—
Roadway subgrade finish stakes–Tolerance Class B (7)	±0.50 feet (±50 millimeters)	±0.16 feet (±10 millimeters)
Roadway finish grade stakes–Tolerance Class B (7)	±0.50 feet (±50 millimeters)	±0.16 feet (±10 millimeters)

(1) At statistical 95 percent confidence level. Tolerances are relative to existing control points.

(2) N is the number of instrument setups.

(3) Centerline points: PC - point of curve, PT - point of tangent, POT - point on tangent, POC - point on curve.

(4) Take the cross-sections normal to the centerline ±1 degree.

(5) Bridge control is established as a local network and the tolerances are relative to that network.

(6) Includes paved ditches.

(7) Tolerance Class B for Very Low Volume Roads with an aggregate or native finished surface.

Section 153. — CONTRACTOR QUALITY CONTROL

153.02 Qualifications.

Delete 153.02(a) entirely and substitute with the following:

Furnish a QCM who has at least two years of experience in similar construction, inspection, quality control, material testing, and (NICET) Level III certification, or equivalent, in construction and material.

153.03 Quality Control Plan (QCP).

Add the following to 153.03(b):

Submit written proposals for approval of alternate AASHTO or State approved test methods. Alternate methods may be allowed based on documented equivalence to the specified method.

Add the following:

(d) Subcontractors and suppliers. Include the work of all subcontractors. If a subcontractor is to perform work under this Section, explain how the subcontractor's inspection plan will interface with the Prime Contractor first tier subcontractors and lower tier subcontractors and organizations, and the CO. Include the work of major suppliers and suppliers of structural and geotechnical services and materials.

Add the following:

Modifications or additions may be required to any part of the plan that is not adequately covered. Acceptance of the QCP will be based on the inclusion of the required information. Acceptance does not imply any warranty by the Government that the plan will result in consistent Contract compliance. It remains the responsibility of the Contractor to demonstrate such compliance.

153.04 Prosecution of Work.

Delete this Subsection entirely and substitute with the following:

Address each of the subjects shown for each phase of construction:

(a) Preparatory phase.

(1) In a preparatory phase meeting, review the Contract requirements for the work; the process for constructing the work; and the plan for inspecting, testing, measuring, and reporting the work. Include the project superintendent, the QCM, the foreman for the work to be performed, and the CO in the meeting. Schedule and conduct a preparatory meeting for each type of work to be performed at least one week prior to beginning the work.

(2) Review and coordinate certifications, submittals, plans, drawings, and permits.

(3) Verify the capabilities of equipment, material, and personnel. Provide training as

necessary.

(4) Establish a detailed testing schedule based on the production schedule.

(5) Ensure preparatory testing and inspection is accomplished.

(6) Review accuracy of the surveying and staking.

(b) Start-up phase.

(1) In a start-up phase meeting, review the Contract requirements and the processes for constructing the work with the personnel who will be performing the work. Invite the CO, project superintendent, QCM, testers, and inspectors to the work being performed, and the personnel directly supervising and performing the work. Review the planned testing, inspection, and reporting requirements with the quality control personnel responsible for the testing and inspection. Explain the reporting procedures to be used when defective work is identified. Conduct a start-up meeting for each type of work to be performed upon beginning the work.

(2) Inspect, test, and report start-up work according to the QCP and ensure the work conforms to the contract.

(c) Production phase.

(1) Inspect, test, and report according to the QCP and evaluate the acceptability of the work produced.

(2) Identify and correct deficiencies.

(3) Request Government inspection and acceptance.

(4) Provide feedback on processes and deficiencies. Identify root causes of deficiencies and make timely and effective changes to work processes to prevent repeated deficiencies.

(d) Construction progress meeting.

(1) Schedule and facilitate a weekly construction progress meeting. Invite the Engineer, project superintendent, QCM, and any other personnel directly supervising or managing the project. At a minimum, discuss the Working Schedule according to Subsection 155.06(f).

153.07 Records and Control Charts.

Delete the first sentence and substitute the following:

Maintain complete testing and inspection records by the pay item number and make them accessible to the Engineer.

153.08 Acceptance.

Add the following:

Performance of the work may be stopped according to Subsection 108.05, either in whole or in part, for failure to comply with the requirements of this Section. The Government may charge the Contractor the cost of any additional inspections required when the work being inspected is found not to comply with Contract requirements during the initial inspection. Work stop orders, due to recurring deficiencies of work required by this Section, will be rescinded after the Contractor demonstrates to the Engineer that changes were made to the quality control plan and system that resulted in the correction of those deficiencies. There will be no adjustment in the Contract time, or payments to the Contractor for any impacts, delays, or other costs due to any periods of work stoppage resulting from failure to comply with the requirements of this Section.

Section 154. — CONTRACTOR SAMPLING AND TESTING

154.04 Testing

Add the following:

Where Process Control Sampling and Testing frequencies are identical to the Sampling, Testing, and Acceptance Tables at the end of each Section for all applicable work, the Process Control Samples may be used for acceptance.

154.08 Payment

Delete this Subsection entirely and substitute with the following:

Payment for Contractor sampling and testing shall be incidental to all bid items requiring testing.

Section 155. - SCHEDULES FOR CONSTRUCTION CONTRACTS

Delete Section 155 entirely.

Section 156. – PUBLIC TRAFFIC

Delete Section 156 entirely and replace with the following:

156.01 Description

This work consists of controlling and protecting public traffic adjacent to and within the project.

156.02 Material

Conform to the MUTCD and the following Sections and Subsections:

Permanent Traffic Control	633

Traffic Signing and Marking Material	718
Concrete Barriers and Precast Guardwalls	618
Temporary Plastic Fence	710.11

156.03 General.

Accommodate traffic according to MUTCD, approved traffic control plan and this section. Perform work in a manner that ensures safety and convenience of the public. Unless otherwise provided for in Table 156-1, keep existing roads open to all traffic during road improvement work, and maintain them in a condition that will adequately accommodate traffic. Delays may not exceed **30** minutes at any one time followed by an open period of no less than **30** minutes. Accommodate public traffic on roads adjacent to and within the project until the project is accepted according to Subsection 106.07(b).

Submit traffic control plan at least 30 days prior to intended use. Perform no work that interferes or conflicts with traffic or existing access to the roadway surface until a traffic control plan has been approved.

Post construction signs and traffic control devices in conformance with MUTCD. All required signs will be in place and approved prior to beginning work on project.

If the Contractor agrees in writing to allow public traffic to use a new road being constructed prior to completion, it will be considered an existing road for traffic control purposes.

156.04 Temporary Traffic Control.

Install and maintain temporary traffic control devices adjacent to and within the project as required by the approved traffic control plan and the MUTCD. Install and maintain traffic control devices as follows:

(a) Furnish and install traffic control devices before the start of construction operations.

(b) All detours outside of clearing limits will be approved in writing by the Contracting Officer as part of the traffic control plan.

(c) Install only those traffic control devices needed for each stage or phase.

(d) Relocate temporary traffic control devices as necessary.

(e) Remove devices that no longer apply to the existing conditions.

(f) Immediately replace any device that is lost, stolen, destroyed, or inoperative.

(g) Keep temporary traffic control devices clean.

(h) Remove all temporary traffic control devices upon contract completion or when approved.

(i) When required, use flaggers certified by the American Traffic Safety Services Association, the National Safety Council, the International Municipal Signal Association, a state agency, or other acceptable organization. Perform the work described under MUTCD Part 6. Use type III, VII, VIII, or IX retroreflective sheeting on flagger paddles. Do not use flags. Flaggers must wear high visibility safety apparel as required by MUTCD 6E.02.

156.05 Temporary Closures.

Road segments may be closed as shown in Table 156-1. The maximum consecutive days of closure shall be followed by a minimum number of consecutive days open to traffic as shown. Maintain traffic control devices during closure period(s). Appropriate barricades and signs will be erected and maintained as shown in the traffic control plan or as otherwise designated.

Prior to closing roads during construction, give written notice to the Owner and Engineer at least 10 days in advance.

156.06 Acceptance.

Public traffic work will be evaluated under Subsection 106.02.

156.07 Measurement and Payment

Do not measure Public Traffic for payment. Payment for contract work is provided indirectly. See Subsection 109.05.

Section 157. — SOIL EROSION AND SEDIMENT CONTROL

157.01 Description.

Delete this subsection entirely and replace with the following:

This work consists of providing, constructing, maintaining, and removing soil erosion and sediment control measures to eliminate or minimize pollutants in stormwater discharges from the project. All work shall conform to the requirements of the Idaho Pollutant Discharge Elimination System (IPDES) General Permit for Stormwater Discharges from Construction Activities, also known as the IPDES Construction General Permit (CGP), and the project-specific Stormwater Pollution Prevention Plan (SWPPP) developed thereunder.

157.04 General.

Delete this subsection entirely and replace with the following:

Provide and construct permanent and temporary soil erosion and sediment control measures according to the contract plans, all applicable permits (including the IPDES Construction General Permit), Section 107, and this Section. The IPDES Construction General Permit requirements and

the project's SWPPP shall take precedence over any conflicting requirements herein. Do not modify the type, size, or location of measures or practices without approval from the Engineer and, where required, the Idaho Department of Environmental Quality (IDEQ).

Manage all SWPPP documentation and reporting requirements as stipulated in the IPDES Construction General Permit. A Contractor-prepared erosion and sediment control plan or SWPPP, with necessary permits, may be submitted for approval according to Subsection 104.06. Submit alternate erosion and sediment control proposals at least 30 days before their intended use.

If soil erosion and sediment control measures are not functioning as intended, immediately take corrective action to eliminate or minimize pollutants in stormwater discharges from the project, as required by the SWPPP and the IPDES Construction General Permit.

DIVISION 200
EARTHWORK

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Section 201. – CLEARING AND GRUBBING

201.03 General

Add the following:

Wetland boundaries and buffers shall be delineated in the field by a qualified professional and clearly marked with high visibility fencing or flagging before any clearing and grubbing begins

No clearing, grubbing, or equipment operation shall occur within wetland boundaries or designated buffer zones unless explicitly authorized by permits. If authorized, retain native vegetation within designated preservation zones and along wetland boundaries to the maximum extent practicable.

Section 203. – REMOVAL OF STRUCTURES AND OBSTRUCTIONS

203.05 Removing Material

Add the following:

(c) Removal of Pilings. Removal of pilings consists of removing wood pilings as shown on the Project Plans or as directed by the Engineer. Piling removal includes all labor, equipment, and materials necessary to extract, cut, and dispose of piles above and below the waterline, including protection of water quality and adjacent structures.

(d) Removal of Cribs. Removal of cribs consists of deconstructing or demolishing and removing wooden structures as shown on the Project Plans or as directed by the Engineer. Crib removal includes all labor, equipment, and materials necessary to remove cribs above and below the waterline and/or partially buried within the project limits. Protection of water quality and adjacent structures is considered incidental to removal.

Pilings and cribs shall be removed in a manner that minimizes disturbance to the substrate and surrounding environment. Removal shall be in accordance with the project's permit conditions and best management practices (BMPs).

Prior to any in-water work for pile and crib removal, the Contractor shall implement fish exclusion protocols under the direction of a qualified biologist. The biologist shall be from the Idaho Department of Fish and Game (IDFG) or be a professional with the requisite knowledge, training, and experience to implement fish exclusion, capture, handling, and, if necessary, electroshocking procedures in accordance with the U.S. Fish and Wildlife Service's Recommended Fish Exclusion, Capture, Handling, and Electrofishing Protocols and Standards. Fish exclusion measures for this project shall include, but are not limited to, the following:

- Installation of block nets (typically 9.5-millimeter stretched nylon mesh) perpendicular to the direction of flow to isolate the work area.
- Anchoring of block nets using bags of clean washed gravel.

- Removal or herding of any fish within the isolated work area downstream and out of the work zone under the biologist's supervision.
- Maintenance of block nets in place until the work is complete and conditions are deemed suitable for the safe reintroduction of fish by the biologist.

Wood piles shall be removed using vibratory extraction or direct pull methods unless otherwise specified. Piles shall be extracted vertically to the maximum extent practicable.

If a pile breaks during removal, all efforts shall be made to remove the remaining portion. If removal is not possible, the pile shall be cut no more than 2 feet below the mudline or as otherwise specified in the Project Plans.

Extraction shall occur only during approved in-water work windows. Holes or voids shall be backfilled with clean sand or native sediment, unless otherwise specified

203.07 Disposing of Material

Add the following:

All materials shall be disposed of off-site. Creosote-treated or chemically treated piles shall not be reused or stockpiled on-site.

Section 204. – EXCAVATION AND EMBANKMENT

204.02 Definitions.

Add the following:

(e) Engineered Beach Construction. Engineered beach construction consists of grading the shoreline and placing beach sand and washed drain rock in designated areas as shown on the Project Plans.

204.03 Materials

Add the following materials:

Beach Sand	725.20
Washed drain rock	725.21
Rock for Riprap	705.02

204.13 Sloping, Shaping, and Finishing.

Add the following:

(d) Engineered Beach Construction.

(1) Grading the shoreline to a uniform slope as indicated on Project Plans. The contractor shall remove and properly dispose of excess material in accordance with Section 204.

(2) The subgrade shall be free of debris, sharp objects, rocks and clasts larger than 4" in diameter that could compromise the integrity of the beach fill. Compact to refusal.

(3) Place beach sand in uniform, 6-inch loose lifts, uncompacted, to the lines and grades shown on the Project Plans.

(4) Place washed drain rock in uniform 6-inch loose lifts in the locations and depths indicated on the Project Plans. Compact with sheep foot roller unless otherwise specified.

(5) All beach sand and washed drain rock shall conform to the gradation and cleanliness standards specified in Section 725.

Section 207. – EARTHWORK GEOSYNTHETICS

207.04 Geotextile and Geogrid in Separation and Stabilization Applications

Delete part (1) in section (b) and replace it with:

Place the specified backfill material onto the geotextile or geogrid by advancing from the edge of the geosynthetic or from previously placed cover material. Do not operate construction equipment directly on the exposed geosynthetic. Backfill shall be placed by carefully end-dumping and spreading from atop adjacent fill, maintaining a minimum 6-inch cover over the geosynthetic at all times.

In designated beach areas, place backfill as loose, uncompacted 6-inch lifts of sand. No mechanical compaction is required or allowed in these areas unless otherwise noted.

In areas outside the beach section, compact backfill only where specifically called out on the Project Plans. Compact these areas in accordance with Subsection 204.11, using only pneumatic-tire or nonvibratory smooth drum rollers. Do not use sheepsfoot or studded compaction equipment.

Avoid sudden stops, starts, or sharp turns when operating construction equipment over the placed backfill. If rutting occurs, fill ruts with additional cover material rather than blading or grading. If rut depth exceeds 3 inches, reduce equipment size or weight, or increase the thickness of the first lift, as directed by the Engineer.

207.05 Geotextile Filter Applications.

Delete part (b) and replace it with the following:

For slope or wave protection, place the long dimension of the geotextile down the slope. For streambank protection, place the long dimension of the geotextile parallel to the centerline of the channel.

Geotextile will be selectively installed in areas where soft or unstable soil conditions are identified, as determined by site inspection. Areas with firm, competent subgrade may not require geotextile placement.

Overlap or sew seam at the ends and sides of adjoining sheets according to manufacturer recommendations or as shown in the Project Plans. Ensure overlaps are oriented to prevent uplift or infiltration of underlying materials.

Section 208. – STRUCTURE EXCAVATION AND BACKFILL FOR SELECTED MAJOR STRUCTURES

208.07 Dewatering.

Add the following:

Incidental to excavation.

Add the following:

(a) Dewatering of Seepage Areas. This work consists of controlling and removing groundwater seepage from eroded shoreline areas to allow for stable working conditions and effective installation of shoreline stabilization materials. The Contractor shall furnish all labor, equipment, and materials necessary to dewater seepage zones as specified or as directed by the Engineer.

Identify active seep zones by visual inspection or as shown on Project Plans. Perform dewatering prior to or during placement of stabilization materials.

Excavate a shallow trench along or upslope of the seep area. Line with geotextile and place perforated pipe and drainage gravel. Backfill with gravel and wrap with geotextile. Divert discharge in same direction as flow.

DIVISION 250
EARTH RETAINING SYSTEMS AND SLOPES

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Section 251. - RIPRAP

251.01 Definition

Add the following:

Vegetated riprap consists of angular rock placed on a prepared slope, with live woody cuttings (live stakes) installed between the rock voids to enhance slope stability, reduce erosion, and promote riparian vegetation growth.

251.02 Material

Add the following:

Crushed Aggregate	705.06
Live Stakes	725.22

251.03 General

Add the following sentence to the end of the first paragraph:

Place crushed aggregate base according to Section 204.

251.04 Placed Riprap

Add the following paragraph after Paragraph 1:

Prepare subgrade in accordance with Section 204. Install filter layer across the prepared slope as specified on Project Plans. Place riprap in one or more layers to the specified thickness.

(a) Riprap Placement for Live Stakes.

As indicated on Project Plans leave voids in riprap, use rebar rod or pilot bar to pre-form holes if necessary.

Immediately after riprap placement, insert live stakes vertically or at a slight angle into soil between the rock voids.

Ensure at least two-thirds of each stake is embedded in moist soil below the rock layer, with 2-4 inches exposed above rock or as specified in plans. Space live stakes 2-3 feet apart in a staggered pattern, approximately 1-2 stakes per square yard. Compact the riprap lightly after the stake installation to ensure contact between rock and soil.

Perform all planting during dormant season. Soak live stakes in water 24-48 hours prior to installation for improved rooting success.

251.07 Riprap Gradation

Delete paragraphs (a) and (b) and replace with the following:

Refer to Subsection 705.02, Table 705-1 for riprap gradation requirements. Minimum riprap Class is shown on the Project Plans and shall be placed as specified. If the Class specified is locally unavailable, a larger riprap class may be substituted with Owner and Engineer approval.

251.08 Acceptance

Add the following:

Crushed aggregate will be evaluated under Section 204.

251.09 Measurement

Replace the last sentence with the following:

Riprap will be measured in place by the cubic yard, based on the design dimensions shown on the plans or as directed by the Engineer. No additional volume will be measured for loose placement, irregular surfaces, or overbuilding unless otherwise authorized in writing by the Engineer.

In-place volume will be determined using surface area multiplied by the specified thickness of the riprap layer, or by field survey of cross sections before and after placement. Voids within the riprap will not be deducted from the measured volume.

Material placed outside of the designed limits will not be measured for payment unless directed or approved by the Engineer.

DIVISION 600
INCIDENTAL CONSTRUCTION

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SECTION 602.- CULVERTS AND DRAINS

602.01 Description

Delete the subsection entirely and replace with:

This work consists of constructing or reconstructing stormwater systems, including all associated excavation, pipe installation, structures, joint sealing, backfilling, environmental protection, and testing, as shown on the Project Plans or as directed by the engineer.

602.03 General

Add the following:

Where indicated on the Plans, the Contractor shall furnish and install precast concrete headwalls and wingwalls at stormwater outlets. Precast concrete structures must conform to Idaho Transportation Department standard drawing 609-2. For additional reference information, see 2 Rivers Park PH1-Stormwater Plan completed by Welch Comer, stamped on July 7, 2024.

Installation shall be performed in accordance with manufacturer specifications and structural details shown in the Contract Documents. Ensure proper alignment with the pipe and secure integration with adjacent earthwork or structures to prevent undermining, erosion, or misalignment.

Section 626.- PLANTS, SHRUBS VINES, AND GROUND COVERS

626.02 Material.

Add the following:

Live Stakes	725.24
Hydroseed mixture	725.24

626.07 Setting Plants.

Replace paragraph (d) with the following:

(d) **Live stakes.** Stakes should be long enough to pass through riprap armor and gravel filter layer to penetrate 2-3 feet into the underlying soil. Stakes shall be a minimum 6 feet long. Stakes should be driven into the soil until only 4-6 inches are exposed above the riprap surface.

Use a planting bar or other tool to provide pilot holes for planting live stakes. Make pilot holes at least 24 inches deep and place one live stake in each hole. Place live stakes with the basal end pointed downward and in contact with the water table.

Backfill planting hole with native soil and tamp soil around stake to ensure good soil to stem contact. Hand place aggregate filter layer and riprap armor around live stake; ensure that the live

stake is sufficiently exposed above riprap as specified above and that riprap is not directly leaning on the live stake.

Planting during the high groundwater period (April and May) will significantly improve success rates. Do not install live stakes until groundwater is sufficiently high enough to support plantings unless otherwise specified by the Engineer and agreed upon by the Owner.

The Contractor shall monitor live stakes until project close out. The City will monitor growth during the first year, for establishment success, erosion, and weed competition is crucial. The Contractor will be required to replace live stakes, at their expense, if it is determined that live stakes were not correctly planted, diseased, or not adequately sourced per these specifications.

Add the following:

(f) Hydroseed. Apply hydroseed to all disturbed areas upon completion of construction activities. The work includes site preparation, furnishing of seed and mulch materials, application, and maintenance until successful germination. Refer to section 725.23 for project specific hydroseed mixture.

Final grading shall be completed before seeding. All debris, large rocks, and foreign material shall be removed. Soil shall be loosened to a minimum depth of 2 inches. Amend the soil as directed by the Engineer if necessary.

Uniformly distribute hydroseed, mulch, and water slurry. Apply during favorable weather conditions. Maintain continuous application to ensure even coverage without runoff or puddling.

Contractor shall maintain hydroseeded areas for a minimum of 60 days or until final acceptance, whichever is longer. Maintenance includes watering, reseeding bare areas, erosion repair, and weed control. Acceptable germination is defined as 75% vegetative coverage within 45 days of application.

DIVISION 700
MATERIAL

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Section 703.- AGGREGATE

703.06 Crushed Aggregate

Delete the section entirely and replace with:

Provide hard, durable particles or fragments of crushed stone or gravel conforming to the following properties:

- Have a minimum particle size of 1 ¼ inches, or as otherwise specified in Project Plans.
- Be well-graded and processed to produce a stable, compacted base or structural fill.
- Be free of organic matter, clay balls or lumps, and other deleterious materials

Section 725.- MISCELLANEOUS MATERIAL

Add the following subsections:

725.21 Beach Sand Provided beach sand shall be clean, natural sand consisting primarily of rounded to sub-rounded quartz grains. The material shall be free of clay, silt, organic matter, debris, sharp fragments, or any other deleterious materials that may impact recreational use, drainage, or environmental quality.

Gradation Requirements for Beach Sand			
Coarse Sieve Size (in)	Total % Passing	Fine Sieve Size (in)	Total % Passing
4	-	No. 8	95-96 (5)
3	-	No. 10	-
2	-	No. 16	89 (5)
1 1/2	-	No. 30	-
1	-	No. 40	47 (5)
1 1/2	-	No. 50	29-30 (5)
1	-	No. 100	9-10 (5)
3/4	-	No. 200	3-4 (5)
1/2	100		
3/8	100		
No. 4	98 (2)		

() The value in parentheses is the allowable deviation (±) from the target values

If material is unavailable locally, substitutions may be acceptable with engineer and owner approval.

725.22 River Rock Provided river rock shall consist of clean, hard, durable, and naturally rounded stone, free of organic material, soil, clay, silt, or other deleterious substances. The material shall be washed to remove fines and ensure proper drainage performance. Material shall meet the following properties:

Min. particle size	2-inch
Max. particle size	6-inch

If material is unavailable locally, substitutions may be acceptable with engineer and owner approval.

725.23 Live Stakes Live stakes shall consist of dormant, live, woody cuttings harvested from native plant species approved for the project. Stakes shall be suitable for direct insertion into the ground to promote root and shoot growth, contributing to long-term slope or bank stabilization and vegetation establishment.

Live stakes shall be from native riparian species appropriate to the project site and approved by the Engineer. Acceptable species include:

- *Salix spp.* (willow)
- *Cornus sericea* (red-osier dogwood)
- *Populus spp.* (cottonwood)
- *Alnus incana* (gray alder)
- *Crataegus spp.* (hawthorn)

Install live stakes on approximately 2-foot centers, in a staggered or triangular pattern. Cuttings shall be sufficiently long to reach moisture within the soil profile and to anchor securely into place; provide live stakes that are a minimum of 6 feet long and a minimum of one-half inch in diameter. Stakes shall be straight, freshly cut, and free of disease, insects, mold, or mechanical damage.

725.24 Hydroseed Mixture Contractor shall furnish and apply the following seed mixture or equivalent approved by the engineer and owner to all disturbed areas:

Botanical Name	Common Name	Percent of Mix
Elymus trachycaulus ssp. trachycaulus	Slender wheatgrass	15%
Poa annua	Sandberg bluegrass	10%
Bromus marginatus	Mountain brome "Bromar"	10%
Lolium multiflorum	Annual rye	10%
Elymus glaucus	Blue wildrye	12%
Achillea millefolium	Yarrow	5%
Lupinus argenteus ssp. rubicaulis	Mountain Lupin	3%
Chamaenerion angustifolium	Fireweed	5%
Solidago canadensis	Canada Goldenrod	5%
Clarkia pulchella pursh	Clarkia	5%
Gaillardia aristata pursh	Blanket Flower	5%
Phlox ssp.	Slender Phlox	5%
Fragaria vesca	Woodland Strawberry	5%
Castilleja mutis	Indian Paintbrush	5%
Total		100%