

BLUEWATER HATCHERY SETTLING BASIN REPLACEMENT
FWP PROJECT NO. 7193139 SPECIFICATIONS

SPECIAL PROVISIONS

SP-1 SPECIFICATIONS AND CONTRACT DOCUMENTS

The Bidding Requirements, Contract Forms, Conditions of the Contract, Standard General Conditions, and Specifications governing this contract are the Montana Public Works Standard Specifications (MPWSS), Seventh Edition, April 2021.

SP-2 GENERAL

The following special provision items are included to supplement the standard specifications and to clarify items specific to this contract. These provisions are part of the overall specifications and, as such, shall be regarded in a like manner during the bidding process and during the construction phase. If a conflict, discrepancy, contradiction, or inconsistency occurs between the Specification and the Drawings, resolution shall be as specified in Article 1 of the General Provisions.

Contractor shall coordinate all construction activities through all phases of the project, the intent being to complete the proposed construction in a neat orderly fashion, in a timely manner, and with a minimum of disturbance to neighbors and the traveling public.

The Contract Drawings consist of 9 sheets. Each sheet bears the following general title: Montana Dept of Fish, Wildlife and Parks, Bluewater Fish Hatchery, Settling Basin Replacement.

Contractor shall construct project only using plan sheets marked “Issued for Construction”.

SP-3 PROJECT DESCRIPTION

This project consists of two (2) new double settling basins and piping to fill and drain the basins.

SP-4 SCHEDULING

Prior to or at the Preconstruction Conference, the Contractor shall provide the Engineer/Owner with a practicable Construction Progress Schedule showing the order, timing, and progress in which the Contractor proposes to complete the work.

This schedule shall be in bar graph, CMP, or PERT format. The schedule shall be updated and resubmitted with each application for payment requested.

SP-5 PAYMENT AND PERFORMANCE BONDS

Payment and Performance Bonds are required per the General Conditions.

SP-6 CERTIFICATE OF INSURANCE

Insurance coverage shall be per the General Conditions.

SP-7 PREVAILING WAGE RATES

All work performed under this contract shall be paid per General Conditions 3.4, Labor, Wages, and Materials.

SP-8 PAYMENT OF CHANGE ORDERS

Additional work, above and beyond the original contract work will not be paid for without a signed change order or contract amendment signed by the Owner prior to the start of any work. Change orders shall be in accordance with Article 7.2 of the General Conditions.

A reconciling change order showing final in-place quantity over-runs and under-runs will be prepared before the final payment to the Contractor. The unit prices will remain unchanged. This reconciling change order shall be prepared before authorization of final payment to the Contractor.

SP-9 ADVERSE WEATHER SHUTDOWN

The Contractor is advised that should the Contractor request an adverse weather shutdown and should such a shutdown be approved by the Engineer/Owner, all work on the project shall cease. The Engineer will not be available for work inspection during such shutdowns and any work completed by the Contractor during such a shutdown will not be accepted by the Engineer.

In no case will an adverse weather shutdown be approved by the Engineer until all temporary services have been restored.

During adverse weather shutdown, Contractor must maintain storm water management facilities in accordance to the Storm Water Management and Erosion Control Permit, (in accordance to Montana Department of Environmental Quality), and maintain all temporary roads and walkways.

SP-10 BASIS OF PAYMENT

The bid items included in the Bid Form include all items, which will receive payment under this contract. Additional work described in the Contract Documents or shown on the Plans, which is

not specifically listed in the Bid Form, shall be considered incidental to the closest associated Bid Item.

The basis for payment shall be as abbreviated on the Bid Form and defined below:

LS = Lump Sum; EA = Each; LF = Linear Feet; VF = Vertical Feet; CY = Cubic Yard;
SY = Square Yard; SF = Square Feet; TN = Ton; GL = Gallon

At project completion, adjustments to quantities will be made based on actual amounts installed. Adjustments will not be made for Lump Sum items unless the scope of work is substantially changed during construction as determined by the Engineer. The Engineer shall have final authority in determining if the scope of work has substantially changed. If scope of work must be changed due to negligence or fault of the Contractor, additional payment for Lump Sum items shall not be made. Quantity adjustments to all non-lump sum items shall be measured by the Engineer in the presence of the Contractor. Payment for each item shall be for the finished product including all labor, materials, equipment, overhead, profit and any other miscellaneous items unless otherwise noted in the Contract Documents.

Mobilization and Insurance Bid Items . These items include the mobilization of equipment to the site, insurance and bond costs and demobilization. Payment for Mobilization and Insurance Bid Items shall be made as follows. Sixty (60) percent of the total item shall be paid with the first application for payment. The remaining forty (40) percent of the total shall be paid with the first application for payment that is submitted to the Engineer after the Certificate of Substantial Completion has been signed by the Engineer and the Owner.

Partial Payments of Lump Sum Bid Items. Payment for all lump sum items shall be made on the basis of percent of work complete on individual items at the time the Contractor submits the Application for Payment to the Engineer. If required by the Engineer, the Contractor shall provide evidence of percent of work complete. The percent of work shall then be determined by the judgment and calculations of the Engineer.

SP-11 LIMITS OF CONSTRUCTION

The Contractor is required to confine construction activities within the area of construction activity as shown on the plans.

Open space, vacant lots, or undeveloped land shall not be considered for Contractor use unless the Contractor obtains separate temporary easements. Said separate temporary easements shall be in writing executed by the property owner of said land and an executed copy shall be filed with the Owner and the Engineer, prior to Contractor occupancy of land.

Unless specifically designated for removal, all trees and other improvements in or adjacent to easements and rights-of-way shall not be touched, trimmed or injured. All restoration outside the limits of the construction areas shall be at the Contractor's expense.

SP-12 STAGING AREA

The staging area for this project shall be coordinated with the management of the hatchery. Contact Matthew Wipf, (406)668-7443.

SP-13 CONSTRUCTION ACCESS

The Contractor may access the site via Bluewater Road. The Contractor shall provide temporary access as required, but shall restore the site to its original condition. Any damage to existing roadways or existing facilities will be repaired at the Contractor's expense.

SP-14 PRESERVATION AND REPAIR BY CONTRACTOR

The Contractor shall be responsible for the preservation of existing paved and gravel street sections which are not to be disturbed by construction. The Contractor is hereby cautioned that any damage done in any paved or gravel service road, due to any construction or travel operations (hauling, storage, unloading, etc.), shall be repaired and/or replaced at Contractor's expense, and to the satisfaction of the Owner. The Contractor shall familiarize themselves with the existing sections in the area and consider self-imposed load restrictions conforming to those sections. All access roads shall be kept free and clear of all mud, gravel, debris, etc., during the project. There will be no additional payment to the Contractor for the cleaning and sweeping of all access roads.

SP-15 CONTRACTOR'S SUPERINTENDENT

The Contractor will be required to have a full-time resident General Superintendent on the project at all times while the work is in progress. The General Superintendent shall be knowledgeable and qualified to evaluate the quality of not only the general construction work but especially the systems and installations of subcontract work.

The General Superintendent shall:

- Aggressively evaluate on a day-to-day basis and be responsible for the quality and acceptability of all work.
- Make the first determination as to the fitness and compliance of all work performed.
- Be the initiator in regard to rejection of unfit work.
- Not passively default or abdicate, in the first analysis, these duties to the Architect/Engineer or to the Owner.

The General Superintendent shall be in a position to direct the work and make decisions either directly or through immediate contact with General Superintendent's superior. Absence or incompetence of the General Superintendent shall be reason for the Owner to stop all work on the project.

The General Superintendent or Contractor's designated representative shall maintain, at the project site, a "Record Set of Drawings" showing field changes, as-built elevations, unusual conditions encountered during construction, manufacturer's catalog number of equipment supplied, and other data as required to provide the Owner with an accurate "as-constructed" set of Drawings. An approval by the Engineer shall not be given on the final payment request until complete record drawings are submitted to the Engineer.

SP-16 CONTRACTOR WORK HOURS

The schedule for this project has been figured on the basis of the Contractor working five days a week (Monday through Friday, excluding legal holidays), eight (8) hours a day. Should the Contractor and/or Contractor's subcontractor(s) desire to work more than five (5) days per week or more than eight (8) hours per day, then approval to do so must be obtained from the Engineer/Owner. If the additional work hours result in costs above and beyond the Engineer's contract fees, the actual cost of the additional Engineer's services will be the responsibility of the Contractor and will be deducted from the Contractor's application for payment. These costs shall not be considered a part of the liquidated damages.

No work shall be done between the hours of 8:00 p.m. and 6:00 a.m., nor on Saturdays, Sundays, or legal holidays, without the written approval of the Owner. However, work necessary in case of emergencies or for the protection of equipment or finished work may be done without the Owner's approval.

SP-17 CONTRACTOR RESPONSIBILITIES

The Contractor shall be responsible for obtaining all permits as required by local government agencies.

The Contractor shall enforce strict discipline and good order among Contractor's employees and other persons carrying out the Agreement. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on performance of the work.

The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Agreement. At completion of this work, the Contractor shall remove from and about the project waste materials, rubbish, tools, construction equipment, machinery and surplus materials.

To the fullest extent of the Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer from and against all claims, costs, damages, losses and expenses, including, but not limited to, attorney's fees arising out of or resulting from performance of the work caused in whole or in part by negligent acts or omissions of the Contractor, subcontractor(s), anyone

directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder.

The Contractor shall coordinate all phases of the work with Owner's use of the site to minimize or avoid conflict, protect all existing work adjacent to new construction, and repair any damage and leave premises in original condition, except where otherwise specified by the Engineer. Contractor agrees to attend or be represented at weekly team meetings during the term of the project to assure coordination with the other project participants.

SP-18 WATERWAY AND DITCH CROSSINGS

The Contractor shall schedule Contractor's work to prevent interruptions of local irrigation operations and waterways. All ditches and waterways are to be restored to the satisfaction of the user(s).

SP-19 GROUNDWATER CONSIDERATION

The Contractor is advised that groundwater may be present at the project site. The Contractor is responsible for providing dewatering equipment and methods for this project.

The Contractor shall be responsible for arrangements of permits and obtaining of sites of groundwater discharge or flushing discharge. This shall include all cleanup, restoration, etc., of any discharge areas. No claims for any of the above-related work shall be submitted to the Owner.

SP-20 TEMPORARY FACILITIES

Water, power, heat, and toilet facilities are not available at the job site. The Contractor shall provide, at Contractor's expense, temporary water, power, heat, and toilet facilities, as required.

The Contractor shall design, construct, and maintain miscellaneous services and facilities as needed to accommodate performance of the work, including temporary stairs, ramps, ladders, staging, shoring, scaffolding, temporary partitions, waste chutes, sidewalk bridge/walkway, and similar items.

SP-21 EXCAVATION

The associated quantities included within the plans are based upon existing ground to bottom of excavation.

Payment for excavation of the calculated quantity will be paid under the associated bid item.

SP-22 SITE GRADING

Excess material generated from excavation will be distributed throughout the site as directed by the Engineer/Owner or shall be disposed of across Bluewater Road at a site within the property designated by the hatchery management. . Excess material shall be graded and blended into the surrounding topography to provide a natural appearance to the finished grade of the project. The placement and grading of this material shall be considered incidental to the excavation bid item.

SP-23 DUST CONTROL

The Contractor shall provide dust abatement for all roads and work areas and prevent dust from becoming a nuisance to adjacent properties. There will be no payment for dust control as a separate bid item and this work is considered incidental and at the Contractor's expense.

SP-24 WATER FOR CONSTRUCTION PURPOSES

Construction water required for compaction of embankments, gravel courses, or any other construction related work must be supplied by the Contractor at Contractor's expense.

SP-25 UNDERGROUND UTILITY CROSSINGS

The Contractor shall be responsible for checking with the owners of the underground utilities such as the power, gas, and telephone companies, etc., as to the location of their underground installations in the project area. The Contractor shall be solely responsible for any damage done to these installations due to failure to locate them or to properly protect them when their location is known.

It shall be solely the responsibility of the Contractor to fully coordinate Contractor's work with the agencies and to keep them informed of Contractor's construction activities so that these vital installations are fully protected at all times.

A Montana One-Call system (1-800-424-5555) has been established to facilitate requests for underground facility location information. The Contractor is cautioned that all utilities may not be on this system.

The Contractor shall have full agreement and understanding with the affected utility companies on what the existing conditions are and what will be necessary to be changed for the Contractor's construction. The Contractor will obtain any permits, agreements, or insurance required. No separate measurement and payment shall be made for this item, unless specifically noted. All costs shall be considered an integral part of and be included in the price bid for pipe complete-in-place.

SP-26 SIGNS, SIGN POSTS AND UTILITY POLES

All existing signs, sign posts and utility poles determined to be in the path of the work zone shall be temporarily removed and later replaced in their previous location. The conditions of MPWSS Section 02114 shall apply to this section with the exception that there shall be no separate measurement and payment for this item.

SP-27 SECURING WORK AREAS AND PEDESTRIAN TRAFFIC

The Contractor is reminded of the importance of securing all work areas during and after construction work hours to prevent pedestrian access. Costs associated shall be considered incidental to the work with no separate payment for this item.

SP-30 CONSTRUCTION STAKING

The Contractor is responsible for providing construction staking for measurements, lines, locations and grades necessary for construction. All construction staking shall be performed under the responsible charge of a land surveyor licensed in the State of Montana and by a party chief or engineering technician experienced in construction layout and staking techniques as are required by the specific type of work being performed.

Payment for construction staking shall be considered incidental to the work and is to be covered under other bid items of the project.

SP-31 COMPACTION REQUIREMENTS

All earthwork and gravel shall be compacted to 95 percent of maximum dry density as determined by the standard proctor method ASTM (D-698).

SP-32 MATERIALS TESTING AND CONTROL

A. The following materials and control tests may be made by the Engineer to determine the Contractor's compliance with the specifications:

1. In place density test of basin floor gravel, independent of any contractor testing required for completion of the work. 2. Gradation, liquid limit and plasticity index tests of gravel aggregates. Tests of gravel materials shall be made from material in place. 3. Stripping tests, volume swell tests, fracture tests, wear tests, and soundness tests shall be made prior to or during the Contractor's crushing operations. The periodic tests made by the Engineer, of the Contractor's production may serve as the basis for rejecting completed work or stockpiles as unacceptable. The above tests - paragraphs A.1 through A.3 - shall be made with no cost to the Contractor, except as herein provided for test failure. Should any of these tests fail, the Contractor shall then be responsible for the cost of the failing test. The costs of the failing tests shall be deducted from the Contractor's application for payment.

B. The costs of the following tests shall be paid for by the Contractor:

1. Any additional tests the Contractor requires to control Contractor's crushing, screening or other construction operations. 2. Test failure, as provided above. 4. Any additional tests required to verify acceptable quality of supplied materials. This shall include, but not be limited to, a three-edge bearing test.

D. Acceptance and rejection of materials will generally be determined from tests made of the various courses complete and in-place in the field. While the Engineer may, during course of construction, make tests at the source or point of production; it is the responsibility of the Contractor to conduct, control and test Contractor's production operations in such a manner that the materials produced will meet the specification requirements.

Contractor shall be responsible for all quality control testing. Owner shall be responsible for quality assurance testing.

SP-33 TECHNICAL SPECIFICATIONS

Technical specifications have been included in the Contract Documents and are incorporated by reference. The attached technical specifications shall be considered a part of these Special Provisions in determining precedence of the Contract Documents.

SP-34 SHOP DRAWINGS

Shop drawings or submittals shall be submitted for all materials used in the project including, but not limited to the following:

A. Gravel, and pit run materials

B. Concrete

C. Reinforcing Steel Mill Certs

SP-35 UNSUITABLE BACKFILL

The Contractor is responsible for stabilizing all excavated areas before backfilling. Any excavated material that is unsuitable for backfill, due to moisture content (either excessively wet or dry), shall be conditioned in a manner acceptable to the Engineer to render it suitable for backfill in accordance with Section 02221 of MPWSS, Sixth Edition. All costs associated with this work shall be considered incidental.

If the Contractor chooses not to condition the unsuitable materials, imported material, approved by the Engineer, shall be substituted for backfill. Imported material and disposal of unsuitable materials shall be considered incidental.

SP-36 PRECAST ALTERNATES

The Contractor may propose to use precast substructure units in lieu of placing concrete substructure units. Shop drawings must be submitted for the precast units and approved by the Engineer/Owner.

SP-37 EXPLANATION OF BID ITEMS

The following items are intended to clarify the scope of the following Bid Items, but are to be considered supplemental to the rest of the Contract Documents and not necessarily all inclusive of items, which must be completed for payment of each Bid Item.

Bid Item No. 101 – Mobilization. This bid item shall include the costs associated with mobilizing equipment to the project site, insurance, bond costs, permitting, submittals, and demobilization. Measurement and payment will be by lump sum (LS). Sixty (60) percent of the total item shall be paid with the first application for payment. The remaining forty (40) percent of the total shall be paid with the first application for payment submitted after the Certificate of Substantial Completion has been signed by the Owner.

Bid Item No. 102 – Remove & Reset Fence. This bid item shall include the costs associated with the removal and resetting of the existing chain link fence as shown on the plans. Measurement and payment will be by linear feet (LF).

Bid Item No. 103 – New 20' Double Gate. This bid item shall include the costs associated with the installation of each new gate which includes two 10' gate sections per New 20' Double Gate, labor, and hardware required for the installation. Measurement and payment will be by each (EA).

Bid Item No. 104 – Excavation. This bid item includes the excavation for the basins and PVC pipe installation, removal of excavated basin material, drainable backfill along the basin walls, removal and backfill of the pipe trench, and the compaction of the backfill. Measurement and payment will be by the cubic yard (CY). Basis of payment will be the actual measured excavation quantity required to place the basins and pipe.

Bid Item No. 105 – Concrete 4000 psi. This bid item includes the forms, labor, and concrete to complete the substructure units. Measurement and payment will be by the cubic yard (CY). Basis of payment will be the actual measured concrete quantity required to place the settling basins as per the plan drawings.

Bid Item No. 106 – Reinforcing Steel. This bid item includes the furnishing and placing of the reinforcing steel shown on the plans for the settling basins. Measurement and payment will be by the pound (LB). Basis of payment will be the actual weight of the reinforcing steel as shown on the certified delivery invoice.

Bid Item No. 107 – Basin Gravel. This bid item includes the furnishing and placement of the gravel required for the bedding of each basin floor. Measurement and payment will be by the ton (TN). Basis of payment will be the actual load weights of each truckload measured and ticketed with a certified scale.

Table 1. Basin Floor Gravel Gradation

SIEVE SIZE	PERCENT PASSING
3”	100
2 ½ ”	90-100
1 ½ ”	25-60
¾ “	0-5

Bid Item No. 108 – Roadmix Gravel. This bid item includes the furnishing and placement of the gravel required to build the roadway beside and between the settling basins. Measurement and payment will be by the ton (TN). Basis of payment will be the actual load weights of each truckload measured and ticketed with a certified scale.

Table 2. Roadmix Gravel Gradation

SIEVE SIZE	PERCENT PASSING
¾”	100
½ ”	90-100
¾ “	40-70
#4	0-15
#8	0-5

Bid Item No. 109 – Magnesium Chloride. This bid item includes the furnishing and placing of the Magnesium Chloride on the roadmix gravel. Measurement and payment will be by the square yard (SY). Basis of payment will be the actual measured in place quantity.

Furnish liquid magnesium chloride in accordance with the following requirements.

LIQUID MAGNESIUM CHLORIDE REQUIREMENTS: Alkali chlorides $\leq 5.0\%$ by mass; NaCl Arsenic ≤ 5.0 mg/Kg; Assay $\geq 28.5\%$ MgCl₂ by mass; Barium ≤ 100.0 mg/Kg; Cadmium ≤ 0.2 mg/Kg; Chromium ≤ 1.0 mg/Kg; Copper ≤ 1.0 mg/Kg; Cyanide ≤ 0.20 mg/Kg; Lead ≤ 1.0 mg/Kg; Magnesium hydroxide $\leq 0.2\%$ by mass; Mg(OH)₂ Mercury ≤ 0.05 mg/Kg; Phosphorous ≤ 2500.0 mg/Kg; Selenium ≤ 5.0 mg/Kg; Settleable solids $\leq 1.0\%$; Sulfate $\leq 3.0\%$ by mass; SO₄ Zinc ≤ 10.00 mg/Kg

Bid Item No. 110 – Crack Sealing. This bid item includes the furnishing and placing of the crack sealer in the construction joints and any noticeable cracks as directed by the owner. The sealant specifications and the application method shall be submitted and approved by the owner prior to installation. The sealant shall be safe for fish. Measurement and payment will be by the linear foot (LF). Basis of payment will be the actual measured in place quantity.

Bid Item No. 111 – 8” PVC Schedule 40 Pipe. This bid item includes furnishing and the labor to install the PVC pipe, elbows, wyes, tees, and couplings as shown on the plans. Measurement and payment will be by the linear foot (LF). Basis of payment will be the actual measured in place quantity.

Bid Item No. 112 – 18” PVC Schedule 40 Pipe. This bid item includes furnishing and the labor to install the PVC pipe and elbows as shown on the plans. Measurement and payment will be by the linear foot (LF). Basis of payment will be the actual measured in place quantity.

Bid Item No. 113 – 18” Butterfly Valve. This bid item includes furnishing and the labor to install the 18” Butterfly Valves as shown on the plans. Measurement and payment will be by the each (EA).