

Environment Assessment

The New Mount Carmel Foundation Access Road Amendment and Natural Gas Pipeline

WY-020-EA11-50

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BLM

Cody Field Office, Wind River/Bighorn Basin District, Wyoming



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1.0 INTRODUCTION

The New Mount Carmel Foundation (NMCF) has applied to the Bureau of Land Management (BLM) for an amendment to a right-of-way (ROW) grant that would allow the upgrade of an existing road ROW and expansion of the authorized scope of the ROW to include construction traffic. A ROW application has also been received from the NMCF for the construction and operation of a natural gas pipeline. This Environmental Assessment (EA), entitled The New Mount Carmel Foundation Access Road Amendment and Natural Gas Pipeline, is being prepared to comply with the National Environmental Policy Act (NEPA), and has been assigned number WY-020-EA11-50 on the BLM Wyoming NEPA register. The lands and realty case file number for the access road ROW grant is WYW-165919 and the case file number for the natural gas pipeline ROW grant is WYW-165952.

1.1 Background

On June 25, 2010, a primitive road ROW (WYW-165919) across approximately 3 miles of BLM road, in several distinct segments, was granted to Mr. Dave Grabbert for legal access to his deeded lands. The ROW was granted with no authorized upgrades; however the Plan of Development (POD) referenced anticipated future actions including the assignment of the ROW due to a land purchase and potential future amendment of the ROW grant to allow the upgrade of the access road. The ROW was assigned to the NMCF on October 18, 2010. Please refer to Map 1 – Monastery Access Road. BLM has granted two other ROWs along the same road as the proposed action (WYW-158678, to Gary Ventling for access to private property, DNA-WY020E05-069, March 15, 2005, and WYW-151431, to MC Land and Cattle for access to Foster Reservoir, EA WY-020-E A01-148, December 19, 2008).

The existing NMCF access road ROW provides legal access from the Spring Creek oil field paved road to the NMCF private property. The existing road is the primary ingress/egress to the NMCF deeded lands, and includes the 1.4 miles of BLM road proposed for upgrade. NMCF obtained Park County Special Use Permits authorizing construction of a monastery and coffee-roasting facility (“coffee barn”) on its private land. The Board of County Commissioners for Park County approved the permits by adopting Resolutions #2010-46 and #2010-47, approval of Special Use Permits for a major institutional use (Monastery) and major industrial use (Coffee Barn) for the NMCF, on October 5, 2010 (the “Special Use Permits”). Given the size of the development of the monastery and associated facilities, Park County has required the upgrade of the access road to meet specific standards outlined in the Special Use Permits. These standards will be discussed in detail in the description of the proposed action.

1.2 Purpose and Need for the Proposed Action

The purpose of the action is to provide the private landowner legal access and authorization to construct a new buried natural gas pipeline across 1.4 miles of public land administered by the Cody Field Office, BLM.

The need for the proposed action is established by the BLM's responsibility under FLPMA to respond to requests for an amendment to an existing ROW grant for the upgrade of an existing access road and construction of a new buried natural gas pipeline across public land, administered by the BLM Cody Field Office.

Decision to be Made: The BLM will decide whether or not to grant a ROW amendment to NMCF for the upgrade and use of an existing access road. In addition, BLM will decide whether to grant NMCF's request for a new grant to construct a natural gas pipeline buried within the access road ROW. The length of both the pipeline and the upgraded section of the road would be 1.4 miles. They would be issued for a term of 30 years with both ROWs renewable upon expiration. The ROWs will meet Park County Road and Bridge Standards as outlined by the Special Use Permits.

BLM also will decide whether to amend the scope of use of the entire ROW, including the two authorized sections of BLM road called the Spring Creek Road, which are paved and need no improvement work (see Map 1), to allow for use for ingress/egress by contractors for up to three years while the monastery and coffee barn are being built. Once construction is completed, access will be very restricted as per agreement between NMCF and local private landowners.

1.3 Relationship to Statutes, Regulations, Plans or Other Environmental Analyses

The authority for this decision is provided by the Federal Land Policy and Management Act, 43 U.S.C. § 1761-1766, (WYW-165919, access road amendment), and Mineral Leasing Act of 1920, as amended (30 U.S.C. 185) (WYW-165952, buried natural gas pipeline). The decision will be made in accordance with NEPA, 42 U.S.C. § 4321 *et seq.*, and its implementing regulations, as well as BLM's ROW regulations contained in 43 CFR Part 2800.

Other policy and guidance this assessment takes into consideration include: Threatened and Endangered Species Stipulation (included within Instruction Memorandum No. 2002-174); Migratory Bird Species-Interim Management Guidance Policy (included within Instruction Memorandum No. 2008-050); Bureau of Land Management (BLM) Sensitive Species, Raptors, Migratory Birds, and Prairie Dog Surveys; and other Washington Office and Wyoming BLM guidance.

The Proposed Action conforms to the Cody Resource Management Plan (RMP) (Record of Decision (ROD) signed November 11, 1990). The Cody RMP ROD provides, on page 13: "Existing public access to BLM-Administered public lands in the Carter Mountain area will be continued." It is the BLM's policy to provide access, when appropriate, across BLM administered lands to private land for the land owner's enjoyment of his or her private land.

1.4 Scoping, Public Involvement and Issues

Internal scoping was completed by an Inter-disciplinary Team (IDT), on January 28, 2011. During that process, the IDT identified the resources and issues that will be analyzed in this EA. Please see Table 2 for the list of resources and issues that will be fully analyzed and those that will not be analyzed in this document.

Notice to the public that this document is being prepared in response to the ROW applications, WYW-165919 and WYW-165952, is provided through the Cody Field Office NEPA register, at: <http://www.wy.blm.gov/nepa/search/index.php>. Members of the public can review the Cody Field Office NEPA register and request information on any project shown on the list.

The Wyoming Game and Fish Department provided comments and field notes from an onsite visit with BLM and NMCF in September 2010, regarding wildlife and resource issues.

The Cody Field Office initiated consultation with the Wyoming State Historic Preservation Officer (SHPO) regarding cultural resources on October 27, 2010. Native American Consultation with the Blackfeet, Crow, Eastern Shoshone, Northern Arapaho, Northern Cheyenne, and the Shoshone-Bannock Tribes was initiated on October 29, 2010.

2.0 PROPOSED ACTION AND ALTERNATIVES

NMCF has applied for an amendment to a ROW to allow the upgrade to an existing access road across 1.4 miles of public land administered by BLM, from a rough two-track road to Park County Road and Bridge Standards. NMCF also has applied for a new ROW grant that would authorize construction, operation, and maintenance of a new buried natural gas pipeline. In this EA, BLM is analyzing the impacts of both the proposed amendment to ROW grant WYW-165919, and the proposed new ROW grant, WYW-165952, that would authorize construction, operation, and maintenance of a new buried natural gas pipeline. Both ROW grants would include PODs and standard stipulations.

2.1 Alternative I – Proposed Project

Under Alternative I, BLM would grant the access road ROW amendment and new pipeline ROW requested by NMCF, thereby authorizing the road upgrade and pipeline construction and subsequent use and maintenance of the road and pipeline. The work to upgrade the access road and install the pipeline is described in NMCF's Plan of Development (POD). There are two components of the proposed project, the access road upgrade and the buried natural gas pipeline. Both components meet BLM standards for roads and pipelines

Road

The NMCF seeks to grade and construct an improved all weather surfaced road 20-feet in width with 2-foot shoulders (for a total top width of 24-feet) along an existing right-of-way that provides access to the NMCF private property. The road would serve as the primary access to the NMCF's private property, and would be used by the occupants and a limited number of invited guests, as well as for the delivery of coffee beans and hauling of packaged coffee. The proposed road would be used on a year-round basis. The NMCF seeks to begin construction at once and plans to complete the road in a four (4) month period, weather permitting. The NMCF requests authorization to use the right-of-way for thirty (30) years. Legal description for this is T. 49 N., R. 102 W., Section 12, Lot 1; T. 50 N., R. 102 W., Section 33, Lots 3, 4, NE $\frac{1}{4}$ SE $\frac{1}{4}$, Section 34, NW $\frac{1}{4}$ SW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$.

The Special Use Permit includes a condition requiring the NMCF to construct the last 5.5 miles of a two track road (4.1 miles on private land and 1.4 miles in length crossing BLM lands), as an improved all weather surfaced road with a 20' wide driving surface with 2' wide shoulders. The all weather surface road shall be designed to handle the heavy vehicular loads anticipated for the project, and constructed to Park County Standards, including provisions for drainage facilities and turnarounds as required by the Meeteetse Fire District and Park County Fire Marshall.

The parallel side drainage ditches would be 15' wide with side slopes of 4:1 shoulder slopes and 3:1 back slope on each side of the road. The road would be constructed with 12" native soil excavated from the borrow ditches and overlain with 6" of 4" minus screened pit-run rock. The surface of the road would be 6" of crushed aggregate base material. The approximate length of the road across BLM land would be 7,629 linear feet. Please see Exhibit B, Plan of Development, incorporated herein by reference. The NMCF would need a total right-of-way width of 60'. The additional right-of-way width outside of the ditches would be needed to plow and berm snow. Minimum culvert size shall be 18-inch corrugated metal pipe.

During the construction of the monastery and coffee barn, the road would be used by heavy equipment such as dozers, scrapers, backhoes, and dump trucks. Flat bed semi-trucks would bring the stone in for the monastery. Once authorization is given, construction would begin immediately and the estimated time to complete the proposed road and buried pipeline project is four months.

The NMCF also seeks an additional 10' temporary construction ROW on the north side of the road to provide enough additional space to maneuver heavy equipment necessary for proper road construction and temporary parking.

Table 1. Access Road and Pipeline Acreages

Access Road	Pipeline
7629' x 60' ÷ 43560 = 10.508 acres of public land	7629' x 20' ÷ 43560 = 3.502 acres of public land

Natural Gas Pipeline

The NMCF is requesting a ROW grant to construct and operate a 2" natural gas pipeline. This pipeline would provide natural gas service to the monastery. The proposed length of the project is 7,629 feet. A D-6 Caterpillar would be used to plow the line in to a depth of 24" and 8 inches in width. The pipeline would be plowed in on the north side of the road within the existing right of way. This would be completed before the final crushed gravel is laid and before the re-vegetation is seeded in the existing right of way. Estimated time for completion of work on the pipeline is 2 weeks. Legal description for the pipeline is T. 49 N., R. 102 W., Section 12, Lot 1; T. 50 N., R. 102 W., Section 33, Lots 3, 4, NE¼SE¼, Section 34, NW¼SW¼, NE¼SW¼.

Prior to commencing construction, the NMCF would apply for and obtain any required federal, state, or local permits, including a Storm Water Discharge Permit (SWDP) including a Storm Water Pollution Prevention Plan (SWPPP), and would comply with all their provisions and requirements.

The NMCF would be responsible for performing periodic maintenance and any other provisions/requirements specified in the BLM ROW grant.

The NMCF would adhere to Park County Road and Bridge Standards, and BLM would require weed-free fill and require equipment/vehicle cleaning prior to transport to the site.

The BLM would require that the number of wing-ditches and culverts be designed to ensure that water collected by the road and its ditches is dispersed before it exceeds safe volumes/velocities/energies to minimize erosion and reduce the potential for down gradient runoff/sediment impacts to water and aquatic resources. The BLM would further require that all BLM reclamation standards be met and in place prior to project completion.

2.2 Alternative II – No Action

In the no-action alternative, the BLM would deny the NMCF's applications for an access road ROW amendment and new pipeline ROW. If the BLM selects the no-action alternative, it is likely that the NMCF would explore an alternate all-private access route in order to meet its objectives to construct a monastery and associated facilities. Securing the authorization to use an all-private route and construct a road suitable for the NMCF's purposes would depend on negotiations between the NMCF and private landowners, as well as approval from the Park County Board of County Commissioners. No BLM authorization would be required. Map 2-No Action shows the land ownership within the vicinity of the NMCF's property, as well as existing roads and topography in the area. Although the BLM would not have jurisdiction over an all-private route, the effects of construction and use of an access road on entirely private land are identified in the discussion of effects of the no-action alternative because the NMCF likely would pursue that option only if BLM denies its applications. The construction of the monastery and associated facilities on private land could still occur without any federal authorizations. The private project therefore is not considered a connected action for purposes of this EA.

2.3 Alternatives Considered but not Analyzed in Detail

A. An alternative route considered but dismissed from full analysis is the existing access road through the Spring Creek Oil Field, which is owned and operated by a private company. The NMCF has legal access via this route, however the private landowner would not grant a change to the scope of the current easement because of safety concerns (the route would bring traffic through an operating oil field that contains working pump jacks, open pits, areas that contain H₂s gas, and a small bridge over Meeteetse Creek that cannot carry the weight of construction materials proposed for the monastery). The NMCF easement through this private property does not allow the level of use needed for construction of a monastery and associated facilities; therefore this alternative will not be analyzed further.

B. BLM considered an alternative route that would entail the grant of a new ROW across public land, authorizing construction and use of a new road, that would split from the existing unimproved access road WYW-165919, at private land in Section 34, T. 50 N., R. 102 W. This route would head north on BLM land, cross under an overhead transmission power line, and reach the top of the ridge. The new road would then head to the west, crossing State of Wyoming land to reach the NMCF private lands.

This route would require new surface disturbance, and part of the route would likely interfere with elk movement along a migration corridor on top of the ridge. This area is within crucial winter range for elk, and the ridge is a likely place for elk to winter, as it is windblown and free of snow most of time.

BLM initially considered this because cultural sites were known to exist in the area affected by the proposed action. BLM has concluded, based on the results of a Class III Cultural Inventory, that the proposed action would not interfere with the known cultural sites and that cultural resource values could be protected through Native American Consultation and mitigation of effects on cultural resources. Due to the negative effects associated with new surface disturbance and interference with crucial elk winter range, the new-route alternative will not be analyzed.

3.0 AFFECTED ENVIRONMENT

3.1 Introduction

The proposed project is located on the eastern slope of Carter Mountain, near Meeteetse, Wyoming, and sits high along the Meeteetse Rim, a steep-sided canyon that narrows as it approaches the mountain. Carter Mountain is a prominent geographical feature of the Bighorn Basin. This area provides habitat for many animal species, and is crucial elk winter range. It also provides habitat for grizzly bears and gray wolves. Carter Mountain is popular for hiking and fishing, and other recreational use; it is one of the few places of BLM lands that are alpine in Wyoming. It is approximately 45 miles east of Yellowstone National Park.

Table 2. Resource Issues Identified to be Analyzed or Dismissed from Analysis

Resource	Analyzed	Not Analyzed	Reason for Dismissal of Analysis
Invasive, Non-Native Species (Weeds)	X		
Wildlife	X		
Migratory Birds	X		
T&E Animals (includes sensitive)	X		
T&E Plants (includes sensitive)	X		
Recreation	X		
Wilderness Study Area		X	Not present in the study area
ACEC/Special Designations		X	Not present in the study area.
Lands with Wilderness Characteristics		X	Not present in the study area
Wild and Scenic Rivers		X	Not present in the study

Resource	Analyzed	Not Analyzed	Reason for Dismissal of Analysis
			area
Visual Resource Management	X		
Water Resources (drinking/ground)	X		
Riparian-Wetland Resources			
Rangeland Management	X		Meeteetse Rim Allot # 03096
Vegetative Resources	X		
Wild horses		X	Not present in the study area
Archaeological/Historical Resources	X		
Native American Religious Concerns	X		
Paleontology		X	PFYC = 2 Low potential
Minerals		X	
Geology		X	
Lands		X	
Social/Economic		X	
Environmental Justice		X	
Fire Management		X	
Wastes, Hazardous, and Solid		X	
Soil(s)	X		
Air Quality	X		
Forest Resources		X	
Land Use Planning		X	
Floodplains	X		Meeteetse Creek adjacent to the proposed access road
Farm Land (prime or unique)		X	
Public Health & Safety	X		Safety issues regarding road maintenance

3.1.1 Invasive, Non-native Species (Weeds):

Invasive and non-native species present in the area are: Canada thistle, white top, musk thistle, and cheat grass. It is possible that other plant species currently listed by the State of Wyoming as “noxious weeds” may be present in the area.

3.1.2 Wildlife, Migratory birds, Threatened & Endangered Species; including Sensitive Species

The Canada lynx is listed as Threatened. There is no suitable lynx habitat within the proposed project area, as this area contains sagebrush and xeric dominated shrub communities and a Limber pine and Douglas fir dry timber community. The adjacent Shoshone National Forest contains suitable habitat for Canada lynx.

The Grizzly bear is listed as Threatened and may pass through the area; however, the area is not regularly used or suitable habitat and is within a recovery zone 4 and 5, with many human developments in the area.

The Gray wolf was extirpated from the western U.S. by the 1930s. In 1996 wolves were reintroduced to Yellowstone National Park. They are listed as an Endangered Non-Essential Experimental Population. Gray wolves are known to occur in the Absaroka Mountains and there have been wolves occupying Carter Mountain to the west.

Ute ladies'-tresses is listed as Threatened in Wyoming and occupies mid elevation riparian areas with a near surface water table. Potential habitat is present in the riparian-wetland habitat along Meeteetse Creek. This orchid has never been observed in the Bighorn Basin and only one population has been documented in Wyoming (Fertig et al. 2005).

There is no habitat or known occurrence for the endangered black-footed ferret in the affected area. To the south there is an area where ferrets were discovered in the mid-1980s, but they are not known to be in this area today.

Mountain plover has been proposed for listing as a Threatened species on the Endangered Species List, but they are not known to nest at this elevation or habitat in the Bighorn Basin.

General Wildlife

The proposed road and natural gas pipeline would cross through important and heavily used elk crucial winter range, which provides for migrating and resident elk from Yellowstone Park, the South Fork of the Shoshone and the Greybull River watersheds. The area is also utilized by other big game species including mule deer, pronghorn antelope, occasional moose, some whitetail deer, and trophy game including cougars and black bears.

Most of the birds (including raptors), smaller mammals, reptiles, amphibians, invertebrates, and other floral and faunal species that typically use sagebrush/steppe habitat at this elevation are also likely present.

The aquatic habitat associated with Meeteetse Creek supports a Cold Water Fishery of Statewide Importance (produces 300 – 600 pounds of trout per mile) and is a fishery that the Wyoming Game & Fish Commission ranks as a High Category Mitigation Fishery. Meeteetse Creek supports Snake River and Yellowstone cutthroat trout and several native, non-game fish species including lake chubs, which the WG&FD considers to be a fish species of concern (NSS3).

Wyoming BLM Sensitive Species

The habitat that would be directly impacted by the proposed road and natural gas pipeline is sagebrush-steppe, which provides nesting and brood-rearing habitat for WY BLM Sensitive migratory birds including Brewer's sparrow, sage thrasher, and sage sparrow. Sage grouse, which are a Candidate Threatened or Endangered Species and a BLM Sensitive Species, also use the area for late brood rearing and some nesting. The area is not in a sage grouse Core Habitat Area. Other sensitive bird species that may potentially use the area include peregrine falcons, northern goshawks, and bald eagles.

Yellowstone cutthroat trout are present in Meeteetse Creek. Other moist habitat areas in and near Meeteetse Creek provide habitat for northern leopard frogs, Columbia spotted frogs, and boreal toads.

3.1.3 Recreational Use and Visual Resource Management

Land ownership in the general area is mixed, with a preponderance of private and state land. Recreational use by the general public is severely limited by a lack of legal public access to the general area. Individuals would need to request permission from private landowners to use private lands and roads to access public land.

About one mile of the proposed upgraded access road lies within a Visual Resource Management (VRM) Class III area. About 0.25 mile of the road lies within a VRM Class II area. The general area includes lands within VRM Class II, III, and IV. Management classes determine the amount of modification allowed to the basic elements of the landscape. The objective of a VRM Class II area is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. The objective of a VRM Class III area is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape. The objective of a VRM Class IV area is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. The management activities may dominate the view.

3.1.4 Water Resources

Surface Water

The proposed project is situated in an area that drains into Meeteetse Creek which is tributary to the Greybull River. The Wyoming State Engineer's Water Rights Database was reviewed to obtain information pertaining to surface water near the proposed project area, and there are numerous irrigation/stock water surface water rights in the area. Meeteetse Creek and its tributaries currently support their designated beneficial uses according to the current State of Wyoming 303d List of Impaired Water-bodies.

Ground Water

Meeteetse Creek, in the vicinity of the proposed action, is situated in a fairly wide U-shaped valley that is filled with coarse substrate made up of a mixture of sand, gravel, and cobble deposited by glacial and/or alluvial outwash. This coarse substrate is porous and as a result is filled with water. This water is connected to the surface water associated with Meeteetse Creek and is in constant flux with it. Deeper aquifers are also present and may be connected to the area's surface water and shallow ground water.

3.1.5 Riparian-Wetland Areas, Aquatic Habitat, and Floodplains

The Meeteetse Creek floodplain and streambanks in the vicinity of the proposed project support a diverse riparian-wetland complex comprised of sub-alpine fir, Douglas-fir, aspen, cottonwood, and several species of willows, silver buffaloberry, chokecherry, serviceberry, red osier dogwood, currents, wild rose, and several species of sedges, rushes, grasses, and forbs. The riparian-wetland complex provides important habitat for a wide variety of wildlife species, some of which are listed as Threatened, Endangered, Candidate, and/or Wyoming BLM Sensitive Species.

3.1.6 Rangeland Management

The Meeteetse Rim Allotment #03096 contains approximately 1300 acres of public lands associated with 223 Animal Unit Months (AUMs). Cattle grazing is currently authorized for 130 head, from May 1 to October 27. The current stocking rate is calculated at 6 acres per AUM. Numerous fences and gates are scattered throughout the allotment.

The 91 Ranch Allotment #02545 contains approximately 9463 acres of public land and 1634 Federal Animal Unit Months (AUMs). Cattle grazing are currently authorized in the allotment under a rotational grazing system. The current stocking rate is calculated at 6 acres per AUM. Numerous fences and gates are scattered throughout the allotment.

3.1.7 Vegetation

The proposed project area is situated within an area of transition within two types of vegetation communities, Northern Intermountain Desertic Basins and Central Rocky Mountains Loamy/Shallow Loamy, which includes a mix of four ecological sites including the Loamy and Shallow Loamy.

These ecological sites have the potential to support a very diverse suite of native plants because of the relatively high amount of precipitation, the soil types, and other factors. Plants that commonly occur on these ecological sites (per field observation and the appropriate Natural Resources Conservation Service (NRCS) Ecological Site Guides) are presented in the following table:

Table 3. NRCS Ecological Site Guide - Plants

Plant Life form	Plant Species
Grasses:	Bluebunch wheatgrass, rhizomatous wheatgrasses, slender wheatgrass, Idaho fescue, king spike fescue, mountain and nodding brome, needle and threadgrass, Green needlegrass, Letterman’s needlegrass, Columbia needlegrass, Indian ricegrass, prairie June grass, Sandberg/mutton/big/Canby bluegrass, bottlebrush squirreltail, blue grama, and threadleaf sedge.
Forbs:	Larkspur, lupine, Indian paintbrush, Hood’s phlox, scarlet globemallow, biscuitroot, fringed sagebrush, wild parsley, death camas, penstemon, buckwheat, rose pussytoes, American vetch, geranium, arrowleaf balsamroot, aster, fleabane, gilia, gentian, starwort, mountain dandy lion, milkvetch, false carrot, pearly everlasting, yarrow, bellflower, harebell, goldenweed, stoneseed, golden pea, Indian blanket flower, blue flax, stonecrop, sandwort, and onion.
Shrubs:	Wyoming and/or mountain big sagebrush, black sagebrush, green and rubber rabbitbrush, silver sagebrush, snowberry, and Winterfat.

3.1.8 Archaeological/Historical Resources & Native American Religious Concerns

An inventory for cultural resources was conducted by Archaeological Energy Consulting (AEC) in October/November 2010, following the Wyoming State Historic Preservation Office Format, Guidelines, and Standards for Class III Reports. The inventory documented two newly recorded sites, and three isolates. The sites, an historic irrigation ditch, and multi-cairn site with historic debris scatter, were both recommended as not eligible for the National Register of Historic Places (NRHP). The cairn site, however, is considered a site type of concern for Native American groups, and would be included in a formal consultation. Said consultation resulted in a change in NRHP eligibility for the multi-cairn, historic debris site.

To address potential viewshed considerations, a Visual Contrast Rating (VCR) was executed by AEC in accordance with Appendix C of the Wyoming State Protocol for the newly discovered site and for the surrounding cairn, stone circle, and alignment stone sites found proximate to the proposal. The VCR resulted in a Weak Contrast recommendation, whereby the proposed project elements can be seen, but would not dominate the setting or attract attention of the casual observer due to the horizontal nature of the access road, existing disturbances, and intervening topography and vegetation.

On October 27, 2010, the BLM provided Wyoming State Historic Preservation Office (SHPO) with an Early Alert as per the Wyoming State Protocol, Section III.B.1. A No Historic Properties Adversely Affected determination of effect was forwarded to SHPO on April 26, 2011. SHPO concurrence was received on May 10, 2011.

Native American Consultation with the Blackfeet, Crow, Eastern Shoshone, Northern Arapaho, Northern Cheyenne, and the Shoshone-Bannock Tribes was initiated on October 29, 2010 in relation to the proposal and the presence of known site types of concern (i.e. cairns, stone circles, and stone alignments).

The Eastern Shoshone Tribe met with the BLM at the project location on March 25, 2011. Eastern Shoshone Tribal Historic Preservation Officer, Wilfred Ferris III, and Cultural/Spiritual Representative Delphine Clair, were present at the consultation. Visitation of the project area and the newly recorded multi-cairn, historic debris site resulted in the following recommendations: the natural gas pipeline would be constructed on the north side of the proposed access road, temporary barrier fencing should be erected during construction, and a qualified archaeologist should perform a monitor of construction during all surface disturbing activities. Additionally, the Eastern Shoshone agreed with the Weak Contrast recommendation by AEC for the VCR.

A representative from the Crow Nation met with the BLM at the project location on April 18, 2011. Hubert Two Leggings, Cultural Director, was present at the consultation. Mr. Two Leggings believes the resource (48PA3256) to be a place worthy of protection, and that the setting for the resource is important. Mr. Two Leggings suggested that the cairn features not be disturbed, and that construction personnel be instructed to avoid the site. Both Eastern Shoshone and Crow agreed with the Weak Contrast recommendation for the VCR.

3.1.9 Soils

The soils in the project area and the vegetative communities that they support reflect the foothill environment and landscape setting in which they formed. The soil survey conducted by the Cody BLM Field Office in the 1980's identified the soil at the proposed project site as Attewan-Evanston loams (420AD Soil Map Unit). These soils in concert with the climate and other factors combine to support Loamy/Shallow Loamy ecological sites. The following table contains basic information, including possible limitations related to the proposed action, of the major soils found at the proposed project site. The soil limitations may require special or additional construction/maintenance BMPs to overcome.

The remaining 20% of this map unit include the following soils: Lupinto (4%), Carmody (4%), Zilman (3%), Yamac (3%), and two unnamed soils (3% each). (Per eFOTG).

Table 4. Unique Characteristics of the Soil in the Proposed Project Area

Soil Map Unit	Soil	Slope	Surface Soil Texture	Organic Matter in Surface Horizon	Sub - Surface Soil Texture	Soil Depth	Limitations Related to Proposed Action	
							Roads	Reclamation
420AD	Attawan Loam	0-8%	Loamy / 0-20" (high amount of rock frags)	1-3%	Clay Loam (20-30")	60" plus	Very Limited - (Low strength, shrink swell) 0-10% slope = Slight	Fair - Topsoil is hard to recover (due to the amount of rock fragments), low % organic matter.
	Evanston Loam	0-15%	Loamy / 0-4"	1-2%	Clay Loam (4-18")	60" plus	Somewhat Limited - (Frost action, slope = moderate if it exceeds 10%)	Fair - Sodium and carbonate content, low % organic matter.

3.1.10 Air

Air quality in the project area is good, as no air quality standards have been exceeded. Fugitive dust, internal combustion engine emissions, hydrocarbon flares, H2S, and other air quality impairments related to human activities occur in the general area and may have a negative impact on air quality.

3.1.11 Public Health and Safety

There are no routinely occupied structures within seven miles of the proposed project location. The existing road is currently impassable for emergency vehicles.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

Resources that may be affected by the Proposed Action and No Action Alternative include invasive, non-native species, Wildlife, Migratory Birds, T&E species including Sensitive Species, Recreation, Visual Resources, Water, Riparian-Wetland-Aquatic Resources and Flood-prone Areas, Rangeland, Vegetation, Archaeology and Native American Religious Concerns, Soils, Air, and Public Health and Safety. Impacts of the alternatives are discussed for each resource.

4.1.1 Invasive, Non-Native Species (Weeds)

Alternative I – Proposed Action

Increased use of the existing access road would increase the potential for weeds to become established where there currently are very few. Any new surface disturbance would increase the potential to spread weeds and additional vehicular traffic would also increase the potential spread of weed seeds. Any additional vehicular traffic that occurs as a result of implementing the proposed action would also increase the potential for expanding weeds. Use of surface water for the management of fugitive dust and other surface applications during construction has the potential to spread weed seeds and increase the rate of weed expansion in the project area.

Gravel or other similar materials brought to the site for road surfacing, drainage crossings, and/or road upgrades have the potential to contain weed seed, which if present, can introduce weeds and accelerate the rate of weed species spread on public lands. Seed contaminated by noxious weed or other undesirable plant species seed, if used to reclaim disturbed areas, would introduce unwanted plant species to the area. Equipment such as road graders, scrapers, and dump trucks that are transported to the area from elsewhere can potentially be contaminated with noxious or other undesirable plant species seeds which can result in the introduction of these unwanted plants in areas they were not established previously.

Adhering to the District weed management and reclamation provisions/requirements in the proposed action, mitigation, and COAs would reduce the potential for the introduction and/or spread of undesirable plant species that potentially could occur as a result of implementing the proposed action.

Alternative II – No Action

The introduction or spread of invasive, non-native species that could occur as a result of implementing the proposed action would not occur. The present rate of spread of these species would continue to be influenced by the activities and other processes presently occurring within the general area. Impacts of an all-private access route on invasive, non-native species are anticipated to be similar to those of the proposed action.

4.1.2 Wildlife, Migratory Birds, Threatened & Endangered; including Sensitive Species

Alternative I – Proposed Action

Since the proposed action has included timing stipulations, (Exhibit C, letters Q & R,) there would be no impact on big game winter range, no take on migratory birds and no effect on grizzly bears or wolves in the short-term.

In the long-term, crucial winter range would be disturbed more frequently as travel would increase to approximately 8 trips per month during the winter months. During the spring, summer and fall, there would be visitors driving the road and this disruption would cause the habitat to become less suitable for nesting birds and may disrupt big game parturition along the length of the road. Sage grouse brood rearing habitat would also be fragmented through habitat disruption and habitat loss. Since this area is not in a core area, the lack of a seasonal restriction for sage grouse would conform to the BLM Wyoming Sage-grouse IM WY-2010-012. Increased traffic and vehicle speed may result in mortality of migratory bird and sage grouse chicks. The noise associated with traffic could cause these birds to be more vigilant, resulting in the loss of energy that otherwise could be directed at foraging and taking care of broods.

Since traffic would be minimal and slow on a gravel road and only by invitation, the increased traffic would be unlikely to cause accidental vehicle collisions with wolves or grizzly bears, and no effects on grizzly bear, gray wolf, lynx, black-footed ferret, mountain plover or Ute ladies-tresses are expected.

Alternative II – No Action

The area would continue to be infrequently visited by people, and there would be no effect on wildlife, migratory birds, threatened and endangered species or Sensitive Species. Impacts of an all-private access route are anticipated to be similar to the proposed action, although an all-private access route would cross lands that are more agricultural in character.

4.1.3 Recreation and Visual Resource Management

Alternative I – Proposed Action

There would be no effect on recreation use since the general area receives little public recreational use due to the lack of legal public access. The proposal would not affect access to, and hunting use of, the large Carter Mountain Hunter Management Area which lies to the north of the project area.

The effect on visual resources would be that the upgraded road would be more noticeable than the current route. Proposed road design and measures taken to protect soil and vegetative resources would help to mitigate the effect on visual resources. The short length of the portion of the road that lies within the VRM Class II area, the presence of other manmade features in the general area, and the preponderance of private and state lands surrounding the small BLM-managed public land parcel combine to minimize the effect on the VRM Class II area.

Alternative II – No Action

There would be no effect to recreation opportunities under this alternative. An all-private access route would have impacts similar to the proposed action.

4.1.4 Water

Surface

Alternative I – Proposed Action

Surface waters down gradient from the proposed action could be affected by increased runoff and sediment from the areas that are disturbed by construction or subsequently remain denuded of vegetation, and by any pollutants that may be introduced as a result of the vehicular use of the road during and after construction.

Adhering to the water, vegetation, and soil management provisions/requirements in the proposed action, mitigation, standard stipulations, and state permits would reduce the potential for surface water impacts that could occur as a result of implementing the proposed action.

Alternative II – No Action

Surface water quality impacts associated with the proposed action would not occur. Surface water quality would continue to be influenced by the activities and other processes presently occurring within the watershed. An all-private access route would have impacts similar to the proposed action.

Ground

Alternative I – Proposed Action

Ground water within the project area could be impacted if polluted surface water resulting from implementation of the proposed action enters the ground water. Deeper aquifers could also be impacted if they are connected to polluted surface water and/or shallow aquifers.

Adhering to the water, vegetation, and soil management provisions/requirements in the proposed action, mitigation, standard stipulations, and other permits would reduce the potential for ground water impacts that could occur as a result of implementing the proposed action.

Alternative II – No Action

Ground water quality impacts associated with the proposed action would not occur. Ground water quality would continue to be influenced by the activities and other processes presently occurring within the watershed. An all-private access route would have impacts similar to the proposed action.

4.1.5 Riparian-Wetland-Aquatic Resources and Floodplains

Alternative I – Proposed Action

Riparian-wetland-aquatic resources/floodplains areas located down gradient from the proposed action could be affected by increased runoff and sediment from the areas that are disturbed or remain un-vegetated, and by any pollutants that may be introduced as a result of the vehicular use that occurs on the road during and after construction.

Adhering to the water, vegetation, and soil management provisions/requirements in the proposed action, mitigation, standard stipulations, and other permits would reduce the potential for riparian-wetland-aquatic resource/floodplains impacts that could occur as a result of implementing the proposed action.

Alternative II – No Action

Riparian-wetland-aquatic resource/floodplains impacts associated with the proposed action would not occur. Riparian-wetland-aquatic resource/floodplains would continue to be influenced by the activities and other processes presently occurring within the watershed. Private lands are concentrated around drainage bottoms, therefore an all-private access route is likely to be built closer to riparian/wetland areas over a longer distance than the proposed action.

4.1.6 Rangeland Management

Alternative I – Proposed Action

Livestock grazing would continue as authorized on the grazing lease. However, 2.3 AUMs would not be available for livestock grazing due to the road and natural gas pipeline construction. Depending on the success of the reclamation, a small portion of those AUMs may become available once forage is re-established.

Alternative II – No Action

No impact to livestock grazing on public lands would occur. An all private access route would likely cross agriculture lands, with more forage per acre. Therefore, the impacts to forage on an acre-for-acre- basis would be greater under the no-action alternative.

4.1.7 Vegetation

Alternative I – Proposed Action

The following amounts of upland vegetation would be affected by the various components of the proposed action:

Table 5. Upland Vegetation Effected by Various Parts of the Proposed Project

Component of the Proposed Action	Dimensions of the Public Vegetation Disturbed	Acres of Vegetation Affected
Road Surface & shoulders (pipeline within road ROW)	$24' \times 7629'/43560 = 4.2$ acres	4.2
Ditches	$30' \times 7629'/43560 = 5.2$ acres	5.2
10' Temporary Const ROW	$10' \times 7629'/43560 = 1.75$ acres	1.75
6' Snow Storage	$6' \times 7629'/43560 = 1.1$ acres	1.1
Total		12.25

Approximately 9.5 acres of public upland vegetation along the route of the proposed action would be removed ($54' \times 7629' / 43560$) and another 1.75 acres may be crushed ($10' \times 7629' / 43560$) as a result of the construction of the proposed project. Another 1.1 acres could be impacted by snow plowed from the road periodically during the winter months ($6' \times 7629' / 43560$). Most of the area that may be crushed during construction ($10' \times 7629' / 43560 = 1.75$ acres) should recover within one to two years after construction would be completed. The area used for the road surface and shoulders ($24' \times 7629' / 43560 = 4.2$ acres) would remain basically vegetation-free for the life of the road (some vegetation may reestablish on the shoulders). The ditches ($30' \times 7629' / 43560 = 5.25$ acres) would be devoid of vegetation immediately after construction is complete, but vegetation should reestablish on these areas over time. Some of the vegetation that reestablishes on the ditches may be scraped off occasionally as a result of road maintenance (vegetation removal in these ditches should occur only when necessary to prevent damage to the road or other resources). The areas used for storing snow plowed on the road (1.1 acres) may experience some plant species composition changes, but they should not become devoid of vegetation as a result of having snow piled on them.

Table 1 illustrates the final ROW width and the amount of acreage that would be granted to the NMCF. The 10.5 acres would be the final acreage involved after construction is completed and reclamation and reseeding has been done. Please note, the acreage above includes temporary construction space regarding the removal of vegetation and floral cover.

The proposed action would result in the long-term (life of the project) loss of about 4.2 acres of vegetation on public land due to the road running surface and shoulders. The areas used for piling snow could experience some plant species composition changes that would persist for at least the life of the project.

Short-term vegetation impacts would occur on the areas impacted by the ditches (some of these would be long-term due to plant species composition changes) and the temporary construction ROW where some vegetation would be crushed. Some of the short-term vegetation impacts associated with the ditches may reoccur periodically as a result of road maintenance activities associated with cleaning the ditches. Vegetation located down and/or up gradient from the road may be impacted by increased runoff, sediment, and/or soil erosion resulting from the road. Complying with the specified BMPs would help minimize some of the potential off-site impacts to vegetation.

Reclamation of disturbed areas that are not needed for operation/use of the road should be implemented to restore some of the vegetation lost as a result of the proposed action. This would minimize some of the related impacts to other resources.

Alternative II – No Action

Vegetation impacts associated with the proposed action would not occur. Vegetation would continue to be influenced by the activities and other processes presently occurring within the general area. An all private access route would be expected to impact agriculture lands.

4.1.8 Archaeology/Historical Resources & Native American Religious Concerns

Alternative I – Proposed Action

Potential impacts from the proposed action may include disturbance of previously undetected, buried, cultural remains through construction activities. Potential construction impacts are minimized through the recommended monitoring of construction by a qualified archaeologist. Additional potential impacts to cultural resources include unauthorized surface collection and looting of buried materials. Increased presence in the project area to support and maintain construction of the road and pipeline may result in an indirect opportunity for additional unauthorized surface collection and buried material.

Results of Native American consultation include recommendation of positioning of natural gas pipeline on the north-side of the proposed access road to increase the distance between surface disturbing activities and the newly recorded multi-cairn historic debris site. Additional recommendations were to erect a temporary barrier fence between the site of concern and the southern-most edge of the roads' surface disturbance to ensure no accidental impacts occur to the multi-cairn historic debris site. A recommendation was received to require construction monitoring of surface disturbing activities by a qualified archaeologist to ensure site avoidance would be achieved and to manage potential discovery of unanticipated buried material during construction.

Additionally, the improved access road would facilitate travel in the area, which may increase the number of people visiting the area, and the potential for unauthorized surface collection and looting.

Alternative II – No Action

Potential impacts to previously undetected, buried, cultural remains through construction activities of the proposed action would not occur. Indirect effects of unauthorized surface collecting and looting would remain at levels similar to the existing situation. Potential impacts to previously undetected, buried, cultural remains may occur through construction activities associated with an all-private access route.

4.1.9 Soils

Alternative I – Proposed Action

Impacts to the soil resources on public land as a result of implementing the proposed action would mimic those discussed in the vegetation section above. The amount of disturbance would be the same but the disturbance to the soils directly impacted would persist long after the life of the project. Like vegetation, impacts to the soil up- and down-gradient from the road may occur as a result of increased runoff, erosion, and sediment.

Compliance with the standard stipulations and mitigation in the ROW grants, the provisions and requirements of the SWDP and SWPPP, and other BMPs would help avoid or minimize soil impacts.

Alternative II – No Action

Soil impacts associated with the proposed action would not occur. Soil would continue to be influenced by the activities and other processes presently occurring within the general area. Impacts to soil from an all-private access route would be similar to the proposed action.

4.1.10 Air

Alternative I – Proposed Action

Implementation of the proposed action would result in some air quality degradation since the construction of the road and pipeline, and subsequent use of the road, would result in the release of additional hydrocarbon combustion products and fugitive dust. The natural gas pipeline could have additional air quality impacts if leaks or breaks in the pipeline occur.

Alternative II – No Action

Air quality impacts associated with the proposed action would not occur. Air quality would continue to be influenced by the activities and other processes presently occurring within the general area. An all-private access route would likely be longer, which would result in additional construction time and more fugitive dust.

4.1.11 Public Health & Safety

Alternative I – Proposed Action

During construction the access road would be restricted in order to keep traffic and people at a safe distance. Access would continue to be restricted through private lands. No substantial change in the level of public use in the area is anticipated.

The need for emergency access prompted Park County to require that NMCF have a wide running surface for easy ingress and egress for emergency and utility vehicles should they meet and have to pass on the road. Park County also has required that NMCF plow the road if four inches of snow accumulate on the road.

The natural gas pipeline to NMCF's private lands represents a possible human health and safety risk in the event of a break in the pipeline. If the pipeline were to break and be ruptured, natural gas would leak into the air and an explosion could occur if ignited. These types of pipelines are common throughout Wyoming and if a problem were to occur the owner of the pipeline would be responsible for repair and maintenance.

Alternative II – No Action

Public health and safety impacts resulting from an all private access route would be similar to the proposed action.

4.2 Cumulative Impacts

The Cumulative Impact Assessment Area (CIAA) is defined in Map 3. Please refer to Map 3 showing the area of approximately 26,357 acres. Within the CIAA, current big game crucial winter range, parturition areas, ROW roads, ROW power lines, acres available for livestock grazing, and oil and gas wells are described in the following table.

Table 6. CIAA Ownership and Existing Disturbances

<u>CIAA = 26,357 acres</u>	
<u>Private = 17,777 acres</u>	<u>Big Game Crucial Winter Range - 21,997 acres</u>
<u>BLM = 5,978 acres</u>	<u>Road – 76 miles</u>
<u>State = 2,601 acres</u>	<u>Power Line – 5.75 miles</u>
	<u>Grazing - 25,035 acres</u>
	<u>O&G Development – 144 wells</u>

Past Actions – Livestock grazing, use of rights-of-way, and oil and gas exploration and development of the North Spring Creek oil and gas field have occurred within the CIAA. Although access to public land is limited by adjacent private property, the area has provided opportunities for hunting and fishing and other recreational activities on a limited basis for the general public. Other past disturbances within or adjacent to the Meeteese Creek watershed include paved road, two-track routes, fences, several overhead power lines, one irrigation ditch, and past timber salvage sales. All of these activities have affected wildlife, soils, air, vegetation, visual resources, water, riparian-wetland-aquatic habitat, and floodplains in the area. Habitat fragmentation is most extensive within the North Spring Creek oil and gas field located south/southwest of the proposed project area.

Despite some past development, the Carter Mountain area is known for its wide open spaces with excellent scenic views. Much of the land adjacent to the proposed project area remains in a natural condition due to the size of the area, topography and vegetative screening.

Present Actions – The effects of present activities are similar to those that have occurred in the past. Ongoing activities include cattle ranching and operation of irrigation ditches to provide water for livestock. There are limited recreational opportunities due to lack of public access. Development of oil and gas at the North Spring Creek Field has increased over time, with 144 wells currently located within the field. There are no current plans for additional timber/salvage sales within the area.

Please refer to Table 7 which shows acreages of sage grouse nesting and core habitat, big game winter range and parturition areas, riparian-wetland-aquatic habitat, and floodplains existing within the CIAA.

Table 7. CIAA Existing Conditions

Invasive Species	6 acres
Livestock Grazing	223 AUMs
Sage-grouse nesting habitat	24,238 acres
Sage-grouse core habitat	6,487 acres
Big game crucial winter range	21,997 acres
Big game parturition areas	5,526 acres
Riparian-wetland-aquatic habitat	154 acres
Floodplains	18 miles

Foreseeable Future Actions – The NMCF’s private property is a 2,500 acre ranch where NMCF plans to build a monastery and coffee barn. There are presently no routinely occupied structures within seven miles of the NMCF’s private land. The site is 14 miles from the nearest public road. After completion, the monastery would be occupied year-round by 40 monks. The proposed facility would be approximately 144,000 square feet, with a height of 150 feet at the tallest tower. The coffee roasting barn would be a 7,500 square foot facility, with 3,400 square feet being utilized for roasting coffee, and the remaining space for storage. Coffee beans would be received by truck, stored, roasted, ground, weighed, and packaged. Once per month, a truck would deliver raw beans and once per week, a truck would haul packaged coffee off-site. The facilities would require full utility services such as electricity, natural gas, and telephone to the site. Telephone and electrical services already exist on the property.

Additional oil and gas drilling in the North Spring Creed Field would lead to development which could include production facilities on pads along with additional wells, roads, gathering lines and production facilities. Timber and other wood products will likely continue to be harvested in the CIAA. Livestock grazing also is expected to continue. The present road system will likely persist and may expand. Private lands other than those controlled by the NMCF may be developed and become more fragmented.

These foreseeable future actions within the CIAA are expected to have effects on sage grouse and big game habitat, as well as the extent of invasive species occurrence in the CIAA. Please refer to Table 8. It is not anticipated that there will be any changes to riparian/wetland areas and floodplains as a result of foreseeable future actions.

Table 8. CIAA Expected Conditions Following Foreseeable Future Actions

Invasive Species	20 acres
Livestock Grazing	221.7 AUMs
Sage-grouse nesting habitat	24,209 acres
Sage-grouse core habitat	6,458 acres
Big game crucial winter range	21,968 acres
Big game parturition areas	5597 acres
Riparian-wetland-aquatic habitat	154 acres
Floodplains	18 miles

4.2.1 Invasive, Non-Native Species (Weeds)

It is anticipated that an additional 10 acres of land would be impacted by invasive species as a result of the proposed action. An additional 20 acres would be impacted on private lands (expected conditions following foreseeable future actions) where the monastery and coffee facilities would be constructed. However, all exposed areas would be rehabilitated by seeding grasses (approved seed mix) until vegetation is established. Spraying of invasive species would continue on a yearly basis until successful rehabilitation was achieved. It is anticipated that additional outbreaks of invasive species would be small.

4.2.2 Wildlife, Migratory Birds, Threatened & Endangered; including Sensitive Species

The expected conditions following foreseeable future actions with the construction of the monastery and coffee facilities would result in an addition 15 acres of habitat loss. Please refer to Table 9. Change to wildlife, migratory birds, T&E, and sensitive species would be small within the CIAA.

4.2.3 Recreation and Visual Resource Management

The monastery that NMCF plans to build on its private property would not be visible from the majority of Wyoming State Highway 120, known as the Meeteetse Highway; it is possible that it would be visible from Meeteetse Pass located south of the town of Meeteetse. The development would be visible from the Spring Creek Road approximately 6 miles west of Highway 120. No change to recreational opportunities for the public as a result of foreseeable future actions is expected for recreational opportunities due to limited public access. Construction of the monastery and coffee facility will have no additional impacts on recreation opportunities; however foreseeable future actions will impact visual resources as described above because they will be visible from a distance and from certain view sheds within the area. Change to surrounding view sheds will be moderate within the CIAA.

4.2.4 Water

Surface

Foreseeable future actions are expected to disturb little surface water due to the proximity of the monastery and coffee facility to Meeteetse Creek since these facilities will be constructed in the uplands over ¼ to ½ mile away from Meeteetse Creek drainage. Any change to surface water runoff would be small within the CIAA.

Ground

Foreseeable future actions are expected to disturb little ground water due to the proximity of the monastery and coffee facility to Meeteetse Creek since these facilities will be constructed in the uplands over ¼ to ½ mile away from the drainage. Any change to ground water affects would be small within the CIAA.

4.2.5 Riparian-Wetland-Aquatic Resources and Floodplains

Construction of the road is far enough away from Meeteetse Creek that it is anticipated that there will be no change to riparian-wetland/aquatic resources and floodplains. Foreseeable future actions are expected to disturb 15 additional acres as a result of the construction of the monastery and coffee facility (Please refer to Table 9). Any change to riparian-wetland-aquatic resources and floodplains would be small within the CIAA.

4.2.6 Rangeland Management

Foreseeable future actions are expected to disturb an additional 15 acres with construction of the monastery and coffee facility which will reduce AUMs on their private property. The change will be small compared to the number of acres that the NMCF own and may graze on their private lands, and what is found within the CIAA.

4.2.7 Vegetation

Foreseeable future actions are expected to disturb an additional 15 acres with construction of the monastery and coffee facility which will void vegetation where the facilities will be constructed, along with road infrastructure. The change will be small compared to the number of acres within the CIAA.

4.2.8 Archaeology/Historical Resources & Native American Religious Concerns

Foreseeable future actions are expected to disturb an additional 15 acres. It will not be known what impacts could occur to construction sites of the monastery and coffee facility because it is located on private property and BLM has no responsibility for inventory on private lands.

4.2.9 Soils

Foreseeable future actions are expected to disturb an additional 15 acres during construction of the monastery and coffee facility. Like vegetation, impacts to the soil up- and down-gradient from the road infrastructure and building construction may occur as a result of increased runoff, erosion, and sediment. It is anticipated that the removal of topsoil for construction will be mitigated and rehabilitation of soil associate with recontouring and seeding will be small in comparison to the number of acres within the CIAA.

4.2.10 Air

Foreseeable future actions regarding construction of the monastery and coffee facility will generate fugitive dust, however, it is not expected to exceed any air quality standards. Watering of roads and work areas will help reduce fugitive dust. The coffee roasting equipment does not generate unusual noise or pollution so the footprint to air quality from construction and operation of the coffee facility will be small in comparison to the number of acres within the CIAA.

Future oil and gas development within the CIAA is not anticipated to exceed air quality standards.

Future impacts that may coincide with the construction of the access road include fugitive dust during the summer/fall months when temperatures are warm and moisture is limited. These activities are not expected to result in the exceedance of any air quality standard because the road will be watered when needed during construction.

Future activities that may contribute to fugitive dust over the life of the road for the next 50 years would be annual maintenance as a result of normal use of the road. Watering for dust control would be associated with normal maintenance.

4.2.11 Public Health and Safety

Utilities, solid waste, sewage disposal, domestic water, fire protection, and access road permits were addressed for use in the project area by the Board of Park County Commissioners and authorized through Special Use Permits granted to NMCF (for the monastery and a Major Industrial Use). A minimal increase in human activity associated with maintenance of these health and safety issues would be expected. Building the monastery with 40 more people living in a remote location would increase Park County Emergency Services responsibilities.

Table 9: Cumulative Effects of Proposed Action Relative to Existing and Foreseeable CIAA Conditions

	Existing	Changes Expected Result Foreseeable Future Actions	Changes Expected Result Proposed Action
Invasive Species	6 acres	20 acres	10 acres
Livestock Grazing	223 AUMs	221.7 AUMs	220.7 AUMs
Sage-grouse nesting habitat	24,238 acres	24,209 acres	24,224 acres
Sage-grouse core habitat	6,487 acres	6,458 acres	6,473 acres
Big game crucial winter range	21,997 acres	21,968 acres	21,983 acres
Big game parturition areas	5,526 acres	5,597 acres	5,512 acres
Riparian-wetland-aquatic habitat	154 acres	154 acres	154 acres
Floodplains	18 miles	18 miles	18 miles

4.3 Mitigation Measures

Alternative I – Proposed Action

For standard stipulations and mitigation for migratory birds, cultural resources, and storm water permits, please see Exhibit C.

4.4 Residual Impacts

The loss of vegetation and ground cover from construction, installation, and future maintenance of the proposed project would persist until successful reclamation is achieved on all the areas disturbed. Air quality would deteriorate from dust and exhaust during construction. Erosion potential would increase on disturbed areas. Some changes that occur to the soil, subsoil, slope, hydrology, and other physical features of the sites would remain indefinitely even after the site is reclaimed.

5.0 Tribes, Individuals, Organizations, or Agencies Consulted

The BLM provided Wyoming State Historic Preservation Office with an Early Alert as per Section III. Consultation, B. General Consultation, 1. Project Notification of the Wyoming State Protocol on 27 October 2010. A No Historic Properties Adversely Affected determination of effect was forwarded to SHPO as of 26-Apr-11.

SHPO concurrence was received on May 10, 2011.

Native American Consultation was initiated on October 29, 2010 with the Blackfeet, Crow, Eastern Shoshone, Northern Arapaho, Northern Cheyenne, and the Shoshone-Bannock Tribes.

The BLM also consulted with the Wyoming Game and Fish, Cody Office; Game and Fish staff expressed no concerns.

The Park County Board of County Commissioners approved two Special Use Permits for the development of the Monastery and associated facilities.

6.0 List of Preparer/Reviewers

Cara Blank, Realty Specialist
Ann Perkins, Planning and Environmental Coordinator
Destin Harrell, Wildlife Biologist
Kierson Crume, Archaeologist
Jerry Jech, Natural Resource Specialist
Tricia Hatle, Rangeland Management Specialist
Shirley Bye-Jech, Recreation Planner
Fred McDonald, Assistant Field Manager

7.0 APPENDICES

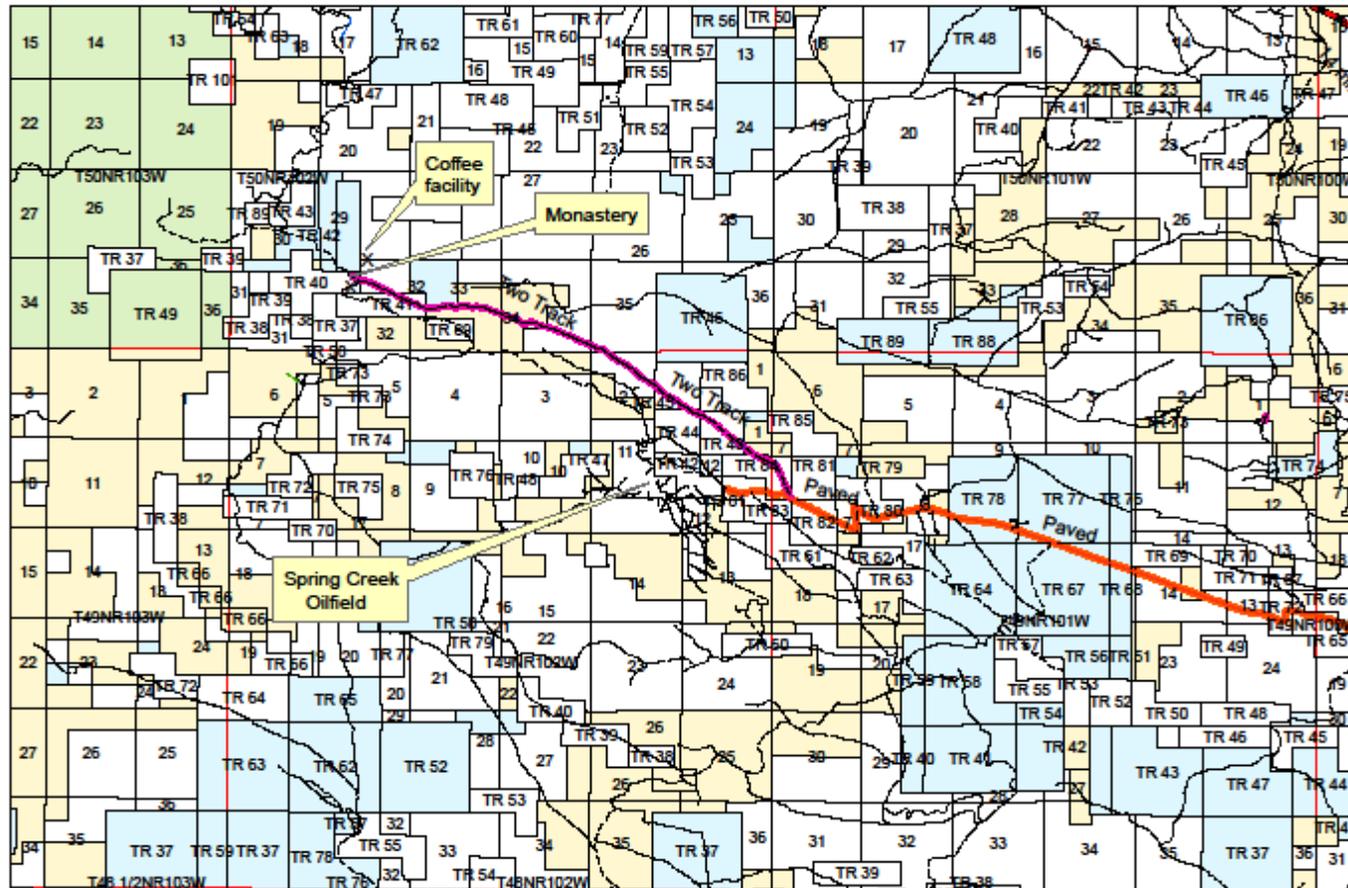
Exhibit A: Map 1, Map 2, Map 3

Exhibit B: Plan of Development (POD)

Exhibit C: Standard Stipulations and Mitigation Measures

Exhibit D: Native American Consultation Table

Exhibit "A" – Map 1 – Monastery Access Road



Monastery Access Road

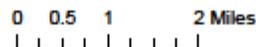
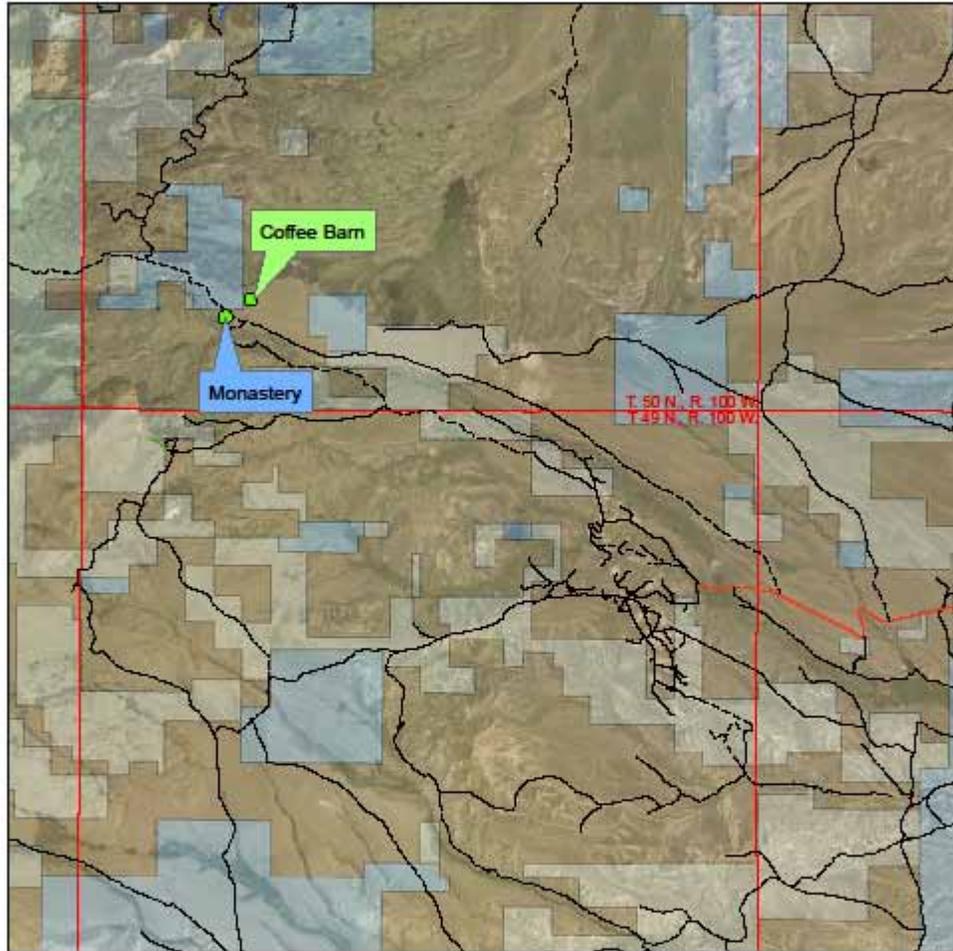


Exhibit "A" – Map 2 – No Action

Map 2 - No Action

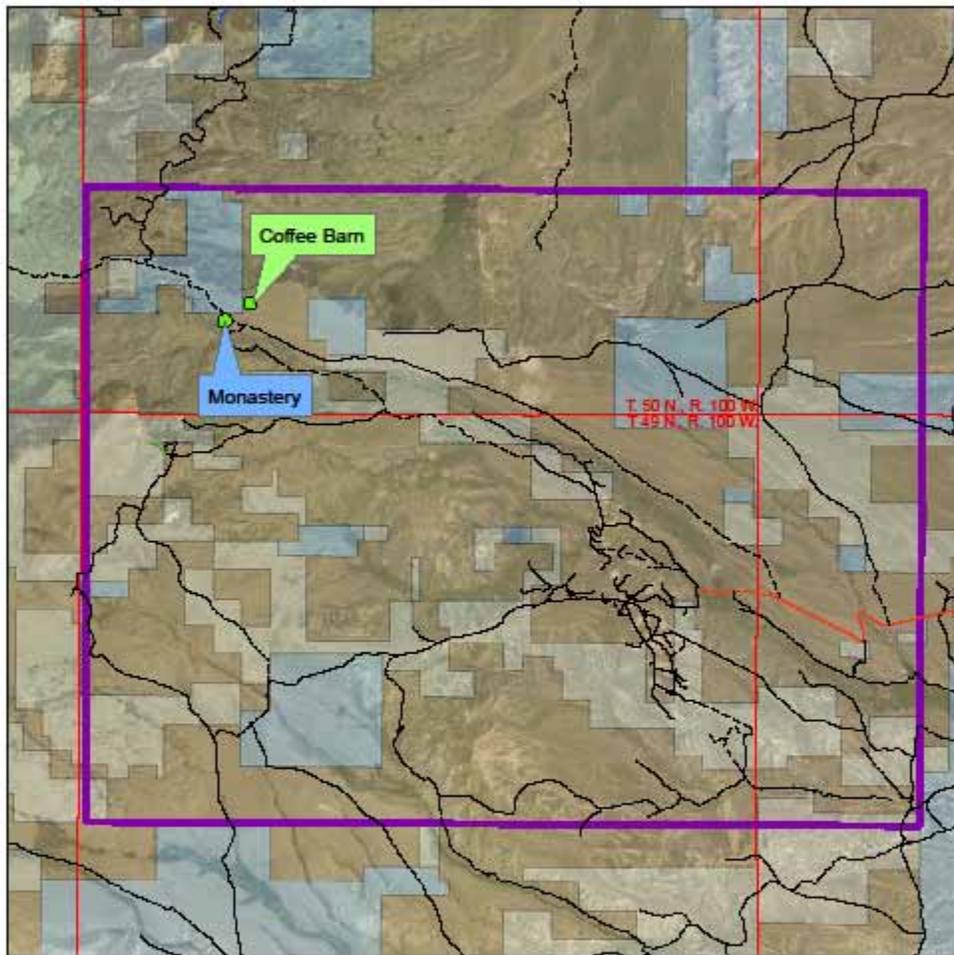


1:80,000

Legend	
Bureau of Land Management	City Street
Forest Service	Gravel Rd.
Private	Graded Dirt Rd.
State	2-track trail
Highway	ATV trail
Secondary Rd.	Reclaimed

Exhibit "A" – Map 3 – Cumulative Impact Assessment Area

Map 3 - Cumulative Impact Assessment Area



1:80,000



Exhibit “B” - Plan of Development

Description of Facility

The NMCF seeks to grade and construct an improved all weather surfaced road 20-feet in width with 2-foot shoulders (for a total top width of 24-feet) which will provide access to the Foundation’s private property. The road will serve as the primary access to the proposed monastery and will be used by both the monks and a limited number of invited guests who come to worship and exercise their religious beliefs. The proposed road will be used on a year-round basis. The NMCF seeks to begin construction at once and plans to complete the road in a four (4) month period, weather permitting. The NMCF is requesting a right-of-way permit for thirty (30) years. The legal description for this project is, T. 49 N., R. 102 W., Section 12, Lot 1; T. 50 N., R. 102 W., Section 33, Lots 3, 4, NE¹/₄SE¹/₄, Section 34, NW¹/₄SW¹/₄, NE¹/₄SW¹/₄.

Natural Gas Pipeline

The NMCF is requesting a new ROW authorization to construct a natural gas pipeline. This pipeline will be installed by Energy West who will also provide the Carmelite Monastery with natural gas. The length of the project will be 7629 feet. The diameter of the pipeline will be 2 inches. A D-6 Caterpillar will be used to plow the line in and maximum disturbance will be 8 inches in width. This will be done before the final crushed gravel will be laid and before the re-vegetation will be done in the existing right of way. The pipeline will be plowed in on the north side of the road within the existing right of way. Estimated time for completion of work on the pipeline will be 2 weeks. Legal description for the pipeline is T. 49 N., R. 102 W., Section 12, Lot 1; T. 50 N., R. 102 W., Section 33, Lots 3, 4, NE¹/₄SE¹/₄, Section 34, NW¹/₄SW¹/₄, NE¹/₄SW¹/₄.

Design Criteria: Road Specifications

The road would be roughly 1.4 miles in length and have a 20’ wide driving surface with 2’ wide shoulders. The parallel side drainage ditches would be 15’ wide with side slopes of 4:1 shoulder slopes and 3:1 back slope on each side of the road. The road would be constructed with 12” native soil excavated from the borrow ditches and overlain with 6” of 4” minus screened pit-run rock. The surface of the road will be 6” of crushed aggregate base material. The approximate length of the road thru BLM will be 7,629 linear feet. Please see the attached typical section, which is attached hereto and incorporated herein by reference. The Foundation will need a total right-of-way width of 60’. The additional right-of-way width outside of the ditches will be needed to plow snow onto.

During construction, fugitive dust will be abated by watering the road if necessary. After construction there will be the normal amount of dust associated with the regular use of a gravel surface road.

This road design will be adequate for the religious and special-use purposes of the NMCF.

Furthermore, the NMCF seeks an additional 10' temporary construction easement on the northerly side of the road to provide enough additional space to maneuver equipment necessary for proper road construction.

Additional Comments

This BLM access road intersects to the south an existing road on the 91 Ranch property. The NMCF enjoys an unrestricted easement across the 91 Ranch and can consequently provide the BLM access to the proposed road for inspection purposes.

Construction of Facility

Prior to construction, GDA Engineers will stake the centerline of the roadway and Harris Trucking will flag the construction limits of the roadway. Harris Trucking will also flag the limits of the temporary use areas.

The NMCF will notify the Cody BLM Field Office at least five (5) days prior to the start of any construction activity in an effort to allow BLM staff to be on location.

Harris Trucking has been hired to construct the road and install all necessary culverts to ensure proper drainage. Runoff ditches will be constructed upon approval of the BLM.

Vegetation will be cleared from both the road surface and the drainage ditches. This vegetation will be disposed of as requested by the BLM. No trees will need to be removed for construction.

The oversize rocks produced from road construction will be removed and disposed of on NMCF Property.

The ditches will be "pulled up" to the roadbed and all culverts will be laid. A 6" section of screened pit run base gravel will be placed and the road will be topped with a 6" section of crushed road base gravel. No material will be obtained from the BLM land.

The NMCF will re-vegetate the disturbed areas outside of the road-driving surface with a native seed mixture provided by the BLM.

The NMCF will be responsible for weed control on the disturbed areas within the right-of-way. Furthermore, the NMCF will consult with the BLM and/or Park County Weed & Pest for acceptable weed control methods. If necessary, the Foundation will work with the BLM to develop a Pesticide Use Proposal (PUP) for approval prior to treatments.

Travel outside the approved easement will be prohibited during construction and after completion.

No construction work will be performed when such work will produce ruts in excess of 4" in depth.

Operation and Maintenance

The roadway will be graded as needed and spot surfaced as necessary. The ditches will be pulled and maintained.

Miscellaneous Information Needs

The NMCF in cooperation with Harris Trucking will maintain the construction area and the right-of-way in a safe condition.

Trash (litter, construction debris) will be policed, removed and will not be allowed to accumulate.

Cross section of proposed right-of-way

Please see Exhibit B, "Meeteetse Creek Road Access Northerly Route – Typical Section" prepared by GDA Engineers, dated October, 2010.

Exhibit “C” – Standard Stipulations and Mitigation Measures

ADDITIONAL STIPULATIONS

WYW-165919 Amendment #1

WYW-165919 01, WYW-165952

- A. Cultural Resources, Standard Stipulation – The holder of this authorization shall immediately bring any objects or resources of cultural value discovered as a result of operations under this authorization of the attention of the Authorized Officer (AO, Field Manager). The holder shall suspend all activities in the vicinity of such a discovery until notified to proceed by the AO.

Cultural Resources, Standard Stipulation - The holder is responsible for informing all persons associated with this project that they may be subject to prosecution for knowingly damaging, altering, excavating or removing any archaeological, historical, or vertebrate fossil objects or site. If archaeological, historical, Native American, or vertebrate fossil materials are discovered, the holder is to suspend all operations that further disturb such materials and immediately contact the AO. Operations are not to resume until written authorization to proceed is issued by the AO.

The AO will evaluate, or will have evaluated, such discoveries not later than five working days after being notified, and will determine what action shall be taken with respect to such discoveries. The decision as to the appropriate measures to mitigate adverse effects to significant cultural or Paleontological resources will be made by the AO after consulting with the holder.

The holder is responsible for the cost of any investigations necessary for the evaluation, and any mitigation measures required by the AO. The AO will provide technical and procedural guidelines for the conduct of evaluation and mitigation. Upon verification from the AO that the required evaluation and/or mitigation have been completed, the operator will be allowed to resume operations.

A temporary barrier fence shall be erected between the proposed road and 48PA3256.

A qualified archaeologist shall perform a monitor of construction for all surface disturbing activities on lands administered by the BLM.

Natural gas pipeline shall be positioned along the borrow ditch on the Northern side of the proposed access road.

Native American Resources

The area under consideration contains no known or known areas or locations of religious or cultural concern to Native Americans. If such areas are subsequently identified or become known through the Native American notification or consultation process they will be considered during the implementation phase. The BLM will take no action that would adversely affect these areas or locations without consultation with the appropriate Native Americans.

Human Remains

If human remains are discovered or suspected the holder shall suspend operations immediately, physically guard the area and notify BLM immediately.

- B. The holder shall not initiate any construction or other surface disturbing activities on the right-of-way without the prior written authorization of the AO. Such authorization shall be a written notice to proceed issued by the AO. Any notice to proceed shall authorize construction or use only as therein expressly stated and only for the particular location or use therein described.
- C. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The holder is responsible for consultation with the AO and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations).

Invasive, Non-Native Plant Species/Weed Control

All equipment/material would be cleaned to remove weed seeds and soil (soil may contain weed seeds) prior to transport to the project area. The operator would control invasive and noxious weeds on all areas disturbed by project activities, using mechanical, chemical, or other methods approved by the BLM Authorized Officer and any mulch or other materials used would be certified weed and cheatgrass seed free.

The operator would be responsible for managing all noxious and undesirable invading plant species in the areas disturbed by the proposed project, including cheat grass, Russian olive and tamarisk, until the re-vegetation activities have been determined to be successful, and the bond (if required), has been released for a given area. If noxious or invasive weeds are encountered, the BLM and the County Weed and Pest Department would be consulted by the operator/holder for suppression and control methods. If chemical herbicide control methods are used on public lands, only BLM approved chemicals and application methods will be permitted. A Pesticide Use Proposal (PUP) must be submitted and approved by the BLM before initiating chemical control methods on public lands. Any questions regarding acquiring or submitting a PUP, please contact the BLM – Cody Field Office at (307) 578-5900.

- D. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the AO and the respective installing authority if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition.

The holder shall record such survey in the appropriate county and send a copy to the AO. If the Bureau cadastral surveyors or other Federal surveyors aroused to restore the disturbed survey monument, the holder shall be responsible for the survey cost.

- E. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 4 inches deep, the soil shall be deemed too wet to adequately support construction equipment.
- F. All operation and termination practices shall be in accordance with safe and proven engineering practices.
- G. Ninety days prior to termination of the right-of-way, the holder shall contact the AO to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surface material, recon touring, top soiling, or seeding. The AO must approve the plan in writing prior to the holder's commencement of any termination activities.
- H. The holder shall seed all disturbed areas (if needed), using an agreed upon method suitable for the location as determined by the AO. Seeding shall be repeated if a satisfactory stand is not obtained as determined by the authorizing officer upon evaluation after the first growing season.

Reclamation – BLM - Washington Office Instruction Memorandum No. 2006-073 requires all Field Offices to use seed on public lands that contain no noxious weed seed and meets certified seed quality. All seed to be applied on public land must have a valid seed test, within one year of the acceptance date, from a seed analysis lab by a registered seed analyst. The seed lab results shall show no more than 0.5 percent by weight of other weed seeds; and the seed lot(s) shall contain no noxious, prohibited, or restricted weed seeds according to State of Wyoming seed laws. All seed used on public lands would meet the Federal Seed Act criteria, would be species/cultivars adapted to the environment at the seeding site, **and would contain no (zero) cheatgrass seed.**

Seed may contain up to 2.0 percent of “other crop seed” by weight which includes the seed of other agronomic crops and native plants; however, a lower percent of other crop seed is recommended.

An exemption will be allowed for small reclamation projects, less than 20 acres or not to exceed 200 pounds of seed, which have an approved BLM reclamation or rehabilitation plan or permit. The seed will be accepted if accompanied by an official seed analysis report that provides documentation to show no noxious weed seed per the State of Wyoming weed law and no more than 0.5 percent of other weed seeds (**cheatgrass seed excluded**). For this exception, any one of three seed test documents will be accepted:

1. A certified “blue” tag or tags.
2. An independent seed lab test.
3. A seed lab analysis supplied by a vendor either by seed lot or by seed mix.

Straw or mulches applied as part of seeding, stabilization, rehabilitation, or restoration projects on public lands must also be certified to be noxious weed and cheatgrass seed free.

The amount of seed applied to public land would be calculated on a Pure Live Seed (PLS) basis. Pounds of PLS equals the pounds of seed divided by the ratio of pure live seed in the mix; the result will always be less than 1.0. PLS is derived by multiplying purity by germination (example: 0.95 purity x 0.95 germination = 0.9 PLS). Thus, to have two pounds PLS of Indian ricegrass in the mix, divide “two” by the PLS ratio, which will always increase the quantity needed (example: 2 lbs of seed/0.9 PLS = 2.2 lbs PLS). PLS determinations must be made for each plant species in a specific mix.

Proposed project area adapted seed would be stored properly before seeding to preserve its viability and would be used within three months of the most recent viability test. Seed that has been stored longer than three months beyond the last viability test would be retested for viability and the bulk pound/acre rates would be adjusted to reflect any new PLS ratios before applying the seed to public land. All seed applied on BLM administered public lands must comply with the current BLM seed policy in IM-2006-073 (see above).

Preparation of the seedbed, application of seed and any soil amendment, and coverage of the seed is critical to successful re-vegetation. Unless otherwise approved, the following cultural methods will be followed:

- a) The site will be ripped or otherwise scarified on the contour up to a maximum depth of 12" on 24" centers to prepare a rough seedbed and eliminate compacted soils. The objective is to leave an extremely rough surface for maximum snow and rainfall retention, as well as ridges to protect the surface from wind erosion.
- b) The operator will drill seed on the contour to a depth of 0.5 inch, followed by cultivation to compact the seedbed, preventing soil and seed losses. If the seed is to be applied by mechanical broadcasting ***, the PLS seeding rate will be doubled and seed will be applied evenly over the entire area to be reclaimed.

c) The broadcast seed will be covered by harrowing, discing, or any other mechanical method of scarifying that assures seed coverage after seeding.

· Western Wheat Grass	(2 lbs / acre)
· Bluebunch Wheatgrass	(2lbs / acre)
· Green Needle Grass	(2 lbs / acre)
· Canby bluegrass	(2 lbs / acre)
· Mtn. Brome	(2 lbs / acre)
· Scarlet globe mallow	(2 lbs / acre)
· American Vetch	(.5 lbs / acre)
· Indian blanket flower	(.5 lbs / acre)
· Green Rabbit Brush	(1 lbs / acre)
· Fringed Sage	(.5 lbs / acre)

*** If you broadcast the seed, double the pounds per acre.***

I. Holder shall maintain the right-of-way in a safe, usable condition, as directed by the AO.

J. Holder shall save, hold harmless, defend, and indemnify the United States of America, its agents, and employees for losses, damages, or judgments and expenses on account of bodily injury, death, or property damage, or claims for bodily injury, death, or property damage of any nature whatsoever, and by whomsoever made, arising out of the maintenance or use of the permitted land use by the holder, his employees, subcontractors, agents, social guests, licensees, permittees, or invitees.

K. The holder shall construct, operate, and maintain the facilities, improvements and structures, within this right-of-way in strict conformity with the plan of development which approved and made part of the grant on March 18, 2011. Any relocation, additional construction, or use that is not in accord with the approved plan of development, shall not be initiated without the prior written approval of the authorized office. A copy of the complete permit, including all stipulations and approved plan of development shall be made available on the right-of-way area during operation and termination to the AO. Non-compliance with the above will be grounds for immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.

L. Standard Paleontological Resource Protection Stipulation

1. **Collecting** – The project holder is responsible for informing all persons associated with this project including employees, contractors and subcontractors under their direction that they shall be subject to prosecution for damaging, altering, excavating or removing any vertebrate fossils or other scientifically significant paleontological resources from the project area. Collection of vertebrate fossils (bones, teeth, turtle shells) or other scientifically significant paleontological resources is prohibited without a permit. Unlawful removal, damage, or vandalism of paleontological resources will be prosecuted by federal law enforcement personnel.

2. **Discovery:** If vertebrate or other scientifically significant paleontological resources (fossils) are discovered on BLM-administered land during operations, the Operator shall suspend operations that could disturb the materials, stabilize and protect the site, and immediately contact the BLM Cody Field Office Manager (AO).

The AO would arrange for evaluation of the find within an agreed timeframe and determine the need for any mitigation actions that may be necessary. Any mitigation would be developed in consultation with the Operator, who may be responsible for the cost of site evaluation and mitigation of project effects to the site. If the operator can avoid disturbing a discovered site, there is no need to suspend operations; however, the discovery shall be immediately brought to the attention of the AO.

3. **Avoidance:** All vertebrate or scientifically significant paleontological resources found as a result of the project/action will be avoided during operations. Avoidance in this case means “No action or disturbance within a distance of at least 50 feet of the outer edge of the paleontological locality”.

- M. Vehicles would be instructed to travel at speeds that would minimize dust and the potential for collisions with wildlife, livestock, and other vehicles.
- N. Project employees and contractors would not be allowed to drive off-road.
- O. All surface-disturbing activities would be supervised by a qualified company representative to ensure compliance with the ROW stipulations.
- P. As directed by the authorizing officer, all road segments shall be winterized by providing a well-drained roadway by water baring, maintaining drainage, and any additional measures necessary to minimize erosion and other damage to the roadway or the surrounding public lands.
- Q. Migratory Bird Stipulation
To comply with the Migratory Bird Treaty Act of 1918 (MBTA) as amended, 16 U.S.C. §703, 50 CFR Subchapter B, Executive Order 13186, IM No. 2008-050, and M.O.U between the BLM and USFWS 2010, the stipulation will protect nests, nestlings, and nesting habitat for migratory birds as to not cause “take” as defined by the MBTA. Surface disturbing activity would not be allowed during the nesting season (April 30 through July 31) unless an avian nesting survey by a wildlife biologist confirms an absence of nesting birds in the affected area. The nesting survey must be conducted in the affected area and will be coordinated with the BLM wildlife biologist (protocol will be provided) and a report documenting the survey and results will be sent to the BLM wildlife biologist. If the survey shows an absence of nesting birds, then surface disturbance can proceed during the nesting season within 72 hours of the survey to avoid harming new nesting arrivals. After 72 hours have lapsed, a new survey would be required. If the survey shows nesting birds are present and or if the permitted activity would likely cause “take”, then the activity will be delayed until the nestlings have fledged.

- R. To protect important big game winter habitat, use of this ROW would not be allowed from February 1 through April 30 during the monastery construction phase, which is expected to last 4 years.

This period is shorter in duration than what is stated in the Cody RMP because of late season elk hunting seasons in the area (Cody RMP Appendix B page 60). After the construction phase is over, long-term vehicle use will be allowed as vehicle abundance and frequency will be low due to the project proponent's secluded nature.

- S. Gravel will be a color which blends into the surrounding environment.

Additional Stipulations (continued) SWDP & SWPPP:

The operator would coordinate with the Wyoming Department of Environmental Quality, Water quality Division, to obtain a Storm Water Discharge Permit (SWDP) if needed, including the associated Storm Water Pollution Prevention Plan (SWPPP) and would comply with their provisions. The holder would provide copies of these documents to the BLM – Cody Field Office.

The holder would coordinate with the U. S. Army Corps of Engineers if any water feature would receive fill as a consequence of implementing the Proposed Action to determine if the water feature is a Water of the U. S. or jurisdictional wetland and whether a 404 Permit would be required. The operator would obtain and comply with any permits/BMPs required by the U. S. Army Corps of Engineers and would provide copies of these documents to the BLM – Cody Field Office.

All disturbed areas not needed for maintenance/operation of the ROWs would undergo “interim” reclamation in order to minimize the environmental impacts of development on other resources and uses. Interim reclamation is required of any disturbed surface and consists of minimizing the footprint of disturbance by reclaiming all portions not necessary for ROW use, maintenance, and operation. Cleared areas not needed for operational and safety purposes will be re-contoured to a final or intermediate contour that blends with the surrounding topography as much as possible and would be reseeded in accordance with current BLM seed policy (IM-2006-073) using the BLM approved seed mix and reclamation practices discussed below.

Water applied on public surface, i.e., to manage fugitive dust along roads, pressure testing welded steel pipe, etc. would come from non-surface water sources such as wells, sealed springs, etc. or from other non-surface water sources such as treated water from a municipality's water system to ensure that invasive, non-native plant, noxious weed, or other undesirable plant species seeds are not introduced to the site via the water being used.

Water used to manage fugitive dust or for other surface applications related to this project would not contain excessive amounts of dissolved solids, i.e., salts, minerals, etc., heavy metals or other potentially toxic constituents in excess of State of Wyoming water quality standards. Water used to pressure test welded pipe would be collected and disposed of in a BLM approved waste water treatment facility.

To preserve biological activity, topsoil stock piles would be isolated from sub-soils, protected from erosion and undesirable plant species (UPS), less than 2 feet high, seeded with BLM approved deep-rooted plant species, and re-spread as soon as possible – preferably within 3 months or less (live-spreading of topsoil preserves topsoil biological activity much better than stock-piling, even if the stock piling follows the mitigation specified above).

It is the responsibility of the operator/holder to ensure that ALL applicable surface disturbing activities and operations comply with the following: 43 CFR 3101.1-2; 3101.1-3; 43 CFR 3160, Onshore Oil and Gas Orders Nos. 1, 2, 6 & 7, Notice to Lessees (NTL's) 2-B, 3-A, 4-A, and the BLM-USGS-USFS brochure, "Surface Operating Standards for Oil and Gas Exploration and Development" (Gold Book) and appropriate, current State of Wyoming standards regarding storm water discharge requirements of Section 401 Water Quality Division of the Wyoming Department of Environmental Quality, Section 404 of the Clean Water Act with the U.S. Army Corps of Engineers and any/all applicable county, state and federal regulations.

Wyoming DEQ WQD Point Source

Primary Contacts:

Leah Krafft, Permitting Supervisor
307-777-7093

lkrafft@state.wy.us

Brian Lovett, Inspection/Compliance Supervisor
307-777-5630

blovet@state.wy.us

http://deq.state.wy.us/wqd/WYPDES_Permitting/index.asp

Wyoming DEQ WQD Non-point

Source Primary Contact:

Barb Sahl, Program Coordinator
307-777-7570

bsahl@state.wy.us

http://deq.state.wy.us/wqd/WYPDES_Permitting/WYPDES_Storm_Water/stormwater.asp

WY DEQ Water Quality Division Contact Information:

DEQ/Water Quality Division

122 West 25th Street

Herschler Building, 4th Floor-West

Cheyenne, Wyoming 82001

307-777-7781

<http://deq.state.wy.us/wqd/>

Wyoming USACE (COE) Contact Information:

US Army Corps of Engineers

Wyoming Regulatory Office

2232 Dell Range Boulevard, Suite 210

Cheyenne, Wyoming 82009-4942

Telephone: (307) 772-2300, Fax: (307) 772-2920

Program Manager: Matthew A. Bilodeau

Project Managers: Michael A. Burgan and Thomas B. Johnson

<https://www.nwo.usace.army.mil/html/od-rwy/Wyoming.htm>

Exhibit “D” - Native American Consultation Table

Tribe:	Name, Title:	Date:	Medium:
Eastern Shoshone	Ivan Posey, Chairman	29-Oct-10	Letter
		16-Dec-10	Letter
Eastern Shoshone	Wilfred Ferris III, THPO	29-Oct-10	Letter
		8-Nov-10	Phone
		12-Nov-11	Letter
		17-Nov-10	Phone
		30-Nov-10	Phone
		31-Jan-11	Phone
		10-Mar-11	Phone
		11-Mar-11	Phone
		14-Mar-11	Phone
		14-Mar-11	Phone
		21-Mar-11	Phone
		22-Mar-11	Phone
		25-Mar-11	OnSite
		6-Apr-11	Fax
Northern Arapaho	Harvey Spoonhunter, Chairman	29-Oct-10	Letter
Northern Arapaho	Darlene Conrad, THPO	29-Oct-10	Letter
		8-Nov-10	Phone
		8-Nov-10	e-mail
		30-Nov-10	Phone
		30-Nov-10	e-mail
		10-Mar-11	Phone
		18-Mar-11	Phone
		20-Apr-11	Phone
Northern Cheyenne	Leroy Spang, President	29-Oct-10	Letter
Northern Cheyenne	Linwood Tallbull, THPO	29-Oct-10	Letter
		8-Nov-10	Phone
		17-Nov-10	Phone
		30-Nov-10	Phone
		6-Dec-10	Phone
		10-Dec-10	Phone
		28-Jan-11	Phone
		10-Mar-11	Phone
		18-Mar-11	Phone
		20-Apr-11	Phone
Northern Cheyenne	Conrad Fisher, THPO*	28-Jan-11	Phone
		10-Mar-11	Phone
		18-Mar-11	Phone
		21-Mar-11	Phone
		24-Mar-11	Phone
		20-Apr-11	Phone
		20-Apr-11	e-mail
Crow	Cedric Black Eagle, Chairman	29-Oct-10	Letter
Crow	Dr. Tim McCleary,	29-Oct-10	Letter

Crow	William Big Day, Burial Preservation Director	29-Oct-10	Letter
		8-Nov-10	Phone
		9-Nov-10	Phone
		17-Nov-10	Phone
		17-Nov-11	Phone
		19-Nov-10	Letter
		5-Jan-11	Phone
		4-Apr-11	Phone
Crow	Hubert Two Leggings, Cultural Director	10-Mar-11	Phone
		10-Mar-11	Letter
		16-Mar-11	Phone
		17-Mar-11	Phone
		18-Mar-11	Phone
		21-Mar-11	Phone
		21-Mar-11	e-mail
		31-Mar-11	Phone
		1-Apr-11	Phone
		4-Apr-11	Phone
		15-Apr-11	On-Site
Crow	Dale Old Horn, THPO*	28-Mar-11	Phone
		29-Mar-11	Phone
		31-Mar-11	Phone
Shoshone-Bannock	Alonzo Coby, Chairman	29-Oct-10	Letter
Shoshone-Bannock	Carolyn Boyer-Smith, THPO	29-Oct-10	Letter
		17-Nov	Phone
		17-Nov-10	e-mail
		30-Nov-10	Phone
		30-Nov-10	Phone
		6-Dec-10	Phone
		6-Dec-10	Phone
		10-Dec-10	Phone
		10-Dec-10	e-mail
		10-Mar-11	Phone
		18-Mar-11	Phone
		20-Apr-11	Phone
Blackfeet	Jay St. Goddard, Chairman	29-Oct-10	Letter
Blackfeet	John Murray, THPO	29-Oct-10	Letter
		8-Nov-10	Phone
		22-Nov-10	Letter
		10-Mar-11	Phone
		18-Mar-11	Phone
		20-Apr-11	Phone
		21-Apr-11	Phone
		22-Apr-11	Phone
		25-Apr-11	Phone
* Identified in BLM, Wyoming State Office, updated - January 2011 Native American Contacts list			