1. DEMOLITION – BLASTING (revised 2-1-2022)

Description. Meet the requirements of Section 204 and the additional requirements of this provision if blasting demolition techniques are used on the project.

Blaster-in-Charge.

The Blaster-in-Charge must possess a current blasting license issued by the State of Montana.

Submit the Blaster-in-Charge’s resume detailing adequate experience on a minimum of 5 verifiable projects, as the Project Blaster-in-Charge, with similar complexity, constraints, site conditions, and environmental requirements to ensure adequate experience in drilling, blasting, and bridge pier/structure demolition.

Use of Explosives.

Perform all blasting/demolition operations, including the storage and handling of explosives, blast planning and design, preparation of all required plans, determination of vibration limits, and vibration monitoring, in accordance with the Specifications, these provisions, and all applicable Federal, State, and local regulations.

Use only explosives permitted by the State, local laws and ordinances, and all respective agencies having jurisdiction over them.

Submittals.

At the preconstruction meeting, submit to the Project Manager for review, an electronic copy of a proposal that describes the plan for structure removal and protection of all adjacent or nearby structures, appurtenances and facilities. The Project manager will submit a copy of the proposal to the US Army Corps of Engineers and the Montana Department of Fish Wildlife and Parks for their review. Do not begin removal operations prior to receiving MDT approval to proceed with the proposal. Notice to proceed with the proposal is contingent on meeting the requirements of the Contract and all permanent and temporary facilities permits. Submit a proposal that includes the following:

Blasting/Demolition Plan.

Safety Plan.

River Closure Plan

Debris Containment and Removal Plan.

Submit a blasting/demolition plan for bridge pier/structure demolition, along with any comments from the Blasting Consultant, the US Army Corps of Engineers, and the Montana Department of Fish Wildlife and Parks to the Project Manager for review a minimum of 14 calendar days before the start of drilling/demolition operations or at any time the drilling and blasting/demolition methods are changed. Include full details of the drilling and blasting patterns and controls to be used in the blasting/demolition plan. Include the information required by Section 204, at a minimum, in the blasting/demolition plans.

Submit a safety plan to the Project Manager for review a minimum of 14 calendar days before the start of drilling/demolition operations. Include the information required by Section 204, at a minimum, in the safety plan.

Submit a river access closure plan in accordance with the Waterway Passage and Signing special provision to the Project Manager for review before blasting/demolition operations.

Submit a debris containment and removal plan, including all comments from the Blasting Consultant, the US Army Corps of Engineers, and the Montana Department of Fish Wildlife and Parks to the Project Manager for review.

Cofferdams are not considered sufficient for primary debris containment.

Blasting mats or other serviceable methods must be employed for primary debris containment. Blasting/demolition will not be allowed until all required permits or authorizations have been received. Include sufficient information in the plan regarding demolition operations, removal operations and methods, detailed containment system drawings and material specifications, applicable calculations, demolition and removal equipment details and specifications, and other information as required by the resource agencies to ensure compliance with all environmental permits or authorizations issued for the project.

The debris containment and removal plan must include, but is not limited to the following:

Any foreign material or debris greater than 6 inches that enters the Big Hole River outside of the secondary containment system must be removed from the river bed. To ensure compliance with this condition:

* Determine the lateral extent of fly rock and debris that exits the secondary containment system.
* Develop a reasonable grid pattern for a systematic examination of the river bed.
* Conduct a visual inspection of each grid cell (underwater camera, high resolution sonar, divers, etc.) to ensure removal of all materials greater than 6 inches.
* Submit video and written documentation of the blast(s) and lateral extent of fly rock and debris, with a detailed description of the methods executed, as well as documentation of the retrieval of the materials from the river bed to the Project Manager.

Blasting/Demolition Operations.

Notify MDT Project Manager for coordination with MDT Environmental Services at (406) 444-XXXX of the intended blast date(s) 10 working days prior to blasting/demolition as well as the requirements of Section 204.

Method of Measurement and Basis of Payment: Include all costs associated with blasting demolition methods, including Blasting Consultant, in the contract unit price per lump sum for Remove Structure.