

**F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT**

A. EXAMPLE PROJECT KEY NUMBER: **AML 7F-5, Hanna No. 4 Mine Project**

B. TITLE AND LOCATION (*City and State*): **Hanna, Wyoming**

C. YEAR COMPLETED - PROFESSIONAL SERVICES: **Ongoing**

D. YEAR COMPLETED - CONSTRUCTION (*If applicable*): **Ongoing**

23a. PROJECT OWNER'S INFORMATION - PROJECT OWNER: **Wyoming AML**

23b. PROJECT OWNER'S INFORMATION - POINT OF CONTACT NAME: **Barry Shelley, AML Project Officer**

23c. PROJECT OWNER'S INFORMATION - POINT OF CONTACT TELEPHONE NUMBER: **307 473-1393**

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (*Include scope, size, and cost*): **Follows**

25. FIRMS FROM SECTION INVOLVED WITH THIS PROJECT

(1) FIRM NAME	(2) FIRM LOCATION ( <i>City and State</i> )	(3) ROLE
<b>BRS Inc.</b>	<b>Riverton, WY</b>	<b>Site Investigation, Design, CM</b>

The Hanna Shallow Ground Water Control Project is similar to typical coal mine reclamation projects with respect to mine subsidence and mine closure issues, but has larger surface water control issues than many AML projects. A brief project description follows:

This project is within the immediate vicinity of Hanna and adjacent to Arch of Wyoming's Seminole mine permit area. The Hanna No. 4 underground mine underlies the majority of the Stink Creek drainage. A subsurface drilling program was developed with the aid of underground mine mapping. Drilling revealed a 30 foot mine void less than 50 feet below the surface within steeply dipping coal beds. One emergency closure of an open subsidence feature has already been completed. Following Arch's reclamation of an old haul road which acted as a dam across Stink Creek, the town of Hanna was left unprotected against storm water runoff from upland areas north of the townsite. BRS constructed surface water attenuation structures which will abate potential flood peak flows by over 90% without the retention of water. Without the construction of these structures, hydrologic studies predicted dire consequences under as low as a 10 year storm event. As a unique aspect of this project, the Hanna Museum was rehabilitated as a historical mitigation, including structural and HVAC repairs to provide structural integrity and comfort for museum staff and patrons.

**KEY PROJECT REQUIREMENTS:**

- **Site investigation, surface and subsurface**
- **Ownership and eligibility determination**
- **Permitting and consents**
- **Mine and subsidence clearance**
- **Surface drainage restoration and flood control**

**Upper Flood Control Structure Site Prior to Construction:**



**During Construction – Construction of Key Way**



**During Construction – Compaction of Earthen Structure**



**Completed Attenuation Feature with Outlet Structure:**



**The Hanna Museum, Registered National Historic Place:**



**Structural Trusses Constructed to Reinforce Roof:**



**Mining Artifact Display:**



**New Heater and Air Conditioner:**

